The Twelfth Annual Texas Environmental Superconference



August 3 - 4, 2000

Four Seasons Hotel
98 San Jacinto
Austin, Texas



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SUMMARY OF 11TH ANNUAL TEXAS ENVIRONMENTAL SUPERCONFERENCE - PROGRAM EVALUATION

Program Evaluation Cards: 77

1. In general the program was:
   26 - Excellent
   32 - Good
   3 - Average
   16 - Unresponsive

2. The course materials were:
   19 - Excellent
   36 - Good
   6 - Average
   16 - Unresponsive

3. The program arrangements were:
   25 - Excellent
   29 - Good
   6 - Average
   1 - Below Average
   1- Poor
   15 - Unresponsive

4. The hotel accommodations were:
   31 - Excellent
   15 - Good
   3 - Average
   4 - Below Average
   5 - Poor
   19 - Unresponsive

5. Are You an:
   49 said they were attorneys
   16 said they were engineer or scientist
   3 said they were students
   4 stated they were other
   5 - Unresponsive

6. Are you in the:
   30 stated they were in the public sector
   33 stated they were in the private sector
   14 - Unresponsive

SPEAKERS:

Bill Jordan:

12 - Excellent
38 - Good
16 - Average
2 - Below Average
1 - Poor
8 - Unresponsive

His materials:
10 - Excellent
30 - Good
20 - Average
4 - Below Average
13 - Unresponsive

Lisa Dyar:

2 - Excellent
14 - Good
30 - Average
20 - Below Average
6 - Poor
5 - Unresponsive

Her materials:
1 - Excellent
8 - Good
21 - Average
19 - Below Average
15 - Poor
13 - Unresponsive

Margaret Hoffman:

21 - Excellent
36 - Good
10 - Average
1 - Below Average
1 - Poor
8 - Unresponsive

Her materials:
25 - Excellent
24 - Good
5 - Average
4 - Below Average
2 - Poor
17 - Unresponsive

Carolyn Ahrens:
27 - Excellent
29 - Good
11 - Average
2 - Below Average
8 - Unresponsive

Her materials:
24 - Excellent
25 - Good
9 - Average
2 - Below Average
17 - Unresponsive

Franz Hiebert:
27 - Excellent
27 - Good
12 - Average
1 - Below Average
10 - Unresponsive

His materials:
11 - Excellent
15 - Good
16 - Average
1 - Below Average
6 - Poor
28 - Unresponsive

Scott Crouch:
30 - Excellent
25 - Good
12 - Average
1 - Below Average
9 - Unresponsive

His materials:
12 - Excellent
23 - Good
20 - Average
2 - Below Average
20 - Unresponsive

B. C. Robinson:
31 - Excellent
25 - Good
9 - Average
1 - Below Average
11 - Unresponsive

His materials:
14 - Excellent
20 - Good
18 - Average
3 - Below Average
22 - Unresponsive

Andrew Strong:
31 - Excellent
26 - Good
9 - Average
1 - Below Average
7 - Unresponsive

His materials:
25 - Excellent
19 - Good
13 - Average
2 - Below Average
19 - Unresponsive

Richard Corsi:
55 - Excellent
12 - Good
1 - Average
1 - Poor
8 - Unresponsive

His materials:
34 - Excellent
28 - Good
4 - Average
8 - Unresponsive

Carrick Brooke-Davidson:
12 - Excellent
29 - Good
17 - Average
1 - Below Average
18 - Unresponsive

His materials:
8 - Excellent
26 - Good
20 - Average
1 - Below Average
22 - Unresponsive

Lisa K. Anderson
18 - Excellent
27 - Good
20 - Average
5 - Below Average
7 - Unresponsive

Her materials:
8 - Excellent
28 - Good
20 - Average
2- Below Average
1 - Poor
18 - Unresponsive

Jay Schmidt
5 - Excellent
23 - Good
27- Average
12 - Below Average
2 - Poor
8 - Unresponsive

His materials:
1 - Excellent
21 - Good
29 - Average
4 - Below Average
22 - Unresponsive

Mark McLeod:
23 - Excellent
28 - Good
15 - Average
2 - Below Average
9 - Unresponsive

His materials:
7 - Excellent
19 - Good
24 - Average
9 - Below Average
18 - Unresponsive

Neil Nixon
42 - Excellent
23 - Good
5 - Average
1 - Below Average
6 - Unresponsive

Ross Richard-Crow:
18 - Excellent
27 - Good
17 - Average
6 - Below Average
9 - Unresponsive

His materials:
16 - Excellent
29 - Good
13 - Average
1 - Below Average
18 - Unresponsive

Gregg Cooke

43 - Excellent
20 - Good
5 - Average
2 - Below Average
7 - Unresponsive

Robert Huston:

36 - Excellent
27- Good
7 - Average
1 - Below Average
6 - Unresponsive

David Cooney

15 - Excellent
37 - Good
9 - Average
3 - Below Average
13 Unresponsive

His materials:
11 - Excellent
29 - Good
9 - Average
28 - Unresponsive

Murl Smith:

18 - Excellent
35 - Good
8 - Average
2 - Below Average
14 - Unresponsive

His materials:
14 - Excellent
29 - Good
8 - Average
26 - Unresponsive

Pat Rankin:

8 - Excellent
31 - Good
19 - Average
5 - Below Average
14 - Unresponsive

His materials:
13 - Excellent
26 - Good
11 - Average
27 - Unresponsive

David Howe:

18 - Excellent
30 - Good
14 - Average
15 - Unresponsive

His materials:
12 - Excellent
16 - Good
15 - Average
8 - Below Average
2 - Poor
24 - Unresponsive

Susan Zachos:

41 - Excellent
21 - Good
4 - Average
11 - Unresponsive

Her materials:
32 - Excellent
20 - Good
3 - Average
22 - Unresponsive

John Slavich:

42 - Excellent
19 - Good
4 - Average
12 - Unresponsive

His materials:
26 - Excellent
16 - Good
12 - Average
1 - Below Average
22 - Unresponsive

Vic McWherter
16 - Excellent
28 - Good
19 - Average
3 - Below Average
11 - Unresponsive

His materials:
17 - Excellent
29 - Good
12 - Average
1 - Below Average
12 - Unresponsive

Jim Blackburn:
21 - Excellent
28 - Good
12 - Average
3 - Below Average
13 - Unresponsive

His materials:
18 - Excellent
26 - good
11 - Average
1 - Below Average
3 - Poor
18 - Unresponsive

Lynne Liberato:
26 - Excellent
34 - Good
10 - Average
1 - Below Average
13 - Unresponsive

Her materials:
26 - Excellent
29 - Good
6 - Average
16 - Unresponsive

Tom Kiehnhoff:
26 - Excellent
31 - Good
10 - Average
1 - Below Average
9 - Unresponsive

His materials:
12 - Excellent
19 - Good
20 - Average
2 - Below Average
24 - Unresponsive

George Shipley:
21 - Excellent
32 - Good
14 - Average
1 - Below Average
9 - Unresponsive

His materials:
8 - Excellent
21 - Good
19 - Average
4 - Below Average
25 - Unresponsive

Barbara A. Pederson
30 - Excellent
27 - Good
9 - Average
2 - Below Average
9 - Unresponsive

Her materials:
22 - Excellent
27 - Good
9 - Average
2 - Below Average
17 - Unresponsive

Nathan Block:
34 - Excellent
31 - Good
7 - Average
5 - Unresponsive

His mateirals:
18 - Excellent
21 - Good
15 - Average
23 - Unresponsive

Jerry Davenport
7 - Excellent
21 - Good
26 - Average
4 - Below Average
19 - Unresponsive

His materials:
8 - Excellent
21 - Good
22 - Average
1 - Below Average
25 - Unresponsive

Julie Jumonville:
8 - Excellent
28 - Good
17 - Average
4 - Below Average
20 - Unresponsive

Her materials:
9 - Excellent
21 - Good
18 - Average

1 - Below Average
28 - Unresponsive

Rick Lowerre
13 - Excellent
29 - Good
17 - Average
1 - Below Average
2 - Poor
15 - Unresponsive

His materials
16 - Excellent
24 - Good
10 - Average
2 - Below Average
25 Unresponsive

Catherine Webking:
5 - Excellent
21 - Good
18 - Average
8 - Below Average
25 - Unresponsive

Her materials:
8 Excellent
24 - Good
11 - Average
34 - Unresponsive

Jim Smith:
40 - Excellent
15 - Good
4 - Average
18 - Unresponsive

His materials:
22 - Excellent
21 - Good
5 - Average
29 - Unresponsive

Jim Phillips
- 15 - Excellent
- 21 - Good
- 9 - Average
- 3 - Below Average
- 29 - Unresponsive

Joe Vogel
- 12 - Excellent
- 24 - Good
- 10 - Average
- 2 - Below Average
- 29 - Unresponsive

Duncan Norton
- 12 - Excellent
- 23 - Good
- 10 - Average
- 3 - Below Average
- 29 - Unresponsive

Charles Sheehan
- 14 - Excellent
- 23 - Good
- 8 - Average
- 2 - Below Average
- 30 - Unresponsive

COMMENTS AS TO PARKING:

1. Hotel should make an effort to notify people to park in convention center parking by placing signs at the 1st and Brazos intersection.

2. Inadequate parking.

3. None.

4. The parking situation was a joke. I arrived at 7:30 a.m. on Thursday and was told that the superconference spaces were all full. How many did the Four Seasons reserve for us? 2? As a government lawyer, I will have to fill out many forms to get my $10 of parking $ back, of course only after I build up enough

expenditures for reimbursement so that the finance office will process my request for reimbursement.

5. Some certainty must be brought to the parking situation. If no parking will be made available by the hotel, perhaps the conference could be moved.

6. Why stay at the Four Seasons if:
   b. No parking no mater how early you arrive or how many of you car pool.

7. Exactly how many parking spaces are available in the garage? 20? The garage was closed at 7:30 a.m. and one person was told the spaces were all taken Wednesday night.

COMMENTS-COMPLAINTS REGARDING HOTEL AND ACCOMMODATIONS:

1. Six comments like this: Do not like the "round table set up". Half the group had their back to the speakers.

2. Not enough room for everyone. I liked having sandwiches on Fridays in previous years better than the meal plan this year.

3. Hotel accommodations are not good. Round tables are not appropriate for a seminar. Inadequate management -- 2 accesses to public phones. I would have to think twice about attending the next conference if it is held at the Four Seasons.

4. The hall needs wider aisles between the tables so people can get in and out to go to the disposal socialites during long sessions.

5. 4 comments as to sitting all afternoon with dirty lunch dishes on table – should eat in a separate room.

6. Before you determine the final layout for attendee seating next year, please, seat 10 people at a round table, with 10 3" finders with three of them sitting backwards to the stage and think about whether that is the best plan.

7. With less than half the conference attendees traveling from outside Austin, it may not be a major problem that hotel rooms in this City are notoriously hard to find. The large number of locally-based participants would indicate that a location with adequate parking should be selected. The Four Seasons, although lovely, fails to satisfy either the room availability or parking requirements. My recommendation is that you select a site that will meet at least one of these.

8. On Friday morning there were not enough bagels/croissants. They were gone by the time I arrived at about 8:40 a.m. Also, the hot water for tea was gone.

9. Meeting space, tables, lunch space was unacceptably POOR.

10. The round tables were conducive to interaction but made using written materials very uncomfortable.

11. You are either going to have to move the conference to the Convention Center or restrict attendance. It's much too crowded. I prefer we stay at the hotel because the accommodations are so great.

12. Why stay at the Four Seasons if:
    A. No rooms available
    C. Not enough cookies for everyone
    D. Meeting lunch space problems
    E. Ridiculously long bathroom lines.

13. If we have to go to the convention center, let's go to th Convention Center! Plenty of room and an opportunity for break-out sessions with in-depth presentations. Ok, the CC is ugly but so much more practical. Don't we have enough form over substance.

14. Blaring music at the beginning was jarring.

GOOD COMMENTS REGARDING HOTEL AND ACCOMMODATIONS:

1. Really liked the new room configuration and the 4 parallel luncheon lines. Much smoother than prior years. Everyone saying it is best superconference ever.

2. Best of several that I have been to -- even though I'm retired I found this -- the 12th -- annual superconference to be the most relevant.

3. This was an excellent presentation (& entertaining). Kudos to the planning committee and all the speakers. It's going to be tough to go to other (boring) CLE presentations after this one.

4. The food was good.

5. I liked new room set up (round tables of 10).

6. Food was good and good to have.

COMPLAINTS AS TO MATERIAL/SPEAKERS.

1. Three comments as to the comments made by George Freda in the opening remarks were wholly inappropriate and insulting to those of us working in the government sector. In a program organized by and including representatives of all facets of the environmental industry, having a speaker spew anti-government rhetoric was insulting to me and other highly trained and educated professionals in the audience.

   The comments of George Freda at the start of the conference went on far too long and were neither funny nor appropriate.

   As one of the many "morons" attending the conference, I was highly offended by George Freda's opening remarks. My colleagues and I work our asses off every day because we want to be in public service! We get tired of crap like Freda's.

2. Please keep speakers on schedule.

3. The moderators did a very poor job of actually moderating the speakers to stay on schedule on Thursday. Particularly the private sector speakers abused the speaking privilege by going and going and going -- At some point they really needed to be cut off.

4. Enforce the dress code -- no suits or ties.

5. List the tab number next to the time on the schedule.

6. The pace, format and topics were all well considered. The bulk of the speakers did a great job and all were knowledgeable about their topics. Perhaps a reduction in the number of speakers would have allowed more in-depth coverage for this very experienced audience.

7. Keep the schedule better next year and once a speaker has run over, don't then actively solicit additional questions and comments from the audience. People with questions can ask them during a break or can email the speaker.

8. Other agencies should be represented such as TD/?D, GLO, COE, USFKLS, NOAA.

9. Consistency in written materials;

10. Consider having speakers submit abstracts in May/June before brochure is sent out. If they fail to submit, find another speaker. Of course, this does not necessarily apply to Cooke/Huston level speakers.

11. Better time management (or harsher punishment threatened to speakers) to avoid running so far behind. (Except Kinnan Coleman who did a good job).

SUGGESTIONS/ OTHER:

1. More opportunity to ask questions during presentations -- particularly controversial issues such as env. audits, air quality and legislative forecasts.

2. Put the course notebook on CD-ROM and eliminate the paper, copying and putting together.

3. Include TNRCC staff when talking about or touching upon a TNRCC program -- environmental audits.

4. Need to send out conference registration package sooner and to all previous attendees. I didn't ever receive even though attended last year.

5. Need to allow more time for topics with 2 speakers. Very difficult for 2 people to cover materials in 30 min. Also need longer breaks with such a large group. Takes a long time just to get out of the room and find the coffee!

6. If people don't have the ability to create Power Point presentations, and have to use the overhead, please instruct them to crate the slides in landscape (11 X 8.5) instead of portrait (8.5 X 11).

9. Too much enforcement related stuff this year. Need a better mix.

10. Little more on "new developments" would have been useful (e.g., Margaret Hoffman's good presentation on TMDLS). More time for questions. Maybe less topics, so more flexibility in schedule.

OTHER:

1. Best seminar in years!

2. Congratulations Jeff on the record-breaking number of registrants. But, it's time to think about a location better suited to handle such a large number of folks. I love Four Seasons, too, but sitting in a traffic for 30 minutes just 3 blocks from the destination without parking is a bit much. (And I was car pooling, as were most of our colleagues.) We have standing room only and

meal logistics are difficult too. With such a tremendous state-wide interest in environmental legal issues, it's time to expand programming. I suggest considering break-out sessions in order to deal with certain issues in depth. My assumption is that your audience is relatively sophisticated. The typical "thumbnail sketch" offered by speakers should be expanded to be more helpful. I'm sure organizing this conference is tremendous work. You do a super job at making it fun. How about if we make it more convenient and meaningful?

3. Great conference.

4. Good experience for this 1st timer!

5. Great theme, very clever. The hard work was evident. Great graphics/sound/multimedia.

SUGGESTIONS FOR FUTU5E TOPICS/THEMES:

1. Cartoons - Superman, Spider Man, Wonder Woman, Transformer, Pound Puppies, Blues Clues, Vegitales.

2. Broadway shows and/or show tunes

3. Board games; Olympics; Beatle's songs; news shows; action films.

4. All I ever needed to know I learned in Kindergarten.

5. Movies; children's books/stories (can have fun with this).

6. 2001 Space Odyssey

7. Toy Story

8. Luxury cruise - Titanic; Rock & Roll; Worldwide cultures; space cowboys; endangered species.

9 Something where speakers and chairs don't wear ties!

10. Natural disasters (such as flood, fire, earthquake) and human response to them. This theme allows for humor and drama. At the same time it relates directly to our interest in environmental issues.

11. Famous paintings/painters; books - possibly by Genre (mystery, sci-fi, etc.)

12. Texas Pro sports: "Take me out to the ball game"; teaming: Cowboys, Spurs, Rockets; Stars, Mavericks, Aeros, RR Express; SA Dodgers; Midland Rock Hunters; El Paso Diuablos.

13. Toys: Easy bake oven GI Joe, Barbie, Legos Food: Lentil soup, hot tamales

14. Endangered species; mixed drinks mixed drinks available at bars (e.g., Border issues = Mexican Flag) Title: "Mix It UP"

15. Harrison Ford films; great westerns; Broadway plays.

16. Prime time sitcoms; daytime soaps; opera; Broadway shows; Academy Awards; George Lucas (or Steven Spielberg) movies

17. 2001: an Enviro Oddity

18. Ripley's Believe it or Not



MEMORANDUM

TO: Attendees

FROM: Planning Committee

DATE: August 3, 2000

On behalf of the Environmental and Natural Resources Law Section of the State Bar of Texas, the Air and Waste Management Association-Southwest Section, the Water Environment Association of Texas, the Texas Association of Environmental Professionals, and the Environmental, Health & Safety Auditing Roundtable, welcome to the Twelfth Annual Environmental Superconference. As you know, the conference is an annual event established to create a dialogue among the attendees, who are drawn from the public and private sector and from the legal and technical professions. The conference provides excellent continental breakfasts, lunches and snacks, and plenty of breaks to encourage participants to discuss environmental issues informally.

For Friday's open mike session, note cards are provided for you to write your questions. Please place your written questions in the designated box at the registration table. You also may ask questions in person, should you prefer.

As always, there are evaluation forms for the program. We appreciate your taking the time to complete them. The organizers of this program take into account these forms in planning next year's conference. In addition, if you have an interest in having a particular topic presented, or in speaking on a particular topic, the evaluation form is the appropriate place to provide that information. Suggestions for themes for next year also are being solicited. Next year's conference is tentatively scheduled for August 2 - 3, 2001. Please mark your calendars.

If you have any questions or comments, please do not hesitate to contact any member of the Planning Committee at the conference, or, thereafter, Jeff Civins at (512) 867-8477 or civinsj@haynesboone.com.

Jeff,

Please announce that

The Environmental, Health and Safety Auditing Roundtable Meeting

Scheduled for 7:30 Tomorrow Morning

has been moved to:

Stone's Crossing Room
on
Lobby Level

Thanks,
Richard Carson

FOUR SEASONS HOTEL
Austin

— Registration / add or correct name

— QUIZZES / submit

— Q's submit for open mike today or tomorrow

— ~~Parking~~ 8:30 — 8:45

Must be here to win

~~Cy 8:30~~

will draw 4

~~8:45~~

— all wins

— grand prize 1 nite + dinner for 2

— Parking

FOUR SEASONS HOTEL
Austin

COPY

h | b

MEMORANDUM

To: Wade Porter
Jonathan Wilson
Greg Samuel
Brian Barnard
Jennifer Franklin
Diana Murphy
Donna Anderson

From: Jeff Civins

Date: August 10, 2000

Subject: Texas Environmental Superconference

On August 3-4, the Environmental Section of the State Bar of Texas, with four other professional groups, co-sponsored the referenced conference. A copy of the agenda is attached. Over 6,000 programs were mailed out. A total of 465 people attended, a 15% increase over last year. A copy of the attendance list is attached. The conference grossed approximately $100,000, of which approximately 25% will go to the Environmental Section of the State Bar, to be used for its activities. Although our firm was not a co-sponsor of the conference (despite a statement to that effect in the Texas Bar Journal)., we received excellent publicity for the role we played.[1] There are a number of kudos to be handed out to our staff, all of whom were a credit to our firm.

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[1] Our firm was responsible for organization of the program, for registration, both by mail and online (many registered through our website), and for onsite check-in and administration. I chaired and moderated the conference, and Mary Mendoza was an active participant on the Planning Committee. Lynne Liberato spoke on ethics (and did her usual great job), and Kathy Tullos assisted Lynne in writing the paper.

Katherine Glass, our part-time legal assistant, was responsible for administering the conference, and for all details, including:

- overseeing registration;
- arranging for publicity (including format, printing, and mailing of brochures and contacts with media);
- coordinating with speakers, regarding their presentations (e.g., audio-visual needs) and papers (being sure they were timely submitted and in correct format),
- arranging meetings and follow-up with the Planning Committee,
- working with co-sponsors,
- dealing with the Four Seasons (including selection of meals and snacks, audio-visual set up, seating arrangement, parking, and establishment of a block of guest rooms);
- arranging for the compilation, printing, and supply of course materials;
- providing input on the content of skits and games and props (this is a fun conference); and
- soliciting evaluations and preparation of registration lists.

Katherine did a phenomenal job and was in large part responsible for the numerous comments we received saying this was the best conference ever. Lei Lord, a legal assistant in this office, capably assisted Katherine on these tasks.

Lyn Gracar, our office manager, assisted on handling the registrations and fees, and helped us find staff to handle administrative matters, and deal with last minute details. Her assistance was invaluable.

Katherine, Lei, and Ali Compton and Rebecca Leonard, legal assistants in our Fort Worth office, were responsible for administering the two-day conference, including check-in, distribution of course and related materials, answering questions, and working with the hotel regarding meals, breaks, audio-visuals, etc. The attendees uniformly were highly complimentary of their work and their attitude, which reflected well on the firm.

Lei also took responsibility for the client dinner we held Thursday night, at which there were 39 attendees, including representatives of sixteen clients and potential clients. A list of the attendees is attached. Lei served as liaison for the attorneys and other attendees and arranged for transportation. The dinner also was a big success, with a number of the attendees discussing potential new business with us.

Finally, we received excellent secretarial support, as always, from Trudi Lehnhardt and Suzanne Walton, who balanced their normal work load with the extra work occasioned by the conference, throughout the past several months as well as at the last moment.

JC/tl
Attachments

c: Steve Waters (w/encl.)
Lyn Gracar (w/encl.)
Katherine Glass (w/o encl.)
Lei Lord (w/o encl.)
Ali Compton (w/o encl.)
Rebecca Leonard (w/o encl.)
Trudi Lehnhardt (w/o encl.)
Suzanne Walton (w/o encl.)

ATTENDEES OF GREEN PASTURES DINNER (8/3/2000)
A-101385.1

ACME Brick Company
Mike O'Connor

American Airlines
Genie Jones

American National Power, Inc.
Marion Stewart
Tray Taylor
Cheryl Spruell

City of Dallas
Dave Howe

City of Fort Worth
Kathy Hansen

Cross Timbers Oil Company
Nina Hutton

Earthwise Technologies, Inc.
Steve Howard

ECON Consulting Services, LLC
Vance Fairchild

EGC CORP.
Jack Bullemer
Bob Richter

El Paso Energy Corporation
Kim Lesniak

Enron Corp.
Frank Smith

EPA Region 6
Gregg Cooke, Regional Administrator

Keeshan & Bost Chemical Company
Sue Schwartz

Marathon Oil Company
Linda Aldrich
Edward Strenkowski
Candance Walker

Pennzoil-Quaker State
Lance Vinson

Sachem, Inc.
Paul Hinman
Louis Hunt

Waste Management
Gerald Davenport

TheVickers Law Firm
Harrison Vickers

The Williams Companies, Inc.
Richard Carson

Fifth Circuit
The Honorable Pete Benavides

Haynes & Boone
Jim Braddock
Ashley Brown
Jeff Civins
Rudy England
Andrew Fono
Laurence Gustafson
Jeffrey Hembree
Elizabeth Kohn
Mary Mendoza
Margaret Menicucci
Bane Phillipi
Gary Sullivan
Kathy Tullos

Carol Batterton

Been with TNRCC since 1978 in a variety of positions including enforcement coordinator, Director of field operations and currently director of the compliance support Division

Past president of the Water Environment Assoc. of Texas

Past Chair of the National Environmental Laboratory Accreditation Conference (NELAC)

12th Annual Texas Environmental Superconference

"The Love Connection"

starring

TNRCC Chairman Bob Huston,

EPA Region 6 Administrator Gregg Cooke & Texas

setting: stage divided into half by a screen. Stage right are 2 stools, each with a standing mike; stage left is a standing mike.

Emcee (Jeff Civins) enters stage left.

Emcee: Welcome to "The Love Connection."
Holds up applause sign.
You know how the game works:
our contestant asks three questions each
of two strangers hidden from view.
Based on their responses, she picks one of them for a date.
Let's meet today's players.
First off is Bob Huston.
Holds up applause sign.

Enter Huston stage left.

Emcee: Bob, tell us a little about yourself.
(Reading from note cards.)
I understand you have a degree in mathematics
and have pursued careers in environmental service.

Huston: Yes. I think because of my background
I approach issues with a reasoned, scientific perspective.
I'm a pretty down to earth, logical fellow. I go for efficiency.
For example, I don't like to have to use a different checkbook
for every different kind of purchase I make.

Can you imagine if businesses or even government agencies were forced to do their spending this way?
The sun should set on this practice.
At the very least, there should be a law passed . . .
INTERRUPT
Emcee: Yes, yes, I get your point.
I can see this is a big issue for you.
But let's meet our other player on The Love Connection today, Gregg Cooke.
Holds up applause sign.

Enter Cooke stage left.

Emcee: Gregg, I see you have had a varied career:
some legal experience, a stint in government,
an interest in cross-border relations, and, like Bob,
a bit of environmental work.
How would you describe yourself?

Cooke: Answer I've seen them work successfully.

Emcee: Well, gentlemen, are you ready to play "The Love Connection?" yes
Please take your places on ~~the other~~ side of the screen so you can be heard but not seen.

Cooke and Huston move stage right.

Emcee: Now please welcome our contestant.
Holds up applause sign.

Enter woman stage left, dressed in Texas flag shirt, jeans, cowboy boots and hat.

Emcee: Welcome and thanks for being on the show, Miss . . . .?

Texas: You can just call me by my initials: TX.
I hate to trouble you, but I am just parched.
Would you have some water?

Emcee hands her a glass of water. She drinks.

Texas: Oh my, that's much better.

Emcee: Ok, TX. Before we introduce you to your prospective dates, let's take just a minute to talk a little about you.
Any special interests?

Texas: Oh yes—dozens and dozens.
Farming and ranching . . . oil and petrochemicals . . . high tech . . . fishing . . . mining . . . education . . . recreation . . . tourism . . . entertainment . . .

Emcee (interrupting): I catch your drift. ***PAUSE.***
What about your background?

Texas: a little German . . . some Mexican and Spanish . . . native American, some Polish and Czech.
Didn't I hear something about a Czech book?
Anyway, I even have some Tennessee blood.
And lately I've been meeting an awful lot of people from California who act like we're kinfolk.

Emcee: Wow, you really are all over the map!
Moving right along, what qualities do you look for in a date?

Texas: Well, because of my diversified nature and broad background, I definitely go for the well-rounded type.
I can't stand guys who think they have things all figured out before the even understand the situation.
You know, those command control freaks.

I guess you could say I prefer the flexible type,
someone who will ask for my opinion,
someone who treats me as a partner.
After all, I have a lot of resources to protect.
Natural Resources

Emcee: Very interesting.
Now let's see if we can match you up with the date of your dreams.
Behind this screen are Bob and Gregg.
You can ask each of them three questions.
Based on their responses, you pick which one you'd like to go out with. Ready?

Texas: Yes! Let's start with Gregg.

3 questions to Cooke. easy ride Home ✓

Emcee: Now for Bob.

Texas: Ok, Bob. Let's say I pick you to be my date.
We decide we want to sail to Matagorda Island
on a 50-foot catamaran.
What happens now?

Huston: Well, the most important thing is to plan properly.
We'd need to sit down and determine the best route to take
and what provisions we need to get us to our goal.
I'd strongly suggest we use one checkbook to buy all those provisions.

Texas: Let's say my family isn't too happy about the idea
of my sailing to Matagorda Island with you.
In fact, my big brothers
(the ones who work for the World Wrestling Federation)
are threatening to pick a fight.
Mostly they're all talk and swagger, but you never know.
How would you handle them?

Would you tell them you'd rudder do it yourself?

Huston: [Proudly] Bob Huston will not be pushed around!
[Holds up applause sign.]
But I'm not one to insist on doing things my way, either.
I'd ask your family for their input.
Your brothers may have some legitimate concerns
that should be addressed.
And the only way to determine that is to talk with them,
perhaps in a series of meetings . . .
outside, of course, of the wrestling ring!

Texas: Fine, you convince them to support the trip to Matagorda.
But now some of my family want to reroute our course
while others insist we have the wrong provisions
in the wrong amounts
and that we need to recompute everything.
What now?

Huston: I'm always open to suggestions.
But if we scuttle one ton of canned peaches
we'll have to replace it with one ton of something else:
prunes, pears, or pineapples.
The goal is set; the means to reach it are flexible.
But did I mention paying for everything with one checkbook?

Texas and Emcee together: Yes, Bob.

Emcee: Well, we've all heard the questions and the answers.
Now TX must pick the date of her dreams.
Will it be Gregg or Bob?
While our contestant ponders that question,
let's poll our audience for their opinion.

How many votes for Gregg?
How many for Bob?

And how about our contestant?
[Turns to Texas.] Whose your choice?

Texas: It's a no-brainer!
I want them both!
I need them both!
Runs around screen;
grabs and raises over her head the hands of Huston and Cooke.

Emcee: [Holds up applause sign.]
How about that Love Connection?
That's it for this episode.

TX turns sideways, throwing the audience a big kiss.

Don't forget to tune in next time,
when we ask TX to come back for another round
with two new players named George and Al.

And now, a word from today's participants.

remove screen
need 2 folks

Emcee: Introduces Cooke.

Cooke: 10-15 minutes

Emcee: Introduces Huston.

Huston: 10-15 minutes

The Twelfth Annual Texas Environmental Superconference



Co-sponsored by:

Environmental and Natural Resources Law Section, State Bar of Texas
Air and Waste Management Association-Southwest Section
Water Environment Association of Texas
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Environmental, Health & Safety Auditing Roundtable

Thursday - Friday
August 3 - 4, 2000
Four Seasons Hotel
98 San Jacinto
Austin, Texas

TWELFTH ANNUAL

TEXAS ENVIRONMENTAL SUPERCONFERENCE

Thursday - Friday, August 3 - 4, 2000

Are You Game?

THURSDAY, AUGUST 3, 2000

8:00 - 8:45 **Registration**

8:45 - 9:00 **Introductory Remarks** - *Password*
Jeff Civins - Haynes and Boone, LLP
Phil Haag - Environmental and Natural Resources Law Section, State Bar of Texas
Cindy Smiley - Air & Waste Management Association - Southwest Section
Clyde Burnett - Water Environment Association of Texas
George Freda - Texas Association of Environmental Professionals
Richard M. Carson - Environmental, Health & Safety Auditing Roundtable

Moderator: David Cabe - Zephyr Environmental Corporation

9:00 - 9:30 **Air Quality Issues** (Nonattainment Upset / Maintenance) - *Jeopardy*
Speakers: Bill Jordan - TNRCC
Lisa Dyar - TNRCC

9:30 - 10:00 **Water Quality Issues** (NPDES Delegation - TMDLs - Stormwater Regulation) - *Newlywed Game*
Speaker: Margaret Hoffman - TNRCC

10:00 - 10:20 **Water Resources** (SB1 - Reclamation and Reuse) - *Greed*
Speaker: Carolyn Ahrens - Booth, Ahrens & Werkinthin, PC

10:20 - 10:35 **Station Break**

Moderator: Carol Batterton - TNRCC

10:35 - 11:35 **Texas Risk Reduction Program (Panel)** (Science - Process - Legal Issues) - *Wheel of Fortune*
Speakers: Franz Hiebert - RMT, Inc
Scott Crouch - JD Consulting, LP
B. C. Robison - ERM - Southwest
Andrew Strong - Campbell, George & Strong, LLP

11:35 - 12:00 **Indoor Air Quality** (Technical - Legal) - *Concentration*
Speakers: Richard Corsi - UT
Carrick Brooke-Davidson, Jenkens & Gilchrist, LLP

12:00 - 1:15 **Lunch** - *Family Food*

Moderator: Mary K. Sahs - Sahs & Associates, PC

1:15 - 1:55 **Legislative Forecast (Panel)** *Make Me Laugh*
Speakers: Lisa K. Anderson - Of Counsel, Brown McCarroll & Oaks Hartline, LLP
Jay Schmidt - Sunset Advisory Commission
Mark McLeod - Environmental Defense

1:55 - 2:35 **Media Relations (Simulation)** - *I Can't Believe You Said That*
Speakers: Neil Nixon - Nixon & Associates
Ross Richard-Crow - Sahs & Associates, PC

2:35 - 3:15 **Federal/State Issues and Highlights** - *Love Connection*
Speakers: Gregg A. Cooke - Regional Administrator, EPA Region 6
Robert J. Huston - Chairman, TNRCC

3:15 - 3:20 **Cookie Break** - *Tic Tac Dough*

Moderator: Kinnan Goleman - Brown McCarroll & Oaks Hartline, LLP

3:30 - 4:10 **Oil & Gas Activities - Environmental Issues (Panel)** - *Strike It Rich*
Speakers: David Cooney - Railroad Commission of Texas
Murl Smith - ExxonMobil Corporation
Robert Lawrence - EPA

4:10 - 4:30 **Environmental Issues Confronting Municipalities** (Smart Growth and Other Issues) - *Who Wants to be a Millionaire?*
Speaker: David Howe - City of Dallas

4:30 - 5:15 **Environmental Concerns in Transactions (Simulation)** - *Lets Make a Deal*
Speakers: Susan Zachos - Kelly, Hart & Hallman, PC
John Slavich - Guida, Slavich & Flores, PC

5:15 - 6:00 **Cash Bar Reception** - *The Price is Right*

FRIDAY, AUGUST 4, 2000

Moderator: Paul Sarahan - TNRCC

8:45 - 9:30 **Public Participation (Panel)** - (TNRCC and EPA Hearing Rules - Rule Making) - *The Gong Show*
Speakers: Vic McWherter - TNRCC
Bruce Jones - EPA
Jim Blackburn - Blackburn & Carter, PC

9:30 - 10:05 **Ethical Issues in an Environmental Practice** - *Who Do You Trust?*
Speaker: Lynne Liberato - Haynes and Boone, LLP

10:05 - 10:20 **Station Break**

Moderator: Ramon Dasch - TNRCC

10:20 - 11:00 **Environmental Manager Liability: A Case Study (Panel)** - *Truth or Consequences*
Speakers: Tom Kiehnhoff - Assistant U.S. Attorney, Eastern District
George Shipley - Baker Botts, LLP

11:00 - 11:20 **Environmental Manager Responsibilities** - *You Bet Your Life*
Speakers: Barbara A. Pederson - Dupont

11:20 - 12:00 **Enforcement Do's and Don'ts - (Simulation)** - *To Tell The Truth*
Speakers: Mike James - Occidental Chemical Corporation
Nathan Block - TNRCC

12:00 - 1:15 **Lunch** - *Name That Tuna*

Moderator: Manisha Patel - EPA

1:15 - 2:00 **Environmental Audits (Panel)** (Types - Issues) - *I've Got A Secret*
Speakers: Jerry Davenport - Shipley, Jennings & Champlin, PC
Julie Jumonville - Caldwell Engineering
Rick Lowerre - Henry, Lowerre, & Frederick

2:00 - 2:20 **Electric Utilities - Environmental Issues** - *What's My Line?*
Speaker: Catherine J. Webking - Attorney at Law

2:20 - 2:50 **Toxic Tort Issues** - *Joker's Wild*
Speaker: Jim Smith - Beirne, Maynard & Parsons, LLP

2:50 - 3:30 **Open Mike (Panel)** - *Hollywood Squares*
Moderator: John Baker - TNRCC
Speakers: Jim Phillips - TNRCC
Joe Vogel - TNRCC
Duncan Norton - TNRCC
Charles Sheehan - EPA

3:30 **Closing Remarks** - *Beat The Clock*

Ice Cream Sundaes - *The 100,000 Flavor Pyramid*

Registration Form

Reservations and Directions: (512) 478-4500

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The **PRE-REGISTRATION DEADLINE IS AUGUST 2, 2000.** Registration at the door will be an additional $25.00. Conference registration is on a first come first serve basis. Pre-registrants are guaranteed course materials, continental breakfast and lunch for both days

You may register by mail, using this form, or online at http://www.hayboo.com/calendr/superconference. In either case, payment must be by check, made payable to **Texas Environmental Superconference.** Please send checks and completed forms, if any, to:

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Austin, Texas 78701

If you have any questions, please contact Katherine Glass at (512) 867-8425 or *glassk@haynesboone.com.* For further information concerning the Environmental and Natural Resources Law Section of the State Bar of Texas, please visit http://www.texenrls.org/.

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_____ General - **$375.00** (400.00 at the door)
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more on back

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Dress: Casual

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Biography for Bill Jordan

Bill grew up Houston, Texas where he spent a number of summers employed with the oil industry. After completing high school, he went on to attend the University of Texas at Austin where he received his undergraduate degree in biology. Bill then completed a masters thesis on the evolution of flight behavior patterns of dragonflies at the University of Texas at Arlington. He then utilized his degrees to the fullest extent possible through employment at an auto parts store in Austin Texas. In order to have weekends off, Bill left his career in auto parts and joined the much more glamorous field of state government. Bill has been with the Texas Natural Resource Conservation Commission for about six years. He started in the Mobile Source Division and has since moved to his present position with the Office of Environmental Policy Analysis and Assessment Division. Bill works as the State Implementation Plan Team Leader.

Houston Information

BACKGROUND

The HGA ozone nonattainment area is classified as Severe-17 under the FCAA Amendments of 1990 (42 United States Code (USC) §§7401 et set.), and therefore is required to attain the 1-hour ozone standard of 0.12 ppm by November 15, 2007. The HGA area, defined by Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, and Waller Counties, has been working to develop a demonstration of attainment in accordance with 42 USC §7410. On January 4, 1995, the state submitted the first of its Post-1996 SIP revisions for HGA.

The January 1995 SIP consisted of UAM modeling for 1988 and 1990 base case episodes, adopted rules to achieve a 9% ROP reduction in VOCs, and a commitment schedule for the remaining ROP and attainment demonstration elements. At the same time, but in a separate action, the State of Texas filed for the temporary NO_x waiver allowed by §182(f) of the FCAA. The January 1995 SIP and the NO_x waiver were based on early base case episodes which marginally exhibited model performance in accordance with EPA modeling performance standards, but which had a limited data set as inputs to the model. In 1993 and 1994, the commission was engaged in an intensive data-gathering exercise known as the COAST study. The state believed that the enhanced EI, expanded ambient air quality and meteorological monitoring, and other elements would provide a more robust data set for modeling and other analysis, which would lead to modeling results that the commission could use to better understand the nature of the ozone air quality problem in the HGA area.

Around the same time as the 1995 submittal, EPA policy regarding SIP elements and time lines went through changes. Two national programs in particular resulted in changing deadlines and requirements. The first of these programs was the OTAG. This group grew out of a March 2, 1995 memo from Mary Nichols, former EPA Assistant Administrator for Air and Radiation, that allowed states to postpone completion of their attainment demonstrations until an assessment of the role of transported ozone and precursors had been completed for the eastern half of the nation, including the eastern portion of Texas. Texas participated in this study, and it has been concluded that Texas does not significantly contribute to ozone exceedances in the Northeastern U.S. The other major national initiative impacting the SIP planning process has been the revisions to the national ozone standard . EPA promulgated a final rule on July 18, 1997 changing the ozone standard to an 8-hour standard of 0.08 ppm. In November 1996, concurrent with the proposal of the standards, EPA proposed an IIP that it believed would help areas like HGA transition from the old to the new standard. In an attempt to avoid a significant delay in planning activities, Texas began to follow this guidance, and readjusted its modeling and SIP development time lines accordingly. When the new standard was published, EPA decided not to publish the IIP, and instead stated that, for areas currently exceeding the 1-hour ozone standard, that standard would continue to apply until the area attained. The FCAA requires that HGA attain the standard by November 15, 2007.

EPA issued revised draft guidance for areas such as HGA that do not attain the 1-hour ozone standard. The commission adopted on May 6, 1998 and submitted to EPA on May 19, 1998 a revision to the HGA SIP which contained the following elements in response to EPA's guidance:

- UAM modeling based on emissions projected from a 1993 baseline out to the 2007 attainment date;
- An estimate of the level of VOC and NO_x reductions necessary to achieve the 1-hour ozone standard by 2007;

- A list of control strategies that the state could implement to attain the 1-hour ozone standard;
- A schedule for completing the other required elements of the attainment demonstration;
- A revision to the Post-1996 9% ROP SIP that remedied a deficiency that EPA believed made the previous version of that SIP unapprovable; and
- Evidence that all measures and regulations required by Subpart 2 of Title I of the FCAA to control ozone and its precursors have been adopted and implemented, or are on an expeditious schedule to be adopted and implemented.

In November 1998, the SIP revision submitted to EPA in May 1998 became complete by operation of law. However, EPA stated that it could not approve the SIP until specific control strategies were modeled in the attainment demonstration. EPA specified a submittal date of November 15, 1999 for this modeling. In a letter to EPA dated January 5, 1999, the state committed to model two strategies showing attainment.

As the HGA modeling protocol evolved, the state eventually selected and modeled seven basic modeling scenarios. As part of this process, a group of HGA stakeholders worked closely with commission staff to identify local control strategies for the modeling. These local strategies are described in Chapter 3 under Scenarios III and VI. Some of the scenarios for which the stakeholders requested evaluation included options such as California type fuel and vehicle programs as well as an ASM-equivalent I/M program. Other scenarios incorporated the estimated reductions in emissions that were expected to be achieved throughout the modeling domain as a result of the implementation of several voluntary and mandatory statewide programs adopted or planned independently of the SIP. It should be made clear that the commission did not propose that any of these strategies be included in the ultimate control strategy submitted to EPA in 2000. The need for and effectiveness of any controls which may be implemented outside the 8-county area will be evaluated on a county by county basis.

The SIP revision was adopted by the commission on October 27, 1999 and submitted to EPA by November 15, 1999, and contained the following elements:

- Photochemical modeling of potential specific control strategies for attainment of the 1-hour ozone standard in the HGA area by the attainment date of November 15, 2007;
- An analysis of seven specific modeling scenarios reflecting various combinations of federal, state, and local controls in HGA. Additional scenarios H1 and H2 build upon Scenario VIf;
- Identification of the level of reductions of VOC and NO_x necessary to attain the 1-hour ozone standard by 2007;
- A 2007 mobile source budget for transportation conformity;
- Identification of specific source categories which, if controlled, could result in sufficient VOC and/or NO_x reductions to attain the standard;
- A schedule committing to submit by April 2000 an enforceable commitment to conduct a mid-course review; and
- A schedule committing to submit modeling and adopted rules in support of the attainment

demonstration by December 2000.

As the result of an agreed settlement between several environmental groups and EPA, in November 1999 EPA informed the state that an additional SIP revision was required in order to quantify additional potential reductions to fill the shortfall or "gap" needed for attainment. This "gap closure" SIP, submitted by the commission in April 2000, contained the following enforceable commitments by the state:

- To quantify the shortfall of NO_x reductions needed for attainment;
- To list and quantify potential control measures to meet the shortfall of NO_x reductions needed for attainment;
- To adopt the majority of the necessary rules for the HGA attainment demonstration by December 31, 2000, and to adopt the rest of the shortfall rules as expeditiously as practical, but no later than July 31, 2001;
- To submit a Post-99 ROP plan by December 31, 2000;
- To perform a mid-course review by May 1, 2004; and
- To perform modeling of mobile source emissions using MOBILE6, to revise the on-road mobile source budget as needed, and to submit the revised budget within 24 months of the model's release. In addition, if a conformity analysis is to be performed between 12 months and 24 months after the MOBILE6 release, the state will revise the MVEB so that the conformity analysis and the SIP MVEB are calculated on the same basis.

The development of the current attainment demonstration SIP for the HGA area has proved to be an extremely challenging effort, due to the large magnitude of reductions needed for attainment and the shortage of readily available control options. The emission reduction requirements included as part of this SIP revision represent substantial, intensive efforts on the part of stakeholder coalitions in the HGA area, in partnership with the commission. These coalitions, involving local governmental entities, elected officials, environmental groups, industry, consultants, and the public, as well as the commission and EPA, have worked diligently to identify and quantify control strategy measures for the HGA attainment demonstration.

In order for the state to have an approvable attainment demonstration, the EPA has indicated that the state must adopt those strategies modeled in the November 1999 SIP submittal, and then adopt sufficient measures to close the remaining gap in NO_x emissions. The HGA nonattainment area will need to ultimately reduce NO_x by more than 750 tons per day to reach attainment with the 1-hour ozone standard. In addition, a certain percentage of VOC reductions will also be required.

The current SIP revision contains rules and photochemical modeling analyses in support of the HGA ozone attainment demonstration. In addition, this SIP contains post-1999 ROP plans for the milestone years 2002 and 2005, and for the attainment year 2007. The SIP also contains commitments to implement further measures, if needed, in support of the HGA attainment demonstration, as well as a commitment to perform and submit a mid-course review. The current attainment demonstration SIP, containing adopted rules and other control measures necessary for attainment, will be submitted to EPA by December 31, 2000. Implementation of the rules and other control measures contained in this SIP revision will close the gap and achieve attainment of the 1-hour ozone standard in the HGA area by November 15, 2007, the date required for attainment.

HOUSTON/GALVESTON SIP
PROPOSED CONTROL STRATEGIES

CONTROL STRATEGY	BRIEF DESCRIPTION	AFFECTED AREA
Inspection/Maintenance	• Requires Acceleration Simulation Mode or equivalent testing as well as On-Board Diagnostics testing • Begins May 1, 2002 for Harris County • Begins May 1, 2003 for Brazoria, Fort Bend, Galveston, and Montgomery Counties • Begins May 1, 2004 for Chambers, Liberty, and Waller Counties	8 HGA Count
Construction Equipment Operating Restriction	• Establishes a restriction on the use of heavy duty diesel construction equipment from 6:00 a.m. - noon starting in April 2005 • Only applies during Daylight Savings Time each year (1st weekend in April thru last weekend in October) • Exempts wet concrete operations and emergency operations • Also provides an exemption from the rule if an alternative plan is submitted assuring equivalent emission reductions	8 HGA Count
Accelerated Purchase of Tier 2/Tier 3 Diesel Equipment	• Requires the early retirement of older equipment and purchase of newer, cleaner off-highway diesel equipment • Phased-in implementation beginning in December 2004 • Also provides an exemption from the rule if an alternative plan is submitted assuring equivalent emission reductions	8 HGA Count
Cleaner Diesel Fuel	• By May 1, 2002 the fuel will have improved aromatics and cetane for all on-highway sales statewide and for all on and off-highway sales in East/Central Texas • By May 1, 2004 sulfur will be reduced to 30 ppm in East/Central Texas for on and off-road fuel • By May 1, 2006 all on-highway fuel statewide will go to 15 ppm (equivalent to proposed federal rule) and off-highway fuel will go to 15 ppm in East/Central Texas	Statewide for highway fuel East/Central Texas for on off-highway f
Airport Ground Support Equipment	• Requires ground support equipment fleets to reduce emissions by 90% by 2005 • Phased-in implementation - 20%, 50%, 90%, in 2003, 2004, and 2005 respectively • Allows for the implementation of alternative emission reduction measures which produce equivalent NO_x reductions	Hobby, Bush Intercontinent and Ellington airports
Low Sulfur Gasoline	• Requires a low sulfur gasoline (15 parts per million) • Enhances emissions performance of newer cars • Begins May 1, 2004	East/Central Texas

California Spark-Ignition Engines	• Requires manufacturers to ensure that all affected large spark ignition (LSI) engines are certified to California LSI standards • Begins May 1, 2004 • Exempts: Agriculture and construction equipment under 175 hp, recreational equipment, stationary engines, marine vessels, and equipment on tracks	Statewide
Point Source NOx Controls	• Requires a wide variety of minor and major stationary sources to meet new emission specifications and other requirements in order to reduce NO_x emissions • Total NOx reductions required from these sources is 90% • Requires sources with a design capacity to emit 10 tons per year or greater emissions to participate in the Emissions Banking and Trading Program	8 HGA Count
VOC RACT	• Implements reasonably available control technology requirements for batch processes, bakeries, and offset lithographic printers	8 HGA Count
Residential and Commercial Air Conditioners	• Requires new units to reduce ozone by at least 70% and retain a minimum ozone reduction efficiency of 50% for 15 years • Begins January 1, 2002	East/Central Texas
Diesel Emulsion	• Requires retail on-highway diesel fuel sales for heavy-duty vehicles over 26,000 pounds to be diesel emulsion fuels • Requires off-highway diesel equipment over 175 horsepower to use diesel emulsion fuels • Begins May 1, 2004	8 HGA Count
NOx Reduction Systems	• Requires a reduction system for locally registered (8 HGA counties) on-highway pre-1997 diesel trucks over 26,000 pounds by May 1, 2004 • Requires a reduction system for all off-highway diesel equipment over 175 horsepower by May 1, 2004 • Requires a reduction system for all locally registered on-highway heavy duty pre-1997 gasoline powered trucks over 26,000 pounds by May 1, 2004	8 HGA Count
Vehicle Idling Restrictions	• Limits idling for all vehicles over 14,000 pounds to five consecutive minutes • Begins April 1, 2001 • Only applies from April 1 through October 31 each year	8 HGA Coun
Lawn Service Equipment Operating Restrictions	• Restricts the use of small gasoline equipment between the hours of 6:00 a.m. - noon starting in 2005 • Only applies April 1 through October 1 each year	8 HGA Coun
Speed Limit Reduction	• The speed limit on all roadways with a current maximum speed limit above 55 mph would be reduced to 55 mph • Starts May 1, 2002	8 HGA Cour

Transportation Control Measures	• SIP control strategy (no rule required) • Numerous projects have been identified by the Houston-Galveston Area Council for inclusion in the SIP such as traffic signalization and bicycle/pedestrian projects	8 HGA Count
Voluntary Mobile Emission Reductions	• SIP control strategy (no rule required) • Numerous projects have been identified by the Houston-Galveston Area Council for inclusion in the SIP such as telecommuting, bus fare promotions, alternative fuel programs, and ozone action days	8 HGA Count
Emissions Banking and Trading	• Creates overall NOx emissions cap • Implements emissions banking and trading program for flexibility in complying with the cap • Modifies the existing banking and trading program statewide to make it compatible with the allowance cap program in the Houston area • Includes mobile source trading	8 HGA Count for the emissi cap Statewide for emissions ban and trading modifications

Dallas/Fort Worth

BACKGROUND

The DFW area was classified as a moderate ozone nonattainment area in accordance with the FCAA Amendments of 1990. As a moderate nonattainment area, DFW was required to demonstrate attainment of the 1-hour ozone standard by November 15, 1996. A SIP was submitted based on a VOC-only strategy. Air quality data from the DFW area ambient air quality monitors from the years 1994-96 showed that the 1-hour NAAQS for ozone was exceeded more than one day per year over this three-year period.

As a result, the EPA reclassified the DFW area from moderate to serious effective March 20, 1998 for failing to monitor attainment of the 1-hour ozone standard by the November 1996 deadline. The EPA required that a serious area SIP revision addressing attainment of the standard be submitted by March 20, 1999. The photochemical modeling investigated the effectiveness of both VOC and NO_x reductions on reducing ground level ozone. The modeling results indicated that a combination of both NO_x and VOC reductions is most effective at reducing ozone levels in the DFW area. Previous modeling results submitted to the EPA in 1994 indicated that attainment of the standard could be reached by VOC reductions alone. The DFW area applied for and was granted a waiver from §182(f) of the FCAA regarding NO_x reductions on November 28, 1994. Because EPA's approval of this waiver was conditional should future photochemical modeling show that NO_x reductions contribute toward attainment in the DFW area, submittal of this modeling resulted in EPA rescinding the NO_x waiver and reinstating the NO_x requirements for DFW which was effective on June 21, 1999. A SIP was submitted to the EPA on March 18, 1999 and contained a 9% ROP target calculation and emission reductions toward satisfying EPA's requirement of reasonable further progress for the DFW four county nonattainment area for the years 1997-99. In addition, the SIP contained photochemical modeling showing the level of reductions needed to attain the standard by 1999. The modeling indicated that reductions of NO_x would be needed to attain the standard. Therefore, the following rules were developed and included in the SIP:

- RACT for NO_x
- Nonattainment NSR for NO_x
- Fix-ups from the change in the major source threshold for RACT for VOCs

The commission indicated to the EPA and the local area that, due to time constraints, the March 1999 SIP would not have the rules necessary to bring the DFW area into attainment by the November 1999 deadline and that a complete Attainment Demonstration would be submitted in the spring of 2000. As a result, the EPA issued a letter of findings that the February 1999 SIP was incomplete which triggered an 18-month sanctions clock effective May 13, 1999.

The attainment deadline for serious areas is November 15, 1999. Because of numerous 1-hour ozone exceedances in 1997, 1998, and 1999 it will not be possible for the DFW area to attain the standard by that deadline. There is mounting technical data which suggests that DFW is significantly impacted by transport and regional background levels of ozone. The reductions from the strategies needed for the HGA area and the regional rules discussed are a necessary and integral component in the strategy for DFW's attainment of the 1-hour ozone standard. The proposed SIP contains a modeling demonstration that shows that the air quality in the DFW area is influenced at times from the HGA area. This demonstration, if approved by the EPA, would allow EPA to determine that the area should not be bumped up from serious to severe under the conditions of a transport policy published in the *Federal Register* on July 16, 1998. The new attainment date for the DFW area would be no later than November 15, 2007, the attainment date for HGA.

The proposed SIP utilizes the photochemical modeling grown out to 2007 with modeled control strategy scenarios showing attainment of the standard. The proposed SIP also incorporates a package of rules that are being developed concurrently under separate rulemaking. The control strategies contained in these rules will be necessary to reduce ozone causing compounds so that attainment can be achieved by the target date. The proposed Attainment Demonstration SIP and associated rules will allow the DFW area to move forward toward attainment of the 1-hour ozone standard and will meet EPA guidance so that the area will not be sanctioned for failure to submit a required FCAA element.

An attainment date of 2007 for the DFW area would allow for the implementation of several federal mobile source programs that involve technology changes. Such programs include heavy duty diesel engines (on and off road), reformulated gasoline phase II, NLEV, Tier II automobile standards, reduced sulfur in gasoline, on-board diagnostics, and on-board vapor recovery. Because of the high percentage of mobile source emissions in the DFW emissions inventory, the implementation of these programs is crucial to the area's ability to attain the ozone standard. A 2007 attainment year would also allow for the reduction in statewide and continental transport of ozone and/or its precursor emissions from upwind sources.

In addition to relying on federal programs, the state is in the process of developing regional rules to control emissions that contribute to the formation of ground level ozone. Such rules include cleaner burning gasoline, stage I vapor recovery, implementation of permitting programs for grandfathered electric generating facilities, grandfathered non-electric generating facilities, and controls for major permitted stationary sources. Additional point source rules associated in this proposed SIP for the four-county DFW nonattainment area include Tier II control levels for NO_x RACT.

In order to develop local control strategy options to augment federal and state programs, the DFW area established a North Texas Clean Air Steering Committee made up of local elected officials and business leaders. Specific control strategies were identified for review by technical subcommittee members. In addition, the NCTCOG hired an environmental consultant to assist with the analysis and evaluation of control strategy options. The consultant was responsible for presenting the findings of the technical subcommittees to the NCTCOG air quality policy and steering committees for final approval prior to being submitted to the state.

The following are the control strategy elements associated with this SIP which are needed in order to get the DFW area into compliance with the 1-hour ozone standard by 2007:

- Federal & State measures to be implemented by 2007 (12 counties)

  - On-road mobile source standards:
    Federal Phase II reformulated gasoline (RFG)
    Tier II vehicle emission standards
    Federal low sulfur gasoline (30 ppm)
    National low emission vehicles (NLEV)
    Heavy-Duty diesel standards

  - Non-road mobile source standards:
    Lawn and garden equipment
    Tier III heavy-duty diesel equipment
    Locomotives
    Standards for compression ignition vehicles and equipment
    Standards for spark ignition vehicles and equipment

Recreational marine standards

- Point Sources:
  - SB 7 mandated that grandfathered EGFs in central and eastern Texas reduce emissions by 50% of 1997 levels
  - Sources identified as grandfathered were reduced by 30%, while sources identified as permitted were not reduced. Sources whose status could not be determined were reduced by the average (weighted) value of 13%. This is included as part of the Weight-of Evidence Analysis.
  - Emissions from EGFs in the remainder of the state are also to be reduced by 30%
  - In Oklahoma, Arkansas, Louisiana, Mississippi, and Florida, a reduction of 30% from 1996 emission levels was assumed for all point source NO_x to reflect national trends towards lowered emissions. In Georgia, Missouri, Kentucky and Tennessee, NO_x emissions were reduced by 59% from 1996 levels to reflect reductions expected under EPA's NO_x SIP Call. This is included as part of the Weight-of Evidence Analysis.

In addition, the following list contains the controls endorsed and recommended by the North Texas Clean Air Steering Committee. While the commission took all recommendations from the North Texas Clean Air Steering Committee very seriously, some control strategies have been modified from the Committee's recommendations due to technical and other constraints.

- Electric generating facilities reduced up to 88% with use of episodic control technologies
- Up to 50% NO_x reductions in Ellis County from controls on cement kilns
- ASM including VMAS with integrated OBD I/M test with increased enforcement
- Remote sensing to detect high emitting vehicles
- Vehicle Recycling
- Transportation control measures
- Travel Demand Management, such as vanpool, park and ride
- Accelerated purchase of Tier III heavy-duty (>50 hp) construction/mining diesel equipment
- A 4-hour ban (6am to 10am) on heavy-duty (>50 hp) diesel construction equipment between May 1 through October 31
- California Diesel
- Airport electrification standards and operations management with state or local control
- Voluntary non-road mobile emission reduction program
- Energy conservation efforts for buildings which includes 2000 International Energy Conservation Code (IECC), and low NO_x water heaters
- California large spark ignition (LSI) engines (> 25 hp)

- A 5 mph speed limit reduction from currently existing 70 and 65 mph posted limits

A complete description of the control strategies is presented in Chapter 6 of this SIP.

This SIP contains the following elements:

- Photochemical modeling of specific control strategies and future state and national rules for attainment of the 1-hour ozone standard in the DFW area by the attainment deadline of November 15, 2007.
- A modeling demonstration that shows that the air quality in the DFW area is influenced at times by transport from the HGA area.
- Identification of the level of reductions of VOC and NO_x emissions necessary to attain the 1-hour ozone standard by 2007.
- Control strategies developed by the State involving controls on stationary sources.
- Control strategies selected by the NCTCOG North Texas Clean Air Steering Committee.
- A 2007 mobile source budget for transportation conformity.

Beaumont/Port Arthur

The BPA ozone nonattainment area consists of Hardin, Jefferson, and Orange Counties. The BPA area is classified as moderate and, therefore, was required to attain the 1-hour ozone standard of 0.12 parts per million by November 15, 1996. The BPA area did not attain the standard by that date and also did not attain the standard by November 15, 1999, the attainment date for serious areas.

In determining the appropriate attainment date for an area, EPA may consider the effect of transport of ozone or its precursors from an upwind area which interferes with the downwind area's ability to attain. On July 16, 1998, EPA issued a guidance memorandum titled "Extension of Attainment Dates for Downwind Transport Areas." The guidance, referred to hereinafter as the "transport policy," provides a means for EPA to extend the attainment date for an area affected by transported air pollution, without reclassifying ("bumping up") the area to a higher classification. The transport policy was published in the March 25, 1999 *Federal Register* with a request for comments on its interpretation. The transport policy is particularly relevant to BPA, which is downwind of the HGA area and is affected by transport from HGA. If EPA approved such a determination for BPA, the area would have until no later than November 15, 2007, the attainment date for HGA, to attain the 1-hour ozone standard.

In order to receive EPA approval under the transport policy, an area must meet the following requirements:

7. Be identified as an affected transport area;
8. Submit an approvable attainment demonstration with any necessary, adopted local measures, showing attainment of the 1-hour ozone standard no later than the date that reductions are achieved in the upwind area;
9. Adopt all applicable local measures under the area's current classification, as well as any additional measures necessary to show attainment; and
10. Implement all adopted measures as expeditiously as practicable, but no later than the date that reductions are achieved in the upwind area.

In a letter to the Governor dated October 30, 1998, the EPA Region 6 office in Dallas informed the state of the criteria under which EPA would consider extension of BPA's attainment date under the transport policy. The Governor replied to EPA in a letter dated December 21, 1998, in which the state committed to work with EPA to submit the necessary SIP revisions to obtain approval under the transport policy.

On April 16, 1999, EPA proposed in the *Federal Register* to allow BPA to take advantage of the transport policy if an approvable attainment demonstration is submitted by November 15, 1999. In a letter to the agency dated May 21, 1999, EPA stated that unless the state modeled a second ozone episode in which BPA's emissions, not HGA's transported emissions, predominantly influence BPA air quality, EPA would likely not approve the attainment date extension, resulting in bump-up to the serious classification. As a result, the agency conducted modeling of an ozone episode (September 8-11, 1993) in which BPA's locally-generated emissions predominate. EPA stated that "reasonable" point source NO_x reductions must be modeled, and appropriate rules adopted, for the attainment demonstration to be approvable. The agency modeled "Tier I" reductions, which are pre-combustion controls such as low-NO_x burners and flue gas recirculation, after EPA confirmed that this level of control would be acceptable for an approvable attainment demonstration SIP. This modeling predicted maximum peak ozone values of 131 ppb in BPA, compared to the federal attainment standard of 125 ppb. Although the modeled ozone exceeds the standard, use of WOE techniques demonstrates attainment of the 1-hour ozone standard in BPA.

The first attainment demonstration SIP for BPA was adopted by the commission on October 27, 1999 and submitted to EPA by November 15, 1999. That SIP contained modeling for both transport and non-transport episodes, two VOC reasonably available control technology (RACT) rules, and a NO_x rule for lean-burn engines (Phase I).

The current SIP contains modeling and additional Phase II NO_x rules for the BPA attainment demonstration. Extensive discussions have been held with BPA industries and local elected officials, in addition to EPA Region 6 staff, concerning the elements of an approvable attainment demonstration for BPA. Because the current modeling analysis comes close to, but does not actually show, attainment, the current attainment demonstration relies on WOE arguments. This final attainment demonstration SIP revision will be submitted to EPA in late April, 2000.

REQUIRED CONTROL STRATEGY ELEMENTS BPA

FCAA, §182(f) requires that NO_x RACT be applied to all major sources of NO_x in ozone nonattainment areas classified moderate and above. This section of the FCAA states that the requirements for major stationary sources of VOC shall also apply to major stationary sources of NO_x. However, in contrast to VOC RACT, neither the FCAA nor the EPA specify presumptive NO_x RACT limits in the form of CTGs. As required by the FCAA, §183(c), the EPA instead issued ACT documents for categories of stationary sources of VOC and NO_x that emit more than 25 tons per year. The NO_x ACTs were issued for nine NO_x point source categories: nitric acid and adipic acid manufacturing plants, stationary gas turbines, process heaters, internal combustion engines, utility boilers, cement manufacturing, iron and steel mills, glass manufacturing, and industrial/commercial/institutional boilers. These documents identify NO_x control technologies and costs, but do not establish presumptive RACT levels.

In response to the FCAA requirements, the commission adopted NO_x RACT rules effective June 9, 1993, in Chapter 117, "Control of Air Pollution from Nitrogen Compounds." These requirements apply to electric utility boilers, industrial boilers and process heaters, gas turbines, rich-burn stationary gas-fired internal combustion engines, nitric acid plants, and adipic acid plants in the BPA area.

On October 27, 1999, the commission adopted revisions to 30 TAC Chapter 117 by adding an emission limit of 3 g NO_x/hp-hr for gas-fired, lean-burn stationary internal combustion engines rated 300 hp or greater. An analysis of the agency's recent emissions inventory data indicates that about 27 lean-burn engines, operated at five major sources of NO_x in the BPA area, are required to reduce NO_x emissions under the adopted emission limit. The existing Chapter 117 exemptions for rich-burn engines apply to lean-burn engines as well. These exemptions include the following: engines that are employed in research, testing, emergency, firefighting, or agricultural uses (among others), or that are demonstrated to operate less than 850 hours per year. The adopted rule sets an expeditious compliance date of November 15, 2001, or approximately two years after the effective date of the rule. The commission estimates that this rule will achieve NO_x reductions of 6.90 tpod below 1997 levels, or expressed as reductions below the projected 2007 levels, 6.80 tpod. The percent reduction is calculated by subtracting the 3 g NO_x/hp-hr emission limit from the emission factors, in g NO_x/hp-hr, used in the 1997 emissions inventory.

PHASE I RULE MAKING

The October 27, 1999 SIP revision represents "Phase I" of the state's NO_x rulemaking activities for the BPA attainment demonstration. As part of that SIP revision, adopted VOC rules for batch process and industrial wastewater sources and NO_x rules for lean-burn engines were submitted to EPA by November 15, 1999. The Phase I NO_x rules achieve reductions of 6.80 tpod from the projected BPA 2007 NO_x point

source emissions inventory. Table 6.1-1 provides a summary of NO_x reductions to be achieved by 2000, including reductions obtained from Phase I rules.

NO_x Reduction Estimates BPA
(includes Phase I and Phase II rules)

Emissions Inventory	1990	Percent of 1990 Total	Growth	2007	Percent of 2007 Total
Area sources	1.44	0.5%	-13.2%	1.25	0.5%
Point sources	221.01	78.1%	-44.8%	170.51	50.2%
On-road mobile sources	27.15	9.6%	31.2%	35.61	14.6%
Non-road mobile sources	33.32	11.8%	152.7%	84.21	34.6%
TOTALS	**282.92**		**-14.1%**	**243.13**	

EPA-ISSUED RULES	2007 Projected tpod	Reduction, tpod
FMVCP, Tier I, NLEV, on-road HDD	35.61	6.40
Locomotive engines	5.24	1.89
Non-road HDD	28.42	7.73
Small engines	0.49	-0.48
Recreational marine engines	0.13	-0.10
Subtotal	68.69	15.44

TNRCC-ISSUED RULES

FCAA NO_x RACT:
Rich-burn engines (compliance date 11/99)

Attainment Demonstration NO_x Rules:
Electric utility boilers
Industrial boilers
Industrial process heaters
Gas turbines
Lean-burn engines

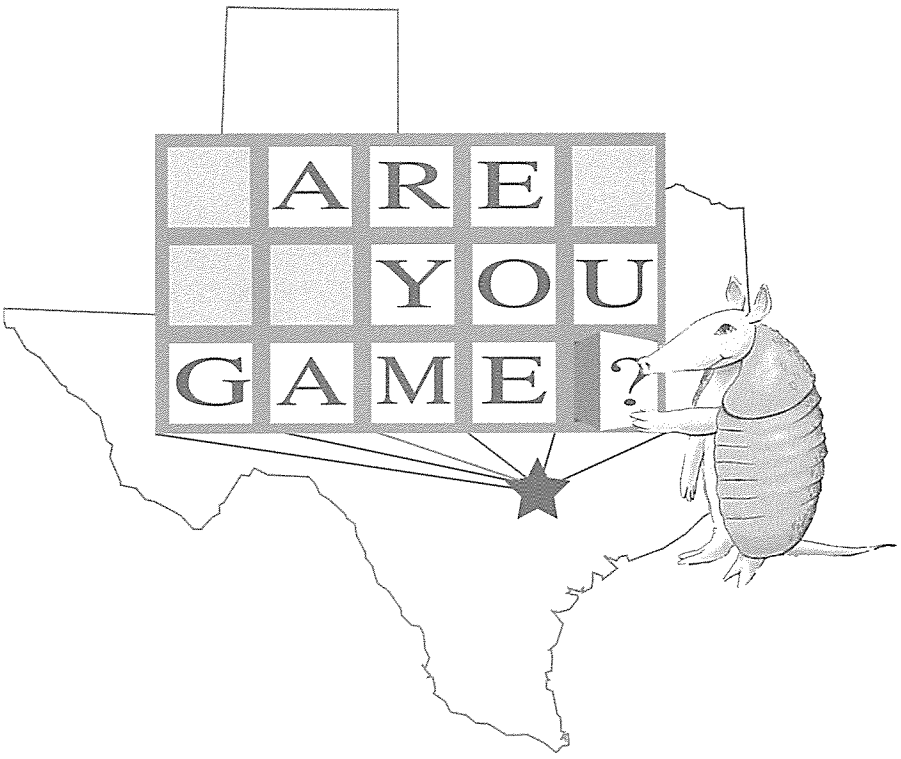
Subtotal	**170.51**	**75.09**
TOTAL	**240.40**	**90.53**

PHASE II RULEMAKING

This strategy represents "Phase II" of the state's NO_x rulemaking activities for the BPA attainment demonstration. The adopted "Phase I" rules, for lean-burn engines in BPA, and a concurrent SIP revision, were submitted to EPA on November 12, 1999. The state committed in the SIP to develop additional NO_x rules as needed for attainment in BPA. These "Phase II" rules needed for attainment will be submitted to EPA in April, 2000.

This strategy applies to major stationary sources of NO_x in BPA. The adopted NO_x emission limit of 0.10 lb NO_x/MMBtu for the five electric utility power boilers in BPA represents approximately a 50% reduction in emissions from this source category. The adopted NO_x emission limit of 0.10 lb NO_x/MMBtu for industrial boilers and 0.08 lb NO_x/MMBtu for process heaters requires four refineries and 15 chemical plants which are major sources of NO_x in BPA to reduce their total NO_x by approximately 20%.

The emission reductions necessary for the BPA attainment demonstration SIP are based on the modeling episode from September 6-11, 1993, and the controlling day, September 10, 1993. The control case modeling reflects a point source NO_x reduction of roughly 40%. The commission believes that the modeled point source BPA NO_x rules, coupled with numerous additional reductions, including on-road and non-road reductions within the area (identified in Table 6.1-1), and reductions in all categories outside the area, and the design value calculations in the SIP being proposed for public hearing concurrently with these proposed rules, demonstrate that BPA will attain the 1-hour ozone standard by 2007.


ARE
YOU
GAME ?

LISA USELTON DYAR

Lisa Dyar is a Senior Attorney with the Texas Natural Resource Conservation Commission's Litigation Division where she practices environmental and administrative law representing the agency's enforcement programs. She has worked primarily with air quality cases and has negotiated a large number of enforcement agreements during her employment with the TNRCC. Through this work, she has been recognized as an expert on upset/maintenance, fugitive emissions, BACT, and unauthorized emissions issues. Her practice has also included intensive involvement in enforcement-related legislative activities with the Texas Legislature. Ms. Dyar earned her J.D. in 1993 from the University of Texas School of Law, and her B.A., in 1990 from the University of Texas.

JEOPARDY:UPSET/MAINTENANCE EVENTS

I. INTRODUCTION

Purpose of the upset/maintenance rules: to specify when and how unauthorized emissions are recorded and reported, and to establish the criteria by which exemptions may be granted.

II. RULEMAKING

- A. Basic Review of How the Texas Rule Operates
- B. Highlights of 2000 Rulemaking Process
  1. June 29, 2000 Adoption
  2. EPA Participation and Policy
- C. Summary of Changes from 2000 Rulemaking
  1. Texas-specific substances added to the 5,000 pound RQ list.
  2. 5,000 pound RQ applies to "all isomers."
  3. Cause of upset or reason for maintenance, startup or shutdown.
  4. Compound-descriptive type of individually-listed compounds or mixtures of air contaminants for all upset/maintenance events, not just those that result in a release at or above a reportable quantity.
  5. Addition of final record requirement for all U/M events at or above an RQ to be submitted to TNRCC no later than two weeks after the end of an event when information differs from 24-hour notification.
  6. Established more detailed criteria for determining when emissions from upsets, maintenance, startup and shutdown events are exempt.
  7. Clearly placed the burden of proof on the owner or operator to demonstrate that unauthorized emissions from an upset were unavoidable.

III. AGENCY INITIATIVES

- A. TNRCC Upset/Maintenance Program Implementation Plan
  1. Increased attention to reviewing and responding to upset/maintenance events to reduce emissions
  2. Rules & Tools
- B. EPA Region VI Episodic Release Initiative
  1. Voluntary cooperative effort to exchange information about causes and successful application of corrective efforts.
  2. Development of "best practices" that can be shared with other companies.

IV. ENFORCEMENT RESPONSE

- A. Case-by-case review of upset/maintenance events
- B. Unauthorized emissions determined not exempt
- C. Burden of proof on the owner or operator

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Professional History

Following graduation from law school and completion of two judicial clerkships, she joined Wood, Boykin and Wolter in Corpus Christi, where she practiced in the fields of commercial litigation, bankruptcy and creditors' rights for 16 years. In 1993, she entered the LL.M. program at the University of Houston Law Center, earning her LL.M. in Environmental Law that same year. She joined the Office of Legal Services of the TNRCC as a staff attorney, becoming Senior Attorney for Water Quality and Water Quantity in 1996 and Director of the Environmental Law Division in August of 1998.

Water Quality Issues:
The Newlywed Game

Margaret Hoffman*

With the long-awaited delegation of the National Pollutant Discharge Elimination System (NPDES) from EPA to TNRCC, one of the most extended unconsummated regulatory relationships in history finally reached the altar. As everybody who has ever been married knows, the ensuing, unfolding bilateral enterprise is more complex, and just bigger, than the parties expected. Also as is usual in these situations, the reasons for the expansion of expectations is that so much is involved. NPDES is a permitting system for point source discharges of pollutants into surface water, but it doesn't come unaccompanied into the home of its recipient. A full family of inlaws is the prize; chief among them in the current water quality family is the mother-in-law of all programs—TMDLs.

TOTAL MAXIMUM DAILY LOADS (TMDLS)

The Clean Water Act's (CWA) primary goal is ecological restoration: "the objective of this chapter is to restore and maintain the chemical, physical and biological integrity of the nation's waters."[1] Two approaches were originally incorporated to protect and restore water quality impacted by point sources of pollutants: the technology-based approach, which aims to reduce pollution as much as is possible by identifying and requiring the best available treatment technology, and a water quality-based approach, which strives to reduce pollutant loading as much as necessary to reach specific numeric and narrative standards deemed appropriate to protect aquatic life, human health, and the environment.[2] Of the two approaches, the technology-based approach is often easier to define, and so has thus far received more financial investment and been more widely implemented.[3] Fifteen years after the original adoption of the CWA, Congress added a third approach limited to nonpoint source management, reflecting the realization that nonpoint sources of pollution require increased attention in order for the goals of the CWA to be met in all waters. Section 319 of the Act sets a more flexible goal than the sections relating to point source regulation, and it also provides for more flexibility in attaining it.

EPA has used the term "watershed management" to characterize a number of programs including waste load allocations pursuant to CWA §303, watershed-wide permitting in the point source stormwater management program, the Clean Lakes Program, EPA-funded studies of point/nonpoint source pollution allowance trading, funding of state nonpoint source control programs under CWA §319 and the National

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1 Clean Water Act §101, 33 U.S.C. §1311(a) (1998).

2 Clean Water Act §301. *Compare* §302 *with* §§304 and 306.

3 Adler, Robert W., *Addressing Barriers to Watershed Protection*, 25 ENVTL L. at 1038.

Estuary Program. EPA has had difficulty integrating these programs into a single national mandate, at least partly because EPA has regulatory jurisdiction over some programs and not over others.[4] This problem became critical for EPA in the 1990s, when litigation was brought or threatened against it in over 30 states on the basis that EPA had failed to perform its duties under §303 of the CWA to list impaired waters and create Total Maximum Daily Loads (TMDLs) where states had not done so.[5] Since congressional action to confer this missing jurisdiction has not been forthcoming, EPA at first creatively used its existing TMDL regulations, and now has creatively amended them, to give itself broad new authority over state water quality programs. This new federal authority will be exercised under the mantle of overseeing 303(d) listing, TMDL development and administration of the NPDES, the state-operated federal permitting program for point sources of pollutants.[6] The controversial rules have intensified debate not only about whether the CWA gives EPA the legal authority to so boldly expand its direct jurisdiction or the degree of its oversight of state water quality management, but also about whether a detailed, uniform and mandatory national model is really compatible with the flexibility inherent in a watershed-by-watershed approach.[7]

Water Quality Standards and TMDLs

The cornerstone of all CWA and Texas Water Code water quality management is state water quality standards. Section 303 of the CWA requires states to set them, but does not define what a water quality standard is. In regulations, EPA has defined a water quality standard as the combination of a designated use and the criteria necessary to attain and maintain that use.[8] A water quality standard consists of those two parts, plus an antidegradation policy.[9] Following federal and state law, TNRCC sets water quality standards for the entire state by rules that are revised as appropriate and readopted at least every three years.[10] A water quality standard defines the water quality goals of a body of water by prescribing the uses for which the water is to

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4 William Goldfarb, *Watershed Management: Slogan or Solution?*, 21 ENVTL AFF. 483, 491-92 (1994).

5 See Lennard and Chen, "TMDL Litigation Update," CLE International, November 1999. TMDL litigation has been so extensive and of such a degree of interest, EPA now maintains a Web site devoted to it: http://www.epa.gov/owow/tmdl/lawsuit1.html.

6 Federal Register Vol. 65, No. 135 at pp. 43585 - 43670 (July 13,2000). The rules were proposed in August 1999 and inspired extensive negative comments from state and local authorities, industrial groups and utilities. Over 30,000 comments were received on the proposals, and adoption of the final rules was accomplished as a procedural coup to circumvent congressional action to prevent it.

7 Federalism, in its traditional sense, was recently endorsed by President Clinton in an executive order that requires federal agencies, whenever possible, to avoid rulemaking that preempts state authority and to consult with states before doing so: Executive Order 13132, 64 FR 43255, 43256 (August 10, 1999). EPA has expressed reservations about the wisdom of the President's Order.

8 40 CFR §§130.2(d), 131.3(i).

9 40 CFR §131.6.

10 Texas Water Quality Standards are contained in Chapter 307 of Title 30, Texas Administrative Code. See also TEX. WATER CODE §26.023.

be fit and by setting the criteria necessary to support those uses. Criteria are either numeric–a limit on the amount of a certain pollutant that may be contained in a quantity of water–or narrative–a prohibition on a certain condition in the water, such as color, odor or turbidity.

Standards serve at least two purposes. They not only establish the goal for water conditions, they also serve as the basis for water quality based regulatory and nonregulatory control of pollutants beyond the technology based levels of treatment required by sections 301 and 306 of the CWA. Wastewater discharge permits, best management practices for nonpoint sources, water quality monitoring, assessment and planning and TMDLs are all part of a single effort, which is to attain and maintain water quality standards.

The New Basics of TMDLs

As both the states and EPA have been rediscovering, the CWA does, in fact, create the blueprint for an integrated management program for watershed ecosystems.[11] Sections 303 and 319 create regulatory and nonregulatory approaches for point and nonpoint sources that emphasize attainment of water quality standards rather than technology. Section 319 was added to the CWA to address nonpoint source (NPS) management programs. Under §319, states prepare an annual report identifying waters not meeting water quality standards because of nonpoint source pollution, identifying the sources of that pollution, identifying BMPs for controlling these sources and describing programs for their control. States must have an EPA-approved management program for reducing pollution from nonpoint sources.[12] The programs are to be developed and implemented on a watershed-by-watershed basis to the maximum extent practicable.

Under §303(d), states identify waters for which technology-based effluent limitations on point sources have not been stringent enough to achieve water quality standards, and then establish the total amount of each pollutant of concern that the water can receive daily, set at the level necessary to achieve water quality standards for each waterbody identified. Under rules currently in effect, but soon to be superceded, states submit their "303(d) lists" of water quality impaired waterbodies biannually for EPA review and approval, with priority ranking according to the severity of the pollution and the uses of the waters.[13] A TMDL must be developed for each pollutant for which each body of water appears on the list.[14] If approved by EPA, each TMDL is incorporated into the state's Continuing Planning Process under §303(e) and used to calculate watershed waste load allocations to be incorporated into a watershed plan that includes individual water quality-based permit limitations.[15]

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11 Compare, for example, §303, which requires states to inventory waters that are not meeting water quality standards and to create daily load allocations for them, with §208, which requires the state water quality management plan to include those load allocations.

12 33 U.S.C. §1329(b) (1998).

13 33 U.S.C. §303(d)(1); 40 CFR §130.7(d). These sections were modified in amendments adopted as final rules on July 13, 2000.

14 33 U.S.C. §303(d)(1).

15 40 C.F.R. §130.2-6. Section 130.2, Definitions, was substantially and substantively changed in the amendments adopted on July 13, 2000.

Eager to remedy its perceived past failures, EPA in recent years seized upon §303(d) as a vehicle through which to configure state watershed management programs into a uniform, highly regulatory system prescribed by EPA. With actual or threatened litigation as the background, EPA encouraged states to agree to abbreviated schedules for development of TMDLs and of TMDL implementation plans. Using the same tools of persuasion, EPA convinced states to list so-called "threatened" waters in addition to impaired waters described in §303(d) and to include waterbodies impaired only by nonpoint sources in their 303(d) lists.

Some of these tactics may achieve for some states the desired result of avoiding judicially imposed TMDL development schedules and judicially required EPA promulgation of 303(d) lists and TMDLs. Recently, in a suit in which the plaintiffs sought to compel EPA to promulgate TMDLS for the state of Oklahoma, the court granted EPA's summary judgment motion[16] based on the recommendation of the magistrate. The recommendation was based largely on two factors: Oklahoma had entered into a memorandum of understanding with EPA committing to establishing TMDLs for all segments on its 1998 303(d) list by 2010, and it had actually completed, and EPA had approved, 29 TMDLs before suit was filed and an additional 30 thereafter. In effect the magistrate held that even though a state may have failed for years to perform its §303(d) obligations, once it takes on those duties and actually produces EPA-approved lists and TMDLs the prior deficiencies are cured. Consequently, EPA has no obligation to assume performance of those responsibilities.[17]

EPA's judicially-inspired eagerness resulted in the proposal and adoption of the new regulations for 303(d) lists, TMDL development and implementation, and NPDES permitting.[18] As adopted, the rules delete some of the most objected-to features of the proposal, but they also codify much of the controversial guidance EPA has heretofore encouraged states to follow, as well as conferring on EPA some authority it has not previously claimed under the auspices of the CWA, even in its most expansive guidance.[19] For example, there are new definitions that substantively add to the CWA provisions:

- They revise the definition of TMDL to include an implementation plan, thereby not only adding the requirement that the state develop a plan, but also giving EPA the power to disapprove the

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16 *Hayes v. Browner*, 2000 U.S. Dist. LEXIS 5392 (N.D. Okla. Jan. 26, 2000) (adopted by *Hayes v. Browner,* 5393 (N.D. Okla. March 30, 2000)).

17 *Id* at *35. Compare, however, the Special Master's report adopted by the court in *Sierra Club v. Clifford,* 1998 U.S. Dist. LEXIS 16031 (E.D. La. June 16, 1998) (which adopts Order of *Sierra Club v. Clifford,* 1998 U.S. Dist. LEXIS 15841, 47 ENV'T REP. CAS. [BNA] 1417 (E.D. La. Sept. 21, 1998)) in which the opposite result was reached on similar facts. The key distinction was one of statute. The *Hayes* suit was brought under the citizen suit provisions of the CWA, which must be based on the failure of EPA to perform a nondiscretionary duty, while the plaintiffs in *Sierra Club* also attacked EPA's actions and non-actions as arbitrary and capricious under the federal Administrative Procedure Act. They prevailed, at least in avoiding a summary judgment, on the APA claims.

18 The proposals were published in Federal Register Vol. 64, No. 162 at pp. 46012 and 46058, respectively (August 23, 1999).

19 A copy of EPA's factsheet summarizing the adopted rules and their departures from the proposal is Appendix A to this paper.

TMDL because the implementation plan doesn't fit EPA's design. The result is that EPA would then establish both the daily load and the means for achieving it, within 30 days after disapproving the state submission.[20]

- They add definitions of impaired waterbody, pollution, pollutant, reasonable assurance and waterbody to codify EPA's existing guidance and, in the case of "reasonable assurance," to introduce a term foreign to the CWA. In one interesting example of peremptory reasoning, EPA proposed adopting a definition of "pollutant" that embellished the CWA definition to incorporate contaminants identified under the Safe Drinking Water Act. In response to comments that it might not have the legal authority to add elements to a statutory definition, EPA decided to omit the addition, but notes in its preamble "However, EPA interprets the CWA definition of pollutant to include, in most cases, drinking water contaminants that are regulated under ... the Safe Drinking Water Act."

- The definition of "load allocation" is clarified to expressly state that it must include pollutants from storm water runoff, groundwater, air deposition and all other natural and man-induced nonpoint sources. Correspondingly, "wasteload allocation" includes only point sources that are subject to permitting under the NPDES.

The new rules establish a more expansive 303(d) list and a more closely regulated listing regimen:

- An "impaired waterbody" is one where, regardless of the results of known measures of water content and chemistry, biological data show it does not attain and maintain water quality–that is, designated uses–regardless of whether the source of the impairment is known. According to the preamble "attain and maintain" means the waterbody must consistently continue to meet water quality throughout the waterbody. All impaired waterbodies must be listed.

- As newly revamped, the "list" includes four parts, only one of which requires TMDL development:

  1. Part 1 is the traditional or statutory list; added is the requirement that states submit with it a "prioritized schedule," newly subject to EPA disapproval. Part 1 waters must get TMDLs on the approved schedule. Priorities are no longer expressed as high, medium and low.

  2. Part 2 is waterbodies impaired by pollution but not by pollutants. No TMDL required. To illustrate the difference, EPA gives the following examples of waterbodies that would not be on Part 2: "The discharge of copper from an NPDES regulated facility is the introduction of a pollutant into a waterbody. To the extent that this pollutant alters the chemical or biological integrity of the waterbody, it is also an example of pollution. ... Similarly, landscape actions that result in the introduction of sediment into a waterbody constitute pollution when that sediment (which is a pollutant) results in an alteration of the chemical, physical or biological integrity of the waterbody." Examples of Part 2 waters are given as those imparied by habitat alteration, impaired biologic communities and

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20 40 CFR §130.34.

flow alterations.

3. Part 3 consists of segments for which a TMDL has been approved, but which has not achieved water quality standards.

4. Part 4 includes impaired waters that the state demonstrates will achieve standards soon. If standards are not attained in a Part 4 segment by the time the next list is due, the segment moves to Part 1.

- Lists are due every 4 years, the first one under the new rules on April 1, 2002. There is a procedure for amending lists in the interim to add or delete segments, subject of course to EPA disapproval. EPA notes that "these modifications to the list may be time consuming."

- Unless EPA approves a different schedule, the TMDL must be completed within 10 years from the date a segment is listed on Part 1.

The TMDL itself will be more complicated, including 11 mandatory elements, notably an implementation plan detailed as prescribed by EPA in addition to the allocation of load and wasteload, specific effluent limits for all point sources, and allowance for future growth.[21] The implementation plan must contain "reasonable assurance" that standards will be attained by issuing NPDES permits and amendments "as expeditiously as practicable" for point sources and by nonpoint source management protocols meeting a four-part test: "they specifically apply to the pollutant(s) and the waterbody for which the TMDL is being established; they will be implemented as expeditiously as practicable; they will be accomplished through reliable and effective delivery mechanisms; and they will be supported by adequate water quality funding."[22] The implementation plan will be based on the goal of water quality standards to be attained and maintained within 10 years and for controls placed on nonpoint runoff within 5 years after the plan is approved.

Some new features proposed by EPA were not adopted. The proposed public petition process for listing and implementation plans, mandatory listing of "threatened" waters, mandatory priority status for segments with endangered species or drinking water sources, requirements for "offsets" from other permittees as a condition of issuance of new permits prior to TMDL issuance and EPA authority to "designate" agricultural and silvicultural sources as point sources and require them to obtain NPDES permits were dropped from the final rule.

However, the concurrent amendments to the NPDES regulations do require that permits issued in listed segments where a TMDL has not been established must include a explanation of how permit limits were derived for all pollutants for which the waterbody is impaired. Presumably, EPA s means to make this requirement for permits in all listed waters, not just those on the Part 1 list. Also, EPA did adopt the controversial proposal giving itself the opportunity to partially revoke NPDES delegation by withdrawing the state's authority to administratively continue expired permits in listed segments under some circumstances. This provision was added to 40 CFR 123.44, "EPA review of and objections to State

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21 40 CFR 130.32 (July 13, 2000).

22 40 CFR 130.2(p) (July 13, 2000).

permits," reflecting EPA's contention that it merely clarifies authority EPA has always had under the CWA to veto a proposed state-issued permit if it violates NPDES program requirements.

These new regulations are aimed at all aspects of the listing, TMDL and permitting processes, but probably most emphatically at the management of nonpoint sources, that explicit authority that has so exasperatingly eluded EPA's grasp. Adoption may have been delayed until after the decision in *Pronsolino v. Marcus*,[23] in which a federal district court in California decided a direct challenge to EPA's listing a waterbody in California that is impaired solely by nonpoint runoff. Judge William Alsup answered the question that all waters are subject to §303(d), regardless of the source of pollution. Referring to the legislative intent of the CWA with regard to 303(d) lists and TMDLs, he wrote:

> No substandard river or water was immune by reason of its sources of pollution. The process was made just as mandatory for wild but ruined rivers as it was for urban-blighted waters.[24]

Most, if not all, states had already determined to list nonpoint impaired waters, either on their own initiative or after persuasion by EPA. The *Pronsolino* opinion continues in interesting fashion, in dictum that has inspired comment from opponents of the new regulations:

> Once the TMDLs were prepared, they were intended to be applied to point and nonpoint sources differently. As to point sources, the TMDLs were to be taken into account in further restricting effluent, under NPDES permits as authorized by Section 301(b)(1)(C). As to nonpoint sources of pollution, the TMDLs were to be incorporated into the continuing planning processes of the states. This conferred a large degree of discretion on the states in how and to what extent to implement the TMDLs for nonpoint sources. A state could even refuse to implement a TMDL, eschewing best management practices if it wished, although to do so might provoke EPA to curtail or to deny grant money to the state.[25]

Texas Statutes and Rules

Permit-by-Basin Rule

Within the context of the TMDL regulations, the combined NPDES and state permitting system and state and federal nonpoint source programs, TNRCC has fashioned its own comprehensive watershed management plan. Although much of the nation's remaining water quality shortfall has been attributed to nonpoint source runoff, there are still waterbodies that do not meet water quality standards due at least in part to point source discharges. NPDES regulations provide delegated states the impetus to implement

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23 *Ponsolino v. Marcus*, 91 F. Supp. 2d 1337, 2000 U.S. Dist. LEXIS 4267, 50 ERC (BNA) 1409 (N.D. Cal. 2000).

24 *Id.* at 1356.

25 *Id.*

water quality-based permitting in state-administered NPDES programs.[26] Watershed-based planning facilitates creation of water quality-based permit limits. Under a watershed approach, fine tuning permit parameters for pollutants of concern in a particular watershed can be accomplished as appropriate in conjunction with strategies to prevent runoff.[27] TNRCC's TMDL strategy incorporates this design for listed waters and TMDL implementation plans.[28]

Texas has adopted basin permitting for point sources. The permit-by-basin rule was adopted by TNRCC on January 3, 1995.[29] The rule requires comprehensive evaluation of the combined effects of multiple permitted discharges on water quality within each of 23 designated watersheds or basins.[30] To the greatest practicable extent, the TNRCC requires that all industrial and domestic wastewater permits within a single river basin or watershed have the same expiration date. This rule applies to all permit applications—new, amended, and renewed—received on or after the effective date of the rule. The rule allows the TNRCC to balance its permit workload annually over a five-year period, and brings greater consistency to the permitting process.[31]

The rule reflects the hydrologic connection between major river basins and coastal basins. Permits will be issued to coincide with the implementation phase of the five-year watershed management schedule. The TNRCC may, if necessary to achieve the watershed cycle, issue a permit for less than five years, but never for less than two years. Recognizing the need for flexibility during transition to the five-year cycle, permit schedules will be changed to reduce the burden on permittees. As provided under the rule, when appropriate, permit expiration dates have been be changed to accommodate a three-year compliance period before water quality-based limits become effective.[32]

TMDL Implementation in Texas

TNRCC has devised several methods for providing detailed information about the status of water quality around the state, including the State of Texas Water Quality Inventory Report, nonpoint source

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26 Notable is 40 CFR §122.4(i), which prohibits issuance of a NPDES permit for a new discharge that would result in exceedance of a TMDL.

27 WATER QUALITY 2000, Water Env't Fed'n, A National Water Agenda for the 21st Century, Final Report 37 (1992).

28 TEXAS NATURAL RESOURCE CONSERVATION COMMISSION, CONTINUING PLANNING PROCESS, Series 6.

29 30 TEX. ADMIN. CODE §305.71.

30 See 30 TAC 305.71(b) for basins and expiration dates. See also TEXAS NATURAL RESOURCE CONSERVATION COMMISSION, THE STATEWIDE WATERSHED MANAGEMENT APPROACH FOR TEXAS: THE TNRCC'S FRAMEWORK FOR IMPLEMENTING WATER QUALITY MANAGEMENT (1997) at 6-1 – 6-4 for discussion of basin management schedule.

31 TEXAS NATURAL RESOURCE CONSERVATION COMMISSION, THE STATEWIDE WATERSHED MANAGEMENT APPROACH FOR TEXAS: THE TNRCC'S FRAMEWORK FOR IMPLEMENTING WATER QUALITY MANAGEMENT (1997) at 3-3 – 3-4.

32 *Id.* at 3-4.

assessment report, the Clean Rivers Program basin assessment reports, and its electronic databases. Most water quality programs have historically focused on monitoring and assessment, and marginal emphasis has been placed on documenting consensus-based management strategies for individual watersheds.[33] The current trend toward a comprehensive interpretation and implementation of §§303(d) and (e) is forcing local, regional, state, federal and international water resource management agencies to consider a much broader approach to point and nonpoint source pollution controls. A total maximum daily load is not merely a load allocation number obtained through a water quality modeling exercise.

TNRCC conceived and implemented a comprehensive, integrated listing, TMDL and nonpoint source program long before the new federal regulations were proposed. As envisioned by TNRCC's plan, a TMDL is a process that will culminate in a quantitative assessment of water quality problems and contributing sources, and an implementation plan identifying responsible sources and specifying actions needed to restore and protect water quality standards.[34]

In a priority watershed, the TMDL will provide a pollutant allocation mechanism useful in coordinating local, regional, state, federal, and international actions to restore water quality. Allocations for point source pollutants can be incorporated as pollution limits in enforceable discharge permits. Allocations for nonpoint source pollutants are targets to be met, at lease initially, through cooperative agreements and incentives. In outlining appropriate management strategies and objectives, establishing implementation schedules, and identifying potential sources of funding, the TMDL provides critical direction for watershed management at the local and regional levels.[35]

One purpose of a TMDL is to provide a consistent reference document that presents specific management strategies and corresponding roles for those responsible for implementing water quality restoration and protection measures. TMDLs document sources of water resource impairment, pollutant load allocations, appropriate management strategies and objectives, implementation schedules, and potential funding sources for the management strategies.[36]

The objectives of the watershed management program in developing TMDLs are:

1. to implement a consistent methodology for selecting high-priority watersheds for early action under §303(d);

2. to adopt and revise, as necessary, a schedule for development of TMDLs for high-priority watersheds;

3. to establish consistent methods and means for identifying, evaluating, and selecting management alternatives and funding mechanisms to achieve point and nonpoint source

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33 *Id.* at 2-13.

34 *Id.* at 2-14.

35 *Id.*

36 *Id.*

pollution load allocations in priority watersheds; and

4. to establish a regular forum for continuing coordination with other agencies and organizations with management authority of point and nonpoint source pollution.[37]

In addition to these goals, the anticipated benefits of including TMDLs in a management strategy for the whole basin include the advantage of consolidation of multiple water quality program objectives and resources to focus on the development of TMDLs and implementation plans.[38]

Texas recently added a tool to TNRCC's point source permitting chest that is anticipated to contribute to the efficient implementation of many TMDLs. In HB 1283 the 76th Legislature amended the general permits statute, Water Code §26.040, to make it more feasible to create general permits targeted at specific pollutants and the industries discharging them in individual segments, watersheds or basins. HB 1283 added flexibility to the commission's ability to target discharges by size, content and location and to include procedural requirements that make it feasible for industries to avail themselves of general permits.

One important feature of TMDL programs is that TMDLs get done. In states like Texas, where a serious commitment has been made to establish them with a high degree of quality control in the science and with extensive public participation, progress has been less than speedy in actually producing the early product. It is anticipated, however, that with the procedures and parameters now established, TNRCC will submit 20-30 finished TMDLs to EPA this calendar year.

NPDES[39]

Newlyweds, if your honeymoon had a movie title, would it be:
a. "The Producers,"
b. "Bye, Bye, Birdie" ... and fishie and froggie and buggie,
c. "Irreconcilable Differences"or
d. "Breaking Away"?

Assumption of the Program

Readers who have followed implementation of the combined state and federal wastewater discharge permitting program—Texas Pollutant Discharge Elimination System or TPDES—know that the answer is a. The fears of those who thought NPDES delegation would produce dire consequences to water-dependent species in Texas, the hopes that it would result in freeing Texas industries and municipalities from the burdens of EPA's progressively expanding interpretations of the CWA, and the fears (or hopes) that wastewater

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37 *Id.* at 1-4.

38 *Id.*

39 The National Pollutant Discharge Elimination System, described in Section 402(b) of the CWA was delegated to TNRCC on September 14, 1998, after many years of negotiation.

permitting would be paralyzed by conflict between TNRCC and EPA did not materialize. The first year was a bit rocky due to the large backlog of unprocessed applications that arrived in Austin from Dallas late in 1998. Through the cooperative effort of TNRCC and EPA Region 6, however, the backlog was virtually eliminated by the end of 1999.

In the process of clearing the NPDES backlog and issuing the first round of TPDES permits to combine the existing state and federal permits for the same sources, issues have arisen of the proper limits of oversight. The agencies have largely worked through these, almost always without allowing that negotiation to substantially delay the timely processing of permit applications. Issues concerning the form and content of the state's water quality management plan, adoption of a permit by rule for Concentrated Animal Feeding operations,[40] the technical content of supporting documents necessary for EPA review of draft TPDES permits and limits in some permits in 303(d) listed segments are examples of the accommodations the agencies have been able to work out while the system has continued working. The agencies successfully negotiated their first TPDES annual inspection priority plan well before the deadline.

Stormwater Permitting Program

Having established a working relationship, new challenges lie just ahead. For example, TNRCC will issue general permits to replace Region 6 general permits and to replace TNRCC permits by rule that authorize discharges to waters of the U.S. Under the Memorandum of Agreement setting the groundwork for TPDES administration, TNRCC will assume responsibility for Phase I of the federal stormwater program as each NPDES general and individual permit expires.[41] That is, TNRCC will have the responsibility to issue the renewal permit and enforce it. Also, TNRCC will implement Phase II as it becomes effective.

For Phase I, the first major project is the reissuance of the NPDES industrial multi-sector general permit, which expires September 29, 2000. The permit covers 11 categories of industrial activity.[42] A workgroup has been established, and TNRCC has begun drafting the new permit. In final rules to implement Phase II of the stormwater program EPA adopted changes that will affect the renewal of the multi-sector general permit. Primary is the concept of "no exposure." This is a form of permit in reverse, in which facilities that fall into the industrial categories covered by the permit regulations are exempted from the permit requirement, but only if they certify that there is no exposure of any industrial material or activity to stormwater. Specific shelters and practices must be used and certified to be used in order for the permit exemption to apply.[43]

Other aspects of the Phase I program include renewal and assumption of enforcement of the individual permits issued by EPA to 19 large and medium municipal separate stormwater sewer systems (MS4s). They

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40 Subchapter B of 30 TAC Chapter 321, adopted in July, 1999.

41 The full text of the MOA can be found on the TNRCC website, www.tnrcc.state.tx.us. Follow the index to TPDES program assumption application.

42 They are described in 40 CFR 122.26(b)(14).

43 40 CFR 122.26(b)(14), as amended. See EPA preamble and regulations in Federal Register, Vol. 64 at pages 68782-68785 and 68838-68839 (December 8, 1999).

began expiring this year. Also, the general permit for construction activities disturbing at least 5 acres will transfer to state administration when the NPDES permit expires on July 7, 2003. A 1999 amendment to Section 26.040 of the Texas Water Code makes it possible for TNRCC to issue general permits to replace EPA's Phase I general stormwater permits and to initiate required coverage under Phase II.[44]

TNRCC is required to have its initial Phase II permits in effect by December 9, 2002. Phase II is contemplated to be implemented almost entirely through the use of general permits that, like the Phase I permits, will employ best management practices, reporting requirements and public outreach rather than effluent limits in most cases. Phase II covers small MS4s, which include all MS4s that are not "large" or "medium" (operated by an incorporated city or a county of 100,000 population or greater) and that are located in "urbanized areas" as defined by the Bureau of the Census. MS4s are not limited to systems operated by towns and cities, but include those run by all public bodies created under state law. The rules define "regulated small MS4s" to include not only those in urbanized areas, but also those designated by the NPDES permitting authority. The permitting authority must develop a set of criteria and assess all MS4s located outside urban areas and serving populations of at least 10,000 with a density of 1,000 people per square mile, as well as those physically interconnected to a regulated MS4.. The NPDES authority may also grant waivers to small MS4s whose discharges "do not cause, or have the potential to cause, water quality impairment."[45]

Phase II also covers construction activity that disturbs 1 to 5 acres. Permits must be available by March 10, 2003. This part of the program is contemplated also to be administered through one or more general permits, primarily employing best management practices, reporting requirements and public outreach. Waivers by the NPDES permitting agency are permitted if based on factors set out in the Phase II regulations. As in Phase I construction permits, the cornerstone is the Stormwater Pollution Prevention Plan, which must include structural and non-structural best management practices, erosion and sediment control and other practices for waste and runoff control.

401 COMPLIANCE AND CERTIFICATIONS

About the end of July, 2000, TNRCC and the Southwestern Division of the U.S. Army Corps of Engineers (Corps) expect to sign a mutual written statement describing a newly consolidated, highly cooperative process for ensuring that activities permitted by the Corps in Section 404 permits will not result in violation of Texas water quality standards.[46] The new system is the product of year-long negotiations and mutual brainstorming, and is intended to maintain a high level of water quality standards protection while also making the process as efficient, uniform and transparent as possible for the participants and the public. It's hallmark is the introduction of a multi-tiered system for state review of §404 projects and its foundation is an enhanced system for sharing information between the two agencies.

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44 Amended rules implementing §26.040 were proposed on June 2, 2000 (25 Texas Register 5139).

45 40 CFR 122.32(c). The Phase II regulations are long and intricate. For a superficial overview, see EPA's series of factsheets located at **www.epa.gov/owm/swphase2/factsheets.htm.**

46 Permits are issued by the Corps under Section 404 of the CWA to applicants whose projects involve filling waters of the U.S., subject to certification by the state under CWA §401 that the project will not violate the state's water quality standards.

Initially, there are two tiers of §404 activities designated, with the commitment to study further refinements to the system, such as identifying additional tiers. Tier 1 will consist of projects that affect, alone or in combination, up to three acres of wetlands or 500 linear feet of stream. For Tier 1 projects, the applicant will have the option to incorporate into its §404 permit a preset group of Best Management Practices (BMPs), designed by TNRCC to generally ensure substantial compliance with Texas water quality standards. If this option is taken, the application requires no individual TNRCC review, and the Corps' permit can be issued without TNRCC certification. If the applicant prefers to use other BMPs or to incorporate water quality control otherwise than as specified in the Tier 1 checklist and materials, they may choose individual 401 review.

Tier 2 consists of all activities not included in Tier 1. Tier 2 activities will generally receive individual TNRCC certification review. In most cases this review and certification will be expedited by early and comprehensive sharing of information between the Corps and the TNRCC. TNRCC will participate in the Corps'pre-permitting meetings and comment processes. Probably the most novel feature of the Tier 2 procedure relates to the cornerstone of §404 water quality review–the evaluation of the project in accordance with the federal 404(b)(1) guidelines. These guidelines are also the model for TNRCC's rules governing §401 certifications, found at 30 Texas Administrative Code, Part 279. In the past, the Corps 404(b)(1) review and TNRCC's Part 279 review have progressed separately, requiring each agency to proceed from scratch. Under the new system, the Corps will conduct its review early and will forward its analysis to TNRCC for use in making the certification decision. In most cases, this change in function - from performing the full analysis to reviewing the Corps' analysis - is expected to save considerable staff time and effort, and result in quicker certification decisions.

The draft Memorandum of Agreement appears at Appendix B.

WATER QUALITY STANDARDS

State water quality standards are the foundation for all surface water quality programs. All states are required to adopt them,[47] and to review and revise them at least every three years. Standards consist of three parts:[48]

a. Designated uses for aquatic life, human recreation and public use. A use known to have been actually attained since 1975 or to be attainable in a body of water must be designated and maintained. Where actual and attainable uses of a segment are known, they are specifically listed in the Appendices to the standards rules, and the segment is called a "classified segment." Because of the large number of surface water segments in Texas, many smaller or more remote waterbodies have not been studied sufficiently to determine their actual or attainable uses. For those, the state presumes uses; if the stream is perennial, high aquatic life and contact recreation are the presumptions.

b. Numeric and narrative criteria necessary to support the designated uses. Numeric criteria represent the concentrations of oxygen and other constituents that can be in the water while

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47 CWA §303(c).

48 See 40 CFR §131.6.

the designated uses continue undiminished. Narrative criteria describe conditions of the water necessary for continuation of its designated or presumed use. For example, under Texas standards one narrative criterion is that "there shall be no foaming or frothing of a persistent nature."[49]

c. An antidegradation policy. The antidegradation policy is a "safety net," which says in essence that independent of meeting the numeric and narrative standards, where the water quality meets the CWA "fishable, swimmable" standard, it will not be allowed to decline from that standard except under very limited circumstances requiring specific findings and decision making by the permitting agency.

This is a year that TNRCC will adopt a triennial revision of its water quality standards, Chapter 307 of Title 30, Texas Administrative Code. The commission will formally consider adoption on July 26th. Highlights of the proposed revisions include:

- Inclusion of habitat as a named part of aquatic life uses. Current standards require vegetative and physical components of the aquatic environment to be maintained or mitigated to protect existing aquatic life uses. Procedures to protect habitat in permits for dredge and fill activities are specified in §404 of the Federal Clean Water Act and in 30 TAC Chapter 279 (relating to Water Quality Certification). Adding a statement that habitat is included in the aquatic life provision would reflect the review that is currently being conducted in the consideration of discharge permits, 401 certifications and coastal management plan reviews.

- Inclusion of seagrass propagation as a named water-quality use protected under the Texas Surface Water Quality Standards. The TNRCC, in conjunction with the General Land Office, Galveston Bay Estuary Program, Coastal Bend Bays and Estuary Program, and Texas Parks and Wildlife Department, sponsored the "Seagrass Conservation Plan" for Texas where TNRCC agreed to consider adding seagrass propagation to the standards to emphasize its importance as an aquatic life use.

- Adding "wetland water quality functions" as a category of water-quality related use to emphasize the connection between the standards and wetlands, which are designated "waters in the state" by Texas statute.

- Revising the water quality standards for three segments based upon the results of Use Attainability Analyses. The riverine section of Sam Rayburn Reservoir, where the Angelina River enters the reservoir, is recommended to be changed from high to intermediate aquatic life use for a small, newly created segment in the upper riverine portion of the reservoir. A proposed site-specific standard for aluminum in this are of the Angelina River is deleted pending additional toxicity testing. The Nueces River Tidal at Corpus Christi is changed from exceptional to high aquatic life use, and the lower Pease River is changed from high to intermediate aquatic life use.

- Providing new provisions for temporary variances, clarifying how interim effluent limits related to temporary variances, and providing a new provision for temporary standards.

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49 30 TAC 307.4.

- Revising definitions for terms such as "fecal coliform," "best management practices," "mixing zone," "surface water in the state;" adding new definitions for terms such as "attainable use," "biological integrity," "*E. Coli*," "Enterococci," "existing use," "designated use," "pollution," "presumed used," "seagrass propagation," "significant aquatic life use," "stormwater," "stormwater discharge," "titdal," and "wetland water quality functions."

- Revising narrative provisions in the general criteria concerning toxic criteria applicability, salinity provisions, and the general provision to maintain dissolved oxygen for aquatic life categories.

- Amending the antidegradation policy to conform to EPA terminology referring to a "tier" approach, and clarifying antidegradation review procedures for wastewater, dredge and fill projects and other activities.

- Revising toxic criteria to protect aquatic life, including the adjustment of criteria for dissolved metals as required by EPA.

- Revising numerous toxic criteria to protect human health based on updated information on toxicity of specific toxic substances.

- Changing the indicator bacteria for contact recreation from fecal coliform to *E. coli* in freshwater and enterocci in saltwater.

- Clarifying the low-flow condition for applying acute toxic criteria in streams and providing a clarification of standards applicability to stormwater discharges.

- Updating procedures for assessing instream standards compliance and providing new provisions for measuring biological integrity.

- Revising Appendices A-E to the standards to add and update site-specific standards for numerous waterbodies, in addition to revising aquatic life uses for three segments in Appendix A (as discussed above). An additional 103 sites are assigned aquatic life uses and criteria for dissolved oxygen in Appendix D, and an additional 15 sites are assigned site-specific toxic criteria in Appendix E. Criteria for total dissolved solids, chloride and sulfate were revised for numerous waterbodies in Appendix A based on additional instream data.

United States Environmental Protection Agency
Office of Water (4503F)
Washington, DC 20460
http://www.epa.gov/water
EPA 841-F-00-008
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EPA Final TMDL Rule: Fulfilling the Goals of the Clean Water Act

The U.S. Environmental Protection Agency (EPA) issued a final rule to improve the national program for identifying polluted waters, determining the sources of pollution, and designing clean-up plans. This program, known as the Total Maximum Daily Load (TMDL) program, is the framework for working cooperatively with the States to finish the job of cleaning up America's polluted waterways and delivering on the promise of the landmark 1972 Clean Water Act. This new rule will provide a cost-effective, common-sense process for cleaning up America's polluted waters.

Background

Over 20,000 waterbodies across America have been identified as polluted by States, Territories, and authorized Tribes. These waters include over 300,000 river and shoreline miles and 5 million acres of lakes. The overwhelming majority of people in the U.S. live within 10 miles of one of these polluted waters.

The Clean Water Act provides special authority for restoring polluted waters. The Act calls on States to work with interested parties to develop Total Maximum Daily Loads or TMDLs for polluted waters. A TMDL is essentially a "pollution budget" designed to restore the health of the polluted body of water.

In August 1999, EPA proposed changes to its existing regulations to clarify and strengthen the authorities of EPA, States, Territories, and authorized Tribes (hereinafter referred to as "States") to implement the TMDL program. EPA considered over 34,000 comments on this proposed rulemaking and talked with hundreds of people in public outreach and information-sharing sessions.

Goals of the Final Rule

This final rule will make thousands more rivers, lakes, and coastal waters safe for swimming, fishing, and healthy populations of fish and shellfish.

The final TMDL rule will:

- Strengthen States' ability to clean up polluted waters by identifying pollution reductions needed to meet clean water goals;
- Provide for a comprehensive listing of all the Nation's polluted waters;
- Encourage cost-effective clean-up by ensuring all sources of pollution are considered in the development of cleanup plans;
- Assure that TMDLs include implementation plans that define specific actions and schedules for meeting clean water goals.

Components of the Final Rule

Identification of Polluted Waters:

- States develop more comprehensive lists of all polluted waterbodies so that the public will have a clear picture of which waters are polluted and when they will be cleaned up.
- States are required to develop their lists every 4 years instead of the current 2 years.
- Threatened waters may be included on the list at the State's discretion.

Prioritized Schedule:

- States will establish a schedule for clean-up plans for polluted waters within 10 years or be given an additional five years if needed.
- EPA is requesting that higher priority be given to polluted waters that are sources of drinking water or support endangered species. States can explain why a higher priority is not appropriate.

Elements of a TMDL:

TMDLs will contain key elements:

- waterbody name and location; identification of the pollutant and the water quality standard for the waterbody;
- amount of pollutant allowable to meet standards; load reduction needed to meet standards; sources of the pollutant; wasteload allocation for point sources; load allocation for runoff and other sources of pollution; and an implementation plan.
- margin of safety; consideration of seasonal variation; and allowance for reasonably foreseeable increases in pollutant loads.
- There is a transitional period so states can phase in new TMDL elements over time.
- The public will have the opportunity to comment on the methodology, lists, prioritized schedules, and TMDLs prior to submission to EPA.

Implementation Plan:

The implementation plan should reflect both point sources, nonpoint sources, and other sources of pollution, including:

- A list of actions needed to reduce pollutant loadings and a time-line for implementation;
- Reasonable assurances that implementation will occur;
- A monitoring or modeling plan and milestones for measuring progress;
- Plans for revising the TMDL if progress toward cleaning up the waters is not made; and
- The date by which water quality standards will be met–generally within 10 years.

- Runoff controls should be put in place 5 years after the implementation plan is developed, if practicable.

The final TMDL rule is available at
http://www.access.gpo.gov/su_docs/aces/aces140.html

Reasonable Assurance:

- For point sources, reasonable assurance is to be provided through National Permit Discharge and Elimination System (NPDES) permits.
- For nonpoint and other sources, load allocations in each TMDL must meet a four-part test:
  - they apply to the pollutant;
  - they will be implemented expeditiously;
  - they will be accomplished through effective programs;
  - they will be supported by adequate water quality funding.

State Flexibility

States have maximum flexibility to make their own choices about which sources of pollution to clean up, and in what manner, and to produce their own plans for local cleanups to ensure the full protection of public health.

- States set the water quality standards tha waters need to meet.
- States develop the TMDLs to decide how to clean up their polluted waters.
- States will have more time to learn the problems, tailor implementation to local conditions, and give full credit to voluntary or incentive-based programs.

Proposals Dropped:

- The proposed public petition process for review of lists or TMDL implementation has been dropped.
- States are not required to list "threatened waters."
- The proposal to require "offsets" before new pollution can be discharged to impaired waters prior to TMDL establishment has been dropped.
- The final rule does not include specific permit requirements for forestry, and EPA withdraws its proposed permit provisions fc aquaculture and animal feeding operations.

Appendix B

** 18 JULY 2000 DRAFT **

Memorandum of Agreement Between the U.S. Army Corps of Engineers and the Texas Natural Resource Conservation Commission on Section 401 Certification Procedures

I General Statement

The purpose of this Memorandum of Agreement (MOA) between the Texas Natural Resource Conservation Commission (TNRCC) and the Southwestern Division of the U.S. Army Corps of Engineers (Corps) is to implement a process for interagency cooperation and TNRCC review of individual Section 404 permit applications under Section 401 of the Clean Water Act. This process is intended to result in maintenance of state water quality standards in Section 404 projects and to maximize the effective use of limited resources at both agencies.

II For the purposes of this MOA, projects are currently designated as either "Tier I" projects or "Tier II" projects.

A. Tier I projects: The TNRCC has designated Tier I projects as those that will result in a direct impact to three acres or less of water in the state (including wetlands) or 1500 linear feet or less of streams. If a project has a combination of impacts that exceeds the threshold, it does not qualify as a Tier I project. For purposes of calculating the Tier I threshold, one acre of impact is equal to 500 linear feet of impact. Projects that impact certain types of rare or ecologically significant wetlands are not eligible for inclusion in Tier I and will require individual review, even if they meet the three acre/1500 linear feet threshold. Rare and ecologically significant wetlands are identified by the Corps in its regional conditions to the nationwide permits in Texas, and include the following: pitcher plant bogs, swamps dominated by bald cypress and tupelo gum tree species, the area of Caddo Lake within Texas that is designated as a Ramsar Wetland of International Importance, mangrove marshes and coastal dune swales.

1) Tier I Checklist

The TNRCC anticipates that incorporation of certain best management practices (BMPs) into and Corps implementation of the Section 404 (b)(1) guidelines for a proposed Tier I project will generally result in substantial compliance with state water quality standards. The TNRCC has compiled a Tier I checklist (Attachment B) which provides applicants with a choice of BMPs to incorporate into their projects. If the applicant chooses to use Tier I, he must sign a statement in the checklist indicating that applicable requirements and BMPs will be satisfied and should return the completed checklist with the ENG 4345 permit application form to the Corps and the TNRCC. If the Corps receives a completed checklist and signed statement, a request for 401 certification is not necessary. Election by the applicant to incorporate the BMPs and requirements described in the TNRCC's Tier I Checklist allows a Section 404 permit application to proceed without further review by the TNRCC. The BMPs selected by the applicant and the other

provisions of the checklist become part of the Section 404 permit and are subject to enforcement. Since the TNRCC will take no certification action on Tier I projects, the Corps will presume a waiver of 401 certification pursuant to 33 CFR 325.2(b)(ii), 10 working days after the close of the public notice comment period.

2) Tier I Information Packet

The TNRCC has provided the following information packet to the Corps: a cover letter that describes the state water quality 401 certification process of Section 404 permits (Attachment A), the Tier I Checklist (Attachment B) and a corresponding description of BMPs (Attachment C). The Corps agrees to include this packet with the information that is provided to applicants for individual Section 404 permits. After coordination with the Corps, TNRCC may revise any part of the packet, including the checklist, by furnishing the revised document to the Corps. Revisions to this document shall be effective upon receipt by the Corps. TNRCC agrees to furnish copies of all the packet documents for the Corps to distribute to applicants.

B. Tier II projects: A Tier II project is any project that is not eligible for Tier I processing, including projects which impact rare or ecologically significant wetlands and projects that otherwise qualify for Tier I, but for which the Corps has not received a complete, signed Tier I checklist before issuance of its permit decision document. The TNRCC and the Corps agree that additional streamlining procedures may be identified, including the designation by TNRCC of additional tiers, and further agree that the Chairman of the TNRCC and the Commander of the Southwestern Division of the Corps will meet before November 1, 2000 to discuss any potential amendments to this MOA.

The processes specified in the following paragraphs apply only to Tier II projects.

1) Participation in Preapplication Process and Comment Process.

For Tier II projects, continuous and early coordination between the Corps and the TNRCC is essential. Accordingly, each agency will routinely provide copies of pertinent information to the other agency. TNRCC will furnish the Corps with copies of TNRCC's 401 certification questionnaire for distribution to all Tier II applicants. The TNRCC will participate in the preapplication process to the maximum extent practicable, and will provide the Corps with project specific comments on water quality impacts of an action during the public notice comment period.

2) Sharing of Decision Documents

The Corps will provide the TNRCC a copy of the Corps' final permit decision document, which will contain the environmental assessment, required mitigation

and §404(b)(1) analysis. The Corps will prepare the decision document as soon as possible following the close of the public notice comment period and when all data necessary to make a decision is available. The decision document will be signed by the appropriate Corps representatives and will represent a final Corps decision document. TNRCC will transmit an acknowledgment to the Corps of the date it receives each Corps decision document.

The Corps will provide a permit decision to the applicant when the following procedures have been completed. The TNRCC will either provide its certification decision (issuance or denial) to, or request an extension from the Corps within 10 working days from receipt of the Corps decision document. If the TNRCC does not provide a certification decision or request an extension within the 10 day period, the Corps may presume waiver of certification in accordance with 33 CFR §325.2(b) and proceed with the issuance or denial of the permit. If TNRCC requests an extension of time, the District Engineer will determine the merit of the time extension request and the length of the extension based on 33 CFR 325.2(b) and notify TNRCC of his intended decision. If the District Engineer decides to deny or modify a request for extension, TNRCC will have 10 working days from the date it is notified of the Corps' intended action on the request for extension in which to either certify or deny certification. If TNRCC takes no action within this 10-day period, the Corps may presume waiver and issue the permit.

III. Effective Date

These procedures will begin as of the date signed by Edwin J. Arnold, Jr., Brigadier General, U.S. Army Corps of Engineers, Southwestern Division, and Jeffrey A. Saitas, Executive Director of the Texas Natural Resource Conservation Commission. This MOA supercedes the interim procedures agreement dated April 3, 2000 and may be amended in writing when signed by authorized representatives of both parties. With at least 60 days prior written notice, this agreement may be terminated by either the Corps or the TNRCC.

Edwin J. Arnold, Jr.
Brigadier General
U.S. Army Corps of Engineers,
Southwestern Division

Dated: _____

Jeffrey A. Saitas, P.E.
Executive Director
Texas Natural Resource
Conservation Commission

Dated: _____

12th Annual Texas Environmental Superconference

Are You Game?

Water Resources (SB1 - Reclamation and Reuse) - *Greed*

WATER REUSE IN TEXAS: AN ENIGMA IN SENATE BILL 1

by

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August 3-4, 2000

WATER REUSE IN TEXAS: AN ENIGMA IN SENATE BILL 1

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CAROLYN AHRENS is a partner at Booth, Ahrens & Werkenthin, P.C. and has been practicing primarily in the areas of water, utility and environmental law for fifteen years at the state, federal, administrative and legislative levels. She has extensive experience in working before the Texas Legislature and the Texas Natural Resource Conservation Commission on wastewater reuse issues. She has been a speaker and author on the subject of water and water quality issues on many occasions over the years. Ms. Ahrens is an incoming, elected director of the Water Environment Federation, a global professional association dedicated to advancing the water quality industry and protecting the water environment. As a WEF director, Carolyn will continue her five-year participation on the Board of Directors of the Water Environment Association of Texas. She serves as the Water Laws Chairman of the Texas Water Conservation Association and serves also on committees of the American Waterworks Association. Carolyn has been active in leadership roles for the local, state and national bar associations and for the international young lawyers association, as well.

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1. INTRODUCTION

Texas has long encouraged water reuse as a means of extending existing water supplies. In order to implement this policy, the State has required, as a condition for new water permits, that permit applicants develop and implement water conservation plans. The statutory definition of water conservation includes practices that increase recycling and reuse of water. *See* Water Code[1] § 11.002. Wastewater permittees in the past also have been required by the State to evaluate reuse as a complete or partial option to discharge. The State requires Texas Water Development Board ("TWDB") grant holders to develop water conservation plans that encourage wastewater reuse. The TWDB has funded a number of reuse water supply projects. Indeed, millions of dollars have been spent by cities and industrial and agricultural interests to study water reuse. Today, many such projects have reached beyond the study and planning stages to implementation. Applications related to several significant water reuse projects have been filed in the last few years or will be filed shortly with the Texas Natural Resource Conservation Commission ("TNRCC").

The prospect of significant large-scale reuse spurred the TNRCC in 1996 to reexamine its policies and procedures. Something was seriously amiss. The TNRCC and its predecessor agencies had been issuing new water rights assuming, but not requiring, that upstream return flows would go unused. Arguably, that practice violated the Texas Supreme Court's decision in *Lower Colorado River Auth. v. Texas Dep't of Water Resources*, 689 S.W.2d 873 (Tex. 1984), that the State may not grant permits when its own records show that the supply must come from an existing permittee's water. Reuse would exacerbate the overappropriation of Texas streams.

The TNRCC's solution was to distinguish between "indirect" and "direct" water reuse. "Direct reuse," for this purpose, would be continued use without discharge into a watercourse. "Indirect" reuse would include storage or conveyance of water for reuse, employing the bed and banks of a watercourse. In February 1997, the TNRCC announced a new "interim policy" to continue to allow direct reuse but to deny indirect reuse of water that had been historically discharged. For surface water, if any water under the right had been historically discharged, then no indirect reuse could be made of *any* water under that right unless the right expressly provided otherwise. Any permit, old or new, that expressly authorized reuse would be honored. The results of this effort were reversed only in part by the 1997 Omnibus Water Bill ("Senate Bill 1")[2] which also affirmed direct reuse and gave the TNRCC discretion to condition indirect reuse to protect downstream rights and the environment.

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[1] References to the Water Code are to TEX. WATER CODE ANN. (Vernon 2000).

[2] References to Senate Bill 1 are to Act effective September 1, 1997, 75th Leg., R.S., ch. 1010, 1997 Tex. Gen. Laws 3610.

The regulatory, then legislative, distinction between water reuse by direct methods and water reuse by way of bed and banks storage or conveyance can best be described as a backdoor method to limiting significant reuse altogether. It is the case that direct reuse of water for human consumption is not currently economically feasible for most of the State. With current technology, most large-scale projects to reuse water for potable purposes in Texas would employ bed and banks techniques. What will happen to water availability in Texas streams as technological changes make direct potable reuse more practical remains an issue. Both methods of reuse reduce flows downstream of historical discharges. The distinction drawn between direct and indirect reuse is fraught with inconsistencies and property right questions and, at best, postpones the day of reckoning.[3] Meanwhile, and despite the shortcomings of current state policy, reuse in many forms still remains a viable source of water supply. It must.

2.
A PRIMER ON PROPERTY RIGHTS IN WATER

2.1 Surface Water Rights in Texas

Surface water rights in Texas today are defined by a combination of state ownership, adjudication of existing rights, state permitting, and limited permitting exemptions. The Texas Legislature has declared state ownership and control over the "water of the ordinary flow, underflow, and tides of every flowing river, natural stream, and lake, and of every dam or arm of the Gulf of Mexico, and the storm water, floodwater, and rainwater of every river, natural stream, canyon, ravine, depression, and watershed in the state." Water Code § 11.021(a). The methods for acquiring the right to use state water have varied over time, and, at one time, unquantified riparian rights to water and rights based on prior appropriation statutes coexisted, leading to tremendous difficulty in management and administration. The legislature passed the Water Rights Adjudication Act in 1967 to bring order and certainty to the right to use surface water in Texas. *See* Water Code § 11.301, *et. seq.* Adjudication was to settle the rights of all claimants to water in identified stream segments. Upon final determination by the court, certificates of adjudication were issued to evidence each water right that was recognized. Now, the provisions of Water Code Chapter 11 set forth the regulatory process for acquiring the right to divert and use water, including application requirements and the standards for granting water right permits and amendments to permits and certificates of adjudication.

The basic principles defining the nature of a permitted or adjudicated surface water right acquired from the State are well-established. The right to appropriate state water is a usufructuary right to water, which is itself a property right, subject to disposition as any other form of private property and which cannot be taken without compensation and due process of law. *Texas Water Rights Comm'n v. Wright*, 464 S.W.2d 642, 649-50 (Tex. 1971). When water is reduced to possession and applied to a beneficial purpose authorized in the grant, the water right under which the water is taken is "perfected" and becomes vested. Water Code § 11.026; *see also Clark v. Briscoe Irr. Co.*, 200 S.W.2d 674, 679 (Tex. Civ. App.–Austin 1947, no writ) ("A water right, when acquired and perfected, constitutes a vested interest in or title to the use of water thereby appropriated."). Although a water right may be totally or partially cancelled according to statute, it may not be diminished for any purpose by agency fiat. *Lower Colorado River Auth.*, 689 S.W.2d 873.

A water right is in the nature of real property. *Cf. Lakeside Irr. Co. v. Markham Irr. Co.*, 285 S.W. 593, 597 (Tex. 1926) (a right to divert and use the water of a stream, acquired by

---

[3] Although the concern about water pollution from wastewater discharges has been a traditional concern, now the impacts of withholding wastewater flows also is increasingly significant. Senate Bill 1, however, acted on water rights for reuse and that is the focus of this paper.

appropriation, is a hereditament, appurtenant to the land for the benefit of which the appropriation is made). However, when water is taken into possession by the appropriator, the appropriator acquires ownership of the water itself. Wells Hutchins, a noted author on Texas water law explains: "In general, water severed from the natural resource and reduced to physical possession loses its character as public property. . . . And so the water diverted by [an appropriator] in the lawful exercise of his valid water right becomes his private property." WELLS HUTCHINS, THE TEXAS LAW OF WATER RIGHTS 81 (1961) (citing *Lakeside Irr.*, 285 S.W. 593, as follows: "[P]laintiff does not own the corpus of the water *until it shall enter its ditch* . . . .") (emphasis in original).

A typical water right describes or identifies the source of supply; the purpose for which water may be used; the location and rate at which water may be diverted; and the authority to store or impound water in a reservoir, if any. A water right may be initially granted with special conditions for various reasons, including for environmental and water quality protection or to require return of surplus water. A consumptive water right that does not specify that a return flow is required, or specify an application rate, is presumed to authorize complete consumption of water, including by reuse of water that is not fully consumed in the initial use.

Another element of surface water rights in Texas, outside the Middle and Lower Rio Grande River Basins, [4] is the time priority of appropriation. The first in time is the first in right. Water Code § 11.027; TNRCC Rules § 297.44. Time priority largely determines the dependability of a surface water supply in a drought, unless reservoir storage has been constructed. As a basic principle, a senior water right will be satisfied *up to the actual need for water* to which he is entitled before the next most senior water right holder can divert or store water. *Bartley v. Sone*, 527 S.W.2d 754 (Tex. Civ. App.–San Antonio 1974, writ ref'd n.r.e.). The priority system is much more simple in theory than in practice, however. The system may even be inefficient where no watermaster has been designated to administer and regulate diversions. Nevertheless, the prior appropriation doctrine has important virtues. The doctrine generally is recognized as being fair, for example, and it contributed to the development of the State's resources by creating an expectation that investment in the use of water would be protected.

2.2 Groundwater Rights in Texas

Groundwater rights have been treated differently than surface water rights in Texas.[5] The legislature has not declared state ownership of groundwater, and Texas courts generally have allowed the surface landowner to claim all of the groundwater that he captures. *See, e.g., Houston & T.C. Ry Co. v. East*, 81 S.W. 279 (Tex. 1904); *Friendswood Dev. Co. v. Smith-Southwest Indus.*, 576 S.W.2d 21, 25-27 (Tex. 1978); *Fain v. Great Spring Waters of America, Inc.*, 973 S.W.2d 327 (Tex. App.–Tyler 1998), *aff'd*, 1 S.W.3d 75 (Tex. 1999). The restrictions on

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[4] The Rio Grande River Basin water rights below Amistad Reservoir are unique in Texas because they are based on a proportionate sharing in water stored in two international impoundments and allocated to the United States, rather than on time priority. *See, generally,* 30 TEX. ADMIN. CODE (hereinafter "TNRCC Rules") ch. 303 (published at www.sos.state.tx.us/tac).

[5] When water flows in a defined subterranean stream, however, the law recognizes the water to serve as surface water and, therefore, "state water." An underground stream has the same characteristics as those of a surface watercourse, such as beds, banks forming a channel and a current of water. *Denis v. Kickapoo Land Co.*, 771 S.W.2d 235 (Tex. App.–Austin 1989, writ denied). Although Texas courts have uniformly held that water flowing in an underground stream belongs to the State, no court has squarely found the water flowing in question to be part of an underground stream, primarily due to a lack of sophisticated hydrological evidence needed to override the presumption that water under the ground is "percolating." *Compare Cantwell v. Zinser*, 208 S.W.2d 577, 578-79 (Tex. Civ. App.–Austin 1948, no writ) (testimony that there were no underground streams that flowed in well defined channels) *with Denis,* 771 S.W.2d at 237 (testimony that water of Kickapoo Springs flows in a defined subterranean stream).

groundwater pumpage have been limited to disallowing waste, preventing withdrawal for malicious purposes, and preventing subsidence. Texas is the only Western State that still adheres to the rule of capture for groundwater, and legislative interim committees currently are considering the merit of continuing the rule here. Currently, throughout much of Texas, and certainly where groundwater is produced outside the boundaries of a groundwater district, a landowner may make such commerce in the resource as he wishes, subject to very few legal constraints. Significantly, for purposes of water reuse, groundwater reduced to possession--just like surface water reduced to possession--is private property.

2.3 Water for Reuse

Often, the first use of water does not result in complete consumption. It would not be unusual for 50% of the water supplied in a municipal system to be returned to a wastewater collection system. This return water is the water that is subject to reuse, whether it originates as surface water or groundwater. There has been no serious question in Texas with regard to whether or not direct reuse of water can be commenced after a period of historic discharge. It can be. There is no basis in Texas statute or case law to find that, as a matter of property, the State can *compel* the discharge of effluent unless the effluent is surface-water based *and* the right as originally granted limits consumptive use or expressly requires return of unconsumed water to a state watercourse.[6]

Generally, return water that is not directly reused from the collection system either is disposed of without discharge or is discharged to a watercourse. As it relates to reuse, discharge of effluent to a watercourse generally will fit into one of three conceptual categories:

1) a release with the present intent to recapture the flow for storage and use;

2) a release with no intent to maintain control of the flow presently released but with the intent to commence the reuse of future return flows; or

3) a release with no intent to reuse present or future return flows.

The key question for indirect reuse is whether the private property interest in effluent is necessarily extinguished when that effluent is discharged. It is clear from *City of Corpus Christ v. City of Pleasanton*, 276 S.W.2d 798 (Tex. 1955) (recognizing no common-law limitations on the right to use state waterways for private groundwater) that private water in Texas can be commingled with state water for transport without affecting the private nature of the water, determined by quantifying it. The court, in *Pleasanton,* noted that there was no common-law limitation on using a state watercourse for conveyance. *Id.* at 294-95. Abandonment also is not the answer to the question. The definitive case in Texas for abandonment of a water right is *City of Anson v. Arnett*, 250 S.W.2d 450 (Tex. Civ. App.–Eastland 1952, writ ref'd n.r.e.), holding that abandonment requires clear evidence of an intent to abandon. *See also* Water Code § 11.030 (intent required).

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[6] Although water quality issues are not the focus of this paper, the following case is of particular note: *PUD No. 1 of Jefferson County v. Washington Dept. of Ecology*, 114 S. Ct. 1900, 1912-13 (1994) (addresses reduced streamflow as pollution).

3.
DIFFERENCES OF OPINION: WATER REUSE PRIOR TO SENATE BILL 1

3.1 The Law Prior to Senate Bill 1

Although both direct and indirect reuse were already approved and occurring associated with some existing water rights, no provision of the Water Code directly addressed reuse prior to Senate Bill 1, save and except the definition of water conservation to include reuse. TNRCC Rules § 297.1 defined return flows (beneficially used but unconsumed water returned to a watercourse) and reuse (use of unconsumed water before discharge), and secondary water (reuse after the original, authorized use). The TNRCC Rules Chapter 210 specifically regulated direct reuse authorizations. For example, those rules did, and still do, specify various treatment levels for specified uses in the terms of contracts for direct reuse, among other things. Groundwater owners and surface water owners have a sufficient property right in their used but unconsumed water to make direct reuse of it by satisfying these Chapter 210 rules, without further reference to Water Code Chapter 11 permitting.

Controversy exists with regard to whether or not a right existed to reuse water by bed and banks conveyance or storage prior to Senate Bill 1. Three Texas cases are debated with regard to water reuse prior to Senate Bill 1. *See Harrell v. F.H. Vahlsing, Inc.*, 248 S.W.2d 762 (Tex. Civ. App.–San Antonio 1952, writ ref'd n.r.e) (sustaining sale of reclaimed water by appropriator for use outside appropriator's boundaries); *Guelker v. Hidalgo County Water Imp. Dist. No. 6*, 269 S.W.2d 551 (Tex. Civ. App.–San Antonio 1954, writ ref'd n.r.e.) (agency has no authority to direct or control the use of return or developed water); *South Tex. Water Co. v. Bieri*, 247 S.W.2d 268 (Tex. Civ. App.–Galveston 1952, writ ref'd n.r.e.) (where no contract for delivery of return flow water to a downstream user existed, the discharger had no claim for the value of the water).

The proponents of reuse find in these cases support for an overriding property interest in effluent that survived discharge of flow, subject only to the State's authority to authorize diversion in such a way that caused harm no greater than the withholding of the discharge altogether. The discharge itself could not have been allowed to adversely affect the water body to which it is made, and conveyance losses had to be accounted such that no state water was inadvertently diverted. Administration of such diversion should be ministerial and akin to State administration of downstream sales of water from upstream storage. *See* TNRCC Rules § 297.102 ("If the exercise of rights under contract between the supplier and the purchaser . . . would require amendment of the appropriative right only by adding a diversion point or by changing the place of use of a water right which authorizes storage . . . the supplier shall not have to submit an application for an amendment."), 294.103 (seller not obligated to release water under a contract for downstream delivery of water when it would aggravate existing flooding conditions to do so.)

Proponents of the State's or of downstream interests in return water rely on one of these same cases to support their position that there can be no right to maintain continued beneficial use of discharged return flow unless such a right is expressly granted in a Water Code Chapter 11 permit or certificate of adjudication. *Harrell* and *Guelker* they distinguish by arguing that return flows there were discharged to drainage ditches and by claiming that man-made, on-channel reservoirs are more like watercourses than like ditches. *Bieri* they use for support by focusing on the circumstance that no claim was found to exist in the upstream discharger and dismissing the court's consideration of whether or not a contract existed for the delivery of the water to downstream users.

None of the Texas cases cited above, and no reported Texas case since, has put an end to the debate. Both the *Harrell* case from Texas and an earlier United States Supreme Court case, however, relied on language from *United States v. Haga* that more directly addresses the continued

possession of developed or reuse water that is commingled with public water in a watercourse. Although it is necessary that an appropriator be able to identify its return flows, the quoted language says that an appropriator can conduct the flow through natural channels and may commingle it with other waters without affecting ownership rights. In the Courts' words:

> One who by the expenditure of money and labor diverts appropriable water from a stream, and thus makes it available for fruitful purposes, is entitled to its exclusive control so long as he is able and willing to apply it to beneficial uses, and such right extends to what is commonly known as wastage from surface runoff and deep percolation, necessarily incident to practical irrigation. Considerations of both public policy and natural justice strongly support such a rule. Nor is it essential to his control that the appropriator maintain continuous actual possession of such water. So long as he does not abandon it or forfeit it by failure to use, he may assert his rights. It is not necessary that he confine it upon his own land or convey it in an artificial conduit. It is requisite, of course, that he be able to identify it; but, subject to that limitation, he may conduct it through natural channels and may even commingle it or suffer it to commingle with other waters. In short, the rights of an appropriator in these respects are not affected by the fact that the water has once been used . . . .

Ide v. United States, 263 U.S. 497, 505-6 (1924) (quoting *United States v. Haga*, 276 F. 41, 43 (S.D. Idaho 1921)); *Harrell,* 248 S.W.2d at 768 (Texas court quoting *Ide* for the same language). How the issue of property rights for bed and banks reuse prior to Senate Bill 1 is finally determined will have great bearing on whether or not that legislation's reuse provisions are constitutional.

3.2 Regulatory Treatment of Bed and Banks Reuse

As explained above, prior to Senate Bill 1, the TNRCC and its predecessor agencies consistently acknowledged the right to directly reuse unconsumed water, at least for the same purpose and place of use specified in a water right. Agency history on continued beneficial use of return flows after discharge has been less than accordant, however. The TNRCC's past modeling practices have been plainly inconsistent. Some, but not all, wastewater return flows were counted in some, but not all, of TNRCC river basin models for purposes of determining water availability for new appropriations.

Although the TNRCC's permitting decisions prior to the 1997 interim policy also were inconsistent, they have, for the most part, favored even indirect reuse projects, as evidenced by the North Texas Municipal Water District's authorization to reuse flows discharged into Lake Lavon; by Trinity River Authority's Lake Bardwell permit; and by the City of Cedar Park's Permit No. 4007A. The TNRCC was less approving of the City of San Antonio's efforts to indirectly reuse groundwater. Of most direct precedent prior to the 1997 TNRCC interim policy on reuse, however, is the express decision of the TNRCC in the Lake Lavon proceedings that amendment of the permit to increase diversion authority to accommodate reuse of return flows after discharge to the lake was not a new appropriation of water. In other words, the overriding right to the discharged water already existed in the water right holder, and reuse after discharge to an on-channel reservoir could be approved without attaching a new, junior time priority.

A major decision against indirect reuse of groundwater was made after the 1997 TNRCC policy was developed. The City of San Marcos' application to divert discharged groundwater was granted but limited in order to protect all downstream water rights as to the level of the highest historically discharged flow. The TNRCC justified the result by finding that junior water rights might have been granted by the agency's predecessors in reliance on the flow and because even

water rights that existed prior to the commencement of the discharge had come to enjoy the flow over time.

It is not surprising that there is not more agency precedent on indirect reuse of return flows. Indeed, it is logical that large-scale reuse would not develop until the availability of water for first use either became tight or came with a price tag that made the application of new technologies for wastewater treatment more reasonable. It was the coincidence of these two factors that also led to the 1997 agency policy and, ultimately, to inclusion in Senate Bill 1 of language directed at limiting water reuse.

4.
SENATE BILL 1: AN OVERVIEW

4.1 Senate Bill 1 Generally

Senate Bill 1, if judged by the word, was primarily a water supply planning and financing bill, and a directed effort to move toward a market-driven water transfer system. Article 1 of Senate Bill 1 created the statewide regional water supply planning process and drought response and conservation planning. Article 2 focused on water management, marketing and transfers, and Article 3 focused on emergency authorizations and enforcement. Article 4 addressed groundwater supplies. Funding for water needs and conservation was included in Article 5. Small communities assistance, in Article 6, addressed certificated service areas, rates and funding, among other things. Article 7 required water data collection that would fuel the planning process. Article 8 created and charged an interim legislative committee. Article 9 repealed, among other things, Water Code § 11.028 (the Wagstaff Act) for moving water to municipal purposes without payment. The omnibus nature of the legislation made myriad other changes in the State's water laws ranging from what notices must be provided to water ratepayers to groundwater district fees. Provisions directed at water reuse were among the most controversial in the legislation, along with interbasin transfer protections and a newly formulated standard for measuring the injury to other water right holders when amendment of a surface water right is proposed.

4.2 Senate Bill 1's Provisions Related to Reuse

Senate Bill 1 added to the State's laws, for the first time, any legislation directly addressing the right to reuse water. Senate Bill 1 affirmed a surface water right holder's right to reuse its water for the purposes and locations of use provided in the water right. Amendments to Water Code § 11.046 confirmed that unless a surface water right specifies that water remaining unconsumed after initial use must be returned to a watercourse, the right of complete consumption exists in the water right holder. *See* Water Code § 11.046 (except as specifically provided otherwise in a water right, appropriated water may, prior to its release into a watercourse or stream, be beneficially used and reused by the holder of the right for the purposes and locations of use provided in the permit, certified filing, or certificate of adjudication).[7] After affirming direct reuse, § 11.046 also provided that once water has been diverted and then returned to a watercourse or stream, it is considered

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[7] This provision could be read to prohibit wholesale customers and treatment plant owners that are not also the water right holders from reusing water. More significantly, for discussion of transfers, the same provision could be read to prohibit the successive use of water for anything other than the original purpose and place of use. For example, municipal effluent no longer could be sold for irrigation purposes. It is somewhat unlikely that the legislature intended to prohibit secondary use in this fashion. Assuming no prohibition was intended, the stated limitation to same purpose and place of use may be overcome by amending the underlying right to allow the new use. If, however, all such direct reuse amendments will be approved in full under the paper-right test discussed in Section 5.2 of this paper, then the requirement for amendment appears to be an unnecessary impediment to water reuse and to water marketing, as well.

surplus water and, therefore, subject to reservation for instream uses or beneficial inflows or to appropriation by others unless expressly provided otherwise in the permit, certified filing or certificate of adjudication. Surplus water was defined in Water Code § 11.002 to mean water in excess of the initial or continued beneficial use of the appropriator.

With regard to reuse after discharge, the as-filed Senate Bill 1 followed suit with the TNRCC's 1997 "interim policy" on reuse by denying indirect reuse options for existing water rights. The amended bill considered by both the House and Senate reversed the TNRCC approach but still severely limited indirect reuse of historically discharged water. Applications to convey historically discharged surface water or historically discharged groundwater were made subject to agency authority to limit the amount of discharged flow that can be diverted. *See* Water Code § 11.042(b), (c). For reuse of groundwater-based effluent, only downstream rights granted based on the use or availability of historical return flows are subject to protection, and such protection is required if "necessary." Special conditions also may be added to conveyance authority for groundwater to help maintain instream uses and freshwater inflows. For surface water, special conditions "may" address existing water rights and environmental uses. Some argued that the restrictions on bed and banks reuse go even further to require a new appropriation for reuse or that the TNRCC's discretion should be uniformly applied to allow no meaningful indirect reuse under existing rights. Existing reuse projects were grandfathered under § 11.042(d). Presumably, any *new* water rights issued could contain whatever indirect reuse authority the TNRCC sees fit to grant.

4.3 Implementation of Senate Bill 1

The TNRCC's rules to implement Senate Bill 1's reuse provisions did not become effective until February 24, 1999. Rather than explaining how the agency would apply Water Code §§ 11.042 and 11.046, they merely tracked the statute verbatim. *See* TNRCC Rules §§ 297.16 (substantive provisions for "Conveyance of Water Down Bed and Banks"), 297.49 ("Return and Surplus Waters"); *see also* §§ 295.112-.113 (procedural provisions for applications to use bed and banks) and 295.161 (notice). One commentator on the Rules urged the agency instead to specify the criteria that the TNRCC would use to determine whether or how the agency would determine if conditions for downstream rights would be imposed on an application related to bed and banks reuse. For example, would the TNRCC consider that the applicant for bed and banks conveyance was solely responsible for the water being available in the system? The agency responded that the inclusion in the rule of additional factors recommended by the commentator would be unnecessary and confusing. If necessary, the staff responded, the TNRCC may revise the agency's regulatory guidance document to provide further description of the technical assessment that will need to be done based upon the statutory considerations.

At the time of this writing, no such guidance has been formalized. A TNRCC staff proposal has been discussed, however, in an agency forum group. See Attachment 3 to this paper. The TNRCC staff proposes that an entity be permitted to divert its return flows conveyed by bed and banks without the necessity of a new appropriation. The proposal, however, also interprets the statutory language that the TNRCC may address the impact on downstream rights and the environment to mean that the entity seeking to redivert its discharged effluent will be responsible for all impacts on downstream water rights and impacts on instream flows and inflows to the bays and estuaries. The TNRCC staff thus reads the discretionary language in § 11.046(c) to actually "require" that downstream water rights be protected. The staff proposes that rights of diversion will be made subject to "call" for the water discharged by all downstream rights that may have relied on the return flows. In effect, the right to divert discharged return flows is given the equivalent of the most junior time priority, little better than a new appropriation.

For going forward with a better system for administering water rights, one significant new rule has been adopted. TNRCC Rules 297.42(g) provides that if the agency grants any new rights

based upon the availability of return flows that may cease in the future, for any lawful reason, those rights will be made expressly interruptible. The TNRCC explained in its responses to comments on the rules that for the water availability analysis for a new water right application, it will be assumed that existing water rights without specific return flow requirements or other limits on direct reuse will be able to directly reuse and consume the entire appropriative amount as authorized by the water right, resulting in no return flows.

4.4 Application of Senate Bill 1 by TNRCC in Contested Proceedings

At the time of this writing, the TNRCC has applied the Senate Bill 1 reuse provisions in only one major contested water right proceeding. *See* Tex. Natural Res. Cons. Comm'n, *An Order granting the Executive Director's Petition to Amend Certificate of Adjudication No. 08-2363 of Dallas County Park Cities Municipal Utility District, Certificate of Adjudication No. 08-2458 of City of Dallas, and Certificate of Adjudication No. 08-2362 of City of Grapevine,* Docket Nos. 95-1626-WR, 96-1017-WR (Apr. 4, 2000). The proceeding involved a petition by the TNRCC Executive Director to involuntarily amend the three certificates of adjudication for use of water from Lake Grapevine by adding an accounting plan to each. The plan was intended, in part, to enforce amended Water Code § 11.046 against the City of Grapevine. Grapevine historically discharges its effluent in the flood pool of Lake Grapevine in which it has contractual rights to store water from the U.S. Army Corps of Engineers and claims those flows as a matter of right. The accounting plan proposed by the Executive Director allocated Grapevine's discharged return flows to the senior water right on the lake.

The reuse question at issue was whether or not Grapevine had a superior claim to its return flows by virtue of the fact that its water right was granted prior to Senate Bill 1, it discharged with the intent to recapture its effluent in its authorized storage capacity in the lake, it could identify its discharged flows by quantity, and it already had the authority to store and divert a quantity of water that included the effluent discharged. The TNRCC staff's position, based on Water Code § 11.046, was that unless Grapevine's water right expressly authorized rediversion of discharged flow, Grapevine had no superior right to the flow. The Administrative Law Judge ultimately recommended that the involuntary amendment petition not be granted, because Grapevine had made a persuasive case for continued dominion over its return flow. That right, she said, should be determined in a case dedicated to the issue of reuse rights. The TNRCC, however, accepted all of the Executive Director's exceptions to the Judge's decision and ordered amendment of Grapevine's rights to impose the allocation of return flows to the senior water right, among other things. The order has been appealed to district court, and Grapevine's separate application under Water Code § 11.042 for the right to its discharged return flows remains pending before the TNRCC, having been submitted in 1998. No party to the involuntary amendment proceeding disputed that Grapevine does have the right to reuse its return flows without discharge and that Grapevine has a Chapter 210 authorization from the TNRCC for that purpose. Grapevine testified in hearing, however, that direct reuse, possible for irrigation purposes rather than municipal purposes, would require more than a four million dollar investment in infrastructure.

5.
THE REUSE ENIGMA

Senate Bill 1 created at least two significant inconsistencies in Texas water law with regard to water reuse. The first exists in the disparate treatment of direct and indirect reuse. The result of this treatment is forcing reuse toward uneconomic and perhaps less healthful projects. It is in stark contrast to the State's goal of making more water available for the most preferential use--human consumption. The second inconsistency involves a friction between indirect reuse and provisions in the same legislation to facilitate transfers of water to new purposes and places of use.

5.1 The Limits of Senate Bill 1 as a Long-Term Direction for Reuse

The impact of water reuse on the availability of flow to satisfy downstream rights is the same whether reuse occurs with or without bed and banks conveyance. Natural conveyance actually may be more protective of the environment as it leaves more water in the watercourse or reservoir for at least some period of time. Forcing reuse projects away from the most economic, healthful and environmentally sensitive implementation is counterintuitive. It also seems unreasonable to recognize in downstream users a right to return flows from stored and foreign waters where the flow would not be available but for the economic investment of the producer. The ultimate justification for the difference in treatment between direct and indirect reuse in Texas has been that a public reluctance to reuse wastewater for potable purposes will naturally discourage direct reuse projects, thereby preventing significant harm to other water rights and the environment. However, as microfiltration and membrane technologies improve, direct reuse of water for municipal purposes becomes a more attractive alternative. Senate Bill 1 merely forestalled the coming conflict between reuse and other water rights.

5.2 Inconsistency with the "No-Injury" Rule

The legislature's indirect reuse policy implicitly recognizes that downstream water right holders may have come to depend on the unconsumed water of upstream users. Amended § 11.042, as interpreted by the TNRCC staff, requires protection of those downstream users, even if reuse is by the original water right holder and for the same purpose and place of use as originally permitted, and considering that the original right to the water was perfected by first use and is vested. However, Senate Bill 1 imposed a contrary value for sales of water rights. As amended by Senate Bill 1, Water Code § 11.122 affords little, if any, protection of other rights against amendment of unused or "paper rights," even when the amendment is for transfer of rights to *other* users for *different* purposes and places of use, and even when water is completely withdrawn from the supply system.

The legal framework for sales of surface water rights is complex largely as a result of the first in time, first in right principle of the prior appropriation doctrine. Because one right is defined by what is left after another more senior right is satisfied, a transfer of one right can impact other water users not party to the transaction. Depending upon the circumstances, an injury-in-fact can occur from a changed point of return flow; an increased diversion rate; an increased rate of consumption; a change in seasonal patterns of use; a change in stream conveyance losses; or a change that alters the order of diversion from a stream, among other factors. The extent to which an injury is legally cognizable is a more complicated matter.

Although the Water Code has long included a no-injury requirement for the granting of a new appropriation under Water Code § 11.134, the Code was silent with regard to the standards for issuing an amendment to a water right. Prior to 1997, a no-injury test was nevertheless assumed. The TNRCC and its predecessor agencies had, in fact, used an injury standard to determine whether to adjust priority dates in amending water rights that often times, but not always, limited the time priority of water rights that had not been perfected through actual use. With publication of the TNRCC's Regulatory Guidance Document in June 1995, the TNRCC expressed a policy for determining injury by looking at the maximum authorized exercise of the water right to be transferred. *See* Tex. Natural Res. Cons. Comm'n, *A Regulatory Guidance Document for Applications to Divert, Store or Use State Water* (June 1995) ("Regulatory Guidance Document"). The Regulatory Guidance Document provided that:

> In determining whether any proposed change would "impair" junior water rights, the Commission compares the water right as it is proposed to be amended with the existing water right. If the existing water right can be exercised lawfully so as to

> have the same impacts on streamflows as the proposed amended water right, then the proposed changes could not, as a matter of law, impair junior water rights.

Id. at 28 (emphasis in original). The Regulatory Guidance Document purported to restate then existing law and policy. The Regulatory Guidance Document still was capable of different interpretations as to how the no-injury rule should be applied in transfer cases. Nevertheless, an approach of measuring the right to be transferred by its "paper" terms was adopted into statute as part of Senate Bill 1.

With regard to defining how the circumstances existing before and after a change of use will be compared, amended Water Code § 11.122 states that:

> Subject to meeting all other applicable requirements of this chapter for the approval of an application, an amendment, except an amendment to a water right that increases the amount of water authorized to be diverted or the authorized rate of diversion, shall be authorized if the requested change will not cause adverse impact on other water right holders or the environment on the stream *of greater magnitude than under circumstances in which the permit, certified filing, or certificate of adjudication that is sought to be amended was fully exercised according to its terms and conditions as they existed before the requested amendment.*

Water Code § 11.122(b) (emphasis added).[8] It is argued by some that, under this new statute, injury may be measured against full hypothetical or paper rights to the water transferred, even if those rights have never been beneficially used, such that they are not vested rights, or have gone long unused, such that they are for that reason subject to abandonment or cancellation.

A historical use test for transfers may be more appropriate and consistent with TNRCC precedent prior to Senate Bill 1. Injury from a transfer can be lawfully measured against past beneficial use and perfection of the water right being changed. The *Lower Colorado River Auth.* case that prohibited double-permitting also protected a water right holder's property interest in developing his use for the purpose and place granted in the permit unless cancelled. The case does not necessarily require that a water right can be *transferred* at face value. Indeed, one can argue that this case prohibits the State from granting amendments that do no protect junior rights at *their* face value. The comparison could be to historical diversions or storage, or to past or assumed consumption. This latter alternative accounts for historical storage and diversions and also for injury from the withdrawal or alteration of return flows. Another variation could look at historical use during the last ten years, the statutory period for cancellation.

The new no-injury test in Senate Bill 1 was particularly directed at promoting water marketing. In its Interim Report following the 1997 Session, the Joint Natural Resources Committee wrote favorably about California as a leader in water marketing policies. California, however, has emphatically rejected a paper-rights no-injury test in favor of a historical use analysis. The equity of historical use analysis of injury is explained particularly well in the following excerpt from the California Water Plan Update.

> The initial rush of enthusiasm for water marketing stimulated much discussion about supposedly unused water. Some water users in the State hold rights (statutory or contractual) to more water than they currently use to meet their needs. Why not sell those rights to others?

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[8] Ironically, changes of the type described as exceptions to the new standard of review have, in some circumstances, caused no injury at all or no significant injury, for example, in the case of increased diversion rates from reservoirs.

> Such arrangements looked attractive to both prospective sellers and buyers. The sellers would receive payment for something they were not using, while the buyers would meet urgent water needs. This view, however, overlooks the fact that water to meet the transferred rights has been part of the basin supply all along, and has almost always been put to use by downstream water right holders or is supporting an environmental need. This type of marketing arrangement became known as a "paper water" deal: the money goes to the seller, while the water is sold to the buyer from the supply of an uninvolved third party.
>
> The California Water Code includes a number of provisions to regulate and facilitate marketing arrangements, as well as a "no-injury" clause that prohibits transfers that would harm another legal user of the water. This clause is the basis for prohibiting sale of paper water.
>
> In analyzing water marketing and water conservation proposals, the Department uses the terms real water and new water to contrast with paper water. Real water is water not derived at the expense of any other lawful user, i.e., water that satisfies the Water Code's no injury criterion. New water is water not previously available, created by reducing irrecoverable losses or outflow to the ocean or inland salt sinks. New water, by definition, must be real, but not all real water is new. For example, water made available through land fallowing is real.

California Water Plan Update Bulletin 160-98 at 6-26 (Nov. 1998) (published at www.state.ca.us).

One key to reconciling transfers under a historical use comparison with the right to fully develop a water permit through reuse is to keep in mind that the authority to further develop a water right to its full potential is specific to the purpose and place of use under an existing grant from the State. So long as use continues consistent with that grant, it must be protected up to its full potential. This is the case with reuse rights discussed above. Another key to reconciling the concepts is that reuse occurs after full perfection of a water right through actual beneficial use. Full use of water rights is the foundation of Texas' prior appropriation doctrine. Profit from speculating in unused water rights is antithetical to that system.

5.3 Compare the Following Hypotheticals

The following hypotheticals are intended to demonstrate the inconsistency of Texas water law after Senate Bill 1 with regard to the right to reuse water. A schematic related to the hypotheticals is Attachment 2 to this paper. In each instance, *A* is the senior water right holder with a permit to store, divert and use 1,000 acre-feet of water per year in an on-channel reservoir. Assume that *A* has a right to divert and use 1,000 acre-feet of water per year. Although the TNRCC assumed when the right was granted that the water would be put to a particular use in certain months of the year and that *50%* of the flow would be returned to the stream as drainage water, it did not place any restrictions on *A's* use other than a maximum diversion rate. *A* never has diverted more than 500 acre-feet in a year, and has returned up to 250 acre-feet a year. The TNRCC subsequently granted downstream rights to *B* having included a hypothetical 500 acre-foot return flow in its water availability models and having determined that 75% of *B's* water needs could be met 75% of the time. *A* has a new contract to serve *C* downstream of *B's* diversion point. Service to *C* is within the terms for purpose and place of use in *A's* permit.

5.3.1 Downstream Sale from Storage

If *A* releases unused water from its storage for conveyance to its downstream customer, it is a simple ministerial procedure to establish a new diversion point downstream. Even if those releases are the only flows in the river, *B* can not divert them. It does not matter in such a situation

if the water used to serve *C* was diverted elsewhere and discharged at *A's* reservoir for terminal storage before it was released to *C*. Even though there are double the diversions, the second diversion is self-supplied and no new water is used.

5.3.2 Direct Reuse

No one disputes that *A* has a right to continue to develop use of its supply up to the full 1,000 acre-foot diversion. If a 50% return flow is maintained, *B* still should have a significant amount of water available for its use. However, as *A's* demands are expected to exceed 1,000 acre-feet, *A* implements a reuse project. Senate Bill 1 law also is clear that *A* can begin to reuse all of its 1,000 acre-feet to complete consumption, leaving nothing for *B*. For a direct reuse project, *A* must construct separate facilities to store return flows for use or pipe the return flows for the subsequent use, such that they are not ever discharged to a watercourse.

5.3.3 Indirect Reuse

Rather than construct pipeline conveyance facilities and off-channel storage facilities at great expense, *A* wishes to move his discharge point to his existing reservoir, or to discharge the flows to the stream in an identified quantity and redivert them downstream after taking into account carriage losses. Mechanically, this is no different than supplying water from storage for first use. This is the project that Senate Bill 1 limited, however. Senate Bill 1 purports to give TNRCC the right to condition the rediversion to accommodate *B's* water use, even including *B's* use of *A's* return flows from stored supplies to which *B* did not financially contribute.

5.3.4 "No-Injury" Rule for Transfer of Used Rights

A could meet its downstream customers' needs by selling water rights instead of water. The impact of the transfer of rights downstream to *C* is judged against *A's* maximum theoretical use in place. *A* can consume 100% of the water that it diverts up to 1,000 acre-feet. Therefore, there is no legal injury to *B*. *A* can keep 800 acre-feet of water and reuse it without discharge. Having sold 200 acre-feet per annum to *C*, *A* will pass that water through his dam downstream to *C*. *C* can divert the water at *A's* old priority, and *B* gets nothing.

5.3.5 "No-Injury" Rule for Transfer of Unused Rights

Changing the scenario somewhat, assume that *A* knows its use will never exceed 500 acre-feet. *A* finds a buyer, *D*, who wishes to obtain 750 acre-feet for use at a different location and for different purposes of use. *D* intends to make no discharges. *A* can satisfy his 500 acre-foot need by reusing 250 acre-feet to full consumption, and he makes the sale. Under a historical use no-injury test, *B* would have some protection in that *D's* use could be subordinated in time priority at least as to the 500 acre-feet that never had been used. Under the Senate Bill 1 no-injury rule, *B* has no protection. The proponents of the paper rights test adopted in Senate Bill 1 argue that because *A* had a right to divert and consume 100% of his 1,000 acre-foot right, he may sell all or part of that right for diversion at a new location and for a different purpose and place of use, and *B* cannot be heard to complain on water right grounds unless the maximum diversion rate is exceeded. Because *B* could not prevent *A* from fully developing *A's* use in place, *B* has no rights that impede *A's* sale.

5.3.6 The End Run on Direct Reuse

If *D* would use *A's* return flows for a new use, delivered by pipeline, the only water right limitation on the sale might be purpose and place of use conditions in *A's* permit. If *A* applies to amend his right, and the TNRCC strictly applies the "paper rights" new no-injury rule without considering public welfare issues, then *A* gets the amendment without limitation. *A* had the right to completely consume his water, so there is no injury.

6.
CONCLUSION

In each of the scenarios in Section 5, *except* indirect reuse, a water user is allowed to make full use of its water right without regard to the uses of other appropriators. This is true even when another appropriator's rights are affirmatively granted in reliance on the expectation that full use will not occur. This was not always the case, both with regard to reuse and with regard to the no-injury rule in water right transfers. Not only creating a statutory inconsistency, Senate Bill 1 also furthered a water marketing "trap."

As a general principle, no viable market in municipal return flows, or water rights based on municipal return flows, is likely to develop until the law recognizes that the superior right to return flows is in the producer of the return flows, unless the underlying water right was issued with a condition requiring that a specified amount of return flow be returned to the river. Uncertainty regarding the right to reuse water can result in a trap for the unwary in that water rights based on another entity's return flows may be purchased with the belief that they are a reliable long-term source but vanish when the discharger implements a reuse program. A downstream water user who relies on upstream return flows needs an agreement limiting direct reuse upstream to have any security in its future supplies.

At a minimum, a progressive and consistent water right philosophy for Texas will require a restored equity in water reuse policy and reconciling the provisions for reuse with Senate Bill 1's new statutory definition of what constitutes injury to other surface water rights when a change in use is proposed. Adjudication of rights in return flow may be the ultimate answer for water reuse in Texas, however. Just as the unpredictable exercise of riparian rights threw appropriative rights in disarray and justified adjudication, the unpredictable exercise of water reuse rights must be solved. Waste also can result if water that can be reused is not used because of the uncertainty of its availability in the future or because direct reuse is infeasible. After adjudication, there would be no reason to distinguish between direct and indirect reuse, allowing reuse to proceed by the most feasible means available.

While today's regulatory environment is not as favorable to reuse as it has been in the past, reuse in many forms still remains a viable source of water supply, and it will become more so as technology advances. The need to resolve the reuse enigma will only grow more acute.

As new water availability models are prepared pursuant to Senate Bill 1 mandates, it is anticipated that many water right holders across Texas will find out that they do not have as much water as they thought. Senate Bill 1 requires the TNRCC to deliver information regarding the impact of reuse to the regional planning groups. Undoubtedly, regional planning will recommend increased future reuse of existing supplies. It may well happen that regional plans for reuse upstream will be in conflict with downstream regional plans that depend on returned flows. Against this planning backdrop, it also is the case that significant water reuse projects are, and will be coming, before the TNRCC for contested case resolution and possibly also to the courthouse.

Senate Bill 1 Water Code Provisions Addressing Reuse and the No-Injury Rule

Water Code § 11.002(10):

"Surplus water" means water in excess of the initial or continued beneficial use of the appropriator.

Water Code § 11.042:

(c) . . . a person who wishes to convey and subsequently divert water in a watercourse or stream must obtain the prior approval of the commission through a bed and banks authorization. The authorization shall allow to be diverted only the amount of water put into a watercourse or stream, less carriage losses and subject to any special conditions that may address the impact of the discharge, conveyance, and diversion on existing permits, certified filings, or certificates of adjudication, instream uses, and freshwater inflows to bays and estuaries. . . .

(d) Nothing in this section shall be construed to affect an existing project for which water rights and reuse authorizations have been granted by the commission before September 1, 1997.

Water Code § 11.046:

(c) Except as specifically provided otherwise in the water right, water appropriated under a permit, certified filing, or certificate of adjudication may, prior to its release into a watercourse or stream, be beneficially used and reused by the holder of a permit, certified filing, or certificate of adjudication for the purposes and locations of use provided in the permit, certified filing, or certificate of adjudication. Once water has been diverted under a permit, certified filing, or certificate of adjudication and then returned to a watercourse or stream, however, it is considered surplus water and therefore subject to reservation for instream uses or beneficial inflows or to appropriation by others unless expressly provided otherwise in the permit, certified filing, or certificate of adjudication.

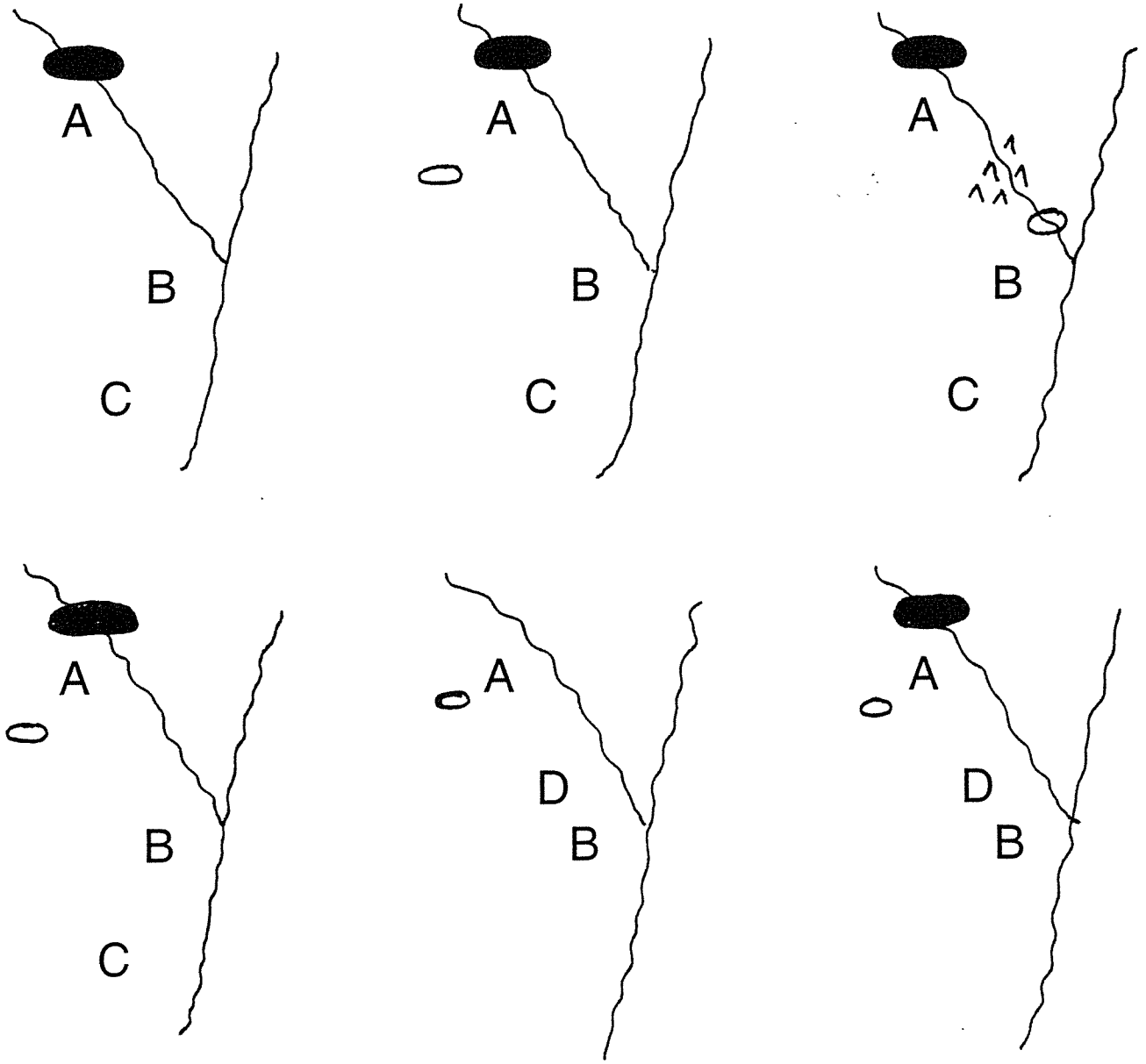
Water Code § 11.122:

(b) Subject to meeting all other applicable requirements of this chapter for the approval of an application, an amendment, except an amendment to a water right that increases the amount of water authorized to be diverted or the authorized rate of diversion, shall be authorized if the requested change will not cause adverse impact on other water right holders or the environment on the stream of greater magnitude than under circumstances in which the permit, certified filing, or certificate of adjudication that is sought to be amended was fully exercised according to its terms and conditions as they existed before the requested amendment.

Water Code § 16.012:

(k) Within 90 days of completing a water availability model for a river basin, the commission, in coordination with the Parks and Wildlife Department and with input from the Department of Agriculture, where appropriate, shall determine the potential impact of reusing municipal and industrial effluent on existing water rights, instream uses, and freshwater inflows to bays and estuaries. Within 30 days of making this determination, the commission shall provide the projections to the board and each regional water planning group created under Section 16.053 of this code in that river basin.

- *A* has a senior water right for 1,000 acre-feet, with no restrictions on consumptive use.
- *A*'s maximum historical use is 500 acre-feet with a 50% return.
- *B*'s water rights were granted based on a TNRCC model that included an assumed 50% return flow from *A*.
- *C* is *A*'s new downstream customer, and service to *C* is within the purpose and place of use specified in A's permit.



RETURN AND SURPLUS WATER

Since the passage of Senate Bill 1 during the 75th Legislative session, the TNRCC has received several water right applications requesting authority to divert returns flows discharged into streams by water right holders. This document addresses how the Executive Director proposes to evaluate these applications under the existing statutes and agency rules.

The Texas Water Code addresses this issue in Sections 11.042 and 11.046. Section 11.042 states in subsection (b) and (c):

> *(b) A person who wishes to discharge and then subsequently divert and reuse the person's existing return flows derived from privately owned groundwater must obtain prior authorization from the commission for the diversion and the reuse of these return flows. The authorization may allow for the diversion and reuse by the discharger of existing return flows, less carriage losses, and shall be subject to special conditions if necessary to protect an existing water right that was granted based on the use or availability of these return flows. Special conditions may also be provided to help maintain instream uses and freshwater inflows to bays and estuaries. A person wishing to divert and reuse future increases of return flows derived from privately owned groundwater must obtain authorization to reuse increases in return flows before the increase.*

This section provides that an entity who wishes to discharge privately owned groundwater must receive Commission approval to divert and reuse those return flows. The entity diverting the return flows must be the same entity that discharged the flows. Carriage losses are the responsibility of the entity. Also, downstream water rights and the environment must also be protected.

> *(c) Except as provided in Subsection (a) of this section, a person who wishes to convey and subsequently divert water in a water course or stream must obtain the prior approval of the commission through a bed and banks authorization. The authorization shall allow to be diverted only the amount of water put into a watercourse or stream, less carriage losses and subject to any special conditions that may address the impact of the discharge, conveyance, and diversion on existing permits, certified filings, or certificates of adjudication, instream uses, and freshwater inflows to bays and estuaries. Water discharged into a watercourse or stream under this chapter shall not cause a degradation of water quality to the extent that the stream segment's classification would be lowered. Authorizations under this section and water quality authorizations may be approved in a consolidated permit proceeding.*

This section provides that an entity may receive Commission approval to convey in and subsequently divert water from a watercourse. The entity will be responsible for all carriage losses, impacts on downstream water rights, and impacts on instream flows inflows to the bays and estuaries.

Section 11.046 in subsection (c) states:

> *Except as specifically provided otherwise in the water right, water appropriated under a permit, certified filing, or certificate of adjudication may, prior to its release into a*

watercourse or stream, be beneficially used and reused by the holder of a permit, certified filing, or certificate of adjudication for the purposes and locations of use provided in the permit, certified filing, or certificate of adjudication. Once water has been diverted under a permit, certified filing, or certificate of adjudication and then returned to a watercourse or stream, however, it is considered surplus water and therefore subject to reservation for instream uses or beneficial inflows or to appropriation by others unless expressly provided otherwise in the permit, certified filing, or certificate of adjudication.

This section provides that a water right holder may totally consume all water diverted under the water right unless expressly provided otherwise in the right. If the water is ever returned to a stream or watercourse, it is surplus water and available for use by other water right holders, appropriation to others, or environmental flows.

The TNRCC rules also address this issue in Chapter 297. Section 297.1 defines return water or return flow as:

That portion of state water diverted from a water supply and beneficially used which is not consumed as a consequence of that use and returns to a watercourse. Return flow includes sewage effluent.

Reuse is defined as:

The authorized use for one or more beneficial purposes of use of water that remains unconsumed after the water is used for the original purpose of use and before that water is either disposed of or discharged or otherwise allowed to flow into a watercourse, lake, or other body of state owned water.

Section 297.49(a) states:

A right to take and use water is limited to the extent and purposes authorized in the water right. Except as specifically provided otherwise in the water right, state water appropriated under a water right may be beneficially used and reused by the water right holder in accordance with the water right prior to its release into a water course or stream. Once water has been diverted under a water right and then returned to a water course or stream, however, it is considered surplus water and, therefore, subject to maintaining instream uses, beneficial inflows to bays and estuaries, or appropriation by others unless expressly provided otherwise in the water right.

Several proposed projects would divert waters that have either historically been discharged as return flows or water that will in the future be discharged as return flows. At least some of the Texas Water Commission's prior water availability models assumed a return flow factor for municipal water rights. The adjudication for the San Antonio River basin relied on historical discharges to that basin. Thus, these assumed return flows were available to be appropriated to other water right applicants. Also, it is likely that Section 11.303 claims of water rights used these return flows during the critical period to establish their claim. Thus, it is likely that some downstream water rights were authorized or

established based on the existence of upstream return flows and these water rights have grown to rely on these return flows.

To evaluate these applications for return flows, the Texas Water Code and TNRCC rules require that downstream water rights be protected and environmental issues be addressed. The TNRCC evaluation will provide that:

1) the applicant will be responsible for all carriage losses associated with the discharged water from the point of discharge to the point of diversion;

2) a "no injury" analysis will be completed for downstream water rights. Thus, downstream water rights which may have relied on these return flows will be protected. This will be accomplished by allowing these water rights to "call" on this water if needed to meet their needs. Since the request to divert water that is already permitted or originated as groundwater, it is not necessary to find additional water available for appropriation. The right to continue to divert this water will be contingent upon the entity to continuing to discharge this water into the watercourse.

3) an environmental analysis will be completed to determine if any special conditions will need to be imposed to protect instream uses and the bays and estuaries.

Thus, it is recommended that an entity be permitted to divert **their** return flows minus any carriage losses, with provisions for protection of downstream water rights, and protection of instream uses and bays and estuaries.

Franz Hiebert is a nationally recognized authority on the application of natural attenuation processes to environmental remediation and regulatory compliance. His early research helped establish the scientific foundation for the use of natural processes as corrective action. Over the past five years, Dr. Hiebert has directed the investigation and quantification of natural attenuation in soil and groundwater for clients throughout the United States, Europe, and Mexico. In Texas, his clients have successfully applied natural attenuation strategies for regulatory compliance and remediation through programs at the Texas Natural Resource Conservation Commission (TNRCC) and Texas Railroad Commission.

Dr. Hiebert has broad training and experience in the geosciences and in the oil and gas/petrochemical industry. His academic degrees are from Harvard University and The University of Texas at Austin. He currently directs RMT's regional program of liability management and remediation by low-impact and natural attenuation methods.

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Paper not submitted in time for printing.


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SCOTT T. CROUCH

Experience

Scott has over ten years of experience in environmental assessment and regulatory compliance. His technical experience includes; regional ground-water assessments for pesticide impacts, ground-water modeling for resource management and remediation system evaluation and planning, site assessments at State and Federal Superfund sites. Scott's regulatory expertise includes the Texas Risk Reduction Program (TRRP) rule, the Texas Voluntary Cleanup Program, and both the State and Federal Superfund Programs in Texas. During his tenure at the Texas Natural Resource Conservation Commission (TNRCC) and the Texas Water Commission, Scott worked in a variety of roles; project manager in the Superfund Program, one of the principal authors of the legislation and rules for the Voluntary Cleanup Program, Unit Manager in the Voluntary Cleanup Program, one of the principal authors of the TRRP rule, and Section Manager of the Superfund Program.

Positions

JD Consulting, L.P., January 2000 - present. Senior Consultant. Direct and assist other project managers in conducting site assessments, development of protective concentration levels, and remedy selection in accordance with the TRRP rule. Perform natural attenuation evaluations to determine efficacy of natural attenuation to obtain remedial objectives in accordance with TRRP rule.

Texas Natural Resource Conservation Commission, April 1999 - December, 1999 -. Section Manager of Superfund Program

Texas Natural Resource Conservation Commission, Sept. 1995 - April 1999. Unit Manager in Voluntary Cleanup Program

Texas Natural Resource Conservation Commission, Feb. 1991 - Sept. 1995. Project Manager in Superfund Program

Texas Natural Resource Conservation Commission, Nov. 1989 - Feb. 1991. Geologist , Ground-Water Assessment Section

Mitchell Energy and Development, June 1982 - Sept. 1986, Geologist

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M.S., Hydrogeology, Oklahoma State University, 1989

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The Texas Risk Reduction Process

The Reasons Behind the Process

The combination of forms, guidance, and prescriptive detail in the rule itself all work to establish a process, which one must follow to obtain the remedy standard of choice. Certainly, the Texas Risk Reduction Program (TRRP) rule (30 Texas Administrative Code (TAC) 350) is more of a process than any previous cleanup rules adopted by the Texas Natural Resource Conservation Commission (TNRCC). To better understand the new rule, it is helpful to understand the desires which drove its development.

The TNRCC had several objectives that drove the development of the new TRRP rule. One of the primary objectives was to develop one risk-based rule that could be used in all remediation programs (e.g., Corrective Action, Petroleum Storage Tank, Voluntary Cleanup Program, etc.). Another objective, was to standardize the "process" used to develop cleanup levels (i.e., protective concentration levels (PCLs)) and the choices for remedial options (i.e., remedy standards). This was deemed important to the TNRCC, in order that TNRCC staff could be trained to review associated reports in a more efficient manner. The assumption being that once TNRCC staff learn the new rule, they can review associated reports submitted to any of the various program areas. This is supposed to allow TNRCC staff to be reassigned to the various program areas to meet the changing work loads.

From the TNRCC's perspective, efficiency is gained in standardization and limiting the

numerous issues that lend themselves to site-specific analyses. With this thought in mind, it is easier understand why the rule and associated forms and guidance documents appear to result in "one-size-fits-all." The TNRCC also expressed an inability to handle certain site-specific technical issues (e.g., probabilistic modeling).

New Issues

Another objective of the TRRP rule was to deal with a number of issues, which were not addressed under the old Risk Reduction rules (30 TAC 335, Subchapter S). This included a number of policy issues (e.g., notification to adjacent landowners and obtaining the landowner's approval when relying upon control measures), which either were not addressed at all in the old Risk Reduction rules or were not sufficiently clear for consistent implementation. On the technical side, the TRRP rule also addresses issues which were absent under the old rules (e.g., the process to develop ecological PCLs). In order to fulfill the TRRP requirements, you must be aware of these new issues and the timing associated with successfully implementing these new requirements. Of particular note, and discussed in more detail below, is the notification requirements that must be completed according to the specified time frames. The new requirement to obtain landowner concurrence for the filing of any institutional controls means it is necessary to begin communications with affected landowners early in the process, otherwise you run the risk of having the landowner prevent any type of closure other than a Remedy Standard A- residential closure (i.e, cleanup everything to residential health-based levels). Failure to understand and comply with these new requirements will at a minimum result in delays and most likely increased costs.

Entering the TRRP

Early in many environmental assessments, the question of "notice to the TNRCC" becomes relevant when contamination is discovered. It is important to note and understand that the TRRP rule does not have any notice provisions for reporting contamination to the TNRCC. In fact, the TNRCC was very clear that the TRRP rule does not contain any such provisions and does not in any way change existing requirements for such notice, with the following exception. The spill rules (30 TAC 327) have been changed to now reference using the TRRP rule for the technical requirements when spills are not addressed within 180 days of the actual spill. Prior to the adoption of the TRRP rule, the spill rules referenced 30 TAC 335, Subchapter S, the old Risk Reduction rules. The only requirements in the TRRP rule which deal with notice are the requirements to notify others (e.g., off-site landowners or easement holders when contamination has migrated off-site).

If the TRRP rule does not require you to notify the agency, then how does one become subject to the TRRP rule? You become subject to the TRRP rule through some other regulatory program and/or rule (e.g., the Voluntary Cleanup Program (VCP) or an enforcement Order). The TRRP rule is best thought of as a set of technical standards that the TNRCC uses to evaluate the sufficiency of environmental assessments and remediations. The TNRCC program coordinator will refer to the TRRP rule to evaluate the technical content of reports and less the timing of the submissions.

The Affected Property Assessment

The TRRP process begins with the affected property assessment or what is more commonly referred to as the site investigation. It will normally only be possible to select the remedy after some information is available concerning the nature and extent of the contamination. And, while the rule does require the submission of a Self Implementation Notice (SIN) for Remedy Standard A, it is important to note that the rule does not require this submittal until ten days before implementing the remedy. The SIN may be submitted earlier but there is no need to do so or to be concerned about choosing the remedy standard until sufficient information is available to make this decision. Unlike the previous rule (i.e., Risk Reduction rules), the requirements for the assessment are fairly specific yet flexible if you understand the rule. The assessment requirements can be described as, "the more you know the less you need to know." As expected, this part of the process is probably the least understood and yet very important to saving unnecessary costs when completing the affected property assessment.

Land Use Classification

The affected property assessment is probably more of a "process" than any other portion of the rule. The process begins by determining land use. Land use determination is completed by simply comparing the actual current land use to the definitions for residential and commercial/industrial. Land use is important to the affected property assessment, because the on-site horizontal soil assessment may be limited based on the land use (i.e., investigate on-site soil laterally to commercial/industrial PCLs instead of lower residential PCLs when the on-site land use is commercial/industrial). The land use determination based upon the definitions is fairly straightforward; however, the landowner must agree with anything other than residential land use. If the landowner does not agree to limit the property to commercial/industrial use, then the land must be classified as residential and assessed accordingly.

Ground Water Classification

The rule requires that each ground water-bearing unit that contains Chemicals of Concern (COCs) at concentrations equal to or greater than the residential groundwater assessment level be classified. Ground water classification may be important to both the soil assessment and the ground water assessment. For example, if the ground water is a Class 3 ground water resource, then the normal ground water assessment level may be increased by a factor of 100 (some limitations may apply due to volatility or ground water discharge to surface water). This factor of 100 also increases the concentration in soil which is required to be protective of the underlying ground water. In instances where the soil assessment is being driven by the soil-to-ground water pathway, the ground water classification may save significant expense.

Assessment Levels

The affected property assessment is generally driven by the requirement to define latterly those media with concentrations of COCs exceeding the assessment level. The rule defines the

assessment level as the critical PCL (i.e., lowest of all applicable PCLs for a specific environmental medium) with the stipulation that all human health PCLs must be derived under Tier 1 except the soil-to-ground water PCL, which may be derived under any of the three tiers. The "tiers" referred to in the rule are the three tiers used under the Risk-Based Corrective Action program developed by the American Society for Testing and Materials. Tier 1 uses default data and does not allow for site-specific considerations. Both Tier 2 and 3 allow site-specific information, with tier 2 being limited to calculation techniques provided in TNRCC guidance. Each tier generally represents an increasing level of effort and sophistication, and care should be taken to ensure the most cost-effective tier is chosen. For most sites, tier 2 values for the soil-to-ground water pathway (i.e., ^{GW}Soil) will be cost-effective and in many instances tier 3 values may be cost-effective for this particular pathway. The soil-to-ground water pathway seems to be the pathway the TNRCC is most willing to allow for adjustments under higher tiers, as evidenced by the special provisions allowing for its adjustment in determining the assessment level. For other pathways (e.g., direct contact with surface soils), the TNRCC has limited the ability to develop PCLs under higher tiers.

Phasing the Affected Property Assessment

One of the most critical steps in deriving any cost savings during the affected property assessment is phasing the assessment to maximize the flexibility provided in the TRRP rule for "risk-based assessments." The old Risk Reduction rule as implemented by the TNRCC required assessments to be conducted latterly to background concentrations to allow for the deeding recording of all areas exceeding background concentrations. One of the pronounced benefits of the TRRP rule is the ability to conduct a "risk-based assessment." However, it is often difficult to realize any significant cost savings and is certainly dependent upon site-specific factors, such as ground water classification.

It is necessary to approach each site on an individual basis to determine how to derive any cost savings. Obviously, the costs of multiple field mobilizations will quickly off-set any cost savings derived from these efforts. However, as the rule actually limits the information that affects the assessment level (i.e., ground water classification, the potential for COCs to impact the underlying ground water, and ecological considerations), phasing the assessment is not as confusing as it may initially appear.

Every site must complete a "tier 1" ecological checklist to determine the potential for ecologial impacts. The ecological checklist can often be completed early in the process, hopefully eliminating any ecological concerns. If a site fails the checklist, then there is a good chance that an additional mobilization may be necessary to investigate to ecological PCLs. If this is the case, then it may be best to focus temporarily on the human health aspects and determine the assessment level based on human health PCLs. Ground water should be classified during the initial phase if there is the potential the ground water is Class 3. If based on existing information (e.g., water well drillers logs) it is unlikely the ground water can be classified as Class 3 and it appears that only soils are impacted, then it probably is not cost effective to install monitoring wells to classify the ground water. Remember that the vertical soil assessment must be conducted to the higher of either the method quantitation limit or background concentrations,

unless an adequate ground water assessment has been conducted (e.g., COC concentrations in groundwater have been measured from appropriate locations). When an "adequate ground water assessment" has been conducted, the vertical soil assessment can be conducted to the ^{GW}Soil PCL. The phasing of the affected property assessment should take advantage of this provision where a significant cost savings may be realized by terminating vertical soil borings at the higher concentration (i.e., ^{GW}Soil PCL). While ground water classification is not always required, development of the ^{GW}Soil PCL will most likely be required. Thus it is better to develop this PCL early in the assessment process.

Some additional flexibility is provided for the soil-to-ground water pathway. This pathway may be eliminated completely, based upon a site-specific demonstration that the COCs in soil will allow the soil response objectives for groundwater protection to be met. Under the old Risk Reduction rules, many Remdy Standard 2 remediations were driven by soil cleanup levels that were developed to be protective of ground water, when in reality the existing contaminants in the soil did not threaten the underlying ground water. The TRRP rule address this issue in two ways: (1) it allows for site-specific cleanup levels for the soil-to-ground water pathway as discussed above and (2) it provides a process to eliminate this pathway entirely. Obviously, option number two is preferable and should in most instances be cost-effective. The rule discusses this approach and the required information in more detail than is appropriate for inclusion in this discussion. However, this possibility should be factored into the process for completing the affected property assessment as the ^{GW}Soil PCL is often the critical PCL for soils.

Notification Requirements

As mentioned above, the TRRP rule does contain new provisions for notifying landowners or others who may be exposed to contamination. Most of the requirements are only triggered when information is provided to the agency. In an instance where there is an actual or probable exposure to contamination above the PCL, the person responsible for conducting the affected property assessment (e.g., VCP applicant, landowner, etc.) must notify those exposed, the landowner, and the TNRCC executive director. The notice must be completed within 60 days of receiving the laboratory analysis that indicates concentrations of contaminants are greater than the PCL (based upon direct contact such as the maximum contaminant level in drinking water). The potential for being required to provide this notice should be included in the process (i.e., site investigation plan) to conduct the affected property assessment. The applicable PCLs (i.e., $^{Tot}Soil_{Comb}$ and $^{GW}GW_{Ing}$ are provided by the TNRCC and a comparison should be completed within the 60 day time frame if the potential for exposure exists at a given site. Otherwise, notice of the availability of the analytical analyses only has to be provided at the same time the information is provided to the TNRCC.

Selection of a Remedy Standard

Assuming the affected property assessment is complete and all applicable notice provisions have been met, the process now focuses on the selection of the remedy standard. While the old Risk Reduction rules had three remedy standards to choose from (Remedy Standard 1 - Background Cleanup; Remedy Standard 2, Generic Risk-Based Cleanup, and Remedy Standard 3, Site-

specific Risk-Based, Removal, Decontamination, and/or Control), the TRRP rule has two remedy standards. Remedy Standard A is a risk-based cleanup and Remedy Standard B is a risk-based approach that may include removal, decontamination, and/or control. If Remedy Standard A is chosen, then the SIN must be submitted prior to starting the cleanup and a Response Action Effectiveness Report is required to be submitted at least every three years to report on the progress of the response action. If Remedy Standard B is chosen, then a Response Action Plan must be submitted and approved prior to implementation of the response action. Response Action Effectiveness Reports may also be required under Remedy Standard B, in accordance with the approved Response Action Plan. Both remedy standards require the submittal of a Response Action Completion Report upon completion of the response action. Some Remedy Standard B response actions which utilize controls may require Post-Response Action Completion Reports. If the control used in Remedy Standard B is a physical control, then financial assurance is also required for the operation and maintenance of the physical control.


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Current Issues in Toxicology and Their Impact on TRRP

By

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Introduction

Toxicology can be broadly defined as the study of the adverse biological effects of chemicals on humans, wildlife and other living systems. One of the bedrock principles of this science is that "the dose makes the poison." That is, all chemicals are toxic at a sufficiently high level of exposure; below that level they are not. Aspirin and sodium chloride, two common chemicals used by millions of people every day, are safe when consumed at recommended levels; when ingested in massive quantities they can be dangerous to the point of lethality.

Chemicals will vary widely in their toxic potential, depending upon their physical and chemical characteristics and route of exposure (oral, dermal or inhalation). Dioxin, pesticides, and arsine gas can exert harmful effects at relatively low levels of exposure; conversely, manganese, hexane and methoxyflurane will be toxic only at higher levels. A chemical's toxicity therefore is a function of its inherent chemical nature and the degree to which exposure occurs, namely, the "dose" received by a person or animal (1).

Risk, on the other hand, can be defined as the probability of the occurrence of adverse effects within a specific individual or population as a result of exposure to a chemical. The process known as risk assessment incorporates site assessment data, toxicology and environmental fate and transport into an assessment of the extent of chemical exposure and ultimately into an estimate of risk resulting from that exposure.

A risk-based regulatory program, such as the Texas Risk Reduction Program, therefore closely depends upon toxicology for the development of its quantitative, risk-based standards. Toxicology is an ever-growing discipline; new information on the health effects of chemicals continually emerges from the nation's laboratories. As our understanding of toxicology evolves, it is inevitable that changes in risk-based criteria and protocols will occur within state and federal regulatory programs.

The following discussion provides a brief overview of current issues in the toxicology of several widely encountered contaminants and of how these issues may impact the implementation of TRRP.

Arsenic

The Office of Ground Water and Drinking Water of USEPA is currently proposing to reduce the drinking water standard for this inorganic chemical from 50 ug/L to 5 ug/L (2). The basis for this proposed change is a March 1999 report by the National Academy of Sciences that states that the current standard does not adequately protect public health. According to the EPA, the new standard would protect an additional 22.5 million from cancer, cardiovascular disease, neurological disorders and other health effects. After taking comments on this proposal, the agency is expected to promulgate a final rule by January 1, 2001, under the 1996 amendments to the Safe Drinking Water Act.

If enacted, this ten-fold reduction in the ground water standard would have significant impacts on TRRP closures for sites where arsenic is a contaminant of concern (COC). Since the standard for is a primary maximum contaminant level (MCL), this new standard will serve as the ground water ingestion risk-based exposure limit (RBEL) for Class 1 and 2 ground waters (30 TAC 350.74(f)). Class 3 ground water is allowed a 100-fold upward adjustment in the RBEL (30 TAC 350.74(g)). For evaluation of the ground water ingestion pathway, which is mandatory under TRRP, the RBEL in effect becomes the protective concentration level (PCL) since direct ingestion is assumed and fate and transport factors are not allowed (except under a plume management zone [PMZ]).

A new and lower standard for arsenic would have the following impacts on a TRRP evaluation for an arsenic site:

- The Tier 1 PCL would immediately drop from 50 ug/L to 5 ug/L;
- Requirements for ground water assessment would expand, since the residential Tier 1 PCL is the endpoint for plume delineation (30 TAC 350.51 (c) and (e));
- Reported concentrations of arsenic in ground water would be more likely to exceed the standard, thereby resulting in an enlargement of the protective concentration level exceedence (PCLE) zone within ground water (30 TAC 350.4(a)(69));
- An enlarged PCLE zone could possibly restrict the location of the alternate point of exposure (POE) for a plume management zone (30 TAC 350.37(l)(4));
- Off-site migration of arsenic above the MCL would occur more frequently, thereby triggering active remediation (e.g., hydraulic control at the property line) where that would not have been required under the previous standard;
- A lower RBEL for arsenic would lower the attenuation action levels for the monitoring program required by a PMZ, potentially making it more difficult to achieve and maintain compliance (30 TAC 350.33(f)(4)(D)(ii)); and

- A lower PCL for arsenic would result in the lowering of the soil-to-ground water PCL, since that criterion is based in part upon the ground water PCL (30 TAC 350.75(i)(7)).

In conclusion, the lowering of the ground water standard for arsenic to 5 ug/L may make site investigation more expensive, create PCL exceedences within TRRP where none existed before, possibly restrict alternate ground water remedies (e.g. the PMZ), lower soil PCLs, and increase overall closure costs for arsenic sites.

Chlorinated Dibenzodioxins

It is difficult to imagine a more thoroughly studied group of xenobiotic compounds than the family of congeners known as dioxin. The EPA and the scientific community has been undertaking a massive reassessment exposure levels and human health effects of dioxin since 1991, resulting in a six-volume draft document (3,4). It is somehow ironic, however, that despite this vast body of knowledge about dioxin, TRRP is unforgiving in its standards for this chemical. The residential soil PCL for 2,3,7,8-tetrachlorodibenzodioxin (2,3,7,8-TCDD) is 1 ug/kg; the commercial/industrial PCL is 5 ug/kg. These standards apply to all three tiers of PCL (30 TAC 350.76(e)(3)). The acclaimed flexibility of TRRP is denied to this well-known contaminant.

This is not to say, however, that a responsible party at a dioxin site has no recourse to minimizing the cost of site assessment or remediation under TRRP. The key to efficient management of a dioxin site lies within the site investigation phase.

Dioxin is actually a family of compounds known as the chlorinated dibenzodioxins and difurans. Separate groups of dioxin, such as the tetrachlorinated or pentachlorinated dioxins, are called homologues. Individual compounds within this each homologue are known as congeners. The congeners differ among themselves, and are named accordingly, by the number and position of their chlorine atoms. For example, 1,2,3,7,8-pentachlorodibenzedioxin has five chlorine atoms at the numbered positions; other five-chlorine dioxins are possible with rearrangement of the atoms to other locations.

An individual congener may have up to eight chlorine atoms; in one of the famous exceptions to the rule in toxicology, increasing chlorination among the dioxins decreases toxicity, instead of increasing it as is frequently the case with other chemicals. These characteristics of chlorine within each congener have an enormous impact on a congener's toxicity; there is a ten thousand-fold range of toxicity among the dioxin congeners. TRRP allows this differential toxicity, expressed as toxicity equivalence factors (TEFs), to be taken into account when estimating site concentrations from analytical data.

Dioxin in soil can be analyzed in one of several ways. First, soil can be analyzed for only the total dioxin/difuran content. Second, only the general homologues of dioxin can be reported. Third, specific congeners can be analyzed and reported. The last two methods are recommended.

TRRP requires (30 TAC 350.76(e)(1)(A)-(C)) that concentrations for total dioxin be assumed to consist entirely of 2,3,7,8-TCDD. This is a very conservative assumption for two reasons: 1) most environmental dioxin is seldom detected as this congener; and 2) 2,3,7,8-TCDD is the most toxic of all dioxin congeners. For homologue or congener analysis, the TEFs can be utilized for each category. TEFs are provided in Figure: 30 TAC 350.76(d)(2)(B); the TEFs reflect the differences in toxicity among the various homologue classes. The reported concentration for homologue or congener is multiplied by the TEF for that category (e.g., 0.1 for the hexachlorodibenzodioxins and 0.0001 for the octachlorodibenzodioxins). It is notable that the most frequently encountered congener group, the octachordibenzodioxins, has a TEF of 0.0001, the lowest of the group. All the values are then summed to give a total for 2,3,7,8-TCDD equivalents, the standard method for reporting dioxin. Given the range among the TEFs, it is readily apparent that analyzing only for total dioxin could result in s drastic overestimation of the actual level of 2,3,7,8-TCDD equivalents.

Over the long-term, it is likely that the regulated community may have to deal with more burdensome remediation of dioxin sites. The director of the dioxin reassessment study, Dr. William Farland of EPA's Office of Research and Development, told me several years ago in a telephone interview that the health reassessment was undertaken in expectation that further study would show that dioxin is less toxic to humans than was previously thought. Instead, the opposite conclusion has resulted. As the reassessment enters its final stages, dioxin is being proposed for an upgrade to a "human carcinogen" with a cancer potency three to 30 times higher than previously estimated. The body burden of dioxin from background exposures is believed to be much closer to the threshold level for non-cancer effects than previously believed. Although the conclusions of the reassessment are not universally accepted within the scientific community, dioxin will continue to be a regulatory and remediation concern in the years to come.

Polychlorinated biphenyls (PCBs)

It has becoming increasingly recognized that certain forms of PCBs, because of their double aromatic structure and spectrum of differently chlorinated congeners, are similar to dioxin in their action at the cellular level. These two categories of contaminants are believed to exert their toxic effects ultimately through the mechanism of receptor binding within the living cell, namely, the aryl hydrocarbon, or Ah, receptor. As a result of these similarities to dioxin, TRRP incorporates (30 TAC 350.76(d)) the TCDD TEF approach as an option for evaluating site analytical PCB data.

TRRP provides an interesting set of options that should be approached with some caution when calculating Tier 2 or Tier 3 PCLs for this compound. One option is that congener analysis may be performed. When certain criteria are met by the congener analytical data, TRRP allows for a drastic reduction in the slope factor for PCL calculation under these tiers (from 2/mg/kg/day for Tier 1 to 0.07/mg/kg/day for Tiers 2 or 3). This is potentially of great advantage to a responsible party, because such a reduction in the slope factor results in a proportionate increase in the PCL. (The slope factor represents the

confidence limits of the slope of the carcinogenic bioassay dose-response curve; a higher factor represents higher carcinogenic potency.)

However, if the congener analysis reveals the presence of "dioxin-like" PCBs (and not all PCBs have dioxin-like similarities), then those "dioxin-like" PCBs must be evaluated by the TEF method, and then compared to the critical soil PCL for dioxin. If dioxin (in the form of TCDD equivalents) is also present at the site, the PCB values must be added to the dioxin values before comparing to the critical soil PCL for dioxin. This PCL is, as we saw above, either 1 ug/kg or 5 ug/kg for all three tiers. These levels compare unfavorably with the Tier 1 residential critical soil PCL of 1.1 mg/kg and the commercial/industrial critical PCLs of 7.7 mg/kg (for a 0.5 acre source area) and 5.3 mg/kg (for a 30 acre source area).

The responsible party should carefully weight the potential outcome of the PCB options for PCL calculation provided by TRRP.

Lead

This ubiquitous inorganic contaminant remains a public health concern, although one of declining urgency due to reductions in ambient concentrations in recent years. From the standpoint of risk assessment and risk-based cleanup levels, exposure issues like bioavailability (the ability of a chemical to be released from soil so that it can enter the body) have been recognized as important factors.

TRRP recognizes that these variables can significantly affect the extent to which exposure to environmental lead can occur (30 TAC 350.76(c)(30)). Specifically, TRRP allows for the adjustment of certain variables in the equation when calculating a commercial/industrial Tier 2 or Tier 3 PCL for this ubiquitous inorganic contaminant. (The residential soil PCL is 500 mg/kg for all three tiers; for the equation in question, see Figure 30 TAC 350.76(c)(3)).

The variables for which TRRP allows modification include baseline blood lead and the available fractions of lead in soil and dust. It is immediately apparent that it will not be a simple matter to develop new site-specific values for these variables. Blood lead levels are not readily obtainable for an exposed population, and bioavailability percentages sometimes require bench-level studies to determine. However, TRRP does allow the use of the open literature for changes from the default values. Again, the responsible party will need to carefully evaluate the potential benefits versus the cost of undertaking a Tier 2/3 modification of the algorithm for calculation of the lead commercial/industrial PCL.

PAHs and TPH

For polycyclic aromatic hydrocarbons (PAHs) and total petroleum hydrocarbons (TPH), certain aspects of their toxicology have been known and utilized for several years in risk-based remediation for these compounds. TRRP now formally incorporates these approaches into its protocol for calculation of PCLs (30 TAC 350.76(f) and (g)). For the

carcinogenic PAHs (TRRP provides a list), use of the relative potency factor is required. As with dioxins and PCBs, these factors represent the differing carcinogenic potency of the PAHs; the factors are provided in Figure: 30 TAC 350.76(f)(2). When calculating the slope factor or the unit risk for a given PAH, the slope factor or unit risk factor for benzo[a]pyrene (the most potent of the carcinogenic PAHs and the benchmark for the others) is multiplied by the relative potency factor. In this manner, the lower toxicity of, for example, chrysene or benzo[k]fluoranthene can be accounted for when calculating PCLs for these substances.

For TPH, TRRP formally incorporates the work of the TPH Criteria Working Group, a group of representative from industry, universities and regulatory agencies that has been working on TPH issues since 1993. The group main focus was to develop a method for determining risk-based cleanup levels for TPH that took into account the complex nature of TPH. TPH is a mixture of hundreds of hydrocarbons that vary widely in toxicity, amount of available data and physical and chemical properties. In addition, TPH mixtures themselves will vary widely in composition, depending upon types of processing from which they originate.

The TRRP guidance document *Development of Human Health PCLs for Total Petroleum Hydrocarbon Mixtures* (RG-366/TRRP-27; June 2000) presents the detailed methodology for PCL calculation. Basically, the method involves an identification of the composition and mass fraction of each aliphatic and aromatic boiling point range. These individual fractions are then assigned a surrogate compound whose toxicity factor will be used for the fraction. A surrogate compound is a compound for which there is sufficient toxicological data to develop toxicity factors for use in developing risk-based cleanup level. An example would the use of n-hexane, a well-described hydrocarbon, as a surrogate for the C6-C8 aliphatic range. The use of this method therefore allows the development of a PCL that best reflects a TPH mixture's unique composition and potential toxicity.

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ARE
YOU
GAME ?

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Andrew has represented clients and trade associations in advocating the development of and reasonable changes to environmental laws and regulations on national and state levels. Most recently, he represented a group of large oil companies on the Texas Risk Reduction Program before the TNRCC Commissioners and staff and is presently working on similar matters in EPA Region VI and Louisiana. He is presently serving as the Chair of the Risk Management Working Group on the TNRCC's Agency/Industry Ecological Working Group. He speaks frequently on environmental topics and has been published.

Andrew is on the Board of Directors of and chairs several organizations that work with at-risk middle school youth in Houston and educate youth on juvenile law issues. He was recently presented with the President's Award by both the Houston Bar Association and Houston Young Lawyers Association and received the Public Service Achievement Award from the Texas Young Lawyers Association (TYLA) for his work on the *Crossing The Line* program in Houston (a juvenile law program). He is also on the Board of Directors for TYLA. He is also active in civic affairs, serving as the President of his neighborhood's civic association.

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The TRRP Wheel of (Mis)Fortune!

Andrew L. Strong[1]

12th Annual Texas Environmental Superconference
August 3, 2000 – 10:35 am to 11:35 am
Austin, Texas

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The TRRP Wheel of (Mis)Fortune!

By: Andrew L. Strong [1]

I. Introduction

The Texas Risk Reduction Program ("TRRP")[2] is now a reality, for better or for worse, comprising over 400 double-column pages in the September 1999 *Texas Register*. After countless hours of meetings, drafting and re-drafting, the Texas Natural Resource Conservation Commission ("TNRCC") finally has what it wants – a common regulatory framework for evaluating and managing potential environmental risks at sites subject to almost all of TNRCC's regulatory programs. It was not that the old risk reduction rules were all that bad, but they were limited in process and scope, applying to only a few of the TNRCC's program areas. The TRRP rule – some might say – is the end all, be all of risk reduction programs. In fact, it is such a big undertaking that the TNRCC devoted an entirely new section in the Texas Administrative Code to it.

With the rule package now final, only time will tell what its real effect will be on the regulated entities subject to its requirements. With its "one size fits all" approach, some are predicting significant problems for larger sites that merit more site-specific considerations. Conversely, others have argued that the rule unfairly subjects smaller sites to "big site" standards, which may result in substantial increases in the investigation and remediation costs for small site. Others argue that the rule offers flexibility and will result in faster and safer remediation of all affected properties.

Aside from that debate, there is no doubt that the TRRP rule generates a host of legal issues that were not of concern under the old risk reduction rules. For example, the rule now contains requirements pertaining to mandatory notification, active public participation for certain decisions, filing of institutional controls such as restrictive covenants and deed notices, participation with the state and federal natural resource trustee agencies, and potential consultant liability.

II. Texas Risk Reduction Program: A Texas-Sized Investigation/Remediation Rule

In devising the TRRP rule, the TNRCC sought to blend in a single rule the prescriptive corrective action rules applicable to Leaking Petroleum Storage Tanks ("LPST")[3] and the old risk reduction rules[4] used at hazardous and industrial waste sites, state Superfund sites, and voluntary cleanup program ("VCP") sites. The LPST rules were fairly straightforward and predictable since the common nature of these types of sites lent itself to this approach. The old risk reduction rules were fairly open-ended, depending on site-specific factors and the decisions made by the responsible parties. Each rule had its pros and cons and the authors of the TRRP rule quickly found out that merging the two approaches wouldn't be easy. As the rule grew, yet more requirements were added to patch holes that were apparently created by the merger to the two rules.

In April 1998, after over 3 years in the development stage, the TNRCC was convinced that it had accomplished its objective of creating a single, harmonized program and decided to formerly take it to the public. The proposed rule was published on May 15, 1998 and a 60-day notice period ensued. By the end of the notice period in late July 1998 and in response to a state court of appeals case requiring stringent compliance with the Small Business Impact Statement requirements, the staff recommended to the Commissions that the rule be withdrawn. In August 26, 1998, the TNRCC formally withdrew the rule. The staff then went to work, guided by the hundreds of pages of comments and the input from numerous meetings with various stakeholders. Many of the comments related to the sheer size of the rule and inclusion of risk assessment and toxicological data that are routinely updated as the national scientific community generates new data; but perhaps the real chink in the armor was potential procedural missteps in the Draft Regulatory Impact Analysis and the Small Business Impact Statement. Had the TNRCC refused to address the later, a legal challenge to the validity of the rule would have likely occurred.

Over the course of the next six months, the TNRCC staff generated two revised versions of the rule, circulated them to various stakeholder groups, and convened meetings to discuss the changes. Finally, in February 1999, the staff presented the third and final version to the Commissioners for review and approval. Thereafter, the rule was proposed on March 26, 1999 with an initial comment period of 30 days. In the midst of that period, the agency issued a 15-day extension and the comment period concluded on May 11, 1999. If the staff had hoped that the drafting, re-drafting and meetings would reduce the number of comments on the rule from the previous proposal, it was mistaken; the staff was hit with over 800 pages of comments, toping the previous number of comments. Undeterred, the staff began sorting, grouping, and responding to all the comments. Additional meetings with stakeholder groups were convened at the Commissioner and staff levels to discuss and better understand the comments. Finally, the Commission approved the rule, which became final and effective on September 23, 1999.

A. It applies to almost all TNRCC regulated sites in Texas

The TRRP Rule applies statewide in all of the TNRCC's major program areas. The applicability section at 30 T.A.C. § 350.2 identifies the following programs that are subject to the rule:

- Chapter 327 – properties where a release of chemicals of concern (COCs) has occurred;
- Chapter 330 – municipal solid waste ("MSW") facilities;
- Chapter 331 – underground injection control ("UIC") facilities;
- Chapter 332 – composting, mulching or land application;
- Chapter 333 – voluntary cleanup program ("VCP") sites;

- Chapter 334 – underground and aboveground storage tank sites, e.g., LPST sites;
- Chapter 335 – industrial solid waste and municipal hazardous waste facilities;
- Chapter 335, Subchapter K – certain hazardous waste facilities, i.e., state inactive and abandoned sites ("Superfund")
- Chapter 336 – radioactive material sites;
- Chapter 312 – municipal wastewater treatment facilities, i.e., sludge use, disposal and transportation; and
- Other releases – Texas Water Code, Chapter 26 "catch all" provision.

Of the sites covered by these programs, a large majority will be sites under Chapters 333, 334, and 335, i.e., the same sites subject to the LPST and old risk reduction rules.

B. Texas Railroad Commission and NPL Sites

Sites not subject to the TRRP rule are those under the jurisdiction of the Texas Railroad Commission ("TRC") and federal agencies such as the U.S. EPA (e.g., sites listed on the National Priorities List). This is not to mean that these and other agencies with jurisdiction over sites in Texas will not use or refer to the TRRP rule; in fact, at many NPL sites, the standard for risk assessment follows the TRRP rule as it is more sophisticated than most federal risk assessment guidance (with some exceptions). In addition, the TRC has been actively involved in several of the work groups presently preparing TRRP guidance documents (*See* below).

The line between TNRCC and TRC jurisdiction over a site is not always clear. Historically, regulation of oil and gas industry wastes in Texas has fallen under the jurisdiction of several different agencies, depending on the type of waste and how and where the waste was handled. With several agencies exerting such authority, the jurisdictional lines of authority became blurred and confusing. Recognizing the jurisdictional confusion over oil and gas wastes, the Texas Legislature passed into law a requirement that the Texas Department of Water Resources (now part of the TNRCC), the Texas Department of Health, and the Railroad Commission execute a memorandum of understanding ("MOU") that provides in detail the agencies' interpretation of the division of jurisdiction regarding the wastes produced from or related to the exploration, development, production and refining of oil, gas and geothermal resources.[5] The original MOU dated January 1, 1982 was revised effective December 1, 1987, and was revised again effective May 1, 1998 to further clarify the jurisdictional boundaries and to reflect legislative changes and the restructuring of agencies that lead to formation of the TNRCC.[6] RRC and TNRCC each have regulations recognizing the MOU.[7]

The key provision of the MOU in determining whether a site is subject to TNRCC or TRC jurisdiction states that "[g]enerally, wastes resulting from activities associated with the exploration, development, or production

of oil or gas or other geothermal resources...and other activities regulated by the RRC are under the jurisdiction of the RRC."[8] Similarly, the Texas Solid Waste Disposal Act, as codified in the Texas Health & Safety Code, carves out from regulation by the TNRCC "waste materials that result from activities associated with the exploration, development, or production of oil or gas or geothermal resources."[9] Regulation of these waste materials is found in the Natural Resource Code at § 91.1011, which is implemented by the RRC. In addition, the Texas Water Code expressly excludes from TNRCC jurisdiction discharges to surface and subsurface waters resulting from activities associated with the exploration, development and production of oil and gas geothermal resources.[10] Such discharges are regulated by the RRC and, as such, the RRC would have authority to pursue a cost recovery claim and/or compel action to address unauthorized releases to surface or subsurface waters.

C. Is There Any Way to Avoid TRRP Applicability?

From the effective date of the rule (September 23, 1999) through May 1, 2000, a person was entitled to opt out of TRRP and resort to the old risk reduction rule. This "grandfather" clause required that the person electing to remain under Risk Reduction Standard 1 or 2 submit an initial notification of intent to use the old rules prior to May 1, 2000 and, within five years from the date of notification, submit a final report. For sites pursuing clean up under Standard 3, the person need only submit a final remedial investigation ("RI") report prior to May 1, 2001.[11] A person may not "mix and match" provisions from the old risk reduction rule and the new TRRP rule.[12]

While there may be benefits to undertaking an action under the old rule, one should be mindful of the TRRP requirements pertaining to "substantial changes" in circumstances. That is, if a substantial change in circumstance occurs, the person must use the rule in effect at the time of the change. Therefore, though a site is closed under the old rules reduction standards, if a substantial change occurs, the new TRRP rule or its successor rule would apply to the site. A substantial change is described at 30 T.A.C. § 350.35(d) as including the following situations, among others:

1. An institutional or physical control fails to prevent exposure;
2. An actual exposure is determined to be occurring at levels not protective of human health or the environment;
3. New information indicates that the presence of COCs at the affected property was not sufficiently characterized such that an unacceptable threat to human health or the environment continues to exist;
4. Exposure area changes resulting in an unacceptable threat to human health or the environment; and
5. A health and safety plan used to prevent inhalation of

COCs is no longer being followed.

D. How Does TRRP Compare to the Old Risk Reduction Rule?

The TRRP rule in some cases replaces provisions of the old risk reduction rule. In other instances, portions of the TRRP rule are entirely new. In general, the old rule provided for three standards of cleanup – clean to background (Standard No. 1), clean to rule-established, media-specific concentrations ("MSCs") (Standard No. 2), or clean to a site-specific risk-based concentration (Standard No. 3). The old rule did not specify how the investigations and response actions were to be carried out; however, they do indicate a general preference for permanent or decontamination remedies.[13] The TRRP rule goes much further than the old rule in these areas, starting with the "affected property assessment" all the way through the risk assessment, and on to remedy selection and implementation. It is "soup to nuts". In addition, TRRP gives equal weight to potential risks to human and ecological receptors, requiring that a response action must achieve the lower of the human health or ecological protective concentration level (referred to as the critical "PCL"). The extent of protection of ecological receptors under the old rules was limited to the general mandate for "...protection of human health *and the environment*".[14] Under the old rules, protection of ecological concerns was done on an *ad hoc* basis, and in some cases ecological concerns were never addressed.

The staff avers that the TRRP rule has been designed in a way to allow flexibility in the selection of an appropriate remedy for managing risks. While there is overlap in the two rules, the TRRP rule establishes two remedial options (Remedy Standard A and Remedy Standard B) as opposed to the three standards provided for in the Risk Reduction Rule (1, 2, and 3). Remedy Standard A is a self-implementing remedy that requires removal or decontamination of the affected media. This standard is analogous to Risk Reduction Standard No. 2 in terms of the requirement to remove or decontaminate. However, Standard A and Standard No. 2 differ with respect to cleanup levels. Under Standard No. 2, the media-specific concentrations are fixed (except as provided for certain exposure pathways)[15], but PCLs under Remedy Standard A are not fixed and can be adjusted under Tier 1, 2, or 3.

Remedy Standard B is not self-implementing and requires the person to select from one or more of the following remedies: removal, decontamination, control, or ecological services analysis (eco only). It is analogous to Risk Reduction Standard No. 3 in that controls can be relied upon for protection, but differs in several significant respects. For example, a baseline risk assessment and corrective measures study (CMS) are not required for the TRRP Remedy Standard B. Rather than a CMS, you need only provide a Response Action Plan (RAP) under TRRP that specifies the remedy to be performed.

There is no counterpart in the old rule for many provisions in the TRRP rule. However, many of these new provisions represent unwritten/written agency policy and practices under the old rule. However, without a rule

requiring compliance, they were applied on a haphazard basis depending on the program area requiring the investigation/ remediation. The new provisions include, but are not limited to, the following: notification requirements, data collection and interpretation requirements, land use issues, releases to off-site or leased properties, risk management options, reporting obligations, post-closure care and financial assurance requirements. Many of these new requirements, especially those with a legal nexus, are discussed further in this article.

E. Implementation Through Guidance

In withdrawing the May 1998 proposed TRRP rule, TNRCC acknowledged that much of the technical detail first proposed for inclusion in the rule should be removed and placed into guidance. The rationale was that scientific data and information changes constantly and it is ill advised to establish in a rule specific scientific data that could outdated within a month. Since then, the concept of placing portions of the May 1998 proposed rule into guidance has exploded and the TNRCC has adopted the mantra of "implementation through guidance" in rolling out the TRRP program, providing interpretation on numerous issues.

A substantial agency/industry task force comprised of TNRCC staff, industry representatives, consultants and attorneys has been working on over 30 TRRP-related guidance documents. A listing of the guidance documents being developed and their expected publication date(s) is available on the TNRCC's web page.[16] In addition to the areas covered by these guidance documents, the TNRCC recognized the need to establish guidance on performing ecological risk assessments in Texas. Though it is not prominently mentioned throughout the TRRP rule, TNRRC recognized that risk to ecological receptors might be the driver for cleanup at some sites. Therefore, over the past two years the TNRCC has frequently convened a working group comprised of various state and federal agencies, industry representatives, academia, and consultants to develop substantive guidance documents on ecological risk assessment. .

III. Public Awareness/Participation: Get Your Notices Ready!

Perhaps the most significant and potentially controversial issues in the TRRP rule are the public awareness/participation requirements. Though it is almost universally agreed that public awareness and participation is a positive thing, many parties subject to the rule's requirements have substantial concerns about the scope, manner and timing of public involvement. Three notices to the public can occur over the course of an affected property assessment – (1) notice of actual or probably human exposure, (2) notice regarding releases to off-site or leased properties, and (3) notice to the public regarding a request to vary exposure factors. Each of these notices is addressed below.

A. *Notice No. 1:* Actual or Probable Human Exposure

In the event that data collected during the affected property assessment indicate an "actual or probable human exposure", notification to TNRRC must be made within 60 days of receipt of the laboratory data.[17] This provision places a higher standard of care on both the person subject to the rule and the consultant, requiring that they contemplate potential exposure pathways that could result in an "actual or probable exposure" when assembling the conceptual site exposure model. Because this occurs early in the assessment process, it is conceivable that notice under the TRRP rule would be required far in advance of the submission of any report or documentation to the Agency for review. This may raise particular problems for a site owner where a consultant does most, if not all, of the investigation and reporting work

The Rule states at § 350.55(e) that an actual or probable human exposure occurs when human receptors are exposed to COCs at a concentration that exceeds the Tier 1 human health PCL established in according with the rule for the applicable land use and exposure pathways. Examples of instances where an actual or probable human exposure might trigger the requirement for notification under § 350.55(e) include the following:

- Access to areas such as playgrounds or recreational areas where COCs are observed in excess of Tier 1 human health PCLs in soil from ground surface to 0.5 foot (non-volatile COC);
- Exposure to vapors in excess of Tier 1 human health PCLs in the basement of a building overlying shallow groundwater containing COCs;
- Water wells used for human consumption with COCs in excess of Tier 1 human health PCLs; and
- Consumption of crops, dairy, beef or other food products with COCs in excess of human health PCLs. (note not Tier 1 since there is none for these pathways).[18]

The notification requirement for actual or probably human exposures is triggered "upon the receipt of the laboratory analysis from the performing laboratory".[19] Since laboratory results can be communicated in many different ways, a question arises as to when does one actually receive the lab data, thereby starting the 60-day clock? The multi-stakeholder work group developing the draft notification guidance concluded that "receipt" of the lab data occurs at the time written analytical laboratory results (e.g., facsimile, e-mail, U.S. Mail, or overnight delivery) are actually received, regardless of whether they are draft or final.

Another interpretation question that has come up pertains to who has the obligation to make notification. Clearly, one person required to make notification is the person subject to applicability provisions of the rule at § 350.2. Therefore, a person who has entered the

site into the VCP program, for example, is required to provide notification, as is a person subject to regulation under Chapter 335 (relating to the storage, processing or disposal of industrial solid waste). However, the Agency has indicated that others, particularly consultants, may also have an obligation to provide notification. The Agency points to provisions in the Texas Water Code that establish enforcement authority for parties that violate commission rules; thus, the failure of a consultant to make notification under this TRRP rule provision could result in an enforcement action being brought against the consultant. Though the Agency's authority to bring a claim against a consultant is highly questionable, this poses a significant dilemma for the consultant, particularly in cases when the client has been provided with the information and fails to provide the required notification. See more discussion on this issue below in Section V (Enforcement).

Once it is determined that an actual or probable human exposure exists, the person responsible for notification must then notify "those actually or probably exposed, the property owner [if different], and the executive director."[20] When considering who the actually or probably exposed parties are, the following shall be considered:

- use of the affected property by tenants and leaseholders;
- human activity patterns at the affected property;
- presence of any areas of congregation or recreation (e.g., playgrounds, natural areas, greenbelts, or break areas);
- distribution and concentration of COCs exceeding Tier I human health PCLs;
- conditions of any structures which may allow or prevent exposure to COCs in soils, water, or vapors; and
- source of drinking water.[21]

The content of the notice must indicate to potentially exposed parties (1) that information is available regarding environmental sampling results from the specific property, (2) that exposure to COCs is possible given certain existing conditions and how that exposure might be occurring (e.g., drinking well water), (3) the critical human health PCLs (Tier 1, 2, or 3), and (4) that additional information is available (what type and how to get it). It is important to remember that the trigger for notification is an exceedance of a Tier 1 PCL involving direct or indirect exposures (not for cross-media PCLs), yet the person making the notification may include the Tier 2 or 3 PCLs indicating that while there may be an exceedance of a Tier 1 PCL, subsequent and more site-specific analysis of the results indicates that there is no unacceptable exposure (assuming the Tier 2 or 3 PCLs are higher than the maximum COC concentrations for the samples collected). The use of the Tier 2 or 3 numbers is a very important point because, while notification must be made if there are Tier 1 exceedances, the party has the opportunity to present the data in the best light possible by using more realistic, site-specific Tier 2 or 3 numbers.

The form of the public notice will typically be written and delivered by mail or by hand delivery, or through a public meeting, etc. In instances where there are exposures in public areas where access is unrestricted (e.g., park, playground, etc.), the person making the notice must use and maintain legible signs at the site. The sign should convey enough information that the person actually or probably exposed to COCs is adequately informed that potential exposure to harmful substances might occur.

Proof that the notices required pursuant to this rule provision have been provided must be demonstrated through a signed, certified and notarized statement of fact, including names and addresses of persons receiving notice, executed by the person responsible for notification or an authorized agent. The certified statement must be provided to the executive director within 30 calendar days of the date the notices are due (i.e., no later than 90 days from the receipt of the laboratory data). The person responsible for notification must maintain documentation of the completion of notice for a minimum of 5 years following the issuance of a no further action letter.[22] If requested by the executive director, the person must produce this information to the Agency.

B. *Notice No. 2:* Data Indicating Releases to the Property of Others

During the affected property assessment, it may be discovered that releases have occurred, either intentionally or unintentionally, to an off-site or leased property. Depending on the concentration and location of COCs, notice to certain on-site and off-site parties may be required.[23]

1. Parties to be Notified

The parties to whom notice may be required include the following: (1) property owners, (2) leaseholders, (3) easement holders and franchisees, and (4) the executive director of the TNRCC. Since the notice requirements for notice differ for each of these parties, each is addressed below separately.

Property Owners. This class includes the on-site property owner if the property is leased as well as certain off-site property owners. The Rule requires that these owners be given a "notice of availability" of analytical results of any samples taken on their property that either are or will be submitted to the TNRCC. Notice must be given at the time the information is submitted to the executive director for review (e.g., when it is submitted as part of the Affected Property Assessment Report). In addition, even if samples were not collected from an off-site property, if the results appear to indicate that "...a COC originating from on-site activities more likely than not exceeds a residential assessment level on property they do not own...," notification of the potentially affected property owner is required.[24] The information to be made available to a property owner under either case includes the analytical results from his/her property (or those that indicate a probable release to his/her property) and the critical protective concentration limit ("PCL")[25] values for the applicable land use classification (i.e., residential or commercial/industrial). Any historical information or data from the off-site or leased property that are used in a report

submitted to the executive director must also be made available.

In the event that the ecological PCLs are not known at the time the information is submitted to the executive director (e.g., where the Ecological Risk Assessment has yet to be approved), the person shall identify the human health PCLs as the critical PCLs and, once the ERA is approved, make subsequent notification to the owner within 30 days of the ERA approval if the ecological PCLs are less than the human health PCLs and result in the need to perform a remedy (i.e., media concentrations exceed the ecological PCL). The purpose of notification of ecological PCLs is to address potential concerns of adjacent property owners regarding exposure of livestock, cattle and other wildlife (e.g., game) to COCs. These receptors, including avian and aquatic species, are included within the scope of the ERA.

Leaseholders. This class includes both on-site and off-site leaseholders. Leaseholders, to the extent they are "known or obvious," are required to be given notice of ecological PCLs for property where the ecological PCL is the critical PCL. The purpose of this notification is the same as that for the property owner – a leaseholder may lease property for ranching and/or farming and the release of a COC could adversely affect the health and vitality of the leaseholders livestock or crops. The Agency used the terms "known or obvious" to tailor the notice to those parties that may actually be exposed. If there is no evidence that a leaseholder is using the affected property (e.g., an unoccupied oil and gas lease), it is not the intention of the rule to require that these parties be tracked down and notified.

Easement Holders and Franchisees. This class includes, for example, municipal or private utilities with easements or other rights-of-way, whether located on-site or off-site. Notice is required when samples within an easement or franchise area at any depth exceed Tier 1 human health PCLs,[26] or when other information suggests that these PCLs are exceeded. Easement holders are also required to receive notice of historical information (i.e. sampling data collected prior to the applicability of the rule) that is submitted to TNRCC. Notice of availability of this information is required to be given no later than the time of submission to the executive director of the TNRCC of any plan or report that contains this information. Note also that, depending on the circumstances, an easement holder or franchisee may also be an actual or probably exposed party.

Executive Director of TNRCC. Notice is required to the TNRCC anytime notice is required to any other class, unless the notice requirement is triggered by submission of the information to the TNRCC. Paragraphs §350.55(d) and (e) require information to be provided to the executive director. Notice to the executive director should be to the TNRCC project manager when one is assigned to the site. In the event no TNRCC project manager has been assigned, then the information should be directed to the manager of the program area (for example, Corrective Action Section, Voluntary Cleanup Section) that has the regulatory jurisdiction over the project. In the event program

jurisdiction is uncertain, then the information should be directed to the manager of the Remediation Division. When the information is provided to the executive director in response to § 350.55(e), the transmittal should clearly indicate that the information is being sent in compliance with § 350.55(e) because there is probable or actual exposure of people to COCs.

Other Parties. Due in part to a strong lobby by the Texas Banker's Association, the TNRCC has agreed to address in its guidance the need to consider whether or not contractual notification requirements are triggered by the TRRP process (e.g., notice requirements in loan or secured party agreements). These considerations are independent of the TRRP rule requirements, but are, nonetheless, important to parties that may be subject to the rule.

2. Timing of Notice

For sampling data, historical data, other data indicating the presence of COCs above a residential assessment level, or sampling or other data indicating COCs above Tier 1 human health PCLs in an easement/franchise area, notice to the party is required no later than at the time of submission of a plan or report to the TNRCC which contains the same information. When ecological PCLs are the critical PCLs, notice is required within 30 days of TNRCC's approval of the ERA. As to third parties requesting information pursuant to the notice of availability, the person must deliver the requested information within 14 days of receipt of the request. Note that only that information relevant to the samples and the corresponding PCLs need to be submitted. The notice requirement is not intended to provide an opportunity for free discovery by eager plaintiff attorneys.

3. Form of Notice

The form of the notice may be an individual communication by letter or personal contact, or by public notice through public meetings, fliers, or signs. For municipal entities, written notices must be delivered to the chief clerk or city secretary. The notice must indicate that information is available for the property, what information is available, and the method for obtaining the information. If notice is required due to possible exposure, the notice must contain information about the possible exposure. The person responsible for notice must submit a notarized statement to TNRCC documenting that all required notices have been completed. This statement is due within 30 days of the date notices are due for notice of actual or probable exposure and within 60 days of the due date for other notices.

C. *Notice No. 3:* Request to Vary Exposure Factors

The PCL calculations assume standard commercial/industrial exposure conditions (250 days per year for 25 years[27]). Where these are unrealistically high exposure factors, the result is lower PCLs and higher remedial costs. In section 350.74(j)(2), the Rule establishes an elaborate approval and public notification process for requests that the executive director vary exposure factors (*i.e.*, duration, frequency, and averaging time) used in calculating human health PCLs for commercial/industrial

properties with restricted access. This provision was perhaps one of the more controversial in the Rule as it involves the public in decisions regarding the use of private land. One criticism of this process is simply that Texas landowners have almost unlimited rights to hold, use, and dispose of land as they wish guaranteed by the Texas Constitution[28] and that the variance process is, in fact, an infringement on those rights. As a counter to that argument, the TNRCC might state that public policy requires public notice and input prior to the Agency's approval of elevated levels of COCs at the site and of limitations on the use of the land. Such a decision by the Agency can have an adverse effect on neighboring landowners, taxing authorities and others who may be affected by the restricted use of the property.

An example of where this variance and public notice process makes sense is the corner gas station in the center of a small town. If the person was allowed to put a fence around the property and walk away, it could have an adverse effect on the town's ability to attract commerce, inhibit area redevelopment, and reduce or eliminate any taxes that might be derived from the property. In this case, input by the public is appropriate and would more than likely result in a decision by the executive director that declines a request for the variance. Conversely, an example where the process seems unnecessary involves an industrial process area or tank farm in a highly industrialized area. As to this example, the TNRCC points out that "[i]f the matter is truly inconsequential to the public, then the public will likely not voice any significant opposition, if any at all."[29]

1. Request for Variance

During the development of the conceptual site exposure model or calculation of the human health PCLs at a commercial/industrial property, the person may consider the use of modified exposure factors to better reflect the future use of the property. Variances are not available for residential properties. The default values for only three exposure factors may be varied – exposure duration (25 years), exposure frequency (250 days per year) and averaging time for noncarcinogens (25 years).

A request must include information that demonstrates that the variance from these exposure factors is supported by "property-specific information; historical, current, and probably future land use; redevelopment potential; and compatibility with surrounding land use."[30] If the property for which the variance request is being made is leased or off-site, written concurrence from the landowner indicating the acceptance of an institutional control is required unless the land is subject to zoning or governmental ordinance that is equivalent to limitations in the institutional control.[31]

The person shall submit the variance request to the executive director (and to the public, see below) at "the same time that variance-based PCLs are submitted" for approval. This submission would occur at the time the Affected Property Assessment Report (APAR) or Response Action Plan (RAP)

is submitted to the TNRCC for review and approval.

In advance of the submittal of the formal variance request, a draft submittal may be submitted to TNRCC staff to review for completeness (e.g., administratively complete, mathematical accuracy, compliance with other PCL development procedures).[32] However, it should be recognized that the staff's signoff on the application does not mean that it will be approved once the public notice and comment period has run its course. Moreover, the person may not mention in the public notice that it has been pre-approved or favorably reviewed by the staff, beyond a statement that it has been reviewed for completeness.[33]

2. Public Notice/Meeting

With few exceptions, notice to the public of the variance request is required at the time the person submits a request to the executive director. The exceptions involve sites where natural physical conditions (e.g., marshes and cliffs) essentially prohibit full commercial/industrial use of the site and the variance would not necessitate a lesser use. At these sites, the executive director will determine the need for public notice.

The notice provided to the public shall be published in a local newspaper at least once a week for three weeks (one must be in Sunday edition) and shall contain the following information:

- Person making request;
- Property-specific information;
- Modified and default exposure values;
- A "clear and concise" explanation of future use of property;
- Referral to TNRCC for more information; and
- Explanation of 30-day comment period (commences on initial publication date).[34]

The notice shall invite written comments that demonstrate that the proposed variance request would be "compatible or incompatible with existing neighboring land uses and preservation of the active and productive land use of the subject property".[35] In addition to the newspaper notification, the following persons must be notified directly by certified mail, return receipt requested:

- Adjacent landowners;
- Local planning board or commission;
- Local taxing authorities/appraisal districts;
- City mayor and health authorities (if within limits of a city);
- County judge and health authorities;
- TNRCC Public Interest Council;
- Persons requesting notice or expressing interest; and
- Other persons named by the executive director.[36]

As appropriate, the notice may be provided along with other required notices provided that the above-mentioned requirements are satisfied. Additionally, notification to an existing citizens' advisory board, for example, would satisfy the requirement to provide notification of the request in the newspaper so long as it effectively provides broad public notice of the variance request.

If requested by the executive director, the person requesting the variance shall schedule, hold and pay for an open public meeting to provide information on the variance request and to allow for comments by the public. The meeting must be held at a time and place "convenient" for the parties receiving notice by certified mail. Notice of the meeting must be provided in a manner that is identical to the first notice of the variance, except that it need only be published once (Sunday edition, if available). In addition to the information required in the initial notice, the person must also state the following:

- Meeting specifics (date, time and location)
- Meeting is open to public
- Opportunity to submit written comments with 15 days after the meeting

The standard of review and comment by the public is the same as that for the initial public notice (*i.e.*, compatibility with neighboring lands and preservation of existing use of the subject property).

3. Executive Director Decision/Motion for Reconsideration

Within a specified time following the notice period and, if conducted, the hearing, the executive director will render a decision on the variance request.[37] The Rule states that the executive director's decision shall be "based upon property-specific data; historical, current and probable future land use; redevelopment potential; and compatibility with surrounding land use."[38] The executive director's decision will be mailed to the person making the request as well as all the parties that received the initial notification via certified mail and may be appealed by any of these parties by filing a motion for reconsideration with the chief clerk in accordance with 30 T.A.C. § 50.39(b) – (f) (Motion for Reconsideration).

Once approved, the variance for exposure factors shall be memorialized by filing an institutional control (i.e., deed notice or restrictive covenant) in the real property records for the county where the property is located. The filing must be made within 90 days of the approval by the executive director of the Response Action Completion Report (RACR).

D. Statute of Limitations Issues Related to Notification

An important question to consider is whether the notification requirements triggered under the TRRP rule start the statute of limitations ("SOL") clock for bringing claims for wrongful death, personal injury, or injury to property that are caused by the release of COCs to the property. For

wrongful death claims, the SOL does not start to run until death occurs. For personal injury, the discovery rule[39] is likely to be applied so that the SOL starts to run at the point in time in which the person knew or should have known of the injury, not that potential exposure to COCs are occurring. For injury to property, notice of a release and potential exposure to COCs at concentrations exceeding the critical PCL is likely to be considered "knowledge" that is sufficient to trigger the SOL.

The Texas SOL for bringing claims for injury to property, personal injury and injury resulting in death is set forth in the Texas Civil Practices and Remedies Code.[40] For injury to property and personal injury, section 16.003(a) provides that a person must bring suit "not later than two years after the day the cause of action accrues."[41] For injury resulting in death, section 16.003(b) provides that suit must be brought not "longer than two years after the day cause of action accrues in an injury resulting in death", and goes on to specify that "[t]he cause of action accrues on the death of the injured person."

The Texas Supreme Court has distinguished 16.003(a) from 16.003(b), recognizing that 16.003(b) provides a specific and unambiguously identifiable point in time at which the cause of action accrues (*i.e.*, at death), while 16.003(a) does not provide a specific point in time at which the cause of action accrues.[42] Thus for wrongful death cases, suit must be brought within two years of the date of death. For personal injury not resulting in death, certain injuries are not immediately discoverable, such as in latent effects of asbestosis. In these types of cases, a majority of jurisdictions, including Texas, apply the discovery rule.[43] The discovery rule is a legal principle providing that the statute of limitations does not start to run until the injured person knew or should have known of their injury.[44] Applying the TRRP notification requirement to the discovery rule, notice of possible exposure to COCs in excess of the human health PCLs, in and of itself, is not likely to start the limitations period, as a person might not know whether he/she has suffered an actual injury even though notified of a possible exposure.

TRRP notification of a release onto property would alert the owner of a trespass to property and, if the critical PCLs are exceeded, that injury to property has occurred. The time at which this notice is provided marks a discrete and identifiable date at which to start the running of the statute of limitations. In an action involving saltwater contamination of groundwater under a neighboring property, the limitations period to bring a claim was triggered at the time the owner whose property had been impacted first knew or should known of such pollution on his or her property, not necessarily the time the impact actually occurs.[45] It is implied that "pollution" would be equivalent to COC media concentrations in excess of the critical PCLs.

However, in *Velsicol v. Winograd* (Texas 1997), the Texas Supreme Court refused to toll the statute of limitations because the appellant was unaware that levels of chlordane in a rental property exceeded safe levels established by the Agency for Toxic Substances and Disease Registry.[46] The

court noted that the appellant's claims for lost revenue, incomes, rents and damage to business reputation incurred as a result of chlordane contamination were not tolled because these types of claims would be applicable at any level of chlordane, not just at governmentally-designated level that would have to be abated and of which he was not aware. The court distinguished this case from those involving asbestosis where claims were brought for costs incurred to abate a threat of asbestosis.[47] Knowledge of the presence of asbestos, by itself, did not trigger the start of the limitations period; rather, the limitations period did not begin to run until concentrations requiring abatement were known to exist.

IV. Remedy Selection/ Implementation: I Would Like to Buy a Vowel!

A. Remedy Standards

Once it has been established through the affected property assessment process that COCs in affected media exceed the critical PCLs, a remedy under either Remedy Standard A or Standard B must be selected. The selected remedy must address both human health and any ecological exposure concerns. For this purpose, human health-based and any ecological PCLs are compared to identify *critical PCLs* (i.e, the lowest concentration level) for each complete exposure pathway between the COC and affected medium, and the remedy is directed toward addressing PCL exceedance zones.

1. Available Response Actions

Under TRRP, a remedy is complete when Standard A or Standard B response objectives have been achieved and all requisite reports have been submitted and approved by the TNRCC.[48] The specific remedy options provided in the rule are presented under Standards A and B and are summarized as follows:[49]

- *Remove (A or B)* – a removal remedy is the direct removal of media containing concentrations of COCs that exceed the critical PCLs (e.g., excavation, dredging). Waste or environmental media must be taken away from the affected property to a proper disposal location.
- *Decontaminate (A or B)* – a decontamination remedy means a permanent and irreversible treatment process that results in the elimination of concentrations of COCs that exceed their respective critical PCLs (e.g., biological degradation, chemical fixation or sequestration, detoxification, or natural attenuation).
- *Control (B only)* – a control remedy contemplates physical and/or institutional controls (see discussion below) that prevent the exposure of human or ecological receptors to concentrations of COCs that exceed their respective PCLs (e.g., capping, containment, and/or institutional controls).

- *Ecological Services Analysis (B only, ecological only)* – in instances where it is proposed that COCs that exceed ecological PCLs are to be left in place, an ecological services analysis must be performed and, where appropriate, an on-site or off-site restoration project must be completed.

The decision to select Remedy Standard A or Remedy Standard B is highly dependent on site-specific factors and the existing and intended land use of the affected property.

2. No Further Action Letters

Once a remedy is completed, a response action completion report ("RACR") must be submitted to the TNRCC for review and approval.[50] The RACR is used to document the remedial activities and to demonstrate that compliance with the critical PCLs has been achieved. Upon approval of the RACR by the executive director and completion of other necessary response action required by the applicable TNRCC program area (e.g., VCP, LPST, etc.), the program areas will confirm that no further action at the affected property is required.[51]

Under Remedy Standard A, a no further action ("NFA") letter will be issued once the remedy is confirmed complete (i.e., approval of the RACR) and, when applicable, proof is provided that an institutional control has been established noting commercial/industrial land use. Under Remedy Standard B, a "conditional" NFA will be issued by the TNRCC subsequent to the approval of the RACR and proof of receipt that an institutional control has been filed for the affected property. The conditional NFA will state that the person has "conditionally completed response actions at the affected property but must perform post-response action care obligations as described in the approved RAP throughout the initial and any continued post-response care period."[52] The letter will also indicate whether financial assurance is required. At the termination of the post-response action care period, a final NFA would be issued from the TNRCC.

3. Post-Response Action Care

Post-response action care is required for Remedy Standard B response actions. It is not required for Remedy Standard A actions. The type, method and extent of post-response action care will be determined on a site-by-site basis in the approved Response Action Plan,[53] but the rule provides that post-response actions include: (1) monitoring, (2) inspection, operation and maintenance, and (3) any other actions necessary to protect human health and the environment. The post-response action care period begins upon the approval of the RACR by the executive director.

The default initial post-response action care period is 30 years;[54] however, the rule establishes criteria that allow a party to demonstrate that a shorter post-response action care period would be appropriate.[55] During the post-response action care period a person may submit a demonstration that documents one of the conditions outlined in 30 TAC § 350.33(i)(1)-(4) and demonstrates that

a threat to human health or the environment is no longer present. Upon written approval by the executive director, the remainder of the post-response action care period will be cancelled. In addition, a party will be released from the requirement to maintain financial assurance, and the financial assurance will be returned.

However, if a party cannot make one of the demonstrations in 30 TAC § 350(i)(1)-(4) by the end of the initial post-response action care period, it will be required to continue post-response action care for an additional 30 years unless the criteria for a shorter period or termination of post-response action care can be demonstrated as outlined above.

The person is required to perform the following record keeping during the initial and any subsequent post-response action care period:

- Keep a copy of the approved RAP at the property or specified other location;
- Keep records of monitoring data, maintenance and inspection reports and unexpected occurrences affecting any waste control unit or post-response care systems;
- Submit post-response action care reports (PRACRs) as outlined in the RAP; and
- Notify the executive director within 30 days if it is determined that additional response actions will be required at the affected property.[56]

4. Financial Assurance

The TRRP financial assurance requirements apply to remedies under Remedy Standard B involving the use of physical controls undertaken in order to satisfy the rule's soil and groundwater objectives.[57] Remedies under Standards A or B involving removal or decontamination remedial activities do not require any financial assurance.[58] Nor is financial assurance required for remedies under Standard B involving institutional controls or use of the Ecological Services Analysis option.

How long must financial assurance be maintained? Financial assurance is required for the duration of the post-response action care period.[59] This period is assumed to be 30 years (beginning upon approval of the response action completion report, RACR) *unless* it can be demonstrated that a shorter post-response action care period would be appropriate based upon:

- the nature of the response action;
- the persistence, migration potential, and toxicity of the COCs; and
- the physical characteristics and location of the affected property.[60]

In the event that the post-response action care period extends beyond 30 years (or, if less than 30 years, the initial period approved by the executive director), financial assurance shall continue to be demonstrated for the continued post-response action care period.[61] The extension of this period would occur automatically if the person

fails to demonstrate that there is no longer a threat to human health or the environment from the presence of COCs in any environmental media or physical controls.[62]

How much financial assurance is required? The amount of the financial assurance shall be the total cost of the post-response action care activities for the post-response action care period. The estimate shall be based upon the cost of hiring a third party to conduct the post-response action care activities associated with the affected property and must be included in the Response Action Plan ("RAP") submitted for the executive director's review and approval. Financial assurance shall be demonstrated within 90 days after the executive director's approval of the RAP and before commencing work. The mechanism used for financial assurance shall be submitted to the executive director. If the total post-response action care cost estimate is $100,000 or less, the executive director may exempt the person from providing a financial assurance demonstration.

What are the acceptable financial assurance mechanisms? A demonstration of financial assurance for post-response action care must be done in compliance with 30 T.A.C. § 37, Subchapter N (*Financial Assurance Requirements for the Texas Risk Reduction Program Rule*). Subchapter N incorporates by reference Subchapters A, B, C, and D of the same title relating to general financial assurance requirements, requirements pertaining to closures, available financial assurance mechanisms, and wording of the mechanisms for closure, respectively. Mechanisms that may be used to demonstrate financial assurance include:

1. fully-funded trust;
2. surety bond guaranteeing payment;
3. surety bond guaranteeing performance;
4. irrevocable standby letter of credit;
5. insurance;
6. financial test; or
7. corporate guarantee.[63]

Specific wording for each of these mechanisms is established in Subchapter D and a person may use more than one mechanism to achieve the required financial assurance. In the event that the post-response action costs increase to an amount greater than the financial assurance amount, the person must increase the financial assurance amount within 30 days of the increase and submit evidence of the increase to the executive director.[64] If the costs decrease, the person may propose to the executive director that the financial assurance amount be decreased.[65]

5. Ecological Issues and Natural Resource Trustee Participation

As noted above, at affected properties where COC concentrations in media exceed PCLs, the proposed TRRP requires that responsible parties (1) identify the critical PCL (the lower of the human health or ecological PCLs) and then (2) perform a remedy to address COCs in media greater than the critical PCL. In many cases, ecological

PCLs for certain COCs are lower than the human health PCL for that same COC. As a result, a responsible party may be required to undertake an active response action for the sole purpose of meeting ecological PCLs or eliminating ecological exposure, regardless of the overall ecological benefits or detriments of the action. In order to avoid the potential for this occurring, the TRRP contains a remedy option that allows a person to demonstrate that certain response actions would actually create more harm to the environment than good or, in other words, that it is possible that the "cure could be worse than the disease."[66]

This remedy option is referred to in the rule as the ecological services analysis option (ESA, or compensatory restoration option) whereby the ecological benefits and detriments of potential response action (large-scale removal, small-scale removal, natural attenuation, etc.) are compared using the same resource equivalency models employed in NRD matters (e.g., habitat equivalency analysis). If the person elects to pursue this remedy option, the state and federal natural resource trustee agencies in Texas (Texas Parks and Wildlife Department, Texas General Land Office, TNRCC, National Oceanic and Atmospheric Administration, and U.S. Department of Interior/U.S. Fish and Wildlife Service) will be notified and may elect to participate in the analysis. Based upon the results of the ESA, the person may propose, subject to approval by the executive director and the trustee agencies, to conduct on-site or off-site habitat restoration in conjunction with a natural attenuation remedy in lieu of an active response action (e.g, removal, decontamination, or control actions). The involvement of the Trustees at this point in the process would effectively result in a *de facto* settlement of claims for natural resource damages ("NRDs")[67] for future natural resource injuries (as they relate to the ecological risks), but not for historical lost uses or recreational losses, regardless of whether a natural resource damage action was on-going at the property. One should be mindful when entering this process that it provides an entrée for the Trustees to request a cooperative natural resource damage assessment ("NRDA").[68] In some cases where ecological issues are prevalent, it may make sense to resolve both the remedial and NRD issues at the same time in order to capitalize on economies of scale as the two overlap in many areas.

In addition to the ESA process, the Trustees are close to finalizing a Memorandum of Understanding ("MOU") by and between the agencies that will specify how the agencies will participate in this process. The MOU will also specify that the TNRCC must provide notification to the other trustee agencies if the conservative ecological PCLs generated as part of a Tier 2 screening level ecological risk assessment during the affected property assessment indicate potential risks to ecological receptors at the site.[69]

From the Trustees' point of view, coordination with TNRCC is extremely important as NRDAs under CERCLA, for example, cannot be paid for from the Superfund. Accordingly, it is highly desirable to the Trustees to have the TNRCC or the responsible party conduct the ecological risk studies and collect data on the condition of ecological

resources in the course of the affected property assessment, so that the Trustees can limit the additional work their assessment will require. Likewise, trustee agencies will often comment on response agency consideration of listing decisions and remediation decisions such as clean-up levels because those decisions can have an impact on the timing of a trustee agencies' suit and the nature and amount of restoration activity required at a site.

Coordination is equally important from the perspective of the responsible party. With effective coordination among the agencies, responsible parties may be able to avoid the cost of a second round of studies required to provide the Trustees with data that could have been generated in the RI/FS. Likewise, with input from all agencies, it may be possible to conduct remediation in the manner least disturbing to the environment and even to incorporate restoration activities directly into the remediation, thereby further reducing costs. That benefit should be carefully weighed against the potential increase in transaction and study costs resulting from additional input by the trustee agencies in the remedial process. For example, the Trustees may steer the ecological risk assessment process in a different direction than it would have otherwise gone in order to gain more information for an NRDA. If no agreement is in place with the Trustees or the Trustees intend to litigate the matter, the responsible party should resist the Trustees' influence on the process and only perform that which is required by the remedial agency. Moreover, many legal defenses are available to the responsible party in an action by the Trustees that are not available in the remedial context (see discussion below). If one of these defenses would defeat an NRD claim, there is no legal obligation to address NRDs at the site. The reality though, is that it is not always clear during the ecological risk assessment that these defenses will prevail in court. Thus, it may still make sense to coordinate with the Trustees during the ecological risk assessment.

B. Institutional Controls

The affected property assessment and/or remedy selected may require institutional controls. The rule defines an institutional control as being either (a) "[a] legal instrument placed in the property records in the form of a deed notice,...VCP Certificate of Completion, or restrictive covenant which indicates the limitations on or the conditions governing use of the property which ensures protection of human health and the environment..." or (b) "...equivalent zoning and government ordinances."[70].

Unless covered by an "equivalent" zoning or government ordinance, the filing of an institutional control is required in the following instances:

- Commercial/Industrial land use involving Remedy Standard A or B response actions;
- Residential Land use involving Remedy Standard B response action;
- Increase in soil exposure area for residential (> 1/8th acre) or commercial/industrial (> 1/2th acre) properties;

- Variance to exposure factors is approved by the executive director;
- Occupational inhalation criteria are used as the basis for determining the protective concentration of COCs in the working air environment; or
- Required by executive directory because response is predicted to or actually does take longer than 15 years.[71]

For any on-site or off-site properties involving changes in circumstances that negate the need for an institutional control, a person may petition the executive director to remove the institutional control by describing the reason(s) why the control is "no longer necessary to protect human health and the environment."[72] If the executive director agrees, the executive director will execute a superceding deed notice that the person may file in the property records for the affected property.

Any legal instrument filed in the property records must include the following:

1. Description of affected property subject to the institutional control (metes and bounds) and corresponding plat map, both certified by a registered professional land surveyor;
2. Statement regarding the appropriate land use;
3. Explanation of which environmental media contain COCs in excess of the PCLs;
4. Discussion of use limitations or maintenance or compliance requirements; and
5. TNRCC information (program, identifier number, address, etc.).[73]

Comments from both industry representatives and environmental advocates supported the creation of a statewide site registry that would involve the creation of a computerized central database of controls, rather than require the filing of legal instruments.[74] The use of such a database would greatly increase the ease of obtaining information regarding site conditions and restrictions, rather than having to search through property records (especially in counties where the records are not computerized). Of course, the comments varied on the scope of information to be included in the database. The concept of the site registry had been discussed almost two years prior to the final adoption of the rule and, despite its support from both industry and the environmental advocates, it was not adopted by the Agency. While not completely ruling out the idea, the Agency stated that though "...it is theoretically possible that a commission registry could be designed and operated to provide adequate notice and oversight of institutional controls, such a system would require a design that has not yet been sufficiently explored."[75] In other words, the Agency simply did not want to develop and maintain a database, an endeavor that would cost money not budgeted for and may have limited effectiveness.

1. Zoning/Local Ordinances

Though the Agency refused to establish a site database, it did address a valid and legitimate concern regarding the need to file a legal instrument in the property records when zoning and local governmental ordinances obviate the need for such filings. In the proposed rule, a legal instrument was required in almost all cases involving non-residential cleanups, regardless of whether a property was zoned industrial or local governmental ordinances preventing exposure existed (e.g., ordinance against drinking groundwater). As stated in the preamble, the Agency recognized that zoning requirements and/or local governmental ordinances would meet the intent of the filing requirement provided that they meeting the following requirements:

1. The zoning or ordinance is by its terms sufficient to provide the control that is required to be protective of human health and the environment;
2. The zoning or ordinance provides notice of the COCs left in place and that the zoning or ordinance is necessary to prevent exposure to the COCs;
3. The zoning or ordinance applies to both current and future uses for the land covered; and
4. The zoning or ordinance cannot be rescinded or modified without the approval of the commission.[76]

Though these four criteria are not included in the rule, their inclusion in the preamble does indicate the somewhat restrictive view that the Agency is taking towards the use of these mechanisms. Interestingly, the preamble states that "there may be other methods by which 'equivalency' of a zoning or governmental ordinance can be demonstrated."[77] Therefore, while it may not be necessary to meet these four requirements in all cases, the threshold requirement is that their effect be equivalent to an otherwise required legal instrument (deed notice, VCP certificate, or restrictive covenant). An example of how this provision might be used involves a pervasive groundwater problem involving releases of chlorinated solvents from drycleaning facilities. In this example, the city or county governments would pass a local ordinance restricting use of groundwater within the city limits (e.g., prohibition against drilling and/or using well water from a specified groundwater zone).

2. Deed Notices/VCP Certificates

Affected properties that do not qualify for the zoning or local ordinances as described above must file either a deed notice or VCP certificate of completion unless the property on which the control is to be filed is owned by an innocent landowner.[78] A deed notice is defined in the rule as "[a]n instrument filed in the real property records of the country where the affected property is located that is intended to provide to owners, prospective buyers and other notice and information regarding, but which does not, by itself, restrict use of the affected property."[79] A VCP is very similar to a deed notice, except that it is

issued by the executive director certifying that the recipient has successfully completed a voluntary cleanup and is thereby released from liability by the state.[80] It is presumed by the Agency that the filing of a deed notice or VCP certificate will provide adequate notice to subsequent purchasers that limited or restricted use of the property is necessary. If the person willfully changes use of the property in contradiction to the notice, resulting in potentially unacceptable exposures, the Agency has the authority under the Texas Health & Safety code to seek an injunction against the person and/or compel a response action.[81]

As noted below, a deed notice can be filed on any property, regardless of ownership. Concerned about potential abuses by persons seeking to restrict use of property that they do not own but have affected by a release, as well as potential takings claims by the property owner, the Agency established fairly stringent requirements that must be followed before a notice can be filed without consent. Examples of when this might occur include instances when the property owner cannot be found or is unresponsive. Additional discussion on the TRRP rule requirements is provided below.

3. Restrictive Covenants

For on-site or off-site properties held by innocent landowners (as defined in TEX HEALTH & SAFETY CODE ANN., Sect. 361, Subchapter V), the Rule requires the use of restrictive covenants as the appropriate institutional control. These properties include those involving cleanups to commercial/industrial standards, variances in exposure factors, or increases in the size of the soil exposure area. Though restrictive covenants pose both logistical and legal problems for the Agency (e.g., must file claim in state district court, common law defenses), they are the only available legal mechanism that prevents a so-called innocent landowner from converting the use of property closed as commercial/industrial to residential. The use of the covenants would prevent the landowner from using the immunity provided in the innocent landowner statute as a defense where the Agency sought to prevent the landowner from changing the land use to residential without first addressing potential human exposures to COCs exceeding residential PCLs.

The down side, however, is that the person performing the remedy must convince the landowner to execute a covenant allowing the Agency to take action directly against him in state court for unauthorized uses of the property. This control measure would go far beyond the more customary tool of recording a notice in the deed records for the county in question. The incremental benefit to the public or to Agency from the restrictive covenant is hard to discern. Failure to abide by restrictions outlined in a deed notice or other institutional control already places the landowner at significant risk to regulatory enforcement under the broad enforcement authority of the Agency as well as potential tort-based claims where affecting human health.[82] Thus, the application of the immunity defense based on an innocent owner status is unlikely to succeed in cases where a person (a) knew or should have known about the deed notice provisions, (b) ignored the notice all the same, and (c)

proceeded with a change in the land use. In Texas, a landowner [of commercial land] is presumed to have knowledge of any recorded instrument pertaining to real property.[83] While these legal precedents in conjunction with the decisional law of CERCLA seem to provide ample authority for Texas courts to deny immunity to those landowners that willfully ignore restrictions in a deed notice, the TNRCC disagrees.

During the 1999 legislative session, a Texas senate bill was introduced that would have modified the innocent landowner statutory immunity provision so that landowners that violate deed notices or other institutional controls will lose their immunity status.[84] Though the bill received wide support from both industry and the TNRCC, is was brought up late in the session and died on the floor, seven bills short of a vote, as the session expired. Had the bill passed, the executive director's staff agreed that the purported need for restrictive covenants would vanish and that a recommendation would be made to the Commissioners to redact these requirements from the rule. An identical bill will likely be introduced early in the 2001 session and, if passed, the executive director's staff has indicated a willingness to modify the Rule to remove the requirement for restrictive covenants.

A question regarding TRPP has arisen regarding the use of various limitations defenses in state actions for enforcement of violations of restrictive covenants (e.g., innocent landowner changes use of property from commercial/industrial to residential without TNRCC approval) state-restricted access and/or development of impaired properties. Based upon analysis of Texas' limitations statutes and interpretive caselaw, the answer appears to be no, that such defenses would not be valid.

TEX. CIV. PRAC. & REM. CODE ANN. § 16.061 provides that the state or a political subdivision of the state is not barred from a right of action under the majority of statutory limitations sections, including those sections related to personal injury and injury to property. The Texas Supreme Court made reference to the State's exclusion from limitations defenses in *Texas v. Durham*, in which it was questioned, in part, whether the State had authority to bring an action for activities that occurred over 50 years prior.[85] Dissenting justices in the case argued that it not fair to be litigating issues that occurred that long ago, though the Court provided that "the State in its sovereign capacity, unlike ordinary litigants, is not subject to the defenses of limitations, laches, or estoppel." This broad privilege afforded to the State makes it appear unlikely that a property owner's defense to a state act such placing a restrictive covenant on impaired property as per TRRP rules would be successful.

4. Consent and Compensation Issues

Section 350.111(d) authorizes the filing of a deed notice on properties without landowner concurrence where: (1) it is technically impracticable to obtain and residential-based Remedy Standard A response action; "(2) landowner refuses to grant concurrence for an institutional control; (3) a court of competent jurisdiction has determined the amount of compensation due the

landowner as compensation for filing a deed notice in the real property records for that property; and (4) the person has paid into the court registry any compensation determined by the court.

This requirement is narrowly defined so as to require that a court of competent jurisdiction must render final judgment with all costs paid into the court registry, evidence that the Agency is being very cautious about potential takings claims.[86] Other mechanisms proposed in the comments and rejected by the Agency included: (a) competent evidence that the matter was mediated and payment was made to the landowner or (b) an out-of-court settlement compensating that landowner for the diminution in value of his/her property and that payment had been made. The Agency believed that these actions would not cover future landowners.

V. Enforcement

The TRRP rule contains no penalty provisions if a person fails to provide timely notice or otherwise violates the provisions of the rule. That being said, however, the TNRCC points to the § 7.101 of the Texas Water Code, which broadly states that "[a] person may not cause, suffer, allow, or permit a violation of a statute within the commission's jurisdiction or a rule adopted or an order or permit issued under such a statute."[87] Furthermore, § 7.051 states that "[t]he commission may assess and administrate a penalty against a person...if the person violates:...(B) a rule adopted or order issued by the commission under a statute within the commission's jurisdiction."[88]

As an example of the broad interpretation given to these statutory provisions, the TNRCC Enforcement division has declined to state whether or not a consultant could conceivably be subject to enforcement under the notification procedures if they were alleged to have caused or suffered a violation of the TRRP Rule notification requirements.[89] While the prospect of prevailing in such an action against a consultant is questionable, the mere possibility of an action being brought may strain the relationship between the consultant (agent) and client (principal).[90]

VI. Conclusion

Though very comprehensive, the TRRP Rule is intended streamline state-wide investigations and remedial actions and make the process much more predictable. In many regards it has and will succeed. In others, however, only time will tell. The Agency has indicated a willingness to make adjustments as necessary to make the rule better and more efficient.

As to the legal requirements, the effect of the Rule's requirements will be felt almost immediately. It is highly advisable that parties subject to the rule be aware of the many requirements that have a legal nexus. Presently, both the TNRCC staff and parties subject to the Rule have yet to fully embrace and understand the core requirements; though, failure to follow these requirements could lead to an enforcement action by the Agency or by used by third-party litigants as evidence against the person.

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[2] 30 TEX. ADMIN. CODE (T.A.C.) §§ 350.1 *et seq.* (West 2000).

[3] *Id.* at § 334, Subchapters D (Release Reporting and Corrective Action) and G (Target Concentration Criteria).

[4] *Id.* at § 335, Subchapter S (Risk Reduction Standards).

[5] *See* Section 10 of House Bill 1407, 67th Legislature, 1981, which appeared as a footnote to the Texas Solid Waste Disposal Act, Texas Civil Statutes, Article 4477-7.

[6] *See* 23 *Tex. Reg.* 5427.

[7] TNRCC recognition of the MOU may be found at 30 T.A.C. § 7.117 (1999), while RRC recognition of the same may be found at 16 T.A.C. § 3.30.

[8] *See* TEX. ADMIN. CODE 16 tit. §3.30 (b)(1999), Memorandum of Understanding between the Railroad Commission of Texas (RRC) and the Texas Natural Resource Conservation Commission (TNRCC).

[9] TEX. HEALTH & SAFETY CODE ANN., §§ 361.003(34) (definition of solid waste). This section expires upon delegation of the RCRA authority to the RRC. It is to be replaced by § 361.003(35) which excludes from the definition of soild waste "the waste, substance, or material that results from activities associated with gasoline plants, natural gas or natural gas liquids processing plants, pressure maintenance plants or repressurizing plants and is a hazardous waste as defined by the administrator of the EPA....". Such delegation has yet to occur.

[10] TEX WATER CODE § 26.131. These activities include: (a) drilling injection water source wells; (b) cathodic protection drilling; (c) gasoline plants or natural gas or liquid gas processing plants, pressure maintenance plants or repressurizing plants; (d) underground natural gas storage facility; (e) underground hydrocarbon storage facility; (f) activities associated with the storage, handling, *reclamation*, gathering, transportation, or distribution of oil or gas *prior to the refining of such oil* or prior to the use of such gas in any manufacturing process or as a residential or industrial fuel [emphasis added].

[11] The RI must "fully comply" with the old risk reduction rules at 30 T.A.C. § 335.553(b)(1) (relating to Risk Reduction Standard No. 3).

[12] *Id.* at § 350.2(m)(1) and (2).

[13] *Id.* at 335.561(b).

[14] *See* 30 T.A.C. §§ 335.556(b), 559(d)(4), 562(c)(3), 563(i)(2)(B) and 563(j)(3). (emphasis added).

[15] *Id.* at 335.556(b). That section states that "[t]he person must evaluate other exposure pathways at or near the facility (e.g., dermal adsorption, ingestion of contaminated fish, etc.) by which human populations (including sensitive subgroups) and environmental receptors (e.g., aquatic organisms, food-chain crops, etc.) are likely to be exposed to contaminants." *Id.*

[16] *See* http://www.tnrcc.state.tx.us/permitting/trrp.htm.

[17] *Id.* at § 350.55(e). Additionally, if new information becomes available which indicates that additional parties could be exposed, then those additional parties and the executive director shall be notified as soon as possible, but no later than 14 days of the date actual or probable exposure is determined; *unless* the exposure determination is based on additional sample analyses in which case notice must be made with 60 days from receipt.

[18] *See* TRRP Notification Guidance Document, Draft (July 27, 2000). TNRCC and industry and trade organization representatives are jointly developing this document. The final document will likely be published and available by the close of September 2000.

[19] *Id.* at § 350.55(e)(1).

[20] *Id.*

[21] *Id.*

[22] *Id.* at § 350.34(1) or (3).

[23] *Id.* at § 350.55.

[24] *Id.* at § 350.55(b).

[25] Critical PCL is defined as "[t]he lowest protective concentration level for a chemical of concern within a source medium determined from all of the applicable human health exposure pathways as described in §350.71 of this title (relating to General Requirements), and when necessary, protective concentration levels for applicable ecological exposure pathways as required in §350.77 of this title (relating to Ecological Risk Assessment and Development of Ecological Protective Concentration Levels). *Id.* at § 305.4(19).

[26] The Tier I PCLs to be used includes those associated with direct or indirect exposure pathways such as inhalation, ingestion or dermal contact and would not, for example, include cross-media only

exposure pathways such as soil leaching to groundwater.

[27] *See* Figure: 30 T.A.C. § 350.74(a).

[28] *See* TEX. CONST. Art. I, § 19; *See also* City of Wink v. Griffith Amusement Co., 129 Tex. 40, 49, 100 S.W.2d 695, 700 (1936) (right of property is right to use and enjoy in a lawful manner); Bielicki v. City of Port Arthur, 12 S.W.2d 976, 978 (Tex. Comm'n App. 1929, opinion adopted) (denial of right to use property as one sees fit, denial of constitutional right).

[29] TRRP Preamble, 24 *Texas Register* 7639 (Adopted Rules, September 17, 1999)

[30] 30 T.A.C. § 305.74(j)(2)(A).

[31] *Id.*

[32] *Id.* at § 305.74(j)(2)(B).

[33] *Id.* at § 305.74(j)(2)(C)(iii).

[34] *Id.* at § 305.74(j)(2)(C).

[35] *Id.* at § 305.74(j)(2)(C)(vi).

[36] *Id.* at § 305.74(j)(2)(E).

[37] The decision shall be rendered within 15 days after the public meeting or, if no meeting, within 45 days after the date of the initial published notice. *Id.* at § 305.74(j)(2)(I).

[38] *Id.*

[39] The discovery rule is generally applied in two types of cases: fraud or fraudulent concealment, and where the nature of the injury incurred is inherently undiscoverable, but may be objectively verified. When a cause of action is deferred by the discovery rule, the cause of action does not accrue until the plaintiff knew or should have known of the wrongful act and resulting injury. *Id.* Even when the discovery rule is applied, the cause of action accrues when the fact of injury is known, not when the responsible parties are known. *Moreno v. Sterling Drug, Inc.*, 787 S.W.2d 348, 351-352 (Texas 1990).

[40] TEX. CIV. PRAC. & REM. CODE ANN. § 16.003(a) and (b) (West 2000).

[41] *Id.*

[42] *Moreno* at p. 351-352 (Texas 1990). This case provides a good explanation of the application of the Discovery Rule in Texas. The case involved a wrongful death suit brought by the parents of two deceased children who died from complications of Rye's syndrome after taking aspirin. The suits were filed more than two years after the deaths of the children, but the parents argued that they did not know of the relationship of aspirin to Rye's syndrome until more than two years after the deaths, and therefore the Discovery Rule should apply. Finding to the contrary, the Court stated that the discovery rule does not apply to statutes that define a clear time of accrual of the action such as at death, but does apply to limitations statutes that do not have a clearly defined time of accrual, citing the time of discovery of a personal injury as per §16.003(a) as an example of situation in which the Discovery Rule is applicable.

[43] *Id.*

[44] *Id* at 353.

[45] *See, e.g. Beck v. American Rio Grande Land & Irrigation Co.*, Tex. Civ. App., San Antonio, 39 S.W.2d 640, *writ ref*; and *Gulf Oil Corp. v. Alexander*, Tex. Civ. App., Amarillo, 291 S.W.2d 792, 793.

[46] *See Velsicol v. Winograd*, 956 S.W.2d at 530-531. (Texas 1997)

[47] *MDU Resources Group v. W.R. Grace & Co.*, 14 F.3d 1274, 1279 (8th Cir. 1994) *and Farm Credit Bank v. United States Mineral Prods. Group*, 864 F.Supp. 643, 650-51 (W.D. Ky. 1994).

[48] *See* 30 T.A.C. § 350.34 and §§ 350.91-.96.

[49] *See Id.* at § 350, Subchapter B.

[50] *Id.* at § 350.95 (Response Action Completion Report).

[51] *Id.* at § 350.34 (No Further Action).

[52] *Id.*

[53] *Id.* at § 350.33(g)-(n).

[54] *Id.* at § 350.33(h).

[55] *Id.* at § 350.33(h)(1)-(3). A shorter period may be demonstrated to be appropriate due to: (1) the nature of the response action; (2) the persistence, migration potential, and toxicity of the COCs; and the physical characteristics and location of the affected property.

[56] *Id.* at § 350.33(k).

[57] *Id.* at § 350.33(l) and (m). The Remedy Standard B soil and groundwater objectives are found at 30 T.A.C. § 350.33(e)(2) and (f), respectively.

[58] It should be noted, however, that financial assurance may be required by other program areas (e.g., a Chapter 335 permitted TSD facility) or applicable federal requirements. For example, while financial assurance may not be required under the TRRP rule, a TSD facility subject to Chapter 335 of this title must satisfy the financial assurance requirements in 30 T.A.C. § 335.179.

[59] *Id.* at § 350.33(l).

[60] *Id.* at § 350.33(h).

[61] *Id.* at § 350.33(m).

[62] *Id* .at § 350.33(i). A demonstration of no threat to human health of the environment shall be made by adequately documenting one of the following conditions: (1) the COCs in soil and groundwater are less than their respective critical protective concentration levels (PCLS) (groundwater comparisons require 3 consecutive years of monitoring data unless an alternate period is approved by the executive director); or (2) the post-response action care period only involves monitoring the effectiveness of the physical control and that control has been proven successful and secure; or (3) affected property

only contains a groundwater PCLE zone and that zone is reducing in size and its boundaries are sufficiently smaller than the boundaries of an institutional control; or (4) COCs in surface and subsurface soils exceed only the ^{GW}Soil, but groundwater PCLE zone is reducing in size and its boundaries are sufficiently smaller than the boundaries of an institutional control.

[63] *Id.* at § 37.4021(c). *See* also § 37, Subchapter C (Financial Assurance Mechanisms for Closure).

[64] *Id.* at § 37.141 (Increase in Closure Cost Estimate). The TNRCC has proposed an amendment to this section that would increase by 30 days (for a total of 60 days) the time within which the financial assurance amount must be increased after the owner or operator becomes aware, or is notified by the executive director, of the increase.

[65] *Id.* at § 37.151 (Decrease in Closure Cost Estimate).

[66] *See Id.* at 350.33(a)(3)(B) and 350.77(f)(2).

[67] *See* Comprehensive Emergency Response, Compensation and Liability Act ("CERCLA"), 42 U.S.C. §§ 9601-9675 (West. 2000). Trustee natural resource damage claims are authorized pursuant to CERCLA § 107(a)(4)(C) and § 107(f)(1); Clean Water Act ("CWA"), 33 U.S.C. § 1321(f)(4) and (5) ("The President is authorized to act on behalf of the public as trustee of the natural resources to recover for the costs of replacing or restoring such resources"); Oil Pollution Act ("OPA"), 33 U.S.C. § 2702(b)(2)(A); and Texas Oil Spill Prevention and Response Act ("OSPRA"), TEX. NAT. RES. CODE ANN., § 40.203(b).

[68] National Contingency Plan, 40 C.F.R. § 300.615(c); 15 C.F.R. § 990.14(b); 43 C.F.R. § 11.23(f).

[69] 24 *Tex. Reg.* 7436, 7660 (Adopted Rules, September 17, 1999).

[70] *Id.* at § 350.4(47) (Institutional Control).

[71] *Id.* at § 350.111(b).

[72] *Id.* at § 350.111(b)(4) and (7).

[73] *Id.* at § 350.111(a).

[74] *See* 24 *Tex. Reg.* 7671 – 7686 (Preamble on Subchapter F. Institutional Controls) (Adopted Rules, September 17, 1999).

[75] *Id.* at 7673.

[76] *Id.* at 7672 and 7674.

[77] *Id.* at 7672.

[78] TEX HEALTH & SAFETY CODE ANN., Sect. 361, Subchapter V (Immunity From Liability of Innocent Owner or Operator). An innocent owner or operator is an owner or operator of a property affected by a release from an off-site property and the person did not cause or contribute to the source or sources of the release. *Id.* at § 361.751.

[79] 30 T.A.C. § 350.4(a)(22).

[80] TEX HEALTH & SAFETY CODE ANN., §§ 361.609 (Certificate of Completion) and 361.610 (Persons Released from Liability).

[81] *Id.* at §§ 361.271 (Persons Responsible for Solid Waste) and 361.275 (Injuction as Alternative to Administrative Order).

[82] The threshold question here is whether the Agency can overcome a so-called innocent landowner's defense to enforcement based upon the immunity provision at TEX. HEALTH & SAFETY CODE ANN. § 361.752. Commentators on the rule stated belief that the Agency can overcome such a defense if the landowner undertakes actions that cause or create a condition that is not protective of human health or the environment. Since there is no case law in Texas that tests this immunity provision yet, one looks to federal case law and holdings relating to the CERCLA innocent owner defense. CERCLA is the federal analog to the state statute and the attachment of liability is similar (i.e., past or present owner/operator, arranger for disposal, and transporter, *see Id.* at § 361.271 and 42 U.S.C. § 9607(a)). In order to qualify for the CERCLA innocent owner defense a party must show that "the real property on which the facility is located was acquired by the defendant after the disposal or placement of the hazardous substance on, in, or at the facility" and that "[a]t the time the defendant acquired the facility the defendant did not know and had no reason to know that any hazardous substance which is the subject of the release or threatened release was disposed of on, in, or at the facility." 42 U.S.C. § 9601(35)(A).

Nonetheless, the court in *CDMG Realty v. The Sharkey Landfill Group* debated whether a soil investigation for the purpose of conducting due diligence was enough to nullify the innocent owner defense. 96 F.3d 706 (3rd Circuit, Sept. 27 1996). The court concluded that the defense would be defeated if the investigation was conducted negligently. *Id.* Many more cases with similar holdings have been decided by the courts. If a party can be found liable under CERCLA for conducting an investigation negligently, it is highly probable that a court would find a person liable in Texas if he or she willfully ignored land use restrictions in a deed notice and used the property in a manner that was not protective of human health.

Finally, EPA's July 3, 1995 policy entitled, *Policy Towards Owners of Property Containing Contaminated Aquifers*, states that CERCLA liability will not attach as long as the "landowner does not cause, contribute to, or make the contamination worse through any act or omission on their part," among other elements. This would mean that actions or omissions undertaken by the landowner that such as dirt moving would result in the attachment of CERCLA liability. While this is only guidance, it indicates the federal position on the so-called innocent landowner's limitations on use of the land.

[83] *NRC, Inc. v. Pickhardt*, 667 S.W.2d 292, 293 (Tex.App.--Texarkana 1984, writ ref'd n.r.e.)("A purchaser of land has constructive notice of all information contained in his grantor's chain of title, and he is bound by every recital, reference and reservation contained in or fairly disclosed by any instrument which forms an essential link in that chain."); *see also Jones v. Texaco, Inc.*, 945 F.Supp. 1037, 1043 (S.D.Tex. 1996). Note that there is also a body of "Discovery Rule" cases that hold purchasers to have "discovered" injury upon purchase (for SOL purposes) if it was noted in the deed records. *Rogers v. Ricane Enters., Inc.*, 930 S.W.2d 157, 166 (Tex.App.--Amarillo 1996, n.w.h.); *Koch Oil Co. v. Wilber*, 895 S.W.2d 854, 863 (Tex.App.--Beaumont 1995, writ denied); *Harrison v. Bass Enters. Production Co.*, 888 S.W.2d 532, 538 (Tex.App.--Corpus Christi 1994, no writ)

[84] Senate Bill 509 (1999 Texas Legislative Session).

[85] *See Texas v. Durham, et al.*, 860 S.W.2d 63, 67 (Texas 1993). See also *Lewis Cox & Son, Inc. v. High Plains Underground Water Conservation Dist. No. 1*, 538 S.W. 2d 659, 662-663 (Tex. Civ. App. –Amarillo 1976, writ ref'd n.r.e.)

[86] As indicated in the Takings Impact Analysis ("TIA"), the Agency was concerned that "takings" litigation would ensue if the TRRP allows deed notices to be executed without either landowner consent or a declaration by a court of competent jurisdiction that an amount has been paid into the court's registry sufficient to compensate the landowner for any devaluation attributable to the recording of the deed notice.

[87] TEX. WATER CODE ANN. § 7.101 (Violation) (West 2000).

[88] *Id.* at § 7.051 (Administrative Penalty)

[89] TRRP Notification Guidance Work Group meeting (June 2000). At this meeting, an issue arose concerning the requirement for consultants or other agents of parties conducting affected property assessments to provide the notices required under TRRP. Draft guidance was proposed stating that consultants and other agents were not responsible for providing the notifications required under the Rule. It was proposed to explicitly state that the person who was responsible for the assessment, and not their agent, was the person required to give notice under the Rules. Furthermore, the agent had no independent obligation to provide such notice absent directions from their principal to do so. Agency staff stated that there was some reluctance to adopt this guidance because of a concern by agency enforcement officials that it would incorrectly state obligations under state law and regulations pertaining to notice.

[90] The issue of consultant liability for failure to notify was addressed by the TNRCC in the past concerning development of the Spill Notification Rules. In the original proposed Rules, August 1994, the TNRCC proposed to make consultants obligated to report historical contamination discovered as part of the consultant's work for other parties. Partly as a result of concern over imposing this obligation on consultants, and the chilling effect this could have on the willingness of consultants to engage in these activities, the historical contamination reporting requirement of the Spill Rule was withdrawn. The considerations which led to the decision to delete that requirement in the Spill Rules apply with equal force here. There is little to be gained and much to be lost if the regulated community and their consultants and contractors are unclear as to where the ultimate responsibility for providing notification lies under the TRRP.

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A Call to Indoor Arms: Recognizing the Importance of Indoor Air Quality

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Introduction

Air pollution. To most, these words stir images of urban "smog", smokestack industries, and automobiles. For all intents and purposes, the terms "air pollution" and "outdoor air pollution" have become nearly synonymous, a fact that is riddled with irony considering that the average American now spends a significant percentage of time indoors, where levels of many pollutants that are regulated outdoors are much higher.

There may be many factors that influence public perception related to air pollution. For one, the media has spent significantly more time dealing with issues related to the outdoor environment, including urban ozone, global warming, stratospheric ozone depletion, and sources of toxic chemical emissions to outdoor air. Furthermore, it is much easier to blame others for outdoor air pollution in a shared atmosphere. In contrast, most people have real control of, and even responsibility for, much of the pollution to which they are exposed in their everyday indoor environments. Unfortunately, public perceptions related to their indoor environments may be grossly misplaced. There is a growing base of scientific evidence that the air we breathe indoors can lead to significant short-term and long-term health effects. In fact, a large percentage of the overall exposure of Americans to toxic chemicals is now believed to occur in indoor environments, especially in the home.

In this paper I have attempted to provide a broad overview of the importance of indoor air quality and some of the sources that contribute to its degradation. I have also attempted to make an argument for why the field of indoor air quality deserves far more attention than it has received, including the need for an immediate and significant expansion of public education, research and regulatory action.

From Cave to Condo: A Historical Perspective

It is not difficult to imagine that, without good personal hygiene, early indoor air pollution problems were probably related to severe body odors in crowded and poorly ventilated caves of early humans. However, these problems likely took a significant turn for the worse when early humans decided to bring fire into caves. In fact, there is significant evidence of early indoor air degradation associated with fires as illustrated by soot deposition on the ceiling of caves. There is also evidence that early humans were affected by, and took action to resolve, combustion-generated air pollution by building fires below openings in caves that vented to the outdoor atmosphere (early stove hoods). Ironically, the issues of occupant-generated odors and pollutant emissions from combustion sources continue to this day.

As early as a century and a half ago, John Griscom, a New York surgeon, described the effects of indoor air on human health in his book entitled, *The Uses and Abuses of Air: Showing its Influence in Sustaining Life, and Producing Disease; with Remarks on the Ventilation of Houses*.[1] Much of what Griscom described in 1850 continues to concern those in the indoor air quality field today. Consider his description of infant exposure to impure indoor air, "First, as a tender Infant, he scarcely has made his entrance into the great ocean of air, and uttered his plaintive petition for a portion of the new element to expand his little chest, ere, by the careful nurse, he is tucked away under the coverlid ..... lest the already impure air of the chamber should be too strong for his weak organs." Griscom further described problems of over-crowded and poorly-ventilated classrooms and chambers, "His next position is as the Schoolboy, and here we find him, with from five to five hundred others, immured between closed walls ..... the carbonic

acid thrown off from his lungs as excrementitious poison, until, in the morning, he creeps from his bed in a dripping sweat and unrefreshed." Finally, he described the general health effects of indoor air pollution, recognizing the potential for chronic impacts, but also alluding to several symptoms that are now associated with the phenomenon of "sick building syndrome" (SBS). Griscom wrote, "Wherever we find a civilized being domiciled ..... we find him breathing an atmosphere more or less impure. Very often the effects are demonstrated at the moment in flushing of face, perspiration, drowsiness, headaches, vertigo, and fainting, and very frequently at more remote periods, by the development of more profound and serious diseases of the lung, heart, head and stomach."

Modern indoor air quality problems are generally traced to the end of World War II. In the United States, there was a great new demand for inexpensive housing, and the building industry responded in several ways. Suburbs sprang up across North America. Homes were built on smaller lots and garages were attached directly to the living space, inadvertently allowing for the entry of automobile exhaust and constituents of evaporative emissions into that space. Homes were also constructed of less expensive building materials comprised of adhesives and other components that off-gas a wide range of pollutants to the indoor environment. For the next several decades there was an increasing demand for furnishings and consumer products that made life easier. Manufacturers responded by producing a wide array of carpet and other flooring material, easy-to-use cleaners, personal care products, air fresheners, pesticides and more. These products generally improved the quality of life. However, the chemicals they emitted, many of which are now known to be irritants, allergens, toxicants, and carcinogens, degraded the quality of indoor air.

While a vast array of new sources of air pollution were added to the interior of buildings following World War II, most of these buildings remained relatively "leaky", either by the intentional actions of their occupants, e.g., opening windows, or via cracks in the building envelope, e.g., openings around doors and windows. In a sense, the intake of outdoor air was a classic example of dilution being the solution to indoor air pollution. However, this began to change in the 1950s with the addition of air conditioning systems in some homes and other buildings, a trend that grew significantly throughout the 1960s and 1970s, meaning a lesser desire to intentionally ventilate homes, schools, and offices. In 1973-74 the world was shaken by an energy "crisis" that led to incentives for homeowners, commercial building owners, and even school districts, to conserve energy by "weather proofing" buildings. Such actions included significant reductions in the amount of unintentional and intentional building ventilation, and accumulation of indoor pollutants.

Humans as Indoor Creatures

In the 1971 science fiction classic *Omega Man*, Charlton Heston battled against a group of photo-phobic neo-humans who were infected by a world-wide environmental "plague", and who only came out at night. Relative to the average American, these neo-humans were nothing short of outdoor enthusiasts. Indeed, Americans have evolved into indoor creatures. Various studies carried out during the past eight years indicate that average Americans spend between 87% and 90% of their time indoors, only about 5 to 7% outdoors, and the remainder in transit.[2-3] Looking at it another way, the average American spends 15 to 18 hours indoors for every hour spent outdoors. On average, Americans spend approximately 2/3 of their indoor time in the home. Those that spend the most time in the home include the most susceptible to indoor air

pollution: young children, pregnant women, the chronically ill, and the elderly. However, there are other indoor environments within which Americans spend a significant amount of time. Many working adults spend nearly 1/4 of their time in office buildings, or nearly ten entire years in such environments over a typical career. Most children spend 14,000 hours in classrooms between kindergarten and 12th-grade, the equivalent of 1.6 complete years in classroom settings.

The Indoor Environment as a Shelter

To many, there is comfort in believing that the places where they and their children spend most of their time are safe havens. In fact, on "smoggy" days the public is often warned to stay indoors. However, over the past twenty years there has been a growing base of scientific evidence that all points to the fact that most of these indoor environments are of lower environmental quality than the outdoor environment.

The USEPA's Total Exposure Assessment Methodology (TEAM) study was a benchmark effort intended to assess everyday exposure of the general population to a wide range of pollutants.[4] It was comprised of a large number of separate studies involving personal, indoor and outdoor monitoring, and 3,000 subjects living in 14 states. Results of the TEAM study clearly demonstrated that most Americans have their greatest exposure to toxic pollutants indoors, and that the primary sources of many of these pollutants are ordinary consumer products and building materials. In fact, the TEAM study indicated that indoor levels of many potentially toxic organic compounds are typically 2 to 5 times, and sometimes as much as hundreds of times, greater indoors than outdoors. Similar results have been observed in various building environments around the world.[5-8]

While it has been established that indoor air is often far more polluted than outdoor air, the same might also be said of indoor materials and surfaces. For example, carpet has received significant attention as a "reservoir" for pesticides and polycyclic aromatic hydrocarbons (PAH), as well as for lead and bio-contaminants.[9] Concerns regarding carpet and other flooring materials are generally heightened by the fact that infants spend a significant fraction of their time in close proximity to, or in direct contact with, the floor. In an eye-opening study completed in the early 1990s, Buckley and Camann measured pesticide and PAH levels in the carpet of 362 midwestern homes.[10] The pesticide DDT, banned in 1972, was observed in the carpet of nearly 25% of the homes. Levels of PAHs in the carpet of over 50% of the homes were greater than levels that would lead to formal risk assessments if found at similar levels in residential soil near a Superfund site.[10] Ott and Roberts[10] concluded that "If truckloads of dust with the same concentration of toxic chemicals as is found in most carpets were deposited outside, these locations would be considered hazardous-waste dumps."

Roots of the Problem

While outdoor air pollution does penetrate into the indoor environment, the fact that many pollutants are observed at much higher levels indoors suggests that there must be significant indoor sources of these pollutants. Dramatic improvements in indoor air quality will in part require a better understanding of the behavior of the wide variety of sources found in indoor environments.

Some sources, e.g., environmental tobacco smoke (ETS), have received significant attention and much is known about the types and amounts of pollutants that they emit. For

example, it is now known that ETS emits some 4,700 different chemicals, 200 toxins, and 43 known or suspected human carcinogens. Knowledge, or at least suspicion, of the negative effects of tobacco smoke is not new. As early as 1880, smoking was widely thought of as a disgusting and unhealthy habit, and was actually forbidden in 15 American states, actions that far exceed our willingness to control this source today. To place the issue of human exposure to ETS in perspective, Smith[11] compared the exposure of Americans to particulate matter originating from ETS and coal-fired power plants, a heavily regulated outdoor source of air pollution. He estimated that although power plants emit 25 times more particulate matter than ETS on a mass basis, from a human exposure standpoint a mere 2% reduction in ETS would be equivalent to closing all coal-fired power plants in the United States.

But, there are many sources that can significantly degrade indoor air quality, even in buildings for which smoking has been banned. While knowledge regarding some of these sources has improved during the past 20 years, there is still much to be learned about source "fingerprints" (the full range of pollutants emitted from a source), source strengths (the amount of each pollutant emitted as a function of time), and the mechanistic behavior of source emissions (how emissions vary as a function of source operating and environmental conditions). For example, one source that has increased rapidly in number within the United States is candles, especially those of the aromatic variety. It is clear that candles can be a source of indoor fine particulate matter in homes, offices, and schools (the author has observed numerous teachers burning candles in their K-12 classrooms), and are likely responsible for much of the black soot deposition in homes, often characterized by a paraffinic fingerprint. However, there is not a large base of independent studies on this rapidly increasing source, and much is still to be known about the types of VOCs, PAHs, and other pollutants that they emit.

Indoor combustion systems also include sources ranging from gas stoves and ovens, associated cooking activities, improperly vented and unvented space heaters, and automobiles in attached garages. These sources emit varying quantities of carbon monoxide (CO), oxides of nitrogen (NO_x), VOCs, semi-VOCs (SVOCs), and particulate matter. Wallace[12] identified cooking as the second most significant source of indoor particulate matter, next to ETS, and Rogge *et al.*[13] demonstrated significant emissions of fine particulate matter for several cooking activities. These results are important given the high potential of inhalation exposure for those doing the cooking and children who may be present in or near the kitchen, and exemplifies a routine daily activity in the lives of most which can be an important contributor to fine particle exposure.

Building materials, e.g., re-constituted wood products used in cabinetry and furniture, emit a wide range of VOCs, including formaldehyde. Formaldehyde has a pungent odor and at concentrations greater than 100 ppb may cause watery eyes, burning sensations in eyes, nose and throat, nausea, tight-chestedness, coughing and skin rashes. It is also a suspected human carcinogen. The World Health Organization recommends that exposure to formaldehyde should not exceed 50 ppb. However, levels in newer homes, manufactured homes, portable classrooms, and many other new or renovated buildings can exceed this level by factors of five or more.

Those pleasant smelling terpene compounds, e.g., pinenes and limonene, emitted from wood products and many consumer products can also lead to indoor air quality problems. Weschler and Shields[14] demonstrated that ozone reacts with terpenes leading to measurable sub-micron particles in indoor settings. The particle yields were significant, an important result considering recent efforts by the USEPA to regulate fine particulate matter in outdoor air.

By the 17th century the aristocracy relied heavily on strong perfumes and powders, as opposed to improved fresh air exchange, to mask the stench of city life. Some things never change. Air "fresheners", household cleaners, personal care products and other consumables (pesticides, etc.) are major sources of indoor air pollution, especially VOCs. Many of the associated pollutants can be severe irritants, are suspected carcinogens, and are heavily regulated as hazardous air pollutants (HAPs) when emitted by industry to outdoor air. As but one of hundreds of possible examples, many air "fresheners" and moth repellants are nearly pure para-dichlorobenzene (*p*-DCB), a chemical known to cause cancer in laboratory animals. Air "fresheners" containing *p*-DCB are used to mask odors in homes, schools, hotels, office buildings, public restrooms, and even nurseries and daycare centers. Average concentrations of *p*-DCB in homes have been observed to be a factor of 20 times higher than outdoor concentrations.[15]

Since most homes operate under slightly negative pressure relative to the surrounding soil, gases can migrate from soil into the building interior. Much of the attention related to soil vapor intrusion has focused on vapors comprised of toxic organic chemicals associated with hazardous waste sites, leaking underground storage tanks, and landfill gas. While these sources can sometimes lead to very high risks to building occupants, a far greater threat when integrated across entire populations are the naturally occurring pollutants of radon and its decay products (see next section).

Interestingly, even treated drinking water can lead to the degradation of indoor air quality.[16] Several researchers have concluded that inhalation exposure to many contaminants emitted from water during indoor usage may be as great, or even greater, than exposure associated with ingesting the water.[17-18] This is particularly true for many halogenated compounds that are generated as by-products of the otherwise beneficial process of drinking water chlorination. These findings may be perceived as somewhat ironic when compared with human fears regarding the ingestion of similar chemicals in water, fears that have led to a worldwide bottled water industry with annual sales of approximately 70 billion dollars. Shephard *et al.*[19] also found that significant levels of chloroform are generated in, and emitted from, washing machines following the usage of chlorine-containing bleach.

Although beneficial in so many ways, even microcomputers emit a wide range of VOCs, many of which would be classified as hazardous air pollutants if emitted to the outdoor environment. Computer monitors have been shown to emit numerous VOCs, particularly in the first several days of usage. The author was recently involved in a study to determine the types and magnitudes of VOCs emitted from actual computers (the CPU box) during initial computer operation. A total of 48 VOCs were identified (many more were present), with toluene being the most dominant (20 to 40% of total VOC emissions). It was concluded that, under certain scenarios, e.g., many new computers in a poorly ventilated classroom, microcomputers (CPU only) can contribute significantly to indoor VOCs, e.g., toluene and styrene. Other electronic devices have been observed to emit VOCs to indoor air, including wet and dry-process photocopiers, television sets, and video recorders. Dry-toner photocopiers and laser printers are also sources of indoor ozone and particulate matter.

Biological air pollutants (bio-contaminants) include bacteria, viruses, fungi, pollen, animal dander, dust mite and cockroach fecal matter. The most widespread effects of these sources include allergic responses such as rhinitis, nasal congestion, and asthma. However, bio-contaminants are also responsible for other diseases such as Legionnaires disease and Tuberculosis, both caused by airborne transmission of specific bacteria. Fungi also release

mycotoxins that are known to cause symptoms ranging from short-term irritation to cancer. Stachybotrys is one type of fungus that has received national media attention due to several extreme cases of contamination in homes and schools.

These are but a few examples of the hundreds to thousands of sources of indoor air pollution that are found in homes, schools, office buildings, and other highly frequented indoor environments. Additional information related to these sources and the pollutants they emit can be found at several of the web sites listed elsewhere in this article.

Risks Associated with Poor Indoor Air Quality

The concept of risk-based decision making and corrective action has evolved into an important regulatory tool during the past two decades, and is often cited for its value in the prioritization of environmental policies and for decisions related to environmental intervention. The latter is often triggered for scenarios of environmental contamination that would lead to greater than 1 or 10 in a million excess cancer risks, e.g., at or near hazardous waste sites, at the fence line of industrial facilities, or in drinking water. So, how do the risks of indoor air pollution compare?

It is generally agreed that poor indoor air quality can have a detrimental, if not devastating, effect on the health of children and other highly susceptible populations. For example, the USEPA estimates that ETS leads to 150,000 to 300,000 lower respiratory tract infections each year amongst children less than 18 months of age and living in the United States, and that these children require 7,500 to 15,000 hospitalizations each year due to the effects of exposure to ETS. The USEPA has also estimated that 200,000 to 1,000,000 American children have worsened asthma problems each year due to exposure to ETS. In addition to the effects of ETS, the USEPA estimates that biological air contaminants in indoor air are responsible for at least 200,000 emergency room visits each year by asthma patients, many of them being children.

Indoor air pollution is also believed to be a significant contributor to chronic diseases such as cancer. The USEPA estimates that ETS causes 3,000 lung cancer deaths each year amongst American non-smokers. This tranlates to a risk of dying of lung cancer due to exposure to ETS of approximately 800 in a million during a 70 year span. Similarly, it has been estimated that indoor pesticides and VOCs contribute as many as 3,000 cancers/year in the United States.[20] Radon and its decay products are now believed to be the second leading cause of lung cancer in the United States, behind only mainstream cigarette smoke. The National Research Council estimates that exposure to the radioactive decay products of radon is responsible for 15,000 to 21,000 lung cancer deaths per year in the United States. This translates to a risk of death from radon exposure of 3,800 to 5,400 in a million (0.38 to 0.54%) during a 70-year span. Ironically, the cancer risks described here are orders of magnitude greater than those that would cause regulatory intervention for other environmental media.

The importance of human health risks associated with indoor air pollution has been recognized for many years. In 1987, radon and non-radon indoor air pollution were each ranked in the top five of 31 environmental problems in terms of the risks they pose to human health, results that were endorsed by the USEPA's Science Advisory Board.[21] Indoor air pollution ranked ahead of many issues that have received far more regulatory attention, including hazardous waste sites, groundwater contamination, drinking water, hazardous/toxic outdoor air pollutants, and outdoor criteria air pollutants. This is not to say that these other environmental issues are not important. Indeed, regulatory attention paid to some of these issues has led to

important environmental dividends. However, the relative importance of indoor air quality does bring to question why it has received so little attention relative to these other environmental issues.

Finally, an additional and often forgotten risk associated with indoor air pollution is the burden that it places on businesses, schools districts and, in fact, entire economies. Researchers at Lawrence Berkeley National Laboratory recently completed an eye-opening assessment of the impacts of indoor air pollution on America's national economy.[22-23] They estimated potential annual savings and productivity gains ranging from 43 to 258 billion dollars (1996 dollars) from improved indoor environments in office buildings alone. Thus, even if the relatively large health impacts (relative to many other heavily regulated environmental issues) are cast aside, the economic impacts of poor indoor air quality on U.S. businesses are staggering. These costs will likely grow in the future as public awareness of this issue is heightened and the costs of legal actions are added to those listed above.

A Call to Indoor Arms

For all intents and purposes, indoor air quality as a field has not advanced significantly during the past 150 years, especially when compared with other environmental fields (drinking water treatment, surface water quality, hazardous waste remediation, outdoor air quality, etc.). It remains a problem-driven field. Building owners pay attention once occupants complain. Federal agencies provide relatively sparse funding once a problem becomes grossly obvious.

There is an immediate need for a massive and effective public education campaign regarding the importance of indoor air quality, its impact on children and other building occupants, sources of indoor pollution, and measures that individuals can take to reduce their exposures to indoor pollutants. If the public is empowered with accurate information related to these issues they will be able to make immediate improvements to their own indoor environments. Their actions and demands will ultimately force the building industry to construct healthier buildings, and will provide the regulatory community with a mandate to deal with this important issue.

The lack of research funding to address indoor air quality problems lags far behind that for outside air quality. This research difference has led to significant knowledge gaps, confusion, misguided public perception, and indoor air "treatment systems" riddled with false claims and, in some cases, contributing to indoor air quality problems. There is a clear and immediate need for a steep increase in research funding to better understand the nature of indoor air pollution and its effects on human health. Research is specifically needed on the mechanistic behavior of indoor pollution sources, lower-emitting building materials and consumer products, indoor chemistry and fate mechanisms, improved building and building ventilation design, passive and active control technologies, and health effects of indoor chemicals and bio-contaminants on children and other building occupants.

The Radon Gas and Indoor Air Quality Research Act of 1986 required, for the first time, that the USEPA establish a formal research program associated with radon and indoor air quality. Five years later, the U.S. General Accounting Office (GAO) published a report on federal efforts to address indoor air pollution.[24] The GAO concluded that the amount of funds spent by the USEPA on indoor air quality research was not commensurate with the high health risks associated with this issue. In subsequent years, research funding amongst the USEPA and nine other federal agencies dealing with indoor air-related issues did not change appreciably.[25]

In 1999, the GAO issued another report on the status of federal research activities related to indoor air pollution, and concluded that many gaps in knowledge and understanding of the problem remain.[25] A consensus opinion was that to fill these gaps and resolve related uncertainties will require "a comprehensive and coordinated research effort involving multi-disciplinary research teams composed of experts in such areas as epidemiology, exposure assessment, medicine, chemistry, microbiology and building systems." The good news is that intellectual resources in these areas exist. The bad news is that financial resources necessary to address the GAO findings continue to be elusive.

To illustrate the relative lack of attention given to indoor air quality I recently completed three simple exercises. First, ten issues of the *Journal of the Air & Waste Management Association* (JA&WMA) published over the past five years were randomly selected. The 10 randomly selected issues included 75 research papers that were focused explicitly on topics related to outdoor air quality or sources of outdoor air pollution. Only three articles were related to indoor air quality, and two of these three articles focused on the effects of outdoor air quality on indoor air quality.

In a second exercise I attempted to compare federal research funding spent on outdoor versus indoor air quality. It was difficult to complete this exercise given that health-related research funding significantly exceeds purely environmental research, and much of the health related funding is ambiguous in its target, e.g., asthma research that is not necessarily targeted at outdoor or indoor air. However, it was eye opening to discover that in 1999 the USEPA's budget for all indoor air quality research was approximately six million dollars (much of which was not actually spent on research!) and the agency's budget solely for studying outdoor particulate matter in 1998 alone exceeded 45 million dollars. Without being able to find any additional figures for comparison, I focused on two additional sources of information. The first was a listing of USEPA Science to Achieve Results (STAR) funded projects for the past three (1997 to 1999) funding cycles. For this exercise I counted over 40 projects related to outdoor air quality and only one related explicitly to indoor air quality. I then did a web-based search of the Community of Science, which includes a database of research funding opportunities in science and engineering disciplines. I entered keywords of "air pollution" and "air quality" to search for funding opportunities in the United States with deadlines after June 1, 2000. Of 23 relevant opportunities, 21 were related specifically to outdoor air quality and two were related to indoor air quality. A third search on "indoor air quality" led to one additional funding opportunity. However, the three IAQ-related opportunities were related to air quality in submarines and spacecraft, and neutralization or decontamination of biological and chemical warfare agents in building interiors, hardly issues that affect the general population on a routine basis!

There is clearly a large disparity in federal resources spent on indoor air quality relative to outdoor air quality. Is the same true on Texas? While stories of Houston becoming the new champion of poor air quality in the United States and Austin teetering on becoming a non-attainment area for ozone are readily and often found in Texas newspapers and on local television stations, Texas also has its share of significant indoor air quality problems. These problems are caused by many factors, including a rapidly growing housing market consisting of energy efficient (tight) homes, a large and rapidly growing manufactured home base, a significant population living in hot and humid climates conducive to excessive mold growth, and third-world living conditions along the Mexican border. Insufficient funds allocated to school districts for proper maintenance, as well as new construction completed without proper regard

for indoor air quality, has led to a significant number of Texas schools that have recently been closed due to interior biological or chemical contamination.

I attempted to determine the extent to which the state of Texas has allocated its funds for addressing outdoor and indoor air quality problems, a difficult and frustrating task. However, following conversations with colleagues at the Texas Natural Resource Conservation Commission and the Texas Department of Health, I was able to approximate the ratio of state employees dedicated solely to outdoor air quality to those employed solely to combat indoor air pollution as 400:1 to 1000:1. Based on instrumentation needs and costs, the ratio of actual resources spent is likely much greater than this range.

These examples are admittedly simplified. However, they do underscore the significant disparity paid to outdoor air quality relative to indoor air quality. While in the author's opinion resources spent on improving outdoor air quality have been an important and justified investment, it seems that indoor air quality is worthy of similar attention, but has received far less.

Over the past 30 years, the original Clean Air Act and associated amendments (CAA) have led to tremendous improvements in our understanding of outdoor (ambient) air quality, sources that impact ambient air quality, and measures to control sources that emit pollution to outdoor air. The CAA has led to a large and complex regulatory framework aimed at improving poor, and maintaining good, ambient air quality. It has motivated tens to hundreds of billions of dollars of research (in current dollar equivalents), a large pollution control and monitoring equipment industry, a significant consulting industry focused on regulatory permit assistance, and significant public awareness campaigns focused on sources of outdoor air pollution. There is nothing remotely similar to the CAA for non-industrial indoor environments. In the opinion of the author, the time is long overdue to explicitly address indoor air quality in future Clean Air Act amendments, and to formally address what may be the most important and *relatively* over-looked environmental issue of our time. It is, indeed, time for a "call to indoor arms".

Some Relevant Web sites

www.arb.ca.gov/research/indoor/indoor.htm
www.cal-iaq.org
www.cpsc.gov/cpscpub/pubs/iaq.html
www.dehs.umn.edu/homeiaq
http://eande.lbl.gov/IEP
www.epa.gov/iaq
www.healthhouse.org
www.lungusa.org
www.nsc.org/ehc/indoor/iaq.htm

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About the Author

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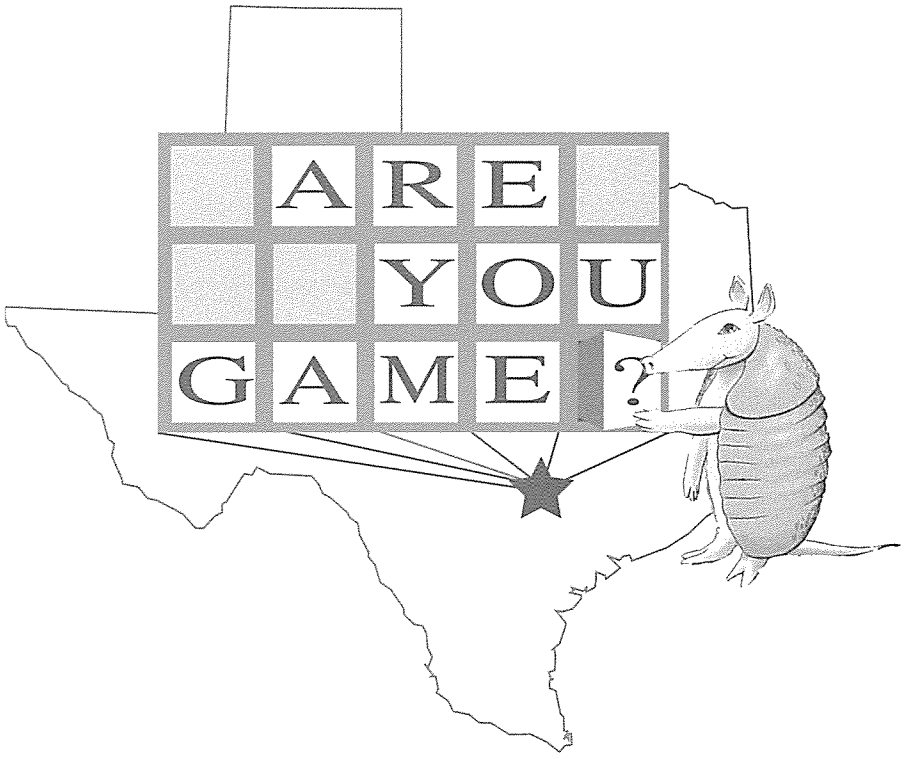
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Indoor Air Quality in Texas: The State Legal Framework

by

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Indoor Air Quality in Texas: The State Legal Framework

I. Introduction

Indoor air quality has received increased media attention in the past few weeks. The cover story of the June 5, 2000 issue of *Business Week* is entitled "Is Your Office Killing You?" and contains a discussion of a variety of indoor air quality issues. The July 12, 2000 issue of the *Journal of the American Medical Association* discusses indoor exposure to lead from the burning of candles with lead-containing wicks. In Texas, indoor air quality issues involving molds in a Dripping Springs residence have been featured in national television news programs. In the Austin area, attention has been focused on the presence of molds in schools and has resulted in the evacuation of an elementary school building. These stories demonstrate the wide variety of contexts in which indoor air quality issues can arise. This article briefly analyzes the legal landscape that currently applies to these issues and points the practioner toward additional resources that may be helpful.

II. Regulatory Programs

A. Federal Programs

Unlike other environmental quality issues, indoor air pollution has not been addressed by a comprehensive statutory and regulatory scheme. On the federal level, indoor air quality is addressed by a variety of statutory and regulatory programs administered by several federal agencies. The agencies with the most significant involvement with indoor air quality issues are the United States Environmental Protection Agency ("EPA") and the Occupational Safety and Health Administration ("OSHA"), but other federal agencies are also involved in indoor air quality issues through the Interagency Committee on Indoor Air Quality ("ICIAQ"). In addition to EPA and

OSHA, primary participants include the National Institute for Occupational Safety and Health, the Department of Energy and the Consumer Product Safety Commission. Overall, at least 20 federal agencies have some involvement with indoor air quality issues. An extensive analysis of federal statutes dealing with indoor air quality is contained in Arnold W. Reitze, Jr. and Sheryl-Lynn Carof, "The Legal Control of Indoor Air Pollution," 25 *B.C. Envtl. Aff. L. Rev.* 247 (1998). The principle statutes through which indoor air quality is currently regulated on the federal level include the Occupational Safety and Health Act, 29 U.S.C. §§651-678, 1994; the Toxic Substances Control Act, 15 U.S.C. §§2601-2692; the Federal Insecticide, Fungicide and Rodenticide Act, 7 U.S.C. §§136-136y, 1994; the Clean Air Act, 42 U.S.C. §§9601-9675, 1994; and the Safe Drinking Water Act, 42 U.S.C. §§300f-300j-26, 1994.

As might be expected, the most well-developed regulations dealing with indoor air quality are work-place standards issued by OSHA. These standards apply primarily to industrial settings. Extensive rules dealing with workplace exposure in non-industrial settings were proposed by OSHA on April 5, 1994. 59 Fed. Reg. 15968. These proposed standards, however, have not yet been adopted.

A determination of whether any particular indoor air quality situation is subject to federal regulation requires a case-by-case analysis of the specific issue and the context in which it arises. In addition to the Reitze and Carol article cited above, federal regulatory requirements are surveyed in Lawrence S. Kirch & Geraldine E. Eden, *Indoor Air Quality, in The Environmental Aspects of Real Estate Transactions* 633 (James B. Witkin ed., 2nd ed. American Bar Association 1999). A more recent article is William Carey Wright, *Indoor Air Quality Claims: Defining the Practical and Legal Issues*, 14 Natural Resources and Environment 255 (American Bar

Association Section of Environment, Energy, and Resources-Spring 2000).

B. Texas Indoor Air Quality Regulation

Texas state indoor air quality regulation follows a pattern similar to the federal practice, i.e., there is no comprehensive state regulation of indoor air quality. On the contrary, there are a variety of specific statutes and regulations which address specific air quality problems. An overview of the state regulatory programs is set out in below in Table 1. As can be seen, a large part of the state indoor air quality regulations are directed towards indoor air quality in schools. There are also statutes requiring specific disclosures in certain real estate transactions which address radon and urea-formaldehyde insulation, as well as requirements pertaining to the application of pesticides. Indoor air quality issues may also arise in the context of cleanup activities under the Texas Risk Reduction Program, 30 T.A.C. Chap. 350, through determination of exposure pathways.

Table 1-Texas Statute and Regulations Related to Indoor Air Quality	
SCHOOLS	
Texas Revised Civil Statutes Annotated, Article 135b-6; The Texas Structural Pest Control Act	Regulates pest control generally and establishes certain requirements with respect to indoor pest control. Requires the provision of pest control information in advance to occupants of buildings that are to be treated for pest control. Requires the state to establish standards for integrated pest management at schools, including requirements that the least toxic methods be used, and that pesticides be applied to school only during certain times. Provides for licensing of pest control professionals.

4 Texas Administrative Code Section 7.26 - adopts by reference the State of Texas Plan for Certification of Pesticide Applicators	Authorizes residents, workers, and persons in charge of licensed day care centers, schools, and health care facilities, within a quarter mile of a field where pesticides are applied, to request from the farm operator prior notification of a pesticide application. Establishes notification methods.
Texas Health and Safety Code, Sections 385.001 et seq.	Requires the Texas Board of Health to establish voluntary guidelines for indoor air quality in public schools, including guidelines for ventilation and indoor pollution control systems. Provides that in establishing the guidelines, the board must consider the potential effects of air contaminants and insufficient ventilation on human health; the potential costs of health care resulting from exposure to indoor air contaminants; and the potential costs of compliance with the proposed guidelines.
22 Texas Administrative Code, Sections 595.11, .15 & .17	Restricts pesticide application in schools based on time of application and products applied. Requires school districts to develop written pest management policies and to designate an integrated Pest Management Coordinator and employ or contract a certified applicator. Requires distribution of fact sheet to all city, county, and state employees who apply pesticides in incidental use situations. Amended in 1997 to alter the restrictions placed on various categories of pesticides and prohibit generally the application of pesticides inside schools or outside on school grounds if such an application will expose students to unacceptable levels of pesticides. Amended in 1998 to add Section 595.17, requiring distribution of a fact sheet to school district employees who apply pesticides on school grounds in incidental use situations.
25 Texas Administrative Code, Sections 297.1 through 297.6	Establishes voluntary guidelines for addressing indoor air quality in schools. Provides general recommendations for development of a school IAQ program; design, construction and renovation of school facilities; operation and maintenance of school buildings; and building occupant responsibilities. Issued in response to a 1995 legislative directive (Texas Health and Safety Code, Title 5, Section 385.001).
RADON	
Texas Property Code, Section 5.008	Requires certain sellers of residential real property with not more than one dwelling unit to give buyers a written notice that discloses defects of the property that are known to the seller including, among other things, the presence of radon and urea-formaldehyde foam insulation.
REAL ESTATE TRANSACTION	
Texas Revised Civil Statutes Annotated, Article 5221(f), Section 20	Requires that before transferring a HUD-code manufactured home, the transferor must provide a formaldehyde health notice as is required by US HUD.

GENERAL	
22 Texas Administrative Code, Sections 595.6 through 595.8 & 595.14	Establishes procedures for prior notification and distribution of consumer information sheets by licensed pest control providers and building owners, managers, and administrators regarding the application of pesticides in or near buildings. Also requires school and day care administrators to notify parents of attending children that pesticides are periodically applied, and requires them to make consumer information available. Establishes qualification procedure for companies seeking to be designated Reduced Impact Pest Control Services and sets operational requirements such companies must meet.
Architectural/Engineering Guidelines for the State of Texas	Provides minimum emission rate guidelines for various indoor air pollutants that must be met by architects/engineers (A/E) and contractors in Texas. Requires A/E to develop an Indoor Pollutant Source Control Plan to reduce or eliminate potential IAQ problems and to make all emission rate test results available to the Commission. Provides guidelines on IAQ assessments and HVAC operations based on ASHRAE standard 62-1989.
10 Texas Administrative Code, Sections 80.180 through 80.186	Establishes formaldehyde emission levels and product certification and labeling requirements for building materials installed in HUD-code manufactured homes. Requires HUD-code manufactured homes to have posted a health notice on formaldehyde emissions. Establishes venting and ventilation standards for HUD-code manufactured homes.
30 Texas Administrative Code, Chapter 350	Establishes risk-based cleanup levels for contaminated property in Texas. Exposure pathways may include indoor air exposure from volatile compounds in soil or groundwater.

III. Common Law Claims

Because of the spotty regulatory nature of indoor air quality, common law and more general statutory remedies may be the more likely venue for indoor air quality issues for the foreseeable future. Classes of parties can in which common law claims that have been asserted include building owners and occupants, manufacturers, contractors and subcontractors, insurors, and design professionals. Typically the plaintiffs in indoor air quality cases are individuals, but

commercial tenants and building owners have also been plaintiffs as well, if employees or occupants have raised indoor air quality concerns.

Liability theories which have been used to assert indoor air quality claims include negligence, strict liability, breach of express or implied warranties, fraud or misrepresentation, and premises liability. In Texas, in addition to these typical common law remedies, Deceptive Trade Practice Act claims may also be available to a plaintiff under certain circumstances. In the Dripping Springs residence involving molds due to water damage, the claims include Insurance Code violations and bad faith. *See Ballard v. Fire Insurance Exchange*, Cause No. 99-05252, In the District Court of Travis County, Texas, 345th Judicial District. As this case illustrates, the fact pattern under which a indoor air quality claims can be litigated are extremely varied.

An indoor air quality case which has received significant attention is *Bahura v. S.E.W. Investors*. This case involves claims by employees of the U.S. EPA for injuries allegedly caused by contaminated indoor air quality at the agency's headquarters. The claims were brought against the buildings owner, who leases the space to the government. On June 15 of this year, the Court of Appeals for the District of Columbia reinstated a $948,000 jury verdict awarded to six of the plaintiffs. A copy of this opinion is attached as Exhibit A. The trial court had set aside the jury award on the basis that the symptoms alleged by the plaintiffs were neither serious nor verifiable. As would be expected in a case of this nature, a large part of the court of appeals' analysis was involved in review of the expert testimony offered by both sides. Contrary to the district court, the appellate court found the expert testimony sufficient to support a jury finding, basing this in large part on the testimony by defendants' own experts. The court held that the testimony of the defendant's experts was sufficient to support the verdict on what amounted to a claim for

intentional infliction of emotional distress, which was not a claim asserted by the plaintiffs. On the contrary, the plaintiffs had claimed that they were exposed to levels of chemicals during building renovation activities sufficient to cause actual physical injury.

Another interesting aspect of *Bahura* is the attempt by plaintiffs to use *Daubert v. Merrell-Dow Pharmaceutical, Inc.*, 509 U.S. 579 (1993) as basis to appeal the district court's exclusion of a plaintiff's expert under the "general acceptance" test of the *Frye* case. *Daubert* has not been adopted by the District of Columbia, but the opinion has been generally perceived as more problematic for plaintiffs attempting to introduce expert testimony, especially on causation issues

IV. Litigation Issues

A. Expert Witnesses

As discussed above, admission of expert testimony under the *Daubert* and *E.I. du Pont de Numerous v. Robinson*, 923 S.W.2d 549 (Tex. 1995) line of state and federal cases is likely to be critical, especially in any indoor air quality litigation involving personal injury. Since the gatekeeping function described in these two cases has been extended to all experts by both the Texas Supreme Court, *Gammill v. Jack Williams Chevrolet, Inc.*, 972 S.W.2d 713, 718 (Tex. 1998) and U.S. Supreme Court, *Kumho Tire Co. v. Carmichael,* 526 U.S. 137 (1999), it is probable that expert qualification issues will arise in any indoor air quality litigation. Especially with regard to causation theories, expert testimony may be especially contentious.

B. Statute of Limitations

The other potential issue which may loom significant in indoor air quality cases involves the running of the statute of limitations. Potentially, the most contentious issue under statute of limitations would be a determination of when the plaintiff knew or, exercising due diligence, should have known of their injury. *See, e.g. Velsicol Chemical Corp. v. Winograd*, 956 S.W.2d 529, 531 (Tex. 1997). In this respect, federal law provides a gloss on the so-called "discovery rule," which to date, has yet to be addressed by any Texas court. Section 309 of the Comprehensive Environmental Response Compensation and Liability Act ("CERCLA"), 42 U.S.C.§ 9658 provides for a federal discovery rule which may be applicable in cases of indoor air quality claims, to the extent that the injuries are alleged to be "caused or contributed to by exposure to any hazardous substance or pollutant or contaminant released into the environment from a facility." The definitions of the applicable terms are broad enough to encompass a variety of indoor air quality claims. If they do, then CERCLA provides that the limitations period does not commence until "the plaintiff knew (or reasonably should have known) that the personal injury or property damage . . . were caused or contributed to by the hazardous substance or pollutant or contaminant concerned." This provision could potentially toll a statute of limitations longer than the applicable state standard, since it appears to require knowledge that a particular substance caused the injury. Under state law, the statute begins to commence upon knowledge of any injury without necessarily identifying the substance. As noted above, no Texas courts have not interpreted the effect that this federal statute would have on a state common law claim on tolling the applicable statute of limitations.

EXHIBIT A

Bahura v. S.E.W. Investors
District of Columbia Court of Appeals
June 15, 2000

Joanne BAHURA, et al., Appellants/Cross-Appellees,
v.
S.E.W. INVESTORS, et al., Appellees/Cross-Appellants.

Nos. 96-CV-418, 96-CV-490, 96-CV-513, 96-CV-1142 and 96-CV-1143

District of Columbia Court of Appeals.

Argued Oct. 4, 1999.

Decided June 15, 2000.

Appeals from the Superior Court of the District of Columbia Hon. Rufus G. King, III, Trial Judge

Thomas X. Glancy, Jr., with whom Fredric G. Levin and Mark J. Proctor were on the brief, for appellants/cross-appellees.

William J. Carter, with whom Gregory A. Krauss and Catherine A. Hanrahan were on the brief, for appellees/cross-appellants.

Before STEADMAN, SCHWELB, and REID, Associate Judges.

SCHWELB, Associate Judge.

In 1990 and 1991, a group of twenty plaintiffs, who included employees of the Environmental Protection Agency (EPA) and spouses of EPA employees, brought these consolidated actions against the owners and managers of the buildings housing the EPA's national headquarters. The employee-plaintiffs claimed to have suffered neurological injuries as a result of their inhalation at the workplace of allegedly contaminated indoor air. The spouses' claims were predicated on alleged loss of consortium. In October 1993, the cases of five representative employee-plaintiffs, and of one employee-plaintiff's husband, proceeded to a consolidated jury trial. [FN1]

At the conclusion of the trial, and in response to interrogatories from the court, the jury found that one of the plaintiffs--Susan Watkins--suffered physical injury as a result of her exposure to contaminants at the Waterside Mall, and that the other four employee-plaintiffs (hereinafter the "somatization plaintiffs") incurred a form of somatization or somatoform disorder. [FN2] The jury found in favor of Robert Diebold, the husband of an employee-plaintiff, on Mr. Diebold's claim of loss of consortium. The jury awarded damages to all six plaintiffs in the aggregate amount of $948,000.

The defendants filed a post-trial motion for judgment notwithstanding the verdict (JNOV), contending that the evidence was insufficient as a matter of law to establish either that the defendants were negligent or that their conduct proximately caused the plaintiffs' injuries. The trial judge granted the JNOV motion as to the somatization plaintiffs, concluding, inter alia, that the emotional harm that these plaintiffs claimed to have suffered was neither serious nor verifiable. See Sowell v. Hyatt Corp., 623 A.2d 1221, 1225 (D.C.1993); Williams v. Baker, 572 A.2d 1062, 1068-69 (D.C.1990) (en banc). The judge further granted JNOV against Robert Diebold, denied the JNOV motion as to Ms. Watkins, and entered judgment in Ms. Watkins' favor in the amount awarded to her by the jury.

The somatization plaintiffs, as well as Mr. Diebold, now appeal from the order setting aside the verdicts in their favor. The defendants cross-appeal from the judgment awarding damages to Ms. Watkins. We conclude that the jury awards to the somatization plaintiffs and to Mr. Diebold must be reinstated. In all other respects, we affirm.

I.
BACKGROUND

Between 1986 and 1989, the EPA's national headquarters, a leased facility at the Waterside Mall [FN3] in southwest Washington, D.C. at which more than five thousand persons were employed, underwent major renovations. Contractors replaced carpeting and ceiling tiles, rebuilt and repainted walls, and installed new office dividers.

Soon after the renovations began, substantial numbers of EPA employees began to report health problems that they attributed to the defective quality of the indoor air at Waterside Mall. Mary Hogrefe, the nurse in charge of the EPA health clinic, testified that over 225 employees came to the clinic complaining of "headache, nasal congestion, hoarseness, ... burning eyes, watering eyes mental confusion, blurred vision, [and] tingling of the fingers." Nurse Hogrefe explained that the Health Clinic operated under standing orders to provide sick individuals with oxygen or to remove them from the building. She

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stated that some patients were so ill that she found it necessary to escort them out of the building, but noted that with exposure to fresh air "[t]he symptoms would start to disappear, [and] the employee would get much better. Sometimes the symptoms would completely disappear."

In 1988, the agency commissioned a survey which was designed to ascertain the extent of neurological symptoms (sometimes called "sick building syndrome") among employees at Waterside Mall. Over 80 % of the employees responded. One half of the respondents reported unusual fatigue, 41 % had difficulty concentrating, 61% often or sometimes suffered from headaches, and significant numbers reported other neurological symptoms. The evidence of serious environmental difficulties at the EPA's own headquarters was widely publicized and came to the attention of Congress. The agency opened a special health clinic to handle indoor air quality complaints. The EPA also established an alternate work space policy to accommodate employees who had apparently become ill as a result of their exposure to contaminated air. In addition, teams of outside neurologists, toxicologists, engineers, and safety inspectors were retained as consultants in the hope that they could help the EPA to combat the chemical exposure problems that had arisen throughout the complex. [FN4]

The representative plaintiffs whose cases went to trial included five EPA employees who claimed to have been injured as a result of the conditions at the Waterside Mall, as well as the husband of one of the employee-plaintiffs. See note 1, supra. They alleged in their complaint that the defendants had failed to provide adequate ventilation at the EPA headquarters and that the buildings had been negligently maintained and renovated. The plaintiffs claimed that they had been exposed to toxic chemicals during renovation, and that their exposure to the contaminated air caused them to suffer serious neurological illness, including brain damage. The defendants denied negligence and contested the plaintiffs' claims of injury and causation. After a mini-trial designed to facilitate a settlement failed to achieve its goal, the parties and the court agreed that the initial jury trial should take up the claims of the six plaintiffs whose cases are now before us.

II.
THE TRIAL

The trial of this case lasted seven weeks, and the record before us is extensive. We confine our discussion of the evidence to those facts that require exposition in order to dispose of the issues raised on appeal.

A. The plaintiffs' evidence.

The case for the plaintiffs consisted primarily of expert testimony designed to show that the defendants violated the applicable standard of care and that these violations proximately caused the employee-plaintiffs' injuries. The plaintiffs, their medical experts, and additional fact witnesses described the injuries that the plaintiffs claimed to have suffered as a result of the defendants' negligence.

The plaintiffs' expert witnesses testified that Waterside Mall lacked sufficient ventilation to conform to minimum industry standards. They explained that when a building lacks adequate air flow, contaminants may build up and, quite literally, poison those who live or work within the contaminated space. If credited, the testimony of the plaintiffs' experts established that this is what happened at Waterside Mall. When renovations began, the inadequate ventilation trapped dangerous organic compounds inside the building. According to Professor James Woods, [FN5] the concentration of contaminants in the indoor air rose to dangerously high levels during normal operations. Professor Woods stated that "for a building of its size, which is over a million square feet, [the Waterside complex presented] the worst ventilation problems" he had ever seen.

The plaintiffs' experts also testified that, in their view, the defendants' supervision of renovations at the EPA headquarters did not satisfy the applicable standard of care. There was evidence that the renovations were conducted near the plaintiffs' work areas, and according to the plaintiffs' experts, the defendants failed to screen off and separate employee work space from the ongoing construction. Consequently, fumes and toxins released into the air during renovation quickly moved to the areas in which the plaintiffs and other employees were performing their jobs. In the opinion of the plaintiffs' experts, the defendants failed to follow basic safety standards for handling chemicals and vapors associated with carpeting, new walls, paint, glue, and other construction materials. Professor Woods testified that this failure on the part of the defendants exposed each of the plaintiffs to "two, three, four times the level associated with neurotoxic injury in the scientific

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literature," or, to put it in more concrete terms, to levels harmful "enough to cause people to get sick."

All of the employee-plaintiffs claimed that their exposure to contaminants at the Waterside Mall caused them to experience serious and persistent health problems for substantial periods of time. [FN6] Each plaintiff reported extensive difficulties in concentrating, loss of memory, impairment of general cognitive functioning, extreme fatigue, and a variety of other symptoms. Joanne Bahura, for example, suffered loss of memory and concentration, diminished hand-eye coordination, weight loss, and sporadic difficulties with moving the left side of her body. Ms. Bahura became depressed and even paranoid, suffered from headaches, and allegedly became nauseous when exposed to certain solvents and compounds. On a visit to the perfume section of a department store, she became pale, dizzy, and weak, she found it difficult to breathe, and she was unable to keep her balance, almost falling down. Ms. Bahura also developed bad headaches, and, according to her husband's testimony, it took her a long time to recover. All of the other somatization plaintiffs reported similar difficulties and experiences on a long-term basis. Steven Shapiro also testified that he was sick "much of the time"; Richard Biggs' health changed "dramatically" and he felt sick "all the time"; and Barbara Diebold was in a "lot of pain," depressed, and irritable to the extent that she spent approximately six months mostly in bed and was unable to work for a year and a half.

Susan Watkins was the sole employee-plaintiff to whom the jury awarded damages for physical (as distinguished from psychogenic) injury. On three different occasions between August 1988 and March 1990, Ms. Watkins became ill at work and had to be taken to the emergency room. During the second episode she passed out altogether. Ms. Watkins described the final incident:

> In March of 1990, there were--I came to work again in the morning, and there had been renovations in the ceiling. They were doing something with the ceiling tile. There was debris and dust in my office. I came into work and I started having trouble breathing, and I felt really weak and sick. And, again, the health unit called the emergency--the rescue squad came.

One of Ms. Watkins' co-workers, Vanessa Musgrave, provided dramatic testimony regarding the severity of Ms. Watkins' symptoms:

> One morning very early, Susan and I were in the office. Because both of us were on an early schedule, and she had an office next to mine. We were speaking to one another, when suddenly--they were cutting Gypsum board at the time, and suddenly this dust arose and I started to cough violently and Susan started to have difficulty breathing and I was so frightened because she couldn't breathe. So I ran to the Health Unit and pounded on the door, and luckily it was before the nurses' hours, but she was there, and she came running down and got Susan with a wheel chair and took her back to the nurse's office.
> And at that point Susan didn't know who she was and was barely breathing. I really thought she was going to die. I was afraid the nurse wouldn't get there in time. I was scared out of my mind.

The plaintiffs also presented the testimony of medical expert witnesses. According to these experts, the plaintiffs suffered neurological symptoms and injuries as a result of their exposure to contaminants at the workplace. Specifically, the plaintiffs' experts testified that the employee-plaintiffs were suffering from "toxic encephalopathy," a condition which "occurs when there has been an alteration to the brain and central nervous system function due to exposure to various toxins." Berry v. CSX Transp., Inc., 709 So.2d 552, 554 n. 2 (Fla.Dist.Ct.App.), review denied, 718 So.2d 167 (Fla.1998). No evidence was adduced by the employee-plaintiffs to suggest that they were suffering from a somatization disorder.

B. The case for the defendants.

The expert witnesses called by the defense challenged the very underpinnings of the plaintiffs' case. According to defense experts who examined the plaintiffs, the plaintiffs did not suffer any physical injury at all. The position taken by most (but not all) of the defense witnesses was that the plaintiffs' symptoms resulted from pre-existing mental or emotional problems unrelated to the conditions at the EPA headquarters. [FN7] Different defense experts attributed the plaintiffs' symptoms to "conversion disorder," "conversion reaction," "depression," or even "hysteria." David Smith, an EPA "risk management consultant" who was not a health care professional, testified over objection by counsel for the plaintiffs that some employees who had reacted to what they "believed had been a toxic release ... reflected the characteristics of mass psychogenic illness."

Two defense experts, Dr. Abba I. Terr and Dr. Philip Witorsch, testified that, in their opinion, the

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plaintiffs were suffering from a "somatization disorder." Both witnesses were careful to explain that a somatoform illness reflects real symptoms, and that it is not to be confused with the feigned or imaginary ailment of a malingerer. See infra pp. [15]-[16].

C. The emergence and disposition of the issues relating to somatization.

The questions relating to the compensability and causation of somatoform disorder apparently escaped the notice of the participants in the trial while the evidence was being presented, and first became a subject of dispute at a very late stage of the proceedings. A brief discussion of the emergence of these issues may be helpful.

In his opening statement, and in the presentation of expert testimony, counsel for the plaintiffs relied on a single theory of the case, namely, that the employee-plaintiffs had suffered physical neurological injury as a result of their exposure to contaminants at the work place. Counsel did not claim, in the alternative, that the defendants' conduct had inflicted a somatization injury. Subsequently, at least one of the plaintiffs' experts ruled out somatization as an explanation of the employee-plaintiffs' symptoms.

The plaintiffs having made no claim that they had suffered a somatoform disorder, or that they were entitled to recover damages for that condition, the defendants did not address the merits of such a claim. In renewing his motion for a directed verdict after all parties had rested, [FN8] counsel for the defendants made no reference to the compensability of somatization or to the question whether a sufficient causal nexus existed between the alleged negligence and the somatization plaintiffs' injuries. It appears that, even after the defense experts had introduced the subject of somatization into the record, no party focused upon the proper resolution of the case in the event that the jurors found that the defendants were negligent but credited the defense testimony that the plaintiffs had incurred a somatization disorder, but not a physical injury, as a result of the defendants' negligence.

During his closing argument, plaintiffs' counsel told the jury that his clients were entitled to recover damages even if they had sustained a somatization disorder rather than physical injury, so long as "the renovations played a substantial part in bringing about the symptoms." This was evidently the first time that any participant in the trial raised the issue. It does not appear that counsel asked the court for leave to make this argument, or for an instruction specifically addressing it. [FN9] Nevertheless, defense counsel did not object. Again without objection, the judge instructed the jurors that if they found in favor of the employee-plaintiffs, they should consider, inter alia, the effects of each plaintiff's injuries on his or her mental health and well-being," as well as "any mental anguish the plaintiff suffered ... and will probably suffer in the future." By its terms, this instruction could be applicable only if the jury decided that the plaintiffs had suffered compensable harm. There was no instruction requested or given regarding whether a plaintiff could recover for a somatization injury.

The wisdom of jurors ought not to be underestimated. Two days into deliberations, the jury sent the following note to the judge:

> If the Plaintiffs are not physically injured, but they believed they were (somatization) is that considered injury?

Predictably, counsel for the plaintiffs argued that the question should be answered "yes," while counsel for the defendants urged the judge to respond with a simple "no."

This key issue having arisen in the midst of jury deliberations, and without the benefit of briefing by counsel, the trial judge quite reasonably punted. Rather than responding to the jury's inquiry, the judge propounded a series of interrogatories to the jury with respect to each employee-plaintiff:

1. Was Plaintiff physically injured?
2. Did Plaintiff believe she was injured (somatization)?

The judge further instructed the jurors to complete the original verdict form, which required the jury to specify the amount of damages awarded to any plaintiff who prevailed on the question of liability, if either question was answered in the affirmative.

After three more days of deliberation, the jury returned a verdict in favor of each of the plaintiffs. The jury found that Susan Watkins suffered physical injury, that the four other employee-plaintiffs "believed [they were] injured (somatization)," and that Robert Diebold incurred loss of consortium. The jury awarded the following damages:

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After the jury was discharged, the defendants moved for JNOV, arguing that the plaintiffs had failed to prove either negligence or causation and that somatization disorder was not generally accepted in the medical community as an illness or injury and therefore was not compensable. The defendants did not ask for a new trial in the event that their request for JNOV was denied. The plaintiffs filed a post-trial motion for a new trial as to damages only, claiming that certain allegedly erroneous evidentiary rulings by the trial judge had prejudiced them in attempting to prove long-term neurological injury. See note 15, infra.

On November 24, 1995, the trial judge issued a twenty-page written order in which he granted the defendants' motion in part. The judge concluded that the somatization plaintiffs' injuries were not "serious or verifiable" and that "somatization is not a compensable injury in these circumstances." Although the judge stated that he therefore need not reach the defendants' contention that the somatization plaintiffs' claims must fail for failure of proof of proximate cause, he nevertheless went on to decide that issue in the defendants' favor as well:

> [The plaintiffs] offered no expert testimony connecting somatization with the acts of the Defendants, nor can they find support in Defendants' expert testimony. Drs. Bradley and Callendar testified that Plaintiffs suffered physical, not psychological injuries. Defense experts Drs. Witorsch, Gordon, Moses, and Terr testified that Plaintiffs' somatization disorder was not caused by the negligent acts of Defendants. Dr. Schwartz, a toxicologist, testified renovations could not generate enough solvent fumes to cause the kind of injuries claimed here. Plaintiffs' witness Dr. Bell even testified that psychological causes could be ruled out. The link between physical injury and non-physical source is not self-evident in this case, and without expert testimony, the evidence does not support a conclusion that Defendants' negligence caused a psychogenic or somatization injury.

The judge sustained the verdict in favor of Ms. Watkins, and he denied the plaintiffs' motion for a new trial on damages. The parties filed timely appeals.

III.
THE PLAINTIFFS' APPEAL

A. The standard of review.

The question whether the trial judge erred by setting aside the jury's findings is one of law, and we review de novo the judge's award to the defendants of JNOV as to the claims of the somatization plaintiffs and of Mr. Diebold. See, e.g., District of Columbia v. Wilson, 721 A.2d 591, 596 (D.C.1998). "A judgment notwithstanding the verdict is proper only in 'extreme' cases, in which no reasonable person, viewing the evidence in the light most favorable to the prevailing party, could reach a verdict for that party." Id. (quoting District of Columbia v. Cooper, 445 A.2d 652, 655 (D.C.1982)) (en banc). We recently had occasion to elaborate on these principles in another professional negligence case in which, as in these appeals, the principal issue related to the sufficiency of the plaintiff's proof of causation:

> "If there is room for a difference of opinion, the wise course is for the trial judge to allow the case to go to the jury." Corley v. BP Oil Corp., 402 A.2d 1258, 1263 (D.C.1979) (citation omitted). "Motions for a directed verdict deprive plaintiff of a determination of the facts by a jury and should, therefore, be granted sparingly." Id. (citation omitted). It is only in "unusual" cases that issues of negligence and proximate cause may be taken away from the jury. Rich v. District of Columbia, 410 A.2d 528, 532 (D.C.1979) (citations omitted).

Robinson v. Group Health Ass'n, 691 A.2d 1147, 1150 (D.C.1997).

B. Serious and verifiable injury.

The defendants contend, and the trial judge held as a matter of law, that the injuries sustained by the somatization plaintiffs were not sufficiently "serious" or "verifiable" to entitle these plaintiffs to any recovery. We disagree.

As we have previously noted, the employee-plaintiffs did not claim during the presentation of the evidence that they had the right to an award of damages even if they could not show that they had suffered a physical neurological injury. After the plaintiffs' counsel belatedly introduced this contention into the case during his argument to the jury, the compensability of negligently inflicted somatoform disorder emerged as a central issue in the case. The trial judge analyzed somatization as a psychogenic injury, and the

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somatization plaintiffs' case became, in effect, an action for the negligent infliction of emotional distress. In light of this development, the principal question presented by the plaintiffs' appeal is whether the evidence, viewed in the light most favorable to the plaintiffs, would permit an impartial juror to find in the plaintiffs' favor in a negligent infliction action. Because the parties did not recognize until late in the proceedings that the case would implicate the tort of negligent infliction of emotional distress, the evidence was not organized or presented with the elements of that kind of claim in mind. Nevertheless, we conclude that the evidence, viewed in the light most favorable to the plaintiffs, was sufficient to permit an impartial jury to find in the somatization plaintiffs' favor.

Ten years ago, the en banc court held in Williams v. Baker, supra, 572 A.2d at 1067, that "if the plaintiff was in the zone of physical danger and was caused by defendant's negligence to fear for his or her own safety, the plaintiff may recover for negligent infliction of serious emotional distress...." In a negligent infliction case, there can be recovery for mental and emotional distress only if the plaintiff's injuries are "serious and verifiable." See Sowell, supra, 623 A.2d at 1225; Jones v. Howard Univ., 589 A.2d 419, 421 (D.C.1991). The trial judge was of the opinion that the somatization plaintiffs' injuries were neither serious nor verifiable.

This court has previously sought to identify the kind of psychogenic injury which is sufficient to sustain a complaint for negligent infliction of emotional distress:

> The fact that the different forms of emotional disturbance are accompanied by transitory, non-recurring physical phenomena, harmless in themselves, such as dizziness, vomiting, and the like, does not make the actor liable where such phenomena are in themselves inconsequential and do not amount to any substantial bodily harm. On the other hand, long-continued nausea or headaches may amount to physical illness, which is bodily harm; and even long continued mental disturbance, as for example in the case of repeated hysterical attacks, or mental aberration, may be classified by the courts as illness, notwithstanding their mental character. This becomes a medical or psychiatric problem, rather than one of law.

Williams, supra, 572 A.2d at 1068 (quoting Restatement (Second) of Torts § 436A cmt. c). In the present case, the symptoms reported by the somatization plaintiffs were not transitory, non-recurring, or inconsequential. On the contrary, these plaintiffs complained of debilitating fatigue, loss of motor control, persistent cognitive problems, extreme depression sometimes approaching paranoia, flu-like pains, shortness of breath, and a variety of other symptoms. According to the somatization plaintiffs and their witnesses, these conditions sometimes lasted for months at a time and, in some cases, periodically recurred for years. To be sure, there was significant testimony which, if credited, would have sustained a finding that the harm suffered by the somatization plaintiffs was not sufficiently serious to support recovery. We are satisfied, however, that the issue of seriousness was not so one-sided in favor of the defendants that no question for the jury was presented.

There was also ample evidence that the somatization plaintiffs' injuries were verifiable. The defense effectively conceded that the plaintiffs were not feigning their symptoms or fabricating their complaints. On the contrary, Dr. Abba Terr, a specialist in internal medicine and allergy immunology who appeared as an expert witness for the defense, testified as follows:

> Their symptoms are absolutely real. I want to make that clear. What they are experiencing is, I don't believe they make it up. I think they are relating exactly how they feel, and they do suffer from it, the concept that it was caused by chemicals is the belief, not the reality of their symptoms.

A second defense expert, Dr. Philip Witorsch, a specialist in pulmonary diseases whose area of concentration is environmental and occupational medicine, testified as follows:

> Somatoform or somatization in general refers to a circumstance where people are having real symptoms. They're not imagining the symptoms. They clearly have symptoms and discomfort in many cases, and they're experiencing physical symptoms. However, the physical symptoms are not on the basis of any physical injury, but rather the result of emotions.

In addition, the somatization plaintiffs' experiences were described for the jury not only by the plaintiffs themselves, but also by their physicians, and by spouses and other fact witnesses. The similarity of some of the symptoms suffered by all four of the somatization plaintiffs rendered their experiences, in some measure, mutually corroborative. Each plaintiff's account tended to verify the complaints of his or her fellow-plaintiffs. Finally, the somatization plaintiffs' symptoms substantially corresponded to the complaints reported by many hundreds of EPA

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employees in the 1988 survey, to the testimony of Nurse Hogrefe, and to the reports of EPA consultants. See note 4, supra.

Somatoform disorder is a recognized medical condition, see DSM-IV at 445, and it has served as the basis for an award of damages. In Wasiak v. Omaha Pub. Power Dist., 253 Neb. 46, 568 N.W.2d 229, 232-33 (Neb.1997), a case involving injuries suffered by Charles Wasiak in an automobile accident, the plaintiff reported symptoms similar to those related by some of the somatization plaintiffs here. In Wasiak, as in the present case, the plaintiff's experts testified that the plaintiff had suffered physical injury. The defense experts, on the other hand, asserted that Wasiak's symptoms were attributable to somatization. The trial judge agreed with the defense that the accident had caused no physical injury, but he nevertheless held that Wasiak was entitled to recover damages for his somatization disorder. The defendants appealed, claiming, inter alia, that Wasiak had failed to prove causation. The Supreme Court of Nebraska affirmed the judgment, relying on the trial judge's finding that "Wasiak's somatization was another manifestation of injury resulting from the 1991 accident." Id. at 233 (italics omitted). [FN10]

In the present case, an impartial jury could reasonably find that the psychogenic injuries suffered by the somatization plaintiffs were serious and verifiable, and that a somatoform disorder is compensable. We conclude that the trial judge erred in holding to the contrary.

C. Causation.

In their motion in the trial court for judgment notwithstanding the verdict, the defendants also contended that the somatization plaintiffs' psychogenic injuries were not proximately caused by conditions at the Waterside Mall. According to the defendants, no impartial jury could reasonably find that the plaintiffs had satisfied their burden of establishing causation. Although, in a technical sense, the trial judge did not reach this issue, he expressed his agreement with the defendants' position. See p. [12], supra. Viewing the record in the light most favorable to the plaintiffs, we are constrained to conclude that proximate cause was established and that the jury's verdict should therefore have been sustained.

(1) "Rising above" one's own evidence.

Correctly noting that none of the somatization plaintiffs' experts testified that these plaintiffs suffered a psychogenic injury or that any such injury was caused by the defendants' negligence, the defendants argue that "[t]he [p]laintiffs should not be allowed to rise above their own evidence." This contention is fallacious. The sufficiency of the evidence of causation must be determined on the basis of the entire record, and it will not do to examine only the testimony introduced by the plaintiffs.

In Greet v. Otis Elevator Co., 187 A.2d 896, 897 n. 1 (D.C.1963), this court stated the applicable principle:

> If a plaintiff has made out a prima facie case, a motion for a directed verdict at the close of plaintiff's evidence should be denied without restriction. The theory or theories upon which the case is submitted to the jury should be determined at the close of all the evidence because some evidence elicited from defendant's witnesses may be advantageous to plaintiff.

Accord, Harris v. Plummer, 190 A.2d 98, 99 (D.C.1963) (quoting Greet); see also J. Maury Dove Co. v. Cook, 59 App. D.C. 61, 62, 32 F.2d 957, 958 (1929). The former Supreme Court of Errors of Connecticut has correctly explained that

> [t]he jury were not confined to the evidence offered by the plaintiff or any one witness. The truth in closely contested cases does not always lie altogether upon one side. It is often found partly in the evidence of a plaintiff and partly in that of a defendant.

Giambartolomei v. Rocky DeCarlo & Sons, Inc., 143 Conn. 468, 123 A.2d 760, 763 (Conn.1956).

In the present case, the trial judge instructed the jury, in conformity with District of Columbia Standardized Civil Jury Instruction No. 2.9 (1998), as follows:

> In deciding whether a question has been proved by a preponderance of the evidence, you should consider all of the evidence bearing on that question regardless of which party produced it. Each party is entitled to the benefit of any evidence which favors [it]....

The judge also told the jurors that they were free to disregard any expert opinion "in whole or in part." (Emphasis added.) There was no objection to either of these instructions, and we conclude that they were legally sound.

(2) The defendants' view of the evidence.

The defendants next contend that even if the plaintiffs are permitted to "rise above" their own evidence, the

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record will not support a jury finding of proximate cause. They argue, essentially, that the requisite proof of causation could not have been provided by the plaintiffs' expert witnesses, because these witnesses did not believe that any of the plaintiffs suffered from somatoform disorder. If the plaintiffs' experts discerned no psychogenic injury, then, according to the defendants, these experts could not have testified that the defendants inflicted that kind of an injury on the somatization plaintiffs. The defendants essentially view the case as comparable to a hypothetical one in which an expert for the plaintiff claimed that the defendant's negligence caused the plaintiff to suffer a heart attack, but in which the jury found that the plaintiff's heart was healthy but that the plaintiff had sustained a broken leg. According to the defendants, the somatization plaintiffs' claimed injuries are so unlike the psychogenic disorder found by the jury that the testimony of the plaintiffs' experts regarding causation is just as beside the point here as it would be in the hypothetical situation that we have postulated.

The defendants also assert that a finding of causation cannot be predicated on the testimony of the expert witnesses for the defense because, according to the defendants, these experts rejected the existence of any link between the somatization plaintiffs' disorder and the conditions at the Waterside Mall. The defendants conclude that because neither the experts for the plaintiffs nor the experts for the defendants provided evidence establishing proximate cause, the trial judge did not err in granting JNOV.

Although there is a certain appealing symmetry in the defendants' position, we do not believe that their argument can carry the day. In our judgment, the defendants take an unduly cramped view of the expert testimony, and they fail to rebut reasonable inferences that a fair-minded juror could legitimately draw from the sequence of events reflected in this record.

(3) The relevant expert testimony.

We do not agree with the defendants' assertion that there is no expert testimony linking the somatization plaintiffs' symptoms and injuries to the defendants' negligence. The belated emergence of the issue concededly makes the record less specific on the point than it might otherwise have been. Even so, there is significant expert evidence supporting a finding of causation.

Dr. Iris Bell, a psychiatrist and psychopharmacologist, was called by the plaintiffs as an expert witness. Dr. Bell testified that the plaintiffs suffered "neurological" symptoms as a result of their exposure to contaminants during the renovations of the Waterside Mall. It is noteworthy that the term "neurological" was also used by two defense experts who went on to testify that the plaintiffs were suffering from a somatoform disorder. As the plaintiffs logically argue in their brief, "[t]he jury need not have been persuaded by Dr. Bell's opinion that the [p]laintiffs' symptoms were manifestations of a chemical insult to their brains to accept her opinion that those symptoms, which were not present before renovations, were caused by renovations."

The testimony of several of the defense experts, including Dr. Sorell Schwartz, Dr. Abba Terr, and Dr. Phillip Witorsch, though generally favorable to the defendants, nevertheless recognized the existence of a causal link between the plaintiffs' somatization disorder and the conditions at the Waterside Mall. These witnesses testified, in essence, that the plaintiffs' symptoms were the product of odorant conditioning, a process by which an unpleasant reaction to noxious chemicals or odors causes a person to associate similar odors with that adverse physical reaction. As a consequence, such an individual may subsequently experience the same physical reaction if he or she is exposed to otherwise harmless substances and odors associated with the earlier exposure. According to these defense experts, the plaintiffs' exposure to contaminants at the EPA headquarters was capable of causing acute physical discomfort and of generating the plaintiffs' subsequent adverse reactions to substances and odors which otherwise would not have adversely affected the plaintiffs. Indeed, according to Dr. Schwartz, it was a "likely explanation that the conditions during renovation triggered the odorant conditioning process which produced the plaintiffs' symptoms." Dr. Schwartz explained:

> [W]ith certain of these organic solvents, there--there is what we call--a prodromal or earlier effect, at a lower--at lower levels. The effect may be headache. It may be nausea. It may be eye irritation. It may be throat irritation. This--it causes--it's annoying and it causes discomfort. [Whether] [t]hese are ... toxic effects is somewhat of a semantic question. They are reversible effects, but still individuals identify certain odors with certain conditions.
>
> And, it's not unlike hearing music that you heard as a teenager, with your favorite girlfriend, and it reminds [you] of things. There are--there are types of responses, and the same thing occurs with odors.

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> In fact, there is something called behavior [odorant] conditioning, which is now recognized, where individuals have had negative experiences due to various types of exposures, and just detecting the odor will make them--they will feel bad.... So, it's a-- it's--that's what we call odor and [sic] conditioning behavior, [odorant] conditioning. And, if you've had a bad experience with it, if you have had a food and you ate that food, and even one that you liked, and became nauseated afterwards, for whatever reasons, you might have gotten sick for some other reason, then the odor of that food later on, may actually ... make you nauseated.

(Emphasis added.) [FN11]

Dr. Schwartz further testified that exposure to organic solvents during the renovation of the Waterside Mall may have caused the plaintiffs temporary acute discomfort, and that this discomfort may have set off the odorant conditioning process. He stated that "the odors and irritation might be annoying, cause some headache, nausea, and such like that" and that "if you're referring to the fact that they find chemicals to cause them to be, odors of chemicals to cause them to be disporic or have a sense of poor being, I would say that the time of renovation apparently had an impact." Dr. Schwartz gave testimony particularly relevant to the issue of causation when he was asked by defense counsel about symptoms reported by one of the somatization plaintiffs, Samuel Shapiro:

> I mean, if, in fact, he at one time, was very annoyed, had a headache and working in the environment was very unpleasant for him and he identified that with these odors, that he detected during renovation, then it's not inconceivable that smelling the same odors in other things, such as nail polish, magic markers, Wite-out, and so forth will trigger--will trigger the same response. It's just a common thing to occur.

On cross-examination, Dr. Schwartz elaborated:

> Q: Now, you talk about odors. Are you telling this jury that a bad experience in this building during renovations has set off some reaction where these people just react to odors? Is that what you're saying?
>
> A: No. I didn't say that at all. I said that that is a likely explanation.

(Emphasis added.)

Finally, Dr. Karen Bolla, a chemical neuropsychologist who had treated Joanne Bahura, was called as a witness for the defendants. In May 1988, Dr. Bolla wrote in her evaluation that Ms. Bahura's depression "appears to be the result of her occupational disorder." At trial, Dr. Bolla testified that Ms. Bahura's symptoms were not the result of toxic exposure at the workplace. On cross-examination, however, Dr. Bolla acknowledged that Ms. Bahura did not suffer from depression before she went to work at Waterside Mall. Dr. Bolla elaborated as follows:

> I think her depression was a direct result of her belief and her probably feeling ill in her environment, that some of these chemicals were irritants and hurting her eyes and her throat. So yeah, I think it was a direct result of walking into a situation where she didn't like being because of the environment.

We conclude that the expert testimony that we have cited, viewed in the light most favorable to the plaintiffs, cumulatively afforded "a reasonable basis for the conclusion that it was more likely than not that the conduct of the defendant[s] was a cause in fact of the plaintiff[s]' injuries." Robinson, supra, 691 A.2d 1150 (internal quotation marks omitted).

(4) The sequence of events.

Moreover, the expert testimony that we have summarized above should not be appraised in a vacuum, for it is by no means the only evidence of causation presented in this record. As several of the experts recognized, the symptoms reported by the somatization plaintiffs were genuine. These plaintiffs became ill shortly after they were exposed to the conditions at the Waterside Mall. In addressing challenges to the sufficiency of a plaintiff's evidence of causation, courts properly take into consideration the order in which significant events have occurred. Indeed, if the sequence of events is sufficiently compelling, then it alone, without more, may provide the requisite nexus between the defendant's negligence and the plaintiff's injury.

We have held that in some circumstances the "close proximity in time" between an accident and a plaintiff's "subjective symptoms of physical injury" may render unnecessary the presentation of expert testimony as to causation. See Jones v. Miller, 290 A.2d 587, 591 (D.C.1972). In such cases, "[t]he causal connection between the accident and the injury may be satisfied by the close proximity in time between the accident and the symptoms...." Otis Elevator Co. v. Tuerr, 616 A.2d 1254, 1260 (D.C.1992). [FN12] We recently emphasized the importance of timing (and sustained the trial judge's

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finding of causation) in a case which differs from the present one in terms of the facts before the court, but which resembles our scenario with respect to the applicable principle:

> Ms. Okyiri spilled the beans to the OIG auditors, and shortly thereafter she was cashiered. "Coincidences happen, but an alternative explanation not predicated on happenstance is often the one that has the ring of truth." Tursio v. United States, 634 A.2d 1205, 1213 (D.C.1993) (quoting Poulnot v. District of Columbia, 608 A.2d 134, 139 (D.C.1992)).

Raphael v. Okyiri, 740 A.2d 935, 955 (D.C.1999).

To be sure, a trier of fact may be well advised to exercise a measure of caution when assessing a contention that an antecedent event necessarily caused a later one. "[C]ontiguity of space or nearness of time do not, by themselves, afford a proper test for determining whether the negligence charged was the proximate cause of the injury." 65 C.J.S. Negligence § 107, at 1152 (1966 & Supp.1999) (footnote omitted). Rain on the day the war ends does not prove that peace will not brook sunshine. In other words, if something happens after an occurrence (post hoc), it has not necessarily happened on account of that occurrence (propter hoc); hence the post hoc ergo propter hoc fallacy. But neither obeisance to Latin phrases nor our more general obligation to exercise caution before converting "after" into "because" requires us to be blind to common-sense inferences from the timing of the somatization plaintiffs' symptoms. On the contrary, "the lapse of time which may exist between the time of negligent construction and eventual injury is a factor for the jury to consider in determining the causal connection between the negligence and the injury." American Reciprocal Insurers v. Bessonnette, 235 Or. 507, 384 P.2d 223, 224 (Or.1963) (en banc). In the Jones, Otis and Okyiri cases, we held that causation could reasonably be inferred where a single plaintiff incurred injury or other detriment soon after the conduct or event that was alleged to have been responsible. In those cases, each of which involved but one complainant, we held in effect that the trier of fact was not required to attribute to coincidence the proximity in time between conduct and its alleged consequences, but could fairly infer a causal relationship.

On this score, the present case is far stronger for the plaintiffs. Here, many hundreds of employees who worked at the Waterside Mall reported symptoms similar to those experienced by the somatization plaintiffs. The results of the EPA survey, the testimony of Nurse Hogrefe, and the reports of the consultants all corroborate the frequency with which those who worked at EPA headquarters voiced the very complaints presented by the somatization plaintiffs. [FN13] The "logic" of the notion that there was no relationship between the contaminated air and the somatization plaintiffs' symptoms necessarily attributes to coincidence the common experiences of numerous employees. If there was no causation here, then the coincidence was even greater--indeed, much greater--than in the one-plaintiff cases we have cited. Viewing the evidence, as we must, in the light most favorable to the plaintiffs, we conclude that the jury could reasonably find that proximate cause had been proved. The trial judge therefore erred in granting JNOV against the somatization plaintiffs [FN14] on the issue of causation. [FN15]

IV.
THE DEFENDANTS' CROSS-APPEAL

In their cross-appeal, the defendants assert that the plaintiffs failed to prove negligence on the part of the defendants, and that the defendants are therefore entitled to judgment against all plaintiffs, including Ms. Watkins, the somatization plaintiffs, and Mr. Diebold. The defendants also claim that the physical injuries claimed by all employee-plaintiffs--successfully by Susan Watkins and unsuccessfully by the somatization plaintiffs--are not compensable under Frye. Both contentions are without merit.

A. Proof of negligence.

The defendants claim that the plaintiffs' expert witnesses failed to provide precise data regarding the quantity of toxins to which the plaintiffs were exposed, and that these experts were unable to define with any precision the length of plaintiffs' exposure. The lack of such evidence, according to the defendants, undermined the plaintiffs' proof both as to negligence and as to causation. We disagree.

Irvin Fischer, an industrial hygienist who had initially been retained by the EPA to evaluate conditions at the Waterside complex, testified extensively about the specific chemicals and toxins utilized by the defendants during the renovation activity. Mr. Fischer stated that certain types of renovation always involve specific organic compounds and solvents. He explained that "[w]hen you're painting, all paints, basically have the same solvents. So, although you may not be able to identify what color paint was on the wall, you know that the solvent in the paint was basically the same."

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(Publication page references are not available for this document.)

Mr. Fischer studied Material Safety Data Sheets (MSDS) which were provided by the defendants or by the EPA, or which he obtained by filing his own Freedom of Information Act requests. The MSDS documents identified the specific substances that were used during the renovation process. According to Mr. Fischer, most of these substances were neurotoxins which operate as depressants to the central nervous system and which may cause loss of memory, breathing difficulties, unusual fatigue, and other neurological symptoms.

Mr. Fischer testified that the individual plaintiffs were in fact exposed to dangerously high levels of organic compounds, well in excess of "what has been clinically shown to cause neurological dysfunction with those exposures." In Mr. Fischer's opinion, the ventilation system at the Waterside Mall was inadequate and did not conform to accepted industry standards. After considering the proximity of the plaintiffs to the renovations, the limited extent to which the employees were segregated from this activity, and available information regarding the high incidence of neurological symptoms among the EPA employees, Mr. Fischer concluded that the defendants were in breach of the standard of care and that their negligence caused the plaintiffs' condition.

Professor James Woods, the plaintiffs' other principal witness regarding the issue of negligence, had conducted a detailed study of the Waterside complex, at the request of the EPA, before he was retained by the plaintiffs in this litigation. Dr. Woods told the jury, as we have seen, that the ventilation at the Waterside Mall was inadequate for everyday use, and was especially deficient during construction or renovation activity, and that this activity was conducted in an inefficient and haphazard fashion. As a result, according to Dr. Woods, the defendants violated the applicable standard of care and exposed the occupants of the buildings to dangerous chemical substances.

Both Mr. Fischer and Dr. Woods testified that, in their opinion, the defendants had endangered the health of EPA employees by conducting the renovations in a negligent manner. Although the plaintiffs were unable to offer testimony specifying the precise quantity or duration of exposure to particular substances, this did not render the expert testimony insufficient as a matter of law. On the contrary, precise data as to exposure are often unavailable, [FN16] but this does not preclude the presentation of a plaintiff's case to the jury.

Expert witnesses testifying in toxic exposure cases must frequently rely upon circumstantial data to support their conclusions. One court has held, and we agree, that

> where there are no facts, such as the exact degree of [plaintiff's] exposure ... the experts are still entitled to offer their conclusions based on their areas of expertise, the circumstantial evidence, i.e. [plaintiff's] health before and after the accident, and the medical tests given [the plaintiff].
> The jury is then entitled to attach such weight as it finds [that] the expert testimony deserves.

Wisner v. Illinois Cent. Gulf. R.R., 537 So.2d 740, 748 (La.Ct.App.1988), cert. denied, 540 So.2d 342 (La.1989).

These authorities are consistent with this court's approach in comparable circumstances. In District of Columbia v. Bethel, 567 A.2d 1331 (D.C.1990), the District contended that certain expert testimony was insufficient because the materials on which the plaintiff's expert witness, James Murphy, relied did not establish negligence. We rejected the District's position:

> The District does not ... challenge Mr. Murphy's expertise. Rather, it contends in effect that his testimony was legally insufficient because, according to the District, he relied on improper materials to guide his expert opinion. The District cites no authority in support of its contention that a qualified expert's opinion can be undermined in this way. In general, although an opinion rises no higher than the level of the evidence and the logic on which it is predicated, it is for the jury, with the assistance of vigorous cross-examination, to measure the worth of the opinion.

Id. at 1333 (citations omitted).

Admissibility and sufficiency, of course, present different issues; an item of evidence may be relevant and admissible, but insufficient, standing alone, to support a finding of negligence. In this case, however, the plaintiffs presented detailed evidence by well-qualified expert witnesses. If credited, their testimony was quite compelling. Viewing the record in the light most favorable to the plaintiffs, we conclude that the question of negligence was properly allowed to go to the jury.

B. Compensable injury.

The defendants also maintain on cross-appeal that the plaintiffs are not entitled to recover because, during

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closing argument, plaintiffs' counsel had characterized his clients' injuries as "Multiple Chemical Sensitivities" (MCS). According to the defendants, MCS is a "controversial" condition that has not been generally accepted in the relevant scientific and medical community, as required by Frye. [FN17] The defendants claim, in essence, that counsel's argument had the effect of conceding that the plaintiffs had no claim.

The jury having determined that the somatization plaintiffs suffered no physical injury at all, the question whether these plaintiffs would be entitled to any recovery if they were suffering from MCS is moot as to them. The issue remains live only as to Susan Watkins, who was awarded damages for a physical injury.

Viewing the record in the light most favorable to Ms. Watkins, we conclude that there was ample evidence to support the jury's award. We have previously dealt in some detail with the severity and duration of Ms. Watkins' symptoms. See pp. [7]-[8], supra. If the testimony of Ms. Watkins and her colleague, Vanessa Musgrave, is credited--and the jury evidently believed it--then one cannot plausibly assert that she sustained no legally cognizable harm. In addition, Ms. Watkins presented medical evidence showing that she suffered from toxic encephalopathy, i.e., brain damage, surely a compensable injury. See Berry, supra, 709 So.2d at 554. According to Dr. Bell, a battery of tests, including an electro-encephalogram (EEG), disclosed that Ms. Watkins exhibited abnormal neurological functioning. Further tests administered by Dr. Thomas Callendar, a physician and occupational and environmental toxicologist, revealed that Ms. Watkins suffered from impaired balance, decreased grip strength, memory loss, chronic inflammation of the mucous membrane, and episodic tremors in her upper extremities. Dr. Callendar concluded that Ms. Watkins' exposure to toxic organic compounds had caused her to suffer from permanent toxic encephalopathy.

According to the defendants, the closing argument of counsel for the plaintiffs revealed that the plaintiffs' claim, in its entirety, was one for MCS and for nothing else. The defendants rely on the following passage:

> Now what we're going to be talking about is something called multiple chemical sensitivity. Everybody agrees in this case that the plaintiffs symptoms, all of them are real. That they were not faking. So it's one of two things, either it was brain damage or it was this thing called somatization. It doesn't make any difference whether they actually suffered brain damage or whether in their own mind they actually feel like this.

(Emphasis added.) Given the evidence of Ms. Watkins' toxic encephalopathy and comparatively serious injuries, we do not believe that the sentence italicized above can fairly be treated as an abandonment of her claim based on this compensable condition. Accordingly, we must sustain the jury's award in her favor.

V.
CONCLUSION

For the foregoing reasons, the judgment is affirmed in part and reversed in part. The case is remanded for further proceedings consistent with this opinion.

So ordered. [FN18]

STEADMAN, Associate Judge, concurring in part and dissenting in part.

As the majority points out, the plaintiffs' case in chief relied solely upon the allegation that all the plaintiffs had suffered permanent neurological injury as a result of the defendants' negligence. All of plaintiffs' experts focused on that theory alone. All of the defendant's experts understandably addressed their testimony to that theory of the plaintiffs.

Four of the plaintiffs now attempt to recover not for such actual neurological injury but rather for distinct somatization disorder allegedly caused by the defendants' negligence. To do so, they rely on snips and pieces of testimony drawn from the massive amount of expert testimony introduced first to propound and then to combat the neurological injury theory of plaintiffs' case. I do not think this suffices where expert testimony is at issue.

It is undisputed that the negligence, proximate cause, and injury elements of this litigation all depended upon expert testimony. The issues were technical and complex. "[I]n cases presenting medically complicated questions ... we have held that expert testimony is required on the issue of causation." Williams v. Patterson, 681 A.2d 1147, 1150 (D.C.1996) (quoting Baltimore v. B.F. Goodrich Co., 545 A.2d 1228, 1231 (D.C.1988)) Indeed, the factual issues relevant to plaintiffs' claims crossed several disciplines and plainly were "so distinctly related to some science, profession, or occupation as to be beyond the ken of

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the average layperson." Messina v. District of Columbia, 663 A.2d 535, 538 (D.C.1995) (quoting District of Columbia v. Peters, 527 A.2d 1269, 1273 (D.C.1987)). A jury verdict founded on something other than the opinions of experts would be patently unreasonable. Travers v. District of Columbia, 672 A.2d 566, 568 (D.C.1996) ("The purpose of expert opinion testimony is to avoid jury findings based on mere speculation or conjecture.") (quoting Washington v. Washington Hosp. Center, 579 A.2d 177, 181 (D.C.1990)).

While ordinarily it is within the province of a jury to pick and choose among the evidence that it hears on the basis of its common sense and experience, I think that given the nature of expert testimony, the same freedom cannot be uncritically admitted. [FN1] On the contrary, I think that to prevail, the party whose case is dependent upon expert evidence must place before the jury a coherent, logically connected chain of expert testimony to establish the case. It may be that the plaintiff can make his case at least in part through experts tendered by the defense, but the totality of expert testimony must be sufficiently extensive and coherent so that one can reasonably say that there is an expert (or group of experts) who have directly addressed the disputed matters and testified that the elements at issue of plaintiff's case have been established under sound scientific principles. I am unable to conclude that with respect to the claimed somatization injuries and their cause, this chaotic and spasmodic record in that regard satisfies that standard. [FN2] Cf. Lasley, supra, 688 A.2d at 1387 (with expert testimony only on a condition, the procedure, and the injury, but not on causation, "a lay jury could not have pinpointed the cause of Lasley's [injury] without blindly guessing"); Herbert v. District of Columbia, 691 A.2d 1175, 1184 (D.C.1997) (affirming directed verdict because in the absence of expert testimony regarding "a subject with which the average lay person would not be familiar[,] ... the jury was necessarily incapable of determining whether any breach occurred"), vacated in part on other grounds, 716 A.2d 196 (D.C.1998) (en banc).

I agree with my colleagues, however, in sustaining the judgment in favor of Susan Watkins, whose claim of actionable physical injury was supported by cohesive and focused expert testimony.

FN1. The five employee-plaintiffs were Joanne Bahura, Barbara Lively- Diebold, Richard Kirby Biggs, Steven Shapiro, and Susan Watkins. The sixth plaintiff was Robert Diebold, the husband of Barbara Lively-Diebold.

FN2. A somatoform disorder is one which causes a non-malingering patient to experience real physical symptoms of illness or discomfort for which there is no discernible physical basis. See Diagnostic and Statistical Manual of Mental Disorders IV (DSM-IV) at 445 (4th ed.1994); see also discussion, infra, at pp. [15]-[16].

FN3. The EPA facility consists of five buildings connected by a large four-story mall. The mall houses offices, retail shops, and restaurants.

FN4. One consulting neurologist treated between fifty and sixty employees who complained of neurological symptoms. A consulting industrial hygienist testified that in his survey of over one hundred EPA employees, many became ill inside the EPA facility but felt better after leaving the building for a significant period of time.

FN5. The principal expert witnesses who addressed the defendants' alleged violations of the applicable standard of care were Professor Woods of Virginia Polytechnic Institute, a specialist and instructor in building technology, and Irwin Fischer, an industrial hygienist.

FN6. Professor Woods testified that each of the plaintiffs was working in an area under renovation during the relevant time frame.

FN7. There were exceptions among the expert witnesses who testified for the defendants. See infra pp. [20]--[23].

FN8. Counsel had first asked the judge to direct a verdict in favor of the defendants at the close of the plaintiffs' case. At that time, no somatization evidence had been introduced. The judge denied the motion.

FN9. Judges, not attorneys, decide questions of law, and counsel should not attempt to argue, or be permitted to argue, disputed legal propositions to the jury without prior leave of court. Cf. Salmon v. United States, 719 A.2d 949, 951 n. 3 (D.C.1997).

FN10. We note, however, that the Wasiak case differs from the present one in several respects. For example, the Supreme Court of Nebraska held that, notwithstanding the trial judge's findings, "the record [was] replete with evidence that Wasiak suffered other significant injuries caused by the accident which are sufficient to support the trial court's judgment and award." 568 N.W.2d at 233.

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FN11. Dr. Terr, an internist and immunologist, described the plaintiffs' somatization disorders in similar terms:
There is a coincidence of having these symptoms, and they have it before, with a certain event, in this case, exposure to chemicals. Once that happens, once you make that connection in your mind, then every time you're exposed to something you conceive--you perceive to be a chemical, there's a likelihood that you're going to get sick from it. It's a pattern of illness.

FN12. Relying on Jones and Otis Elevator, the plaintiffs plausibly argue that in this case, the demonstrated sequence of events alone was sufficient to show proximate cause, and that this court need not consider the expert testimony on that issue. Because expert testimony in the record also supports that finding, we need not, and do not, decide whether the proof of temporal proximity alone would have been sufficient.

FN13. Nurse Hogrefe remarked that "it's been over two years since I've been there, and it still has impact with me that we saw so many employees with similar type complaints."

FN14. Our reinstatement of the award in favor of the somatization plaintiffs, including Barbara Lively-Diebold, leads logically to similar relief for Robert Diebold for loss of consortium. We do not understand the defendants to argue to the contrary.

FN15. In support of their appeal, the plaintiffs also contend that they are entitled to a new trial on damages. They cite two evidentiary rulings by the trial judge. Neither contention warrants a new trial. The plaintiffs sought to present testimony by Dr. Iris Bell regarding a theory known as "olfactory limbic kindling." Under that theory, long-term exposure to low levels of contaminants may cause permanent injury. The trial judge ruled (and Dr. Bell effectively admitted) that the limbic kindling theory had not received "general acceptance," as required by Frye v. United States, 54 App. D.C. 46, 293 F. 1013 (1923). The judge therefore held that the evidence was inadmissible. The plaintiffs ask that we apply the standard of admissibility set forth in Daubert v. Merrell- Dow Pharm., Inc., 509 U.S. 579, 593, 113 S.Ct. 2786, 125 L.Ed.2d 469 (1993); see also Kumho Tire Co. v. Carmichael, 526 U.S. 137, 119 S.Ct. 1167, 143 L.Ed.2d 238 (1999). The Frye test remains in effect in this jurisdiction, however, see, e.g., Nixon v. United States, 728 A.2d 582, 588 (D.C.1999), cert. denied, --- U.S. ----, 120 S.Ct. 841, 145 L.Ed.2d 707 (2000), and a division of this court lacks the authority to supplant Frye with Daubert and Kumho Tire Co. See M.A.P. v. Ryan, 285 A.2d 310, 312 (D.C.1971).

The plaintiffs also complain that David Smith, a defense witness, should not have been permitted to express the opinion that some of the employees' symptoms "reflected the characteristics of mass psychogenic illness." A trial judge has considerable discretion in determining whether opinion testimony from a lay witness should be admitted under all of the circumstances. See, e.g., Finley v. United States, 632 A.2d 102, 105- 06 & n. 2 (D.C.1993), and authorities there cited. Assuming, arguendo, that Smith's characterization went beyond permissible bounds, we conclude, in light of the record as a whole, that any error was harmless.

FN16. Throughout the trial in this case, the experts for the plaintiffs testified that they lacked precise exposure data because the defendants had rigged air flow during diagnostic testing at the Waterside Mall. These claims, if credited, would permit a reasonable jury to find that the defendants themselves prevented the plaintiffs from ascertaining the precise level of toxic substances which were present at the Waterside Mall during its renovation.

FN17. A diagnosis of MCS is premised upon the theory that "various kinds of environmental insults may depress a person's immune system so that the exposed person ... becomes hypersensitive to other chemicals and naturally occurring substances." Frank v. State of New York, 972 F.Supp. 130, 132 (N.D.N.Y.1997) (internal quotation marks omitted). MCS cases present "a constellation of symptoms that some people believe are caused by exposure to low-molecular-weight organic chemicals at trace levels normally considered quite safe." Michael I. Luster et al., Chemical Pollutants and "Multiple Chemical Sensitivities," in Phantom Risk: Scientific Inference and the Law 379, 381 (Kenneth R. Foster et al. eds.1993). Expert testimony regarding MCS has been excluded by several courts. See Frank, supra, 972 F.Supp. at 137.

FN18. We reiterate that the belated introduction into the trial of issues relating to the causation and compensability of somatoform disorder created a situation in which the case was decided in part on the basis of a record in which the parties did not focus upon these issues. In holding that JNOV was erroneously granted against the somatization plaintiffs, we express no opinion as to whether the defendants would have been entitled to a new trial if they had asked for one.

FN1. Let me venture a crude and perhaps imperfect example. Suppose for example the time is 1620 and the issue is whether the earth is the center of the universe and the sun (like the planets and stars) moves around it in a celestial sphere, rising and setting once each day (the Ptolemaic theory of the

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universe), or instead the sun is the center of the universe and the earth revolves around the sun, the apparent rising and setting of the sun due to the earth's rotation on its axis (the Copernican view). It would not do to permit a jury to conclude that the earth was indeed the center of the universe but the apparent rising and setting of the sun was due to the earth's daily rotation on its axis, a physical state of affairs to which no expert had testified.

I do not question that in general a jury is free to accept or reject expert testimony and give it as much weight as it deserves. But this is a different proposition from that which I address here.

FN2. The majority's reliance on the sequence of events appears unavailing to me here. Given the extreme complexities and risks of error in distinguishing correlation and temporal sequence from causation, recognized in the majority opinion, I do not think that factor can bolster expert testimony except to the extent that the expert himself or herself testifies to its relevance to the issue at hand.

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ENVIRONMENTAL ISSUES

OF THE 77TH TEXAS LEGISLATURE

by

Lisa K. Anderson

Legislative Forecast Panel
"Make Me Laugh"
12th Annual Texas
Environmental Superconference

1. **POLITICAL CONTEXT OF THE 77TH TEXAS LEGISLATIVE SESSION**

a. Redistricting
   i. Once-a-decade redrawing of legislative and congressional districts
   ii. First full legislative redistricting since Texas became a two-party state
   iii. Affects partisan make-up for the next 10 years

b. Leadership
   i. If Governor Bush becomes President
      (1) Lt. Governor Perry becomes Governor
      (2) Senate elects a new Lt. Governor to preside over Legislative Session
   ii. Timing, rules changes, Committee appointments all up in the air
   iii. Senate elections also a factor

c. Sunset of Natural Resource Agencies
   i. Coastal Coordination Council
      (1) public hearings on staff recommendations held 6/21/00; vote 9/00
   ii. Parks and Wildlife
      (1) Commission adopted recommendations 6/20/00
   iii. Railroad Commission
      (1) staff review just starting; staff report scheduled 11/00
   iv. TNRCC
      (1) public hearings on staff recommendations held 6/21/00; vote 9/00
   v. Water Development Board
      (1) staff review just starting; staff report scheduled 11/00

2. **SENATE NATURAL RESOURCES COMMITTEE CHARGES**

a. Air Quality
   i. Study the challenges Texas faces in meeting federal air quality standards under the Clean Air Act, and the implications of non-attainment on future economic growth. The Committee shall assess the impact that federal vehicle, fuel, engine, aircraft and other standards have on the state's ability to meet the Clean Air Act requirements. The Committee shall also study the connection between air quality and such related issues as transportation conformity and funding.
   ii. Likely proposals for consideration include:
      (1) diesel emission reduction program;
      (2) alternative fuels incentive;
      (3) incentives for the purchase of low-emission passenger vehicles;
      (4) delay in start date of public schools;
      (5) incentives for energy efficiency programs;
      (6) incentives for development of clean air technology, equipment and products;
      (7) clean air mitigation fee in lieu of auto emissions test for newer cars;
      (8) incentives for employer-based programs; and
      (9) research and/or technology clearinghouse.

iii. Report expected to be released September 1, 2000.

b. Groundwater Resources

i. Develop a comprehensive study of state's groundwater resources, keeping a strong focus on the need for conservation. The Committee shall examine a regional approach to groundwater management, inventory the availability of groundwater, and consider the future regulation of groundwater and the role of groundwater districts.

ii. Likely proposals (expected in one omnibus "conjunctive management" bill covering groundwater and surface water issues) include:

(1) creation of new and or/reauthorization of existing groundwater districts;

(2) sunset of junior water rights provision currently applicable to interbasin transfers of surface water;

(3) future of both surface and groundwater marketing and exports;

(4) coordination of groundwater district boundaries and issues relating to single-county districts versus regional (aquifer-based) districts;

(5) groundwater district funding mechanism;

(6) groundwater permit exemptions in Texas and an analysis of alternative groundwater management or regulatory approaches used in other states; and

(7) groundwater and surface water availability models and the critical need for management decisions to be able to be based on good science and data availability.

iii. Report expected to be released September 1, 2000

c. Roles and Missions of River Authorities

i. Review the missions and roles of all Texas river authorities, including their powers and duties, financing, fee structures, service areas, board composition, relationships with other river authorities, competition with private sector service providers, communities they serve, and roles in and contributions to the state's water plan.

ii. Anticipated proposals for consideration include:

(1) staggered Sunset review of all river authorities;

(2) basic powers and duties appropriate for all river authorities;

(3) codification of the specific enabling legislation creating each of the individual river authorities;

(4) development of a definition of what actually constitutes a river authority;

(5) appropriateness of state's oversight role regarding river authorities and identification of the range of existing reporting requirements (both financial and management audit functions); and

(6) the appropriate role that river authorities should play in:

(a) implementation of SB 1

(b) water quality initiatives (Clean Rivers, TMDLs, etc.)

(c) facing challenges of floodplain management, dam safety/ maintenance and funding
(d) aquatic vegetation management plans
(e) water supply responsibilities, including issues related to conjunctive use of surface water and groundwater.

iii. Report expected to be released September 1, 2000

d. Low-level Radioactive Waste Disposal

i. Study the necessity for storage and disposal options for low-level radioactive waste. The Committee shall examine Texas' obligations under the Texas-Maine-Vermont Low-Level Radioactive Waste Compact, the status of other federally-formed compacts, the practicality of assured isolation facilities, the feasibility of underground disposal operations, and the viability of public-private ventures and other licensing issues.

ii. Issues to be addressed include:
(1) necessity for storage in Texas;
(2) options for storage/disposal;
(3) assured isolation (safety, cost-effectiveness, fulfill Compact?);
(4) disposal (who holds permit, limits on amount of waste received?);
(5) survey other states about the future of low-level radioactive waste disposal; and
(6) Maine and Vermont's positions on disposal vs. storage, and predicted amounts they will send for disposal.

iii. Report expected to be released November 1, 2000.

e. Texas Coastal Region

i. Identify and characterize opportunities and challenges facing the Texas Coastal Region, recognizing that the Region will experience significant population growth and economic development within the state's foreseeable future. The Committee shall recommend strategies to ensure progress in the Coastal Region without diminishing the quality of life and natural resources within the Region.

ii. Issues expected to be addressed include:
(1) water quality and quantity, freshwater inflows to bays and estuaries;
(2) air quality, especially non-attainment and near non-attainment areas;
(3) living marine resources conservation, user conflicts, endangered species; and
(4) beaches, open beaches, coastal erosion, and management regimes.

iii. Report expected to be released September 1, 2000.

f. Future of the Texas Oil and Gas Industry

i. Evaluate the future of the Texas oil and natural gas production industry. The Committee shall identify existing impediments to exploration and production, and examine whether incentives should be offered to help

Texas producers capitalize on the expected increase in natural gas demand in coming years. The Committee shall also analyze the effectiveness of the well-plugging and remediation program of the Texas Railroad Commission.

ii. Issues anticipated to be covered in the report include:
   (1) continuation of the severance tax;
   (2) the oil field clean-up program, including the need for additional funding;
   (3) workforce development, including the current need for workers, incentives to retain workers, and training programs;
   (4) technology enhancements; and
   (5) financial assistance, including research and development tax credits, pollution abatement tax credits, and repeal/adjustment of the severance tax.

iii. Report expected to be released November 1, 2000.

g. Oversight Function

i. Monitor the implementation of the following bills enacted during the 76th Legislature, Regular Session: HB 2, relating to agriculture and state agriculture policy; and SB 766 relating to the issuance of certain permits for the emission of air contaminants. The Committee shall also assess, monitor, and report on the qualitative and quantitative impacts resulting from the environmental provisions of SB 7, 76th Legislature, Regular Session, relating to electric utility restructuring and to the powers and duties of the Public Utility Commission of Texas, Office of Public Utility Counsel, and the Texas Natural Resource Conservation Commission.

ii. Report expected to be available September 1, 2000.

3. **SENATE COMMITTEE ON STATE AFFAIRS CHARGES**

a. Transportation/NAFTA Corridor

i. Evaluate the state's intermodal transportation planning efforts with an emphasis on NAFTA-related corridors and their impact on both metropolitan and rural areas of the state. The Committee shall address all modes of transportation including highways, farm-to-market roads, turnpikes, mass transit, aviation, railroads and water traffic. The Committee shall determine whether the state is maximizing federal funding levels, and evaluate alternative and innovative methods of transportation funding and develop recommendations for their use. The Committee shall coordinate study of this issue with the Special Committee on Border Affairs.

b. Effect of Devolution of Federal Programs on State Costs

i. Study the impact of devolution and other federal streamlining and efficiency efforts on major state agencies, including full-time equivalent employee (FTE) increases, major programmatic changes, and administrative costs to the state. The Committee shall also study

conflicts and overlaps among agencies resulting from federally devolved functions and responsibilities. The Committee shall coordinate study of this issue with the Committee on Finance.

4. **HOUSE ENERGY COMMITTEE CHARGES**

a. Well-Plugging and Site Remediation Plan Assessment

i. Assess the state's well-plugging and site remediation program to determine if the current funding mechanism and program operations are addressing the state's obligations efficiently.

b. Current Financial Assurance Mechanisms for New Drilling Operations

i. Examine the current financial assurance mechanisms required by the Railroad Commission for new drilling operations to determine whether they are sufficient to cover current and future well-plugging costs.

c. Creation of an Oil and Gas Voluntary Clean-Up Program

i. Evaluate the feasibility of creating a voluntary cleanup program, similar to the program created at the TNRCC, for oil field sites under the jurisdiction of the Railroad Commission.

5. **HOUSE ENVIRONMENTAL REGULATION COMMITTEE CHARGES**

a. Solid Waste Tipping Fees

i. Assess the merits of the current program transferring one-half of the solid waste tipping fee to the councils of government to be dispersed for local solid waste projects.

ii. Report likely to consider earmarking transferred fees for enforcement activities by TNRCC or local governments.

b. Low-level Radioactive Waste Disposal

i. Determine the ramifications surrounding the handling, processing and disposal of low-level radioactive waste within the borders of the state as they relate to compact waste, non-compact waste generated by the federal government, mixed waste, and licensing of a private or state entity. Review policies of the Department of Health related to extremely low-level radioactive waste to determine consistency with other states' regulations.

c. Air Quality/Compliance with NAAQS

i. Identify program options in all areas of the state for achieving and maintaining compliance with federal air quality requirements while preserving the potential for economic growth. The review should consider the effects of projected population growth on transportation requirements.

6. **HOUSE NATURAL RESOURCES COMMITTEE CHARGES**

a. Groundwater

i. Study all issues related to groundwater availability, including the role and needs of groundwater conservation districts to ensure effective management of the resource. Consider the effectiveness and feasibility of aquifer-based management, and the adequacy of data and modeling for regional water planning efforts. Assess the implementation of SB 1911, enacted by the 76th Legislature.

ii. Report likely to lean toward:
   (1) "Rule of Capture" being left as is;
   (2) considering giving TNRCC slightly more power over creating water districts where needed; and
   (3) continuing support of "local control" for water districts.

b. Abandoned/Deteriorated Water Wells

i. Assess the condition of abandoned or deteriorated water wells and the need for state and local involvement to address potential problems.

ii. Main issue likely to be where money for necessary plugging/remediation efforts will come from.

c. Sites for Wetlands Mitigation

i. Study the state's criteria and regulations for determining potential sites for wetlands mitigation efforts.

ii. Report likely to support continued efforts by TNRCC to reach agreement with the Corps of Engineers in efforts not to duplicate or conflict with the Corps' actions.

7. **HOUSE WAYS AND MEANS COMMITTEE**

a. Tax Structure/Effect on Oil and Gas Industry

i. Identify and list the specific changes to the tax structure that would:
   (1) produce the most positive effect on gross state product;
   (2) produce the most positive effect on the creation and retention of jobs that pay a living wage;
   (3) most benefit troubled or declining industries, such as agriculture or oil production;
   (4) promote enhanced tax equity, including mitigation of the regressivity of the current tax structure; and
   (5) address loopholes that permit certain classes of taxpayers to avoid equitable taxation. Each list should be a separate list and any tax changes recommended should take into account the revenue needs of the state.

b. Emergency Severance Tax Measure

i. Review the tax exemptions and credits approved by the 76th Legislature, including SB 441 and the emergency severance tax measures, and evaluate their success in achieving legislative goals.

8. **OTHER POSSIBLE ISSUES**

a. Pipeline Regulation

i. Federal rewrite and spillover to states

ii. Longhorn Partners controversy
iii. Use of pipelines for water transport?
iv. One-call/"Dial before you dig" changes?

b. MTBE Ban???

Prepared with thanks to the legislators and legislative staff who shared information about testimony received, stakeholder discussions, and hunches about the potential legislative recommendations, understanding that any of these issues or possible recommendations may change prior to the printing dates of the reports. Particular thanks to the Senate Natural Resources, House Natural Resources, and House Environmental Affairs committee staff.


ARE
YOU
GAME ?

Biographical Information

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Jay Schmidt is a Senior Policy Analyst with the Texas Sunset Advisory Commission. He has spent the past 11 years working in the legislative branch — first with the Wisconsin Legislative Audit Bureau, and the past 6 ½ years with the Texas Sunset Advisory Commission. As a Senior Policy Analyst with the Sunset Commission, Jay has led reviews of the Texas Natural Resource Conservation Commission, the Texas Department of Transportation, the Texas Turnpike Authority, the Department of Public Safety, the Texas Youth Commission, and the Texas Department on Aging.

He has a undergraduate degree from the University of Wisconsin-Madison and a Master of Public Affairs form the LBJ School at the University of Texas.

Issues / Recommendations

Summary

Overview

Greater assurances of compliance with environmental standards by the regulated community are needed to adequately ensure the protection of Texans' health and the environment. While the Sunset staff review of the Texas Natural Resource Conservation Commission recognizes that the agency serves a vital mission, it concluded that a performance-based regulatory approach would allow the State to expand beyond a traditional, prescriptive approach focused on outputs, to one that better integrates performance incentives, regulatory flexibility, and innovation. The new regulatory structure should encourage action greater than minimum requirements to allow success in addressing persistent environmental problems, such as poor air quality in the state's largest cities, or emerging issues like water quality and nonpoint source pollution.

The Sunset review determined that the current regulatory structure relies more on the agency, rather than the regulated community, to ensure compliance with environmental requirements. The recommendations in this report would begin to shift this emphasis onto regulated entities, extending the Legislature's interest in voluntary compliance while increasing the accountability for these entities' performance. In addition, the report concluded that strengthening programs that support the agency's regulatory efforts would improve regulation in the following ways.

- Meaningful environmental regulation relies upon quality data and its analysis, as well as research that supports long range objectives. To this end, the staff report recommends that environmental laboratories conducting business with the state be accredited and for the agency to improve the coordination and application of environmental research.
- The Commission makes numerous important permitting and enforcement decisions that directly affect peoples lives, the environment, and the state's economy. The report identifies several concerns related to access to the Commission's decisionmaking processes and makes recommendations to ensure adequate and effective participation by regulated entities and the public.
- The current funding structure for the agency, based largely on dedicated fee revenues, restricts the agency's ability to support efforts that universally affect the ability to effectively regulate or address issues that cross air, water, and waste activities. The report contains recommendations and statutory alternatives that would provide greater funding flexibility to better support the broad needs of the agency.

Taken together, the recommendations in this report are designed to provide more impetus for regulated entities to have a larger stake, and for all affected groups to take a greater role, in protecting the environment, and to better position the agency to address the state's environmental regulatory needs. While the staff did not specifically assess the success of the State's environmental regulation, the agency continues to perform an essential function and should be continued. A summary of the key recommendations and findings for each of the issues identified in this report is outlined below.

Issues / Recommendations

Issue 1 TNRCC Lacks Strategic Direction and Innovation in Its Regulatory Structure.

Key Recommendations

- Require the Commission to distinguish regulatory tiers based upon levels of compliance with environmental regulations and to offer incentives within each tier.
- Expand the scope of the Waste Reduction Advisory Committee to advise TNRCC on the implementation of an incentive- and performance-based regulatory structure.
- Require the agency to coordinate all innovative regulatory programs through one office.
- Encourage the use of environmental management systems and expand opportunities for public participation.

Key Findings

- Since its creation, TNRCC has focused on becoming the single environmental regulatory agency envisioned by the Legislature.
- TNRCC primarily operates using the traditional command and control regulatory approach.
- TNRCC's current organization and approach to regulation have limited development of a strategic vision for environmental regulation.
- The current regulatory approach may be inadequate to solve ongoing environmental problems.

Issue 2 Compliance History is Inconsistently Defined and Applied, Limiting Its Use as a Permitting and Enforcement Tool.

Key Recommendations

- Require the Commission to develop a common definition for compliance history.
- Require TNRCC to track and report the compliance history of all regulated entities.
- Require TNRCC to develop a performance assessment for regulated entities to determine eligibility for innovative programs, and to establish permit and enforcement guidelines.

Key Findings

- The Legislature and TNRCC have recognized the importance of holding regulated entities accountable.
- The agency does not comprehensively assess the performance of regulated entities and ultimately its own performance.
- A better approach to compliance history would allow TNRCC to use innovative regulatory schemes currently employed by other states.

Issue 3 Participation in TNRCC's Innovative Regulatory Programs is Not Performance-Based and Lacks Sufficient Accountability.

Key Recommendations

- Require TNRCC to apply a higher compliance standard for participation in its innovative regulatory programs.
- Require entities to show a clear environmental benefit to participate in the agency's regulatory flexibility and Supplemental Environmental Project programs.
- Expand marketing, public education, and technical assistance for innovative regulatory programs.
- Expand opportunities for public participation within innovative programs.

Key Findings

- TNRCC offers regulated entities innovative programs within its predominantly traditional regulatory structure.
- TNRCC does not adequately hold participants in innovative regulatory programs accountable for their compliance performance.
- Despite legislative interest in creating innovative regulatory programs, these programs are not having their intended impact.

Issue 4 Agency Policies on Upsets and Inspections Are Not Based on the Performance of a Regulated Entity.

Key Recommendations

- Require regulated entities to demonstrate a good compliance history before they may receive an announced inspection.
- Require TNRCC to track whether inspections are announced or unannounced, and track and report the occurrences of all upset emissions.
- Limit exemptions from possible enforcement for entities with chronic numbers of upsets.

Key Findings

- Agency policies and rules, which continue to be refined, define how it will conduct inspections and approach unplanned air emissions.
- A lack of information or analysis regarding inspections and upsets hurts the agency's ability to make cost effective decisions about inspections, or to ensure compliance with permit requirements.

Issue 5 Unregulated Environmental Laboratories Place TNRCC at Greater Risk of Basing Regulatory Decisions on Unreliable Data.

Key Recommendations

- Require TNRCC to implement a voluntary environmental laboratory accreditation program consistent with national standards.
- Transfer the Safe Drinking Water Lab Assessment Program from the Texas Department of Health to TNRCC.
- Require TNRCC to only accept data/analyses from accredited labs for all decisions affecting permitting, compliance, enforcement, and corrective action.
- Exempt all on-site or in-house labs from accreditation.

Key Findings

- Oversight of environmental labs providing data to the State is inconsistent and divided between agencies.
- Unregulated, unaccredited labs are more likely to produce inaccurate data for agency decisionmaking, resulting in increased risk to public health and the environment, and increased agency costs.
- Uniform standards provided by a national accreditation program would allow Texas labs to effectively compete with accredited labs in other states.

Issue 6 State Environmental Regulation Lacks the Benefit of Comprehensive Research on the Long-Term Impacts of Pollution.

Key Recommendation

- Require TNRCC to coordinate and facilitate agency research needs and efforts.

Key Findings

- TNRCC performs environmental monitoring and risk assessments, and is involved in independent research efforts.
- Monitoring and risk assessments are insufficient to draw conclusions about long-term impacts of pollutants on human health and the environment.
- Other states have implemented comprehensive research programs to support environmental regulatory efforts.

Issue 7 The Public's Interest Is Not Adequately Supported in Agency Policymaking.

Key Recommendations

- Strengthen the Public Interest Counsel by making it a Governor-appointed position, with clear responsibility for representing the public interest in TNRCC rulemaking and the ability to appeal Commission decisions in court.
- Disqualify persons from being appointed to the Commission if they have received significant income from a regulated entity within two years before appointment.
- Require the agency to track and report the use and composition of Commission-appointed and staff-level stakeholder groups and require these groups to be composed of a balanced representation of affected stakeholders.

Key Findings

- The nature of environmental regulation requires careful consideration of the public's interest in agency decisions.
- The representation of the public interest in environmental matters lacks adequate resources and does not reflect comparable efforts in the regulation of utilities and insurance.
- The public's interest is at a disadvantage on many advisory committees and informal stakeholder groups, and in the agency's internal guidance process.

Issue 8 Having the Agency as an Advocate For Contested Permits Contributes to a Perception of Unfairness in the Decisionmaking Process.

Key Recommendations

- Remove the Executive Director as a party in contested permit hearings before the Commission, but allow the Director to present evidence as needed.
- Consolidate permit notice requirements in one statute.

Key Findings

- State law provides for public participation in TNRCC permitting decisions.
- Statutory notice requirements are confusing for the agency and the regulated community.
- The Executive Director's role in contested cases makes the staff an advocate for permit applications, raising questions about the fairness and objectivity of the decisionmaking process.

Issue 9 TNRCC Has Not Taken Advantage of Using the Public in Its Compliance Efforts.

Key Recommendations

- Require TNRCC to conduct an annual assessment of complaints filed with the agency.
- Require the agency to enhance coordination of complaint investigations with local officials.
- Require the agency to implement policies to respond to complaints after normal business hours and allow the submission of citizen-collected evidence for use by the Commission.
- Require the Commission to use cumulative complaint information in the agency's permitting process.
- Require the Commission to enhance public notice of agency enforcement actions.
- Authorize affected persons to intervene in agency enforcement actions that impact their health or property.

Key Findings

- TNRCC's compliance process involves activities in which the public plays a role, including reporting complaints and commenting on enforcement actions.
- Commission practices and policies limit the collection and use of complaints made by the public.
- Current provisions for notice and comment on agency enforcement actions are inadequate for the public and affected property owners.

Issue 10 TNRCC's Funding Structure Does Not Appropriately Support the Agency's Activities.

Key Recommendations

- Authorize TNRCC to expend a percentage of fee revenues to expand innovative regulatory programs and fund multi-media activities.
- Reauthorize the continuation of the Petroleum Storage Tank Remediation fee, at a lower level, to pay for petroleum storage regulations.
- Limit the fee payment reporting methods available to Solid Waste Disposal fee payers.
- Consider other options to improve the stability, equity, and simplicity of TNRCC's fee revenue collections.

Key Findings

- TNRCC's funding structure lacks flexibility to expand innovative services that benefit the regulated community, stability to adequately fund required regulatory programs, and the ability to provide equity in fee costs among all payers.
- TNRCC's administrative costs could be reduced by simplifying its complex fee structure.

Issue 11 TNRCC's Fee Structure Lacks Accountability and Limits the Revenues the Agency is Able to Collect.

Key Recommendations

- Require the submission of all fees on the date payment is due.
- Require fee credits or refunds exceeding $5,000 to be approved by fee audit staff.
- Provide fee audit staff authority to issue notice of violations to fee payers, and provide the agency authority to charge standard interest and penalties on all delinquent fees.
- Allow TNRCC's Executive Director to modify penalty and interest amounts only upon good cause and with written explanation.

Key Findings

- TNRCC's fee collection system lacks accountability to ensure that fees are being properly paid.
- TNRCC assumes administrative costs to adjust fees for payers, which limits the agency's ability to ensure all fees are being paid.
- TNRCC does not consistently apply existing penalty and interest authority to all entities making late payments.

Issue 12 The Current Regulatory Structure for Low-Level Radioactive Waste Hampers the State's Ability to Administer an Effective Disposal Program.

Key Recommendations

- Transfer all regulatory authority for radioactive waste disposal from TNRCC to the Texas Department of Health, Bureau of Radiation Control.
- Create a new Division in TNRCC charged with the siting and operation of a low-level radioactive waste disposal facility.

Key Findings

- The Legislature has assigned regulatory responsibilities for radioactive materials to three state agencies and remains involved in determining appropriate authority.
- The current regulatory structure for low-level radioactive waste disposal creates a conflict of interest and unnecessarily separates radioactive material regulation.
- The State may fail to meet obligations under the Texas Low-Level Radioactive Waste Disposal Compact, providing for the management and disposal of low-level waste.

Issue 13 Texas Has a Continuing Need for the Texas Natural Resource Conservation Commission.

Key Recommendation

- Continue the Texas Natural Resource Conservation Commission for 12 years.

Key Findings

- Texas has a continuing interest in protecting human health and the quality of its natural resources.
- Despite progress, remaining environmental problems and challenges require a continued regulatory effort.
- No other state, local, or private entity exists that can perform TNRCC's core function of protecting the environment.
- While organizational structures vary, all other states use statewide agencies to provide for the administration of environmental laws and protection of human health and the environment.

Fiscal Implication Summary

This report contains several recommendations that will have a fiscal impact to the State. They are discussed below, followed by a five-year summary chart.

- Issue 1 - Coordinating the use of innovative regulatory programs may require additional staff outside of existing strategic planning and outreach staff resources. A possible source of funding for these positions, if required, could be made available through greater agency funding flexibility as outlined in Issue 10 of this report.
- Issue 4 - Using unannounced inspections for entities with a poor compliance history could result in additional costs to the agency. The amount could not be estimated for this report.
- Issue 5 - Requiring the agency to accredit environmental laboratories conducting business with the state would not result in additional costs to the State, but would be funded by fee payments to cover the costs of administering the program. The accreditation program would require annual revenues of $427,805 and an additional five staff positions.
- Issue 7 - Strengthening the Public Interest Counsel would require the addition of two staff and the reallocation of resources within the Commissioner's budget to provide two additional staff positions and fund outside technical assistance.
- Issue 8 - Removing the Executive Director as a party from contested case hearings would result in a savings to general revenue of at least $345,000 per year and possible staff reductions.
- Issue 10 - Streamlining the agency's current fee structure could result in administrative savings. These savings could not be determined for this report. Several options are provided to stabilize the agency's current funding structure that could have significant fiscal impacts if adopted by the Legislature.

- Issue 11 - Improving revenue management would have a positive fiscal impact for the State of $885,000 in the first year and $660,000 thereafter.
- Issue 12 - Consolidating the regulation of low-level radioactive waste will require the transfer of existing resources from TNRCC to the Texas Department of Health, but will not have a net fiscal impact to the State.

Fiscal Year	Savings to the General Revenue Fund	Gain in Dedicated Fee Revenue	Cost to Dedicated Fee Revenue	Change in FTEs From FY 2000
2002	$345,000	$1,312,805	$427,805	+ 5
2003	$345,000	$1,087,805	$427,805	+ 5
2004	$345,000	$1,087,805	$427,805	+ 5
2005	$345,000	$1,087,805	$427,805	+ 5
2006	$345,000	$1,087,805	$427,805	+ 5


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MARK MACLEOD
DIRECTOR, SPECIAL PROJECTS, ENERGY PROGRAM
ENVIRONMENTAL DEFENSE

Mark MacLeod works with Environmental Defense's energy program. The goals of the energy program are to reduce emissions resulting from the production of energy, encourage investment in renewable energy sources, and promote energy efficiency and conservation. Before moving to Environmental Defense, Mark was the Policy Director for the Texas Senate Interim Committee on Electric Utility Restructuring. Prior to that position, Mark was an Assistant Director in the Office of Policy Development at the Texas Public Utility Commission. At the PUC, he directed the Commission's investigation of Electric Industry Restructuring and the preparation of the Commission's reports to the 75th Legislature on Stranded Investment and the Scope of Competition in the Electric Industry. He has also worked on various issues relating to competition in the telecommunications industry. Mark has received three Master's degrees in Natural Resources, Public Policy and Economics from Ohio State University and the University of Wyoming.

Environmental Defense, a national nonprofit organization, represents 300,000 members. Environmental Defense links science, economics and law to create innovative, equitable, and economically viable solutions to today's environmental problems.

PRESS RELEASE

For Immediate Release

May 24, 2000

Contact: Ken Kramer, Lone Star Sierra Club

512-476-6962

ENVIRONMENTAL GROUPS CRITICIZE

SUNSET REPORT ON TNRCC

Pollution Crisis Will Continue Unless Agency Is Overhauled

(Austin) A coalition of a dozen environmental and consumer groups strongly criticized a report released today by the Texas Sunset Advisory Commission staff that resulted from the review of the state's environmental regulatory agency, the Texas Natural Resource Conservation Commission (TNRCC). While the groups support many of the report's recommendations, overall the proposed changes at TNRCC fail to address core problems at the agency--problems that have led to serious degradation of the environment and public health in Texas. Environmental and health advocates are calling on the Sunset Commission to propose a total reform of the agency.

"Adopting the recommendations of the Sunset report on TNRCC will do little to fix policies that have led to Texas becoming number one in so many forms of pollution," said Ken Kramer, Director of the Lone Star Sierra Club. "For example, Texas ranks number one in total toxic pollutants released from manufacturing industries to the air, land and water. The lack of aggressive action by TNRCC is a major reason why the state has that dubious distinction."

Self-Policing Doesn't Work

An over-arching problem at the TNRCC has been its reliance on polluters' voluntary compliance with state environmental laws. The agency has severely cut back on inspections and enforcement, reduced penalties, and allowed "regulatory flexibility" in permitting.

"The TNRCC's approach to law enforcement is comparable to a traffic cop pulling over someone driving 85 in a school zone, but instead of issuing a hefty ticket the cop merely asks the speeder to please comply with the law and offers compliance assistance counseling," said Reggie James, Director of Consumers Union.

A look at the results of the voluntary compliance program for grandfathered facilities clearly reveals the failure of a "voluntary" regulatory system. Out of over 900,000 tons per year of grandfathered pollution, a reduction of only 3% (17,878 tons per year) due to voluntary permitting has occurred in the 29 months since the program began. Of the 461 grandfathered plants in Texas that are not subject to any existing pollution reduction mandate only 9 have pursued permit applications or agreed orders for reductions.

Despite the dismal and obvious failures of TNRCC's enforcement policies, Sunset staff are inexplicably recommending further use of voluntary compliance and other "perks" for polluting industries in an effort to cajole them into basic compliance with the law. "The Sunset Commission should recommend mandatory enforcement for repeat violators, and referrals to the Attorney General for effective penalties," said Mary Ruth Holder of Texas Committee on Natural Resources.

More Public Participation Crucial

"Public interest advocates are dismayed that the Sunset report fails to make recommendations that would

assure full public participation in agency decision-making and loosen the grip polluters have on the agency," said Erin Rogers, State Coordinator of Texas Public Employees for Environmental Responsibility. "In fact, even agency employees are voicing clear dissatisfaction regarding attempts to clean house from within; in TNRCC's 1999-2000 employee survey, only 14% of the staff agreed that 'people who challenge the status quo are valued.'"

Too Few Changes, Too Much Pollution

"Many of the staff recommendations are valuable and should be supported," said Cyrus Reed of Texas Center for Policy Studies. "Recommendations for an independent and well-funded Office of Public Interest Counsel, stopping the practice of the TNRCC executive director supporting polluters in hearings, the option to remove the volume discount for pollution fees, and more public inclusion in enforcement decisions are all important changes."

However, environmental groups are calling for implementation of more far-reaching changes:

1) The mission of the agency should be clearly defined as protection of public health and the environment, not promotion of economic development.

2) Stronger conflict of interest prohibitions must be enacted to neutralize money politics in agency decisions.

3) The agency must adopt critical citizen rights such as the right to participate in hearings on a level playing field with industry and the right to know which pollutants citizens are being exposed to and when, where, and how they are being exposed.

4) The agency must protect civil rights and actively ensure that low income communities and communities of color do not bear a disproportionate share of pollution.

The following contacts are provided for more detailed response to the report:

Failures of "Voluntary Compliance" and "Regulatory Flexibility" and general comments

Ken Kramer: Lone Star Sierra Club 512-476-6962

Fee Restructuring/Funding Needs

Cyrus Reed: Texas Center for Policy Studies 512-474-0811

Lack of Public Participation

Julia Marsden: League of Women Voters 512-306-1325

Rick Lowerre 512-454-3050

The Radioactive Waste Shuffle

Erin Rogers: Henry, Lowerre & Frederick Law Office 512-454-3050

Independent Office of Public Interest Counsel

Reggie James: Consumers Union 512 477-4431 ext. 118

Analyzing TNRCC's Complaint Data Base

Robin Schneider: Texas Campaign for the Environment 512-326-5655

Public Interest Sunset Working Group
Priority Changes in TNRCC Sunset Review

Sunset Issue/ Recommendation	Public Interest Sunset Working Group Position
Issue 2: *Compliance history is inconsistently defined and applied, limiting its use as a permitting and enforcement tool.* **Key Recommendations:** develop a common definition of compliance history, track all polluters' compliance histories, and develop a performance assessment based on compliance history for eligibility in "flexible" programs.	Sunset recommendations on defining compliance history are headed in the right direction, but need to be **modified.** A statutory and uniformly-applied definition of compliance history should be developed that includes the following components (inclusive, not limiting): · all self-reported violations; · all notices of violation and enforcement; · all civil, administrative or criminal actions brought by the TNRCC or other agency of federal, state or local government (in Texas and in other states) for violation of any environmental statute, ordinance, regulation, court or agency order or license provision; · all actions resulting in agency orders, including consent orders, consent agreements and settlement agreements. A complete list of complaints--investigated and not investigated--should also be considered part of the compliance history. "Bad actor" laws, mandatory enforcement for repeat violators, and better performance indicators for tracking the success of enforcement programs are also needed.
Issue 4: *TNRCC policies on upsets and inspections are not based on the performance of a regulated entity.* **Key Recommendations:** Require regulated entities to demonstrate a good compliance history before they may receive announced inspections. Require TNRCC to track whether inspections are announced or unannounced, and track all occurrences of upset emissions. Limit exemptions from enforcement for entities with chronic upsets.	The coalition **agrees** with all of the Sunset recommendations in Issue 4, but suggests some **modifications:** 1) Unannounced inspections should be standard and non- negotiable to assure that even the entities with the best compliance records STAY in compliance. 2) Require tracking, reporting on, and taking enforcement actions on all "accidental" releases, regardless of volume, and including releases during maintenance, start-ups, and shut-downs
Issue 7: *The public's interest is not adequately supported in agency policymaking.* **Key Recommendations:** Strengthen the Public Interest Counsel and give it the ability to appeal Commission decisions in court. Disqualify persons from being appointed to the TNRCC Commission if they have received significant income from a regulated entity within 2 years before an appointment. Require balanced advisory groups and track the composition and use of advisory groups.	The Public Interest Sunset Working Group **agrees** with all of the recommendations in Issue 7 and suggests some **modifications:** 1) Conflicts of interest prohibitions must apply not only to the Commissioners but also to key agency employees. Eligibility restrictions must be lengthened to a period of 5 to 10 years instead of 2. 2) TNRCC should post minutes of all advisory committees, work groups, and task forces on its web site.

Issue 8 *Having the agency as an advocate for contested permits contributes to a perception of unfairness in the decisionmaking process.* **Key Recommendation:** Remove the TNRCC Executive Director as a party in contested permit hearings but allow the Director to present evidence as needed.	The Public Interest Sunset Working Group **agrees** with all of the recommendations in Issue 8.
Issue 9 *TNRCC has not taken advantage of using the public in its compliance efforts.* **Key Recommendations:** Require TNRCC to conduct an annual assessment of complaints and respond to complaints after normal business hours. Allow the use of citizen-collected evidence in enforcement and permitting cases. Use cumulative complaint information in the permitting process. Require public notice of enforcement actions. Authorize affected persons to intervene in agency enforcement actions that affect their health or property.	The Public Interest Sunset Working Group **agrees** with all of the recommendations in Issue 9 and suggest one **modification:** More resources need to be devoted to providing after-hours responses to complaints. More inspectors are needed.
Issues 10.5 and 10.6 *Remedies to Funding Deficiencies* **Recommendations:** Adjust the Air Emissions fee for inflation. Modify the Air fee, as well as the Wastewater Treatment Inspection and Public Water Systems fees to more equitably distribute costs between large and small payers.	The Public Interest Sunset Working Group **agrees** with recommendations 10.5 and 10.6, and strongly urges removing the fee caps, or volume discounts, for large polluters and creating a progressive fee rate per ton of air emissions.

THE TARRANCE GROUP, INC: for the League of Conservation Voters Education Fund

N = 600 Registered "likely" voters
Field Dates: May 30-June 5, 2000

In making a voting decision... how important are issues involving clean water, clean air and open space for you in deciding how to vote?

- Very important, they are a primary factor in deciding how to vote 41%
- Somewhat important, they are one of several issues you consider 43%
- Not very important, they are not necessarily an issue you consider..... 11%
- Not at all important, they are just not a consideration in deciding how to vote..... 6%

DON'T KNOW/REFUSED **(DNR)** ..... *

Some people say/ Other people say we need to move from a system of mandatory regulations for companies concerning pollution to a voluntary system because voluntary programs are less confrontational and more efficient;

Other people say/Some people say that only mandatory regulations for companies can guarantee the reduction of pollution that industries emit into the environment.

"Which viewpoint comes closest to your own?"

Voluntary programs 23%
Mandatory regulations guarantee reduction 74%
BOTH EQUALLY **(DNR)**..... 1%
UNSURE **(DNR)**..... 3%

Now let me read you two short statements about two candidates and please tell me which one you favor—

(SPLIT SAMPLE) (ROTATE CANDIDATES)

Candidate (**A**/B) believes we must protect the environment, and supports strong laws and enforcement of those laws. Candidate (**A**/B) has been endorsed by and has taken campaign contributions from environmental groups.

Candidate (**B**/A) believes there are too many government regulations, and supports efforts to relieve the burden of regulation on business. Candidate (**B**/A) has also taken campaign contributions from developers and corporations that are known polluters.

If you had to choose, which candidate would you favor? If you aren't sure, you can tell me that too.

IF CHOICE IS MADE, ASK:
Is that Candidate (A or B) strongly or not strongly?

Candidate (**A**/B)/strongly 41%
Candidate (**A**/B)/not strongly 14%
NOT SURE..... 20%
Candidate (**B**/A) /not strongly 7%
Candidate (**B**/A) /strongly 18%

Biographies of Nixon & Associates' Principals

Neil Nixon
President

Neil Nixon has more than 19 years of experience as a communications and management professional. After extensive experience as a journalist, corporate public relations practitioner and management professional in both the corporate and agency worlds, he formed Nixon & Associates to provide clients with comprehensive public relations, crisis communications, community relations and management counsel.

Prior to forming Nixon & Associates, Neil was chief operating officer for the Washington D.C.-based Informative Design Group (IDG), working primarily with its cornerstone company, The History Factory. This unique business was built upon the simple notion that businesses can and should leverage their heritage as they would any corporate asset. At IDG, Neil coordinated efforts for some of the most prominent companies in Corporate America -- names like Shell Oil, Kimberly-Clark, International Paper and Sears. While at IDG, Neil also established a separate communications company, The Reputation Factor, the forerunner to Nixon & Associates.

Prior to moving to the Washington area, Neil worked for Hill and Knowlton Inc. -- one of the world's largest public relations organizations -- where he served as vice president and deputy general manager of the firm's Houston office. Before joining Hill and Knowlton, he worked 11 years with Tenneco, the last five of which were spent managing external corporate communications for Tenneco Gas, the most profitable unit of Tenneco Inc., then one of the 40 largest U.S. corporations.

During the past decade, Neil has focused on issues management and crisis communications, effectively heading communications campaigns in response to labor disputes, refinery fires, chemical spills, pipeline explosions and environmental issues. A frequent speaker on crisis and corporate communications, Neil has authored award-winning crisis plans and video programs and has provided training to more than 4,000 people in over 50 different organizations on how to deal effectively with the news media.

His clients for crisis and communications-related work have included El Paso Natural Gas; Tenneco Gas; Iroquois Gas Transmission; New York State Electric & Gas; Kern River Gas Transmission; Prize Energy; Natural Gas Pipeline Company; Occidental Petroleum; Enron Operations Corp.; PanEnergy Corp.; Shell Oil; Exxon Chemical; Yankee Gas Service Company; MidCon Corp.; Reno Airport Authority; The Child Abuse Prevention Network; Washington County, Tenn.; United Cities Industries; Co-Counsel, Inc.; Trans-Texas Energy; Murphy Oil Company; and Vastar Resources.

Neil is the recipient of some 15 communications and public relations awards, and prior to his corporate tenure did stints as a reporter for *The Houston Post*, *United Press International* and was an editor at *The Angleton* (TX) *Times.*


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ROSS RICHARD-CROW

Ross Richard-Crow is an associate in the Austin law firm of Sahs & Associates, P.C. He received his license from the Texas Supreme Court in 1987. He is admitted to practice in federal court in the Western District of Texas. He is originally from San Antonio and received his bachelor's degree in 1984 from the University of Texas at Austin under the Plan II program. He received his law degree in 1987 from the University of Texas School of Law.

The focus of Mr. Richard-Crow's practice is on administrative law, particularly environmental matters. He also represents clients on a variety of licensing issues before Texas agencies. His work also takes him frequently to Washington, D.C., where Mr. Richard-Crow represents clients at Federal Advisory Committee meetings and in meetings with Congressional representatives. Ross recently spearheaded an effort in Congress that resulted in the first Congressional Symposium on Environmental Justice.

At Sahs & Associates, Mr. Richard-Crow represents both citizen and industry clients on environmental matters. Much of his time is devoted to legal research and writing in preparation for litigation. Additionally he advises the firm's clients on media and governmental relations.

Prior to Mr. Richard-Crow's work at Sahs & Associates, he directed environmental campaigns for the U.S. Public Interest Research Group (USPIRG) and Florida PIRG. At PIRG, Mr. Richard-Crow served as a media strategist and spokesperson, conducting numerous press conferences receiving statewide media attention in both Florida and Texas. During his time at PIRG he lobbied Congress and the Florida legislature on a variety of environmental and consumer issues. He has also served as a consultant for an environmental technologies company, Ardeo, Inc.

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Grabbing the Tiger by the Tail:
Successful Strategies for Getting the Media Attention You Want

Ross-Richard Crow
Sahs and Associates, P.C.

I. Introduction: Media—the biggest arrow in the public interest advocate's quiver

When dealing with an issue that involves harm or potential harm to human health and the environment, often just putting the media spotlight on the issue and raising legitimate questions will transform the situation. Thus, getting media attention to an issue is often paramount to success for a public interest organization's efforts.

II. Your message: Forming it, Framing it and Delivering it

You do not have to be the lone ranger to develop your message and media "spin." With public interest groups, developing message and spin is typically the product of many minds and many brainstorming sessions. Press statements, campaign slogans, and the like are typically worked on by teams of people.

A. First Things First—Developing Your Message

Perhaps the biggest mistake or lost opportunity a public interest advocacy organization could make would be to contact the media in response to some situation without first sitting down with at least a small group of people and carefully fashioning the message it wants the media to report. Clarify among yourselves first the message your organization wants to deliver and to whom you want to deliver it. (Target audiences discussed below.) Start by thinking in large, global terms. In order to accomplish this, a tried and true method is an informal brainstorming session in which everyone tries to get as many ideas out on the table as possible.

There may be many aspects of an issue to sort through, for example:

- Kids are getting sick
- Government is not doing its job
- Industry is not being accountable
- The community is organizing
- Better enforcement is needed

Though all of these may be a part of your message, an organization will want to choose one clear and compelling message to move forward on.

When developing a message for the media, do not get too technical. As you learn more about an issue there is a natural tendency to slip into jargon that is known only to those familiar with the issue. Keep it simple.

For sorting through issues, a good starting place is to develop a list of problems and solutions. Your organization faces a problem, and your organization has a solution, that may be specific or general. Reviewing the list, ask yourselves this question: "In speaking to reporters and the public, which of these will have the greatest impact and attract the most positive media attention?" This question will help guide your group to the key issue. No matter what the message, keep in perspective that your organization ultimately wants that message to move your audience toward your proposed solution.

(i) The big brainstorm session

Once your organization has some clarity on the basic message it wants to deliver, the work as wordsmiths can begin. A classic exercise to this end is to have members of the group start by visualizing the ideal headline that would appear in the newspaper (or the ideal introduction for the TV news story) if *everything* went your way. After pondering this a few moments, the group members, in a moderated brainstorm session, begin to throw out their ideas for headlines. At this stage, as in a typical brainstorming session, there is no editing. Ideas for headlines are being written on a white board or flip chart. After a period of time the group stops and discusses the ideas it has before it. The group selects a few of the most ideal headlines. These will be massaged over time into the organization's primary message.

If the organization is preparing a press release, one of the ideal headlines is selected as the title of the press release. This ideal headline, if appropriate, can often also be fashioned into a "sound bite" or a campaign slogan as well. The group will refine the language of the headline so that it is tight and arresting. The group must constantly be asking: "Does this look like the kind of headline we would see in the paper?" "Is this going to grab the attention of reporters as they thumb through a stack of 30 to 50 press releases a day or scroll through dozens of emails?"

The other ideas developed from the brainstorm session are usually not discarded. These are excellent starting points for further fleshing out the message. Often they are all points that the organization will want to make in the body of a press release. They can form the basis for quotations and important sound bites.

B. Framing the issue

How an issue is framed is critical. For example, in a citizens' group's effort to block a proposed reservoir development, is the issue whether a fish and wildlife will be endangered or is the issue whether building a reservoir is a waste of taxpayer dollars? Both are important; but in selecting the main thrust of a public campaign, the latter may prove more persuasive to the public. Getting the media to adopt a view of the issue that is most likely to gain public support for your position puts victory within reach. If the

media frames the issue as whether the project will waste taxpayer dollars, then the public interest group has a leg up.

(i) Spin

Spin—the angle, the slant, or the perspective one gives to an issue—can make or break a campaign effort. If you want to see spin doctors at work, just follow the presidential election. Almost every statement made by a candidate has been completely tooled over to add just the right spin in anticipation of media coverage. This is not a waste of time. Entire books and seminars may be dedicated to the subject because of its importance. The subject of developing spin is too broad to address in its entirety in this short paper. But some basic principles are offered here.

(ii) Principles or concepts to consider in developing spin—elements of marketing

The fundamental principles of good marketing apply to developing good spin. Good spin is good marketing of your message. A principle of marketing is that people are looking for benefits. Marketers attempt to assess key benefits that consumers are seeking and tailor their message accordingly. As a public interest advocate, consider the benefit your audience may be seeking the most. When faced with challenges, people are looking for inspiration, they're looking for clarity, they're looking for comfort, they're looking for insight, and often they're looking for humor to help them get through. These are just some benefits that people may unconsciously be seeking. If you can tune in to the need of the moment for both the media and the public, you can lend tremendous power to your words.

Practice makes perfect. The more you speak on a topic, the smoother and sharper you get. Take every opportunity to talk about your message among yourselves and to others. Inspiration will come. Take your message and spin for some test runs and then fine tune them. This is typically a key purpose of focus groups in both political and marketing campaigns.

Another basic principle of marketing that is applicable to successful delivery of spin is that you're ultimately selling yourself. People need to feel a connection with you and your organization in order to connect with your message. Often, who you are to others is as important or more important than what you say. People need to feel trust. People need to believe in you, and then they can believe in your message. People will believe you based on your appearance, your tone, your confidence, your candor, and your sincerity. In interviews, much of your message is conveyed nonverbally. The delivery of your message is a key part of your message.

Don't distort or overstate. Your integrity is everything. You must be painstakingly accurate and ethical in your statements. A good media presentation may be a little theatrical at times, but it is always soundly backed by facts.

Your message and the spin put on it is typically most powerful in a public campaign if it appeals to community values and community spirit. Make statements that appeal to people's sense of right and wrong. For example: "This is about protecting our children." "Extinction is forever." "If we find out 30 years from now these chemicals hurt us, it's too late."

C. Direct your message to the audience you most want to receive it

It is good form for a public interest advocate when addressing the media in an interview, at a press conference, in a press release, in an opinion editorial, or by other means to direct the organization's message to the person you want to hear it. Thus, the public interest advocate will often preface an important "message" statement with a phrase directing it to a specific audience. For example, the advocate will say, "We want citizens to know that dioxin from incinerators is dangerous." (This message seems to have reached the U.S. military, which recently complained of this very problem in Japan, where the Japanese had placed an incinerator next to a U.S. military base.) The message may be more politically directed. For example: "These petitions send a clear message to our U.S. Senators in Florida that both democrats and republicans strongly oppose offshore oil drilling within 25 miles of our shoreline."

(i) The importance of directing a message—Leverage, Access and Credibility

Why is it important to direct your message via the media rather than in person? There are several reasons. Leverage, access, and credibility are among the most important. Elected officials are held to a much higher degree of accountability if they have been asked on television to clean up the dirty air in the state. A high profile statement via the media, directed at a public official or agency typically requires a response, if not immediate action. The media spotlight prompts public or industry representatives to respond responsibly and convincingly to a public problem.

(a) Leverage: A case study on the success of directing a message via the media

A case study in this kind of leverage and proactive media approach exercised by public interest advocates is from the campaign against offshore oil drilling in Florida. The environmental advocacy organization the Florida Public Interest Research Group (FPIRG) mounted a targeted campaign directed at one U.S. Senator. Meetings with the Senator's staff, though conducted politely, exposed a certain degree of hostility to the idea of banning offshore drilling in buffer zones along the coast. After the meetings, FPIRG conducted a massive, statewide, grassroots, postcard campaign directed at this U.S. Senator. In just three weeks, 30,000 postcards were gathered, evidencing the

enormous, bipartisan, grassroots support for banning drilling. Before delivering the cards in person, the cards were placed in large fishnets, which helped show the impressive numbers of signatures.

FPIRG then held a statewide, coordinated press conference in several key media centers across the state. In Tampa and Miami the press conferences were held outdoors, overlooking waters that would actually be threatened by the drilling. The bulging fishnets, hung high off the ground with the water in the background, made a captivating visual. The press conference drew all the major print and TV media from across the state. At the press conference, held on a weekday morning, FPIRG advocates across the state, in a coordinated media statement all declared, "These tens of thousands of postcards, gathered in the matter of a few weeks, send a powerful and undeniable message to our U.S. Senator that the people of Florida want their Senator to ban drilling off the Florida coast."

As a result of this press conference, reporters from the largest TV and print media across the state of Florida all called the Senator's office that morning for a comment. By that afternoon, the Senator released a statement stating that the Senator supported a ban on offshore drilling in Florida. Further, the statement declared that the Senator had *always* opposed the idea of offshore oil drilling in Florida and that the Senator had and would continue to take the lead in seeking a ban on drilling. True to this issued statement, this Senator did in fact from that day forward take a significant leadership role in establishing buffer zones along Florida's coast where oil drilling is banned. This, in short, is the power of leveraging a message to a specific audience via the media.

(b) Access

Another simple reason for delivering a message via the media is access. Your message can reach places that an organization, for practical or political reasons, may never have access to directly. One factor can be the incredibly broad dissemination to the public that a small public interest group would, for practical reasons, never be able to reach in significant numbers directly. Immediately after the passage of the Clean Air Act amendments in 1990, CBS radio news contacted the campaign office in Texas where I was serving as director. The reporter indicated that he needed a statement for the breaking news story that would air on syndicated stations nationwide in less than ten minutes. I directed the organization's message to the public stating, "We want citizens to know that this is the largest environmental victory of the decade." The meta-message was, of course, that citizens' grassroots action makes a difference. I turned on the radio five minutes later and heard this message being carried over the airwaves. Some time later a friend in Boston told me they had heard the statement while listening to the radio in his car. That is access.

Similarly, a public interest group may never gain direct access to the President of the United States, yet can significantly impact the president's decision making through messages directed via the media to the president. Again, media can gain access to high places.

(c) Credibility

Finally, the above examples help to bring home the tremendous credibility a public interest group gains when its message is delivered via the media. People may be skeptical of a canvasser at their door, but be deeply impressed by the same message appearing in their local paper or via their local TV station. Media, in an almost magic way, transforms the message into a form that is afforded a high degree of acceptance that simply may not be possible through direct contact. The meta-message is: "This is an important issue that the media takes seriously." Credibility gained when a message is delivered via the media often leads to high impact on the person at whom the message is directed.

III. Proactive approach to media

A public interest organization often can exercise much more control over the message adopted by the media if its approach is proactive rather than reactive. Much forethought can be put into planned press events.

A. Scorecards and reports

An excellent example of a regular proactive and high profile media event is the annual publication of the League of Conservation Voter's (LCV) scorecard for members of U.S. Congress based on members' voting records on environmental issues. LCV typically releases a list of what it calls the "dirty dozen," which lists members of Congress with the poorest environmental voting record. LCV's annual scorecard for legislators is consistently a major press draw, always earning national press attention. The voting records of members are typically accompanied by a report detailing activity on environmental and anti-environmental legislation. The dissemination of this information has been enormously enhanced by websites. Most of these reports can be downloaded from websites.

Another common proactive approach to media is the release of revealing reports regarding an environmental issue. A good report can generate press for weeks or months and trigger further investigative reports by the press. An organization can, for example, take information that has been publicly released, such as the annual release by USEPA of the Toxic Release Inventory (record of industrial emissions) and put it in an accessible and understandable form for the public. Statistics can, in Texas terminology, tell the press and the public how the cow ate the cabbage.

B. The press conference

This is also a topic that could consume many chapters in a book. For brevity's sake here is a checklist of key considerations in preparing for a press conference. Develop a message. Decide on speakers. Develop a visual presentation. Choose a backdrop that supports your message. Choose a location with convenience to media in mind. Make your message timely. Connect your issue to other issues in the news. Generate a buzz

before hand. Contact reporters. Provide reporters with a press release. Tantalize reporters with your spin in a way that lets them know the benefit for them to show up. Have a drawing card such as a captivating visual, a local celebrity or politician, or an awards presentation. Afterwards provide a press package and further contact information. Call no-shows and provide a press packet.

C. The human interest story. The feature story.

A huge part of the news is human interest. Can you fulfill a media need for human interest stories? Many public interest stories go unreported because they lack a human interest aspect.

Cultivating heroes from among ordinary citizens is another strategy for attracting media attention to an issue as a human interest story. The story is typically about the people and their perseverance. But the story also is about the issue and is usually presented in a very sympathetic light to the citizen group's point of view.

D. Celebrity appearances

Celebrity appearances, statements for release, and campaign endorsements can be a powerful drawing card for an organization. Some years back Robert Redford came to Austin to speak on behalf of protecting Barton Springs. This was a big boost for the Save Our Springs (SOS) campaign. Robin Rather, daughter of Dan Rather, who served until recently on the SOS board, also brought some celebrity status that benefited the cause.

IV. Reactive approach to media

A. Register as an "expert" with local media

Be on reporters' short lists of persons to call for a comment whenever a news story touches on your issue area or area of expertise. Be prepared to call reporters to position yourself as the expert. Local news reporters are often desperate for a link to a national story. When the amendments to the Clean Air Act passed in 1990, as director of the local US PIRG office, I called all three local TV stations. All three came to my office and did an interview, all of which aired.

Local television stations frequently keep a rolodex of "experts" on a wide variety of subjects. When a story on air pollution in Texas caused by fires in Mexico needs some experts to tie the story in locally, the station will consult its index under related categories such as "air pollution," "smoke," or "health issues—breathing problems." The station may find listed a local director for the American Lung Association or the U.S. Public Interest Research Group. The representative from the public-interest group does not need to be an expert on fires in Mexico. When interviewed by a TV reporter, the representative merely relies on his or her already-developed expertise and media angle on closely related problems.

The public interest group representative may say for example that the smoke from the Mexico fires drastically worsened already extremely serious air quality problems in Texas's major urban areas. After sharing some statistics on Texas air-quality problems in urban areas and perhaps related asthma rates, the public interest advocate can state in a brief sentence or sound bite the message of their campaign. For example, the clean-air advocate may say, "These fires underscore the great urgency in Texas of taking control of our air quality problems. Citizens simply cannot tolerate another summer like this one."

Further, the advocate being interviewed as a local "expert" may want to take the opportunity to direct a specific message to a public official or agency. The advocate may say, for example, "We want our governor to know that bad air is bad for business. Polls show that Fortune 500 companies are emphasizing more and more the quality of the environment, including air quality, in selecting places to bring their business. We don't want Texans to miss out on good economic opportunities because of bad air."

B. Handling questions

Contacting the media means you will be fielding questions from reporters. It doesn't matter what the question is, once you're giving the answer, you're in control. You should already know everything you're going to say. Often the actual question can be dispensed with a simple yes or no or very brief statement. From there you can take the opportunity to fill in with your organization's message and spin. Be ready for softballs—such as "What are your objectives?" You can knock those out of the park. Be ready for hard balls, such as "Hasn't your proposal failed to gain support?" These you can also work to your advantage when you're well prepared. You look smart and all the more convincing when you handle those kinds of questions well. In brief, be scripted to the hilt but let your delivery be spontaneous and natural.

V. Troubled waters--Public interest groups on the defensive

A. Preparation, organization and strategy the best defenses

Problems discussed below can be avoided or successfully navigated with a little forethought and press strategy. Designate in advance who will talk to the press and on which issues. Directing reporters to the individuals in your organization who are well briefed on the issue in question solves 90% of the problem, as these individuals are typically well prepared to address these challenges.

(i) You're not the expert here

One way that public interest groups are typically placed on the defensive is by being told they are not the experts. Their information is questioned.

Build a reputation for being knowledgeable. Err on the side of knowing too much. A reporter recently described Ralph Nader as a walking bookshelf of position papers. This

is critical to believability. To avoid the first charge, this kind of reputation is the standard to which the public advocate must aspire.

This tactic can often be turned on its head. Public interest advocates, with lots of unwitting help from the industry, have successfully portrayed certain industries or businesses proclaiming themselves the sole expert, as smug, elitist, insensitive, and ultimately self interested. The public became alienated from industry. Proclaiming "We're the only experts" backfired.

(ii) You're bad for jobs and the economy

Your proposal will destroy jobs and will end prosperity. This perhaps is the most common attack on a public interest proposal. An actual examination of the facts will often clearly reveal that this is bluff and exaggeration. There are often existing examples where the proposed environmental program is already in place and in fact is benefiting industry's bottom line as well as taxpayers. The toxic use reduction legislation in Massachusetts is an excellent example of this kind of program. Industry groups aggressively challenged the legislation but now for several years have praised the positive economic and environmental results.

(iii) SLAPPs—Strategic Litigation Against Public Participation

Citizen groups have faced numerous frivolous lawsuits. Take great pains to state only the truth or information you can back up with facts. Members who own homes should check their homeowner's insurance policy as it typically will help pay to defend a defamation law suit. Additional coverage may also be purchased on some policies. Support anti-SLAPP legislation, which has passed now in several states.

(iv) Last word of caution

Even if a reporter appears hostile to your message, don't burn your bridges with reporters by telling them off. This will likely lead to considerable negative press, and reporters are typically close to one another. Reacting defensively with one reporter can hurt your relationships with many.

VI. Conclusion—You've got something they want, so give it to them

Reporters need copy. Put the copy in a form they can readily use. Make the issue accomplish what the media wants—to sell papers and have people stay tuned to their station. Media is a hybrid of news and entertainment, so make your story interesting.

People want to be in the know. Information is a key benefit. If you can shed new light on a subject, many media doors will open for you.

Reporters in large cities working for large papers usually have many stories to choose from. Let them know why yours is the most important, the most urgent, and the most

captivating to the public. Let them know why this is big news, why they want to drop everything and come to you.

Do not overlook media opportunities. A media event does not always have to be a big production. A simple awards ceremony for select public officials can be a great media event. Keep your eyes open. You'll recognize more and more opportunities, more and more avenues. Be creative. Do something new that has never been done.

There are no papers for this section.

Regulatory Framework for Addressing Groundwater Impacted by Oil and Gas Exploration and Production Activities in Texas

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APPENDIX

APPENDIX I - HELPFUL CONTACTS

APPENDIX II - WELL PLUGGING REGULATION 1899 - 1969

Regulatory Framework for Addressing Groundwater Impacted by Oil and Gas Exploration and Production Activities in Texas

I. Introduction

A. Reason For the Topic

1. Need for appropriate regulation is clear. Texas currently has many and varied demands on its groundwater resources. The Texas Water Development Board has stated that during the 1990's groundwater sources accounted for 56 percent of water used in Texas. Due to its widespread availability and relatively low cost, groundwater accounts for about 69 percent of total water used for irrigation and about 41 percent of water used for municipal needs. *See* Texas Water Development Board Report 345, *Aquifers of Texas*, p. 1.

In its August 1997 update to the State Water Plan, the Texas Water Development Board notes that five of the State's nine major aquifers (the Ogallala, Carrizo-Wilcox, Edwards-Trinity[Plateau], Seymore, and Cenozoic Pecos Alluvium) have experienced quality deterioration due to petroleum industry activities. *See* Texas Water Development Board Document No. GP-6-2, pp 3-205 - 3-236 (August 1997).

Demand for groundwater resources will increase. Texas now has 20 million people, and that number is expected to double by 2050. In addition, every study of projected growth suggests that groundwater will continue to be critical to our agricultural economy, to our coastal and inland fisheries, and to the protection of animals and plants dependent either directly on such water, or on surface waters hydrologically connected to groundwater. At the same time that demand for water is increasing, Texas is experiencing a drought period that is also expected to continue.

2. Locating and applying the regulations is not so clear. In response to the need for useable water, both the Texas Legislature and Congress have passed numerous laws over the years, and the agencies charged with the responsibility for carrying out such legislation have promulgated various regulations. There is however no one central location where one can go to find all of the applicable regulations. This is due partly to our dual system of laws and to the detail to which the various regulatory bodies have seen fit to do their bidding. As a result, the practitioner new to this area, when trying to analyze possible groundwater contamination from an oil and gas exploration and production (E&P) activity, will likely have an uneasy feeling about whether all of the applicable regulations have even been located, much less whether they've been properly applied.

This paper identifies the major categories of State and Federal groundwater laws and regulations that may be applicable to oil and gas E&P activities in Texas, and provides examples as to how such laws and regulations should be applied. It is not a compendium of all potentially applicable regulations, but we hope the paper serves at least as a starting point for practitioners faced with such groundwater issues, and thereby reduce some of the uneasiness associated with analysing these kinds of regulatory obligations.

B. How the Topic will be Addressed

1. What is covered. The paper will initially address the types of activities that occur during oil and gas exploration and production (E&P) operations, including their possible impact on groundwater. Following this, the paper addresses the authority of the Texas Railroad Commission to regulate the impact of groundwater from E&P activities, and the Commission's process for addressing such actual or potential impact. The major Federal laws applicable are then listed. Finally, four examples are given to illustrate how the framework is applied.

2. What is not covered. As the title suggests, the focus is regulatory, groundwater, E&P, and Texas. Accordingly, the paper does not address litigation matters such as the elements of causes of action and defences that might be filed in a lawsuit. Surface water issues are also outside the scope of this paper, although many of the regulations that address groundwater are also applicable to surface water. Because the focus is on E&P issues, other aspects of the oil and gas industry, such as refining and marketing "downstream" activities are not included. As a result, issues such as underground storage tanks (UST) are not addressed, even though USTs can be found at E&P facilities. Finally, the focus is on Texas, even when reviewing Federal acts. The federally approved UIC programs in Texas, for example, may not be the same as an approved equivalent program in another state, so a word of caution is in order before applying the contents of this paper outside of Texas.

II. Impact of Exploration and Production Activities

Oil and gas E & P operations include all activities related to the search for, and extraction of, liquid and gas petroleum from beneath the earth's surface. In conducting such operations, the potential exists for contamination of groundwater. The following sections describe some of the work performed in the field to provide the reader with an understanding of the potential threats E&P may pose to groundwater.

A. Potential Sources of Contaminants

1. Exploration.

a) Seismic activities. Found almost exclusively in sedimentary rocks, oil and natural gas accumulate in geologic confinements called traps

which, by virtue of an impermeable overlying layer, have stopped the migration of the fluid. The volume of petroleum contained in a trap can vary from negligible to billions of barrels.

Though at one time such traps may have been close enough to the surface to allow easy detection (*i.e.*, surface seepage), modern exploration relies on sophisticated geophysical testing techniques to locate potentially producible formations. Gravitational and seismic surveys of subsurface geology provide indirect indications of the likelihood of finding promising geological formations. This process is complicated in the U.S. because the average depth at which one may reasonably expect to find oil is increasing since many of the largest shallow formations are assumed to have been found already.

Although, in terms of the potential to contaminate groundwater, "shooting seismic" is likely to be the least troublesome of E&P activities, operators must still exercise care. Preparing the ground for the survey may mean clearing land, with possible stormwater runoff implications. While most modern surveys are conducted by sending and receiving sound waves from heavy equipment, it is not uncommon to drill holes and use explosive charges to generate the needed sound waves. Finally, the trucks and equipment used could also have leaks and spills.

b) Drilling. Drilling operations generally require construction of access roads, drill pads, mud pits, and possibly work camps or temporary trailers. Drill pads are areas used to stage the drilling operation and generally range from 2 to 5 acres. The pad accommodates the drilling rig and associated operations including pumps, reserve pits, and mud tanks.

Modern well drilling involves the use of a rotary drill to bore through soil and rock to the desired well depth. The drill bit is constantly washed with a circulating drilling fluid, or "mud," which serves to cool and lubricate the bit and remove the cuttings to the surface. The drilling mud also serves to prevent "blowouts" from overpressured water and gas bearing formations. If the drilling reaches the desired depth and fails to locate a producible deposit of oil or gas, the well must be plugged and the site abandoned. Even if oil and/or gas is found the well may not be producible. If the formation fails to exhibit the right combination of expected volume, porosity, and permeability, the costs of extraction may be prohibitive.

Drilling operations are a time of special concern for groundwater protection, as the well may be drilled through useable groundwater, on its way down to find oil and gas. Care must be taken to ensure that fluids

injected, such as muds, and fluids from deeper zones do not enter and contaminate the shallow groundwater.

2. *Production.*

a) Well completion. After a well has been drilled, it is "completed" if well testing data indicate that the well is capable of producing commercial quantities of oil or gas. Completion includes a number of operations that may be necessary to allow the well to produce oil or gas. These include installing and cementing casing, installing the production tubing and downhole equipment, repairing damage that drilling may have caused to the formation, and possibly stimulating the well.

During the drilling and production phases of operations, there is a need for numerous structures on site to contain fluids and solid materials. In the past, it was common to dig earthen containers, or pits, for such purposes. In addition to reserve pits associated with drilling and designed to collect cuttings, some muds, and whatever might come up the wellbore, drill wells might also require a flare pit. Before the 1930's when Railroad Commission developed regulations addressing production, operators generally produced as much as they could from any given well, as fast as they could, to keep other operators in the area from draining the production zone. The product generally was placed in earthen storage tanks. The Railroad Commission has long since prohibited the use of earthen storage tanks to store oil, but many such earthen locations, now filled in with dirt, remain in certain areas of the state and have in some cases been a source of groundwater contamination.

Historically, salt water pits were also a common part of production operations. Pits were dug to receive the produced (salt) water after it had been separated from the oil and gas. Such produced water is generally high in chloride content, and may contain hydrocarbons. The water may also have traces of BTEX (benzene, toluene, ethylbenzene and xylene). In the early days of oil and gas operations, the produced water was placed in such pits to either evaporate into the air, or percolate into the soil.

Finally, it was not uncommon to have burn or trash pits at production locations. The pits were designed to receive trash and inert materials such as steel and concrete, but occasionally other wastes such as filters, fluids and materials such as tank bottoms were also disposed of in such pits.

b) Workovers. During a well's active life, periodic "workovers" are necessary. Workovers can include a number of procedures intended to maintain or enhance production such as repairing or replacing downhole equipment, removing accumulated scale or paraffin from tubing or casing, and stimulating the formation to restore or enhance production. Wells can

be stimulated by treating them with acid and/or fracturing, during completion or workover. It is common for wells to be stimulated at completion and then stimulated periodically throughout their lives.

Acid stimulation involves introducing an acid solution to the formation. The acid dissolves the rock, thus creating or enlarging flow path openings. Acids are also used to repair damage to formations caused by drilling or other operations. In addition, they may be used for scale removal and other purposes. Fracturing by hydraulic pressure is achieved by pumping fluids at high pressure (i.e., at high rates) into the well, thereby causing material failure of the rock in the formation of interest (i.e., fractures). The fractures induced in the formations serve as flow paths for hydrocarbons. The process must be conducted in a manner that will ensure that what is injected does not enter useable groundwater.

In instances where the reservoir is sufficiently large, "delineation" wells are drilled to determine the boundary of the reservoir and additional "development" wells are drilled to increase the rate of production from the "field." Because few new wells in the U.S. have sufficient energy (pressure) to force oil all the way to the surface, surface or submersible pumps are placed at the wells and production begins.

c) Enhanced recovery. The first phase of production may continue for several to many years, requiring only routine maintenance to the wells. However, as the oil is removed from the formation, the formation pressure decreases until the wells will no longer produce. Because a large portion of the total recoverable oil may remain in the formation, additional energy may be supplied to produce the remaining product out of the formation. Common methods of supplying the energy needed include controlled injection of water or carbon dioxide from the surface into the formation. The injected media acts to push the oil toward the well bores. Such secondary recovery or "water flooding" projects may employ hundreds of injection wells throughout a field to extend the life of the wells. Much of the water used for injection is produced water that was originally brought to the surface along with oil from the producing well. Such water is separated from the oil, and then reinjected. There have been occasions where injected water has migrated to shallower, drinking water zones, either through natural fissures, or through existing or abandoned wellbores. This movement to shallower zones can also occur when produced water and other E & P wastes are injected for disposal purposes.

d) Gathering facilities. Production from well sites is often gathered and sent to a central location, sometimes called a central treating facility, to separate out the oil, gas and waste (*e.g.*, produced water, emulsions, scale, and produced sand.) The process takes place generally at a central

location because it would be costly to provide such vessels and tanks at each well site. The potential exists at and around such central locations for spills and leaks from gathering lines, tanks and vessels. Historically it was also not uncommon to dispose of wastes such as tank bottoms on location.

Oil is generally separated from emulsion that comes from the wellbore, and is sent to a refinery, either through a pipeline or by truck. Natural gas may require conditioning to remove impurities (*e.g.*, hydrogen sulfide). In some instances, it may be economical to process the gas to take out liquids that can be fractionated for sale (*e.g.*, propane and butane). There may also be numerous chemicals used in these processes. For example, if dehydration is necessary to remove moisture from the gas, quantities of ethylene glycol may be on hand for such use, with the possibility of spills and releases to the environment. Also at such conditioning facilities and processing plants, there are numerous pipes, vessels and tanks, with the corresponding possibility of spills and leaks, and with the corresponding generation of wastes that require disposal.

If the facilities supporting E & P activities in the area are large enough, it may be necessary to drill wells for usable water. If the number of hookups or end users is high enough, such water systems must be registered and monitored.

e) Abandonment. When a well or field ceases to produce oil or gas at an economically feasible rate, the field must be abandoned and reclaimed. In doing so, all remaining wellbores that have no utility must be properly plugged and abandoned. Inactive, unplugged wells are a problem because of the potential for pollution of surface and sub surface water due to leaks and/or the wellbore serving as a conduit between subsurface freshwater and brine or oil zones. Another major issue in the abandonment process will be wastes. Historically, it was not uncommon when decommissioning a facility to bury discarded materials on site. If a gas processing plant had a cooling tower, for example, parts of the cooling tower, which might have contained chemicals such as chromium, may have been buried along with other wastes. Wooden cooling tower slats, which might have been treated with arsenic when in use within the cooling tower, might also be buried on site.

B. Historical Impact

According to the Texas Groundwater Protection Committee Joint Groundwater Monitoring and Contamination Report - 1998 (released October, 1999), the Railroad Commission of Texas was, as of December 1998, handling 94 groundwater contamination cases located in 57 counties concerning oil and gas

E&P activities. The Commission is currently handling 127 such cases. While it is difficult to say in advance which E&P practices pose the greatest threats to groundwater, an analysis of the current cases, and anecdotal evidence, suggests certain patterns.

- Spills and leaks. Hydrocarbon contamination of groundwater from spills and leaks at wellheads, tanks, gas plants and pipelines continues to be an issue. Many of these releases are historical events.

- Injection and disposal. Although not large in number, problems associated with produced water injected for enhanced recovery of oil, or injected for fluid disposal purposes, exist. These can be especially costly to address because of the large volumes of injected fluids involved.

- Wellbore problems. The Commission continues to see problems associated with improperly plugged wells and inadequate completion procedures. These can result in pollution due to leaks and also due to the wellbore acting as a conduit between subsurface freshwater and brine or oil zones.

- Salt water evaporation pits. Saltwater contamination from the historic use of pits for disposal of salt water, either through evaporation or percolation, has proven to be a concern. Railroad Commission staff notes that we are just now beginning to see the sometimes unfortunate impact of that practice.

The Railroad Commission, in carrying out its legislative responsibility to address groundwater contamination, is mindful that not every incident of groundwater contamination in an oil and gas field is as a result of E&P activities. Salt beds naturally leach; fractures between underground fresh water, saltwater and hydrocarbon intervals, may occur naturally and allow for cross contamination. Beds of the old Permian Sea in west Texas have been noted as a source of fresh groundwater contamination. Obtaining the data necessary to accurately determine the exact source of groundwater contamination, hundreds and thousands of feet below the surface, is not always an easy task.

III. Railroad Commission Authority

A. Can the Commission do that?

1. Statutory authority

a) Early history. Regulating E & P *vis a vis* groundwater has been evolving since before the twentieth century. In 1899 the 26th Legislature enacted Texas' first effort to keep oil and subsurface water separated. House Bill No. 542 required the owner or operator of any well being constructed for the production of petroleum oil, natural gas or mineral water to encase the well with steel or iron casing to prevent all surface or fresh water from the lower part of the well from

penetrating the oil or gas bearing rock. *H. B. No. 542, § 1, 26th Leg. 1899, effective March 29, 1899.* Although the "emergency" giving rise to suspension of reading H. B. 542 on three consecutive days was concern over the Navarro County oil field being ruined by surface water in abandoned wells, the statute does plainly require fresh groundwater and oil, gas and mineral water to remain separated in drilling and plugging wells. Section 2 of H. B. 542 required abandoned wells to be plugged in such manner as shall prevent the gas and oil from escaping from the first oil and gas bearing rock.

Railroad Commission jurisdiction over oil and gas exploration and production became possible after a State election held on August 21, 1917, ratified Article XVI, Section 59a of the Texas Constitution which provides:

> . . . the preservation and conservation of all such natural resources of the State are each and all hereby declared public rights and duties, and the Legislature shall pass all such laws as may be appropriate thereto.

Railroad Commission jurisdiction over E & P activities derived first from its power to regulate railroads and common carriers. The Commission had been in business regulating railroads for about 26 years when the Legislature in 1917 declared that persons could not transport crude petroleum for purchase and sale unless "the pipeline used for such business be a common carrier within the purview of this law and subject to the jurisdiction herein conferred on the Railroad Commission of Texas." *Acts 1917, 35th Leg. Ch. 30 § 2.*

The 36th legislature in 1919 established the "duty of the Railroad Commission to make and establish rules and regulations for the conservation of oil and gas", and enumerated such duties as requiring dry or abandoned wells to be plugged in such a way as to confine oil, gas and water in the strata in which they were found, not allowing oil, gas or water to migrate to strata different from where they were found and to require wells to be drilled in a manner as to prevent injury to the adjoining property. *Acts 1919, 36th Leg. Ch. 155 Art. 3.*

In 1955 the 54th Legislature directed the Railroad Commission to make and enforce rules, regulations and orders in connection with drilling, production, operation abandonment and proper plugging of oil and gas wells or any purpose in connection therewith "to prevent pollution of the streams and public bodies of surface waters in the state and any sub surface water strata that are capable of producing water suitable for domestic or livestock use, or for irrigation of crops or for industrial use which would or might result from the escape or release of crude petroleum oil, salt water, or other mineralized waters from any such well, or from operations connected therewith." *Acts 1955, 54th Leg. P. 1097, ch 406 § 1.*

b) Recent history. Current statements of Railroad Commission authority to regulate E&P groundwater impact issues are found in the Texas Natural Resources Code and the Texas Water Code.

The Texas Natural Resources Code states that the Railroad Commission has jurisdiction over all:

- common carrier pipelines defined § 111.002 of this code in Texas;
- oil and gas wells in Texas;
- persons owning or operating pipelines in Texas; and
- persons owning or engaged in drilling or operating oil or gas wells in Texas.

Tex. Nat Rec. Code Ann. § 81.051(a) (Vernon 1993).

In addition, Section 91.101 of the Natural Resources Code, initially adopted in 1977, provides that the Railroad Commission, to prevent pollution of surface water or subsurface water in the state, shall adopt rules and orders and may issue permits relating to the drilling of exploratory wells and oil and gas wells or any purpose in connection with them, the production of oil and gas, including the activities enumerated in Water Code Section 26.131 (a) (1) (A-F), the operation, abandonment and proper plugging of wells subject to the jurisdiction of the commission and matters dealing with oil and gas waste as that term is defined in Natural Resources Code Section 91.1011. *Tex. Nat Rec. Code Ann. § 91.101 (Vernon 1993).*

Section 26.131 of the Texas Water Code, initially adopted in 1977, provides

> (a) The Railroad Commission of Texas is *solely responsible* for the control and disposition of waste and the abatement and prevention of pollution of surface and subsurface water resulting from:
>
> (1) activities associated with the exploration, development, and production of oil or gas or geothermal resources, including:
>
> (A) activities associated with the drilling of injection water source wells which penetrate the base of useable quality water;

(B) activities associated with the drilling of cathodic protection holes associated with the cathodic protection of wells and pipelines subject to the jurisdiction of the Railroad Commission of Texas;

(C) activities associated with gasoline plants, natural gas or natural gas liquids processing plants, pressure maintenance plants, or repressurizing plants;

(D) activities associated with any underground natural gas storage facility, provided the terms "natural gas" and "storage facility" shall have the meanings set out in Section 91.173, Natural Resources Code;

(E) activities associated with any underground hydrocarbon storage facility, provided the terms "hydrocarbons" and "underground hydrocarbon storage facility" shall have the meanings set out in Section 91.201, Natural Resources Code; and

(F) activities associated with the storage, handling, reclamation, gathering, transportation, or distribution of oil or gas prior to the refining of such oil or prior to the use of such gas in any manufacturing process or as a residential or industrial fuel;

(2) except to the extent the activities are regulated by the Texas Department of Health under Chapter 401, Health and Safety Code, activities associated with uranium exploration consisting of the disturbance of the surface or subsurface for the purpose of or related to determining the location, quantity, or quality of uranium ore; and

(3) any other activities regulated by the Railroad Commission of Texas pursuant to Section 91.101, Natural Resources Code.

Tex. Water Code Ann. § 26.131 (Vernon 2000)

2. *Regulations.* The Railroad Commission's regulatory efforts have evolved as well. The Railroad Commission has promulgated rules at various times since 1919, but it is helpful to look at them in three stages: the first statewide rules

enunciated in Circular 11 of 1919; Circular 16-B of 1934 and subsequent regulations; and finally the rules codified in 16 Texas Administrative Code. In addition to statutes and regulations, individual oil fields may be subject to permits, special field rules and Commission orders.[1] The following discussion touches on the three mentioned "waves" of regulation.

a) First steps - Circular 11. The Railroad Commission adopted its first water protection provision, Rule 20, *Fresh Water to be Protected*, to be effective July 26, 1919, as part of Oil and Gas Circular No. 11 promulgated "in pursuance of the provisions and requirements of Chapter 155, Acts of the 36th Legislature of Texas . . . to Conserve the Oil and Gas Resources of the State of Texas." Rule 20 stated:

> Fresh Water, whether above or below the surface, shall be protected from pollution, whether in drilling or plugging.

Other rules in the same circular touched on groundwater issues. Rule 10 required all dry or abandoned wells to be plugged by confining all oil, gas or water in the strata in which they occur. Rule 16 provided that no well shall be drilled through below any oil, gas or water stratum without sealing off such stratum and the contents thereof. . . . . Rule 39 (7) (adopted May 1, 1920) prohibited open earthen storage for merchantable oil except where the Commission granted an exception, and required such storage then in use to be discontinued within a reasonable time.

b) Second steps - Circular 16-B, et seq. Oil and gas circular No.16-B was promulgated in 1934, and included general statewide rules and special rules for various oilfields around the state. Rule 20 was modified to state:

> Fresh water, whether above or below the surface, shall be protected from pollution, whether in drilling, plugging, or disposing of salt water already produced.

Rule 12 in 1934 required a "sufficient amount of surface casing to protect fresh water sands which are or may be a source of water for that area or field." Rule 16 remained the same and required strata to be sealed off.

On February 1, 1934, a memorandum issued from the Railroad Commission which called for more general regulation of well plugging techniques. Of particular note in that memorandum was section two which called for the spot

[1] Any practitioner faced with groundwater contamination issues should check with the Commission for the existence of permits, special field rules and orders in addition to evaluating potentially applicable statutes and regulations. It is recommended that the Production and Permitting and Environmental Services Divisions Sections be contacted. Telephone numbers are listed in Appendix I, HELPFUL CONTACTS.

plugging of high pressure gas and water formations with cement. This type of plugging procedure would isolate gas and water and would prevent them from migrating up the wellbore to fresh water zones.[2]

On March 19, 1955, Rule 55 was added to define "exploratory wells" and subject them to Railroad Commission jurisdiction governed by the provisions of the rules of statewide application which are applicable to the drilling, safety, casing, abandoning, and plugging of exploratory wells in the same manner as prescribed for oil and gas and injection wells, and in particular that operations in connection therewith be carried out such that no pollution of the water of the state will occur.

c) Third steps - 16 Texas Administrative Code. Today the Commission oversees and regulates many specific exploration and production activities with a view toward protecting groundwater. These regulations are found in 16 Texas Administrative Code (TAC) Chapter Three. The regulations are accessible through the Railroad Commission website, www.rrc.state.tx.us. These provisions are commonly referred to as "Statewide Rules" and are referenced by number, (*e. g.* Rule 8), a practice in place since publication of the circulars.

Disposal of oil and gas wastes by injection is covered by Statewide Rule 9 (*16 TAC § 3.9*), the injection of fluid for enhanced oil recovery by Statewide Rule 46 (*16 TAC § 3.46*), and the underground storage of hydrocarbons by Statewide Rules 95, 96, and 97 (*16 TAC § 3.95, 3.96, 3.97*). The Commission's Underground Injection Control Program for these categories of wells (Class II) is administered as an EPA approved program under the Safe Drinking Water Act. The focus of the program is the protection of underground sources of drinking water. Class II wells must meet permitting standards and be tested and monitored to demonstrate mechanical integrity.

Well plugging is covered by Statewide Rule 14 (*16 TAC § 3.14*). Statewide Rule 20 (*16 TAC § 3.20*) requires operators to report all fires, breaks, leaks and blowouts. Rule 91 (*16 TAC § 3.91)* covers the cleanup of soil contaminated by a crude oil spill, and establishes two categories of spills in creating cleanup requirements: 1. Crude spills in non sensitive areas (final cleanup level of 1% total petroleum hydrocarbon by weight), and 2. Crude spills in sensitive areas and condensate spills everywhere (cleanup requirements handled on case by case basis). Railroad Commission policy provides that all spills that threaten

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[2] A detailed example of the evolution of Commission oversight of a groundwater critical element of E & P appears in Appendix II, WELL PLUGGING REGULATION 1899 - 1969, which chronicles the history and sources of well plugging provisions from 1899 - 1969. As can be seen from this sample topic (well plugging), there has been a definite evolving of regulations at the Railroad Commission since early in the 20th century. The Commission's most recent efforts at well plugging regulation regarding W 1X extensions are out for public comment.

groundwater fit into the "spills in sensitive areas" category, so that cleanup requirements are established on a case by case basis. Rule 91 states, "Where cleanup requirements are to be determined on a case by case basis, the operator must consult with the appropriate district office on proper cleanup standards and method, reporting requirements, or other special procedures." *16 TAC § 3.91 (b).*

Statewide Rule 8, Water Protection, (*16 TAC § 3.8*) is the primary Commission rule for protecting groundwater. It combined Rules 20 and 55 when first adopted, effective January 1, 1969. Through the current version of Rule 8, the Railroad Commission regulates the surface storage and disposal of oil and gas wastes. Rule 8 requires permits for pits and disposal methods that are not specifically authorized by the rule. There are currently 44 land farming facilities permitted for disposal of oil and gas waste and 4,687 pits permitted for storage or disposal of oil and gas wastes or retention of brine. Of the 4,687 permits, approximately 44 percent authorize pits to be used for short-term storage (48 to 72 hours) of produced water during emergency situations. The remaining permits are for various categories of pits, including saltwater disposal pits, collecting pits, skimming pits, brine pits, brine mining pits, and drilling fluid and gas plant evaporation/retention pits. Many of the pit permits require liners and leak detection systems.

Rule 8 permits may also contain groundwater monitoring requirements in certain circumstances. The Railroad Commission monitors 109 wells associated with 52 disposal sites regulated under Rule 8. No monitoring wells were determined to be affected by contamination in 1998.

B. The Process

1. Allegation. Claims of groundwater contamination through E&P operations usually arise in one of three ways. A landowner may complain, either to an operator, or to the Railroad Commission (e.g., elevated chlorides in a home water well). The agency may raise the issue as the result of an audit, or other investigation. A third way is for an E&P operator to report a finding, either because a regulation obligates the reporting, or because the operator elects to do so, though not otherwise obligated.

2. Contamination exist? A central question that may arise when an allegation is made is when is there sufficient cause to merit further investigation. A claim by a landowner that water coming from his well tastes different may not be enough. A report of elevated chlorides with traces of oil and grease would certainly be enough to merit further investigation. The Commission's response may include investigation and sampling by the appropriate District Office. Oil-field cleanup is under the jurisdiction of the Commission and is regulated by Statewide Rule 8, Statewide Rule 91 (*16 TAC §* 3.91) and Commission Special Orders.

3. *Regulation violated?* The Railroad Commission must rely on a law, Commission order or regulation as a basis for holding an operator or other responsible person accountable for an alleged groundwater problem. It should be noted that the Railroad Commission approaches its authority to protect groundwater from the point of view that historical laws and Rules are quite broad, should be read in the context of Article XVI, Section 59a of the Texas Constitution (public interest in protecting natural resources), and – at least from 1919 forward – did not allow oil, gas or water to migrate to strata different from where they were found and required wells to be drilled in a manner to prevent injury to the adjoining property. *Acts 1919, 36th Leg. Ch. 155 Art. 3.* Nevertheless, if the likely cause of the problem is historical, this may require analysing orders and regulations that were in effect at the time the problem was caused.

4. *Who is responsible?* From the Railroad Commission's perspective, a rebuttable presumption exists that all environmental problems, including groundwater problems, associated with oil and gas activities, are the responsibility of the current or most recent operator. The Commission's P-4 form (Producer's Transportation Authority and Certificate of Compliance) which all current operators complete before taking over operations includes a declaration that as of the time the operator commences operation, the lease is in full compliance with all Commission regulations. If that operator can convince the Commission that the problem was caused by someone else, the Commission will likely pursue the party it believes responsible.

5. *Assessment.* Once the Commission has reason to believe a groundwater problem exists, it will want to know the extent, if any, that harm, or the potential for harm, exists. If no acceptable assessment exists, the Commission will likely ask the operator (or responsible party, if not the operator), to provide one. The Commission primarily wants to know the size and aerial extent of any location or plume of contaminants, the contents of the contaminated area or plume, and the speed and direction of the movement of the contamination or plume.

6. *Remediation.* Responsible parties may volunteer remedial action or cleanup may be required by legal action. When investigation and research cannot locate a responsible party, the Site Remediation Section of the Oil and Gas Division's Environmental Services will oversee the remediation of the groundwater contamination with state funds. Monitoring wells are associated with all cases involving groundwater contamination.

What to do with groundwater contamination is generally treated on a case by case basis. If groundwater contamination occurs at a site, the responsible party is required to remediate to acceptable levels. Important considerations are the types of contaminants in the groundwater, and possible pathways for the contaminants to impact people, animals or plants. The Commission often employs or suggests

a health based risk analysis as useful in determining what should be done. A plume with small amounts of mild contaminants that isn't going anywhere, under land owned by the operator will likely be addressed differently from a large plume containing hazardous substances located in the middle of an aquifer that is the sole source of drinking water for an area.

C. Enforcement

The Commission's enforcement paradigm can be divided into three categories - informal, formal hearing and litigation. Once field staff or remediation personnel report a matter, the Environmental Services arm of the Office of General Counsel will solicit voluntary remediation efforts from the party the Commission believes is responsible. If in a short time these efforts fail and a formal hearing may be necessary, the matter is referred to the Enforcement Section of the Office of General Counsel. Ultimately, enforcement efforts can end up referred to the Attorney General for litigation.

Since 1983, the Commission has been empowered to assess administrative penalties for operators who violate Commission rules. *Tex. Nat Rec. Code § 81.0531 (Vernon 1993)* (authorizing administrative penalties of up to $10,000.00 per day).

Violations of Statewide Rules 14 and 8 account for the great majority of the penalty assessments. Rule 14 requires an operator to produce or plug an inactive well after a certain time period and Rule 8 prohibits unauthorized discharges into the surface or subsurface waters of the state.

Once referred to enforcement, a docket is created and the case is assigned to a staff prosecutor who produces a complaint detailing the rule violations. The complaint is sent to the operator who is given an opportunity for a hearing and an opportunity to settle. The enforcement staff determines the penalty amount based upon commission - approved penalty guidelines which are, in turn, based upon the factors set out in the administrative penalty statute. Tex. Nat Rec. Code § 81.0531 (c) (Vernon 1993).

If the operator does not respond, the Commission prosecutes under its default process which involves proving the violation at a default hearing presided by a hearings examiner. This process is a contested case proceeding governed by the Administrative Procedure Act (APA). The examiner later presents a master default order to the Commission for approval.

Operators who desire a hearing are afforded one and those hearings called protested hearings are also conducted in front of a hearings examiner. The examiner produces a Proposal for Decision and again this process concludes with a Final Order. Of course, under the APA, operators are given the right to file a

Motion for Rehearing. Note that the Legislature last session lengthened the time to file a Motion for Rehearing from 20 to 23 days.

The enforcement process can lead to a referral of Final Orders to the Attorney General for litigation. In addition to Final Orders, the Commission also refers state-funded well plugging and site remediation claims for collection. The Attorney General abstracts judgments against these operators and there have been instances in which the abstracts paid off years after the judgment was obtained.

IV. Federal Jurisdiction

The primary federal statutes and regulations applicable to groundwater contamination by oil and gas operations are the Safe Drinking Water Act (SDWA), the Clean Water Act (CWA), the Resource Conservation and Recovery Act (RCRA), the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), and the Emergency Planning and Community Right to Know Act (EPCRA.)

A. The Safe Drinking Water Act (SDWA)

1. Purpose. The SDWA, 42 U.S.C. § 300f *et seq*, was enacted in 1974 in response to the discovery of organic chemicals and other pollutants in American drinking water systems. The Act enables several programs, including the public water supply system, sole source aquifer, wellhead protection, and underground injection control (UIC) programs.

2. Applicability. The **public water system program** sets minimum standards for contaminant levels (MCLs) in public water supply systems. (SDWA §§ 1411 - 1417, 42 USC §§ 300g - 300g-6) Generally, any system that has at least 15 service connections or regularly serves at least 25 people is subject to regulation under this program, which TNRCC administers in Texas. There are occasions on which larger E&P operations depending on privately drilled water wells may be affected by this program, but the topic will not be covered in this paper.

Under the **sole source aquifer program** (SDWA § 1424(e), 42 U.S.C. § 300h-3(e)), EPA designates aquifers which are a sole or principal source of drinking water for an area and reviews proposals for federal financial assistance in their recharge zones to assure the assisted projects do not create a significant hazard to public health. Because few, if any, E&P operations are federally funded, this program has little or no effect on such operations.

The **wellhead protection program** (SDWA § 1428, 42 U.S.C. § 300h-7) requires that states develop programs to protect public water supply wells from anthropogenic sources of contamination. Texas has a "voluntary" program under which TNRCC establishes wellhead protection zones representing distance groundwater contamination may travel in 5 years (generally 1/4 to 2-1/2 mile

radius from wellhead), local governments inventory potential contamination sources in zones and *may* adopt protective ordinances or establish non-regulatory programs. Wellhead protection program primarily affects E&P operational siting, e.g., operators should generally avoid seismic or drilling operations in protection zones. TNRCC also considers wellhead protection zones in establishing casing depth requirements applied by the Railroad Commission. .

The **UIC program** is primarily established by SDWA § 1422, 42 U.S.C. § 300h-1. EPA regulations at 40 C.F.R. Parts 144, 145, and 146 establish various programmatic classes for various types of injection wells and minimum requirements for approval of state regulatory programs for each class. Such programs are primarily intended to protect both actual and potential sources of drinking water, generally any aquifer with less than 10,000 ppm total dissolved solids. EPA's state program approvals are codified at 40 C.F.R. Part 147. For the most part, TNRCC is authorized to implement all but the Class II program in Texas.

Under SDWA § 1423, 42. U.S.C. § 300h-2, federal enforcement of an approved state UIC program is secondary, *i.e.*, EPA must generally provide a "primacy" state a 30 day opportunity to commence appropriate enforcement action before it can take a federal enforcement action for a program violation. EPA may also address actual or threatened drinking water contamination which is 'an imminent and substantial endangerment to the health of persons" on an emergency basis if appropriate state agencies fail to act under SDWA 1431, 42 U.S.C. § 300i.

In 1980, Congress amended the Act and established an "optional demonstration" for state Class II (produced water injection wells, secondary/tertiary recovery wells, and hydrocarbon storage wells) programs. Pursuant to SDWA 1425, 42 U.S.C. §300h-4, EPA is essentially required to approve such a program if it is "effective" and the Agency has promulgated no regulations establishing minimum requirements for them. It has, however, published guidance at 46 Fed. Reg. 27333 (May 19, 1981). Because E&P operators in Texas must generally dispose of produced water *via* class II injection wells, this program is of great importance to them. EPA has authorized the Railroad Commission to administer the Class II UIC program in Texas. Class II programs do not normally regulate E&P wells, but in *LEAF v. EPA*, 118 F.3d 1467 (11th Cir. 1997), the court held that UIC programs were required to regulate hydraulic fracturing involving fluid injection. The *LEAF* holding is currently applied only to the Alabama UIC program (at issue in the case).

B. The Clean Water Act (CWA)

1. Purpose. The CWA, 33 U.S.C. § 1251 *et seq.* (formerly known as the Federal Water Pollution Control Act) is intended to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters." 33 U.S.C.

§1251(a). CWA 301(a), 33 U.S.C. § 1311(a), renders it generally unlawful to discharge pollutants to surface waters in the absence of an authorizing permit, most frequently a national pollutant discharge elimination system (NPDES) permit issued pursuant to CWA 402, 33 U.S.C. § 1342. EPA Region 6 currently regulates such discharges from E&P facilities in Texas through NPDES permits. Discharges of oil (and hazardous substances designated at 40 C.F.R. §116.4) to waters of the US, not regulated under NPDES permits, are violations of CWA 311, 33 U.S.C. § 1321, and may give rise to substantial liability for penalties and cleanup costs. The Oil Pollution Act of 1990, 33 U.S.C. §§2701-2719 may also be applicable. Generally, an oil spill of sufficient quantity to cause a "film or sheen upon or discoloration of the surface of the water or adjoining shorelines or cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines" is considered "harmful." (40 C.F.R. §110.3(b)).

2. Applicability. Discharges to groundwater are not generally regulated under the CWA. See *Exxon Corp. v.. Train,* 554 F.2d. (5th Cir. 1977), *Kelley v. United States,* 618 F.Supp. 1103, 1107 (W.D. Mich. 1985). Some courts have held discharges which reach jurisdictional surface waters through groundwater, however, are subject to regulation under CWA. See *Quivera Mining Co. v. U.S. EPA*, 765 F.2d 126, 129-130 (10th Cir. 1985); cert. denied, 474 U.S. 1055 (1986); *Washington Wilderness Coalition v. Hecla Mining Co.*, 870 F.Supp. 983 (E.D. Wash. 1994); *Sierra Club v. Colorado Refining Co.*, 838 F.Supp. 1428 (D. Col. 1993); *Friends of Santa Fe County v. LAC Minerals,* 892 F.Supp. 133, 1357-58 (D. N.M. 1995); *Williams Pipeline Co. v. Bayer Corp.*, 964 F.Supp. 1300, 1319-20 (S.D. Iowa 1997). Others have disagreed. See, e.g., *Umatilla Water Quality Protective Association, Inc. v. Smith Frozen Foods, Inc.*, 962 F.Supp. 1312 (D.Or. 1997).

3. CWA Regulations. No EPA regulations directly address application of the CWA to alleged groundwater contamination.

C. The Resource Conservation and Recovery Act (RCRA)

1. Purpose. RCRA, formally enacted in 1976 as an amendment to the Solid Waste Disposal Act, is today said to regulate the generation, handling, treatment, storage, transportation, and disposal of solid and hazardous wastes (42 U.S.C.A. § 6901 *et seq.*). In an effort to secure enforcement of the Act's provisions, Congress conferred enforcement power not only on the EPA, but also on duly authorized state agencies, and in certain circumstances on affected US citizens, through citizen suits.

2. Applicability. The main provisions of RCRA address the handling of hazardous waste, although RCRA also addresses solid (*i.e.*, non-hazardous) waste. Certain E&P wastes, though otherwise hazardous, are exempt from being covered by the regulations. Being exempt from being deemed hazardous does not mean

all waste is exempt from RCRA, in that certain provisions of the Act apply also to solid waste, where there is an imminent and substantial threat of harm.

a) The RCRA E&P exemption (hazardous waste). The 1984 amendments to RCRA required the EPA to conduct a study and report to Congress regarding the impact of certain oil and gas wastes ("drilling fluids, produced waters and other wastes associated with the exploration, development, or production of crude oil and natural gas"). These wastes were to be temporarily exempt from being deemed RCRA hazardous (the "E&P RCRA exemption"). The EPA was to then submit a determination to Congress as to whether the exemption should be continued. The EPA submitted its report in December 1987 and its determination (that the exemption should continue) in 1988.

For oil and gas operations, the E&P RCRA exemption applies if the substance is hazardous as defined in RCRA, and the substance is a drilling fluid, produced water, or other associated waste. The rule of thumb generally applied is that anything coming up the wellbore (even if put down the wellbore by the operator to stimulate production), and anything that comes in contact with the production to enhance its value (*e.g.*, ethylene glycol to remove moisture) falls under the exemption. It should be noted therefore that not all hazardous production wastes fall under the exemption. Hazardous chemicals that are spilled or released that never entered the wellbore, and never came in contact with the flow stream, likely do not fall within the exemption. The same would be true of lube oil used on compressors, or even ethylene glycol, if used as an antifreeze in one of the engines.

b) RCRA 7002 and 7003. These RCRA sections have only recently been applied in the oil and gas context. RCRA 7002 allows for citizen suits to compel a clean up of contamination which may present an *imminent and substantial endangerment* to health or the environment. RCRA 7003 provides authority for an agency to compel a clean up for the same type of contamination as addressed by RCRA 7002. The important feature to these sections is that they apply to hazardous wastes and solid wastes. Because the RCRA E&P exemption applies to hazardous wastes only, RCRA 7002 and 7003 are said to be available even to waste that are E&P exempt, as long a such wastes meet the definition of "solid waste." Just about any type of waste (gas and liquids included) will meet the definition of solid waste.

3. RCRA Regulations. The regulations concerning RCRA are found at 40 CFR Part 260. The RCRA E&P exemption is noted at 40 CFR 261.4(b)(5). EPA clarifications as to those oil and gas wastes which qualify for the RCRA E&P exemption are published at 53 FR 25446 (1988), and 58 FR 15284 (1993).

D. The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

1. Purpose. Congress passed CERCLA in 1980, primarily to address clean up of abandoned and inactive waste sites where hazardous substances could be released into the environment, including groundwater (42 U.S.C.A. § 9601 *et seq.*). Certain provisions of CERCLA also require notification to the EPA. Specifically, immediate notification to the National Response Center is required in the event of a release of a hazardous substance into the environment from a vessel or facility, equal to or in excess of the reportable quantity (RQ) for that hazardous substance, within a 24 hour period (Section 9603). "Hazardous substance" as defined in Section 9601 means substances EPA designates pursuant to Section 9602 or under various provisions of CWA, Clean Air Act (CAA), Toxic Substances Control Act (TSCA), and RCRA.

2. Applicability. The Act applies to clean up and reporting of those certain hazardous substances identified, with certain exceptions.

a) The RCRA E&P exemption. For almost all hazardous substances, the RCRA E&P exemption will likely not exclude such substances from CERCLA coverage. Although there are no oil and gas E&P cases directly on point, several courts addressing mining issues (the mining industry has a RCRA exemption similar to the oil and gas E&P exemption) have held that while the mining RCRA exemption does apply to CERCLA, its exemption is limited to those hazardous substances defined by RCRA. That is, if the substance is deemed hazardous by virtue of any of the other four Acts (CWA, CAA, TSCA or CERCLA), then the hazardous substance will fall under CERCLA coverage (absent some other exemption or exclusion), even though it is exempt under RCRA.

b) The petroleum exclusion. CERCLA specifically excludes petroleum from the definitions of hazardous substances. The EPA has indicated that it interprets this exclusion as covering crude oil, fractions of crude oil, and all hazardous substances indigenous thereto. It should be noted that although the great majority of releases to the environment at an oil and gas E&P site would likely fall under the petroleum exclusion for CERCLA analysis, there are some releases (*e.g.*, lube oil leaks from a compressor) that would not fall within the petroleum exclusion. Further, it should be noted that adding a hazardous substance to a crude product may cause the mixture to lose its petroleum exclusion. For example, produced water that comes up a wellbore with production would get the petroleum exclusion. However, if something non indigenous to the production stream is introduced (*e.g.*, a corrosion inhibitor injected into the flow line), to the extent the mixed stream is hazardous due to the injection of the inhibitor, the mixed stream would not get the petroleum exclusion.

c) Inroads to the exclusion. In the case of *Cose v. Getty Oil Co*, 881 F.2d 801 (9th Cir.1993), the 9th Circuit ruled that tank bottoms containing a hazardous substance (chrysene in this case) were not entitled to the petroleum exclusion because tank bottoms were not really "petroleum" in that tank bottoms would not be subject to the refinery process. To date, *Cose* has been confined to the 9th Circuit, and has not been addressed by the 5th Circuit. The Railroad Commission staff would likely assert *Cose* is wrong and should not apply in Texas. EPA has not ruled out applying it in Texas.

3. CERCLA Regulations. The regulations concerning clean up are found at 40 CFR Part 300, while the regulations addressing reporting obligations are found at 40 CFR Part 302.

E. Emergency Planning and Community Right-To-Know Act (EPCRA)

1. Purpose. Also known as SARA Title III because it was created as part of Superfund re-authorization in 1986, EPCRA was passed by Congress in response to the vapor release of chemicals in Bhopal, India (42 U.S.C.A. §§ 11001 to 11050). The Act applies to inventories on site of certain hazardous substances (§§ 11021 and 11022); an inventory of releases of certain hazardous substances (§ 11023, the Toxic Release Inventory section, which currently does not apply to oil and gas E&P operations); and the reporting of certain releases (§ 11004).

2. Applicability. Section 11004 requires immediate notice to the Local Emergency Planning Committee (LEPC), and the State Emergency Planning Commission (SEPC) when a facility where hazardous substances are used, produced or stored, experiences a release of a CERCLA hazardous substance or an EPCRA extremely hazardous substance (EHS), into the environment, which results in exposure to a person offsite, where the release is excess of an EPCRA reportable quantity (RQ) limit, within a 24 hour period. "Facility" is defined as all buildings, equipment, structures, and other stationary items which are located on a single site or on contiguous or adjacent sites and which are owned or operated by the same person (section 11049).

It should be noted that while the petroleum exclusion will keep CERCLA hazardous substances from being reportable under EPCRA, it will not keep an extremely hazardous substance (EHS) listed substance from being reported under EPCRA. If, for example, crude oil containing hydrogen sulfide was released to the environment, reporting to the National Response Center under CERCLA may not be required (because of the petroleum exclusion, which excludes petroleum substances and hazardous substances indigenous thereto). However, if the amount of hydrogen sulfide in the crude released exceeds the RQ, the release may be reportable under EPCRA to the SEPC and LEPC.

3. *EPCRA Regulations*. The regulations addressing what constitutes an EHS, and setting out the RQ for each, as well as the process for providing notice are set out in 40 CFR Part 355.

V. Application - Examples

A. Recent Release - Enhanced Recovery Operations

1. *Facts*. In 1999, while preparing to shoot seismic in an area, holes were drilled in the ground over the target area in order to insert small explosive charges. While drilling one of these charge holes, salt water began to flow to the surface. An investigation of the facts indicates the source of the salt water is a nearby oil and gas enhanced oil recovery (EOR) program. The operator has been taking produced water that comes up with oil production in the area, and injecting it down a drill well (converted to be used for water injection purposes), in order to sweep oil in the production strata below, over to a currently producing well. Apparently some of the injected water moved over to an old nearby plugged and abandoned wellbore, and either moved up inside the old wellbore, or channeled up outside the old well, into a shallow aquifer, used for drinking purposes.

2. *Railroad Commission Regulations*. Rule 8(b), and perhaps rules 9, 14 and 46 would appear applicable.

- *Rule 8(b) (16 TAC § 3.8)* states that "No person conducting activities subject to regulation by the commission may cause or allow pollution of surface or subsurface water in the state." The rule, adopted in 1977, would appear clearly applicable. The EOR program has been in operations for years, and is in current operations.

- *Rule 14 (16 TAC § 3.14)* requires abandoned wells to be plugged in a manner that does not allow the well to cause or contribute to pollution.

- *Rules 9 and 46 (16 TAC §§ 9 and 46)* are designed to address wells used for injection and disposal of fluids from oil and gas activities. Both rules require a review of the area within 1/4 mile of the radius of the injection well, in order to locate offset wells that might be conduits to shallower water depths. If the old plugged well in this fact situation (the conduit to the shallow zone) was located within 1/4 mile of the injection well, and Rule 9 and 46 were in effect when the injection well was converted into an injector, Rule 9 or 46 would have required a reasonable inquiry into whether the old plugged well might be a conduit.

3. *Federal Regulations*. Absent some extraordinary circumstance, this is not a likely candidate for federal enforcement action. CWA does not apply unless the surface breakout of salt water reaches a surface water. There is a potential violation of the Class II UIC Program, but EPA would take no enforcement action

unless the Railroad Commission fails to commence appropriate action after 30 days notice. Unless contamination of the shallow aquifer poses an "imminent and substantial endangerment to the health of persons" and no State agency will take adequate protective action, issuance of an EPA emergency order under SDWA 1431 is similarly unlikely. The produced water is subject to the RCRA E&P exemption and is only subject to a RCRA 7002 or 7003 action if it is an "imminent and substantial endangerment." CERCLA is inapplicable because of the petroleum exclusion. It is unlikely the operator will be required to provide emergency notification under EPCRA 304 because produced water does not normally contain reportable quantities of an EHS.

B. 1930s Production Casing Leak

1. Facts. A landowner complains to the Railroad Commission of elevated chlorides, and hydrocarbons in a water well she recently completed behind her house. A review of the matter indicates that an oil and gas company had a leak in the production casing of one of its wells in 1938. The problem well was just up dip of the landowner's new well. The facts strongly suggest the 1938 casing leak is the source of the contaminants in the new water well. The problem well has long since been plugged and abandoned, and the operator of that well has had no operations in the area for the last 25 years.

2. Railroad Commission Regulations. In reviewing the regulations applicable to this property in 1938, the Commission may look to at least four Statewide Rules (SWR 12, 16, 20 and 26) applicable at the time of the 1938 release. These SWRs are found in Railroad Commission Oil and Gas Circular No. 16-B, promulgated by the Commission on May 15, 1934. The Commission would also look to the local field rules, to determine if any are applicable to the 1938 release. In the facts as given, the Commission determined there were no fieldwide rules applicable to the production casing leak for the area where the problem well was located.

- *Rule 12. Describing Casing and Tubing Requirements*, states in pertinent part that "[a]ny well drilled in any field or area shall be required to set and cement a sufficient amount of surface casing to properly protect fresh water sands which are or may be a source of water supply for that area or field." If in our example the facts show the operator did not set surface casing to a sufficient depth, then Rule 12 may be the basis for the Commission compelling the operator to address today, what the operator's well caused in 1938.

- *Rule 16. Strata to Be Sealed Off,* states, "[n]o well shall be drilled through or below any oil, gas or water stratum without sealing off such stratum or the contents thereof...."

- *Rule 20. Fresh Water to Be Protected,* states "[f]resh water, whether above or below the surface, shall be protected from pollution whether in drilling, plugging, or disposing of salt water already produced." The question here becomes whether the pollution being addressed is applicable only to drilling, plugging and salt water disposal activities. If so, arguably under our facts, Rule 20 would not apply.

- *Rule 26. Notification of Fire, Breaks, Leaks or Blow-outs* does not appear to apply because the facts do not suggest a fire, break or blow out, and the language addressing leaks references tanks, pipe lines or other receptacles. A subsurface production casing leak does not appear to be what was contemplated. Even if the rule did apply, the rule addresses only notification of such events.

- *Current Rule 8(b) (16 TAC 3.8)* states "[n]o person conducting activities subject to regulation by the commission may cause or allow pollution of surface or subsurface water in the state." However, this rule was adopted after the 1938 event. Could Rule 8(b) be applied retroactively to an event that occurred in 1938, or could it arguably be applied to today's movement of contaminants even though the source of the contamination occurred long before Rule 8(b) was adopted? Suppose the facts are changed slightly - the oil and gas lease is still in effect, including over this area, but there has been no activity in this area for over 25 years. Could Rule 8(b) be said to apply to an event that occurred in 1938 by virtue of the fact the operator is currently operating the lease that covers the area where the production casing leak occurred in 1938?

3. Federal Regulations. No federal enforcement authority appears to address this situation. CWA doesn't apply because there is no discharge to surface water. SDWA does not apply because no public water supply is threatened and no injection well is involved. The RCRA E&P exemption applies to the release. It appears from the facts here that there is no imminent and substantial endangerment warranting action under RCRA 7002 or 7003. CERCLA would likely not be applicable because of the petroleum exclusion. No reportable release occurred while EPCRA was in effect.

C. Historical Salt Water Pit Issue

1. Facts. A landowner can't get crops to grow in a certain area of his pasture. His research indicates the location is where an old commingling facility used to be, where oil and gas production was collected from several wells. There were several salt water disposal pits at the location. The salt water that was separated from the oil and gas was discharged into these pits, where the water either evaporated, or percolated into the ground. There are no current oil and gas operations on the property. The investigation by the Railroad Commission shows

the operator who operated the property abandoned the site in 1932. An analysis of the groundwater beneath the old site indicates high levels of chlorides, oil and grease.

2. Railroad Commission Regulations. A review of the Commission regulations in effect in 1932 indicates that Oil and Gas Circular No. 11, promulgated in 1919, was in effect in 1932. There is no indication of any applicable field rule concerning the subject commingling facilities in 1932. The closest Statewide rule from Circular No. 11 that might be applicable is rule 20.

- *Rule 20. Fresh Water to Be Protected* states that "[f]resh water, whether above or below the surface, shall be protected from pollution, whether in drilling or plugging." Arguably, the activity in question is not addressed. There is no drilling or plugging involved. It should also be noted that when the Statewide rules were replaced in 1934 by Oil and Gas Circular No. 16-B, Rule 20 was rewritten to say that "[f]resh water, whether above or below the surface, shall be protected from pollution, whether in drilling, plugging, *or disposing of salt water already produced.*" (emphasis added).

- *Rule 8(b) (16 TAC 3.8).* For the same reasons indicated above (V. B., "1930s Production Casing Leak"), the issue of whether the current Rule 8, enacted in 1977, could be applied to a salt water disposal method that was known, and not disallowed by regulations, in 1932, is open to question.

3. Federal Regulations. There appears to be little or no federal enforcement authority to address this situation. CWA does not apply because there is no discharge to a surface water. SDWA does not apply because the brine disposal activities do not involve a well and no public water supply is threatened. The produced water is subject to the RCRA E&P exemption and is only subject to a RCRA 7002 or 7003 action if it presents an imminent and substantial endangerment to health or the environment. CERCLA's petroleum exclusion applies. No release from a facility occurred while EPCRA imposed a reporting requirement.

D. Tank Bottom Burial

1. Facts. In 1980, an operator decides production has declined to the point that the field should be abandoned. In cleaning up and restoring the area, the operator removed all of the surface facilities, including the tanks, vessels and pipes associated with a location used for commingling purposes. A year after the operator left the area, the landowner decided to clear the location where the old commingling facility had been located, in order to build several structures. When the contractor cleared the area, a certain volume of stained substances was found. An investigation determined the stained soil was the residue from the bottoms of the storage tanks that were located at the commingling facility. Over the years, when the bottom of the storage tanks became thick with sludge and debris, the

bottoms were cleaned out, and buried at one central site, near the tanks. While there is no indication the tank bottoms got into the groundwater, there is every reason to believe the tank bottoms will eventually leach into the groundwater. An analysis of the tank bottoms indicates a substance that is deemed hazardous under CERCLA.

2. *Railroad Commission Regulations*. While there is no current groundwater contamination, under the facts as given there is a threat to groundwater. The Commission will likely deem Rule 8(b) (*16 TAC 3.8*) as applicable because of the threat to groundwater, especially since the facts indicate the tank bottoms contain hazardous substances.

3. *Federal Regulations*. CWA does not apply because there is no discharge to a surface water. UIC program authorities do not apply because no injection well is involved and there is apparently no imminent and substantial endangerment to the health of persons which might be addressed under SDWA 1431. The RCRA E&P exemption would be applicable under these facts. Application of EPCRA requirements to this situation would be problematic because the facility was abandoned before its enactment in 1986, but if reportable quantities of EHS are present, it might be argued its reporting requirements apply because there is a continuing release. EPA might choose to take action under RCRA 7003 if the facts show imminent and substantial endangerment. EPA might also assert CERCLA applies based on a contention that tank bottoms are not subject to the petroleum exclusion as in *Cose v. Getty Oil,* supra..

VI. Conclusion

When addressing potential E&P groundwater contamination issues, the practitioner may have to sort through regulations covering more than a century in time, from a variety of sources. Most are State regulations, but Federal provisions should not be overlooked. Groundwater will always be an important natural resource the protection of which will always be in the public interest. In providing guidance through the regulatory maze, we hope this paper in some small manner contributes to preservation of this important resource.

APPENDIX

APPENDIX I
HELPFUL CONTACTS

Railroad Commission of Texas
Web Address: www.rrc.state.tx.us

Railroad Commission
Division District Offices

Districts 1 and 2
Telephone: 210-227-1313
115 East Travis Street, Ste 1610
San Antonio, TX 78205-1689

District 3
Telephone: 713-869-5001
1706 /Seamist Drive, Ste 501
Houston, TX 77008-3135

District 4
Telephone: 361-242-3113
P.O. Box 10307
Corpus Christi, TX 78460-0307

Districts 5 and 6
Telephone: 903-984-3026
619 Henderson Blvd
Kilgore, TX 75662-5998

District 7B
Telephone: 915-677-3545
3444 N First Street, Ste. 600
Abilene, TX 79603

District 7C
Telephone: 915-657-7450
622 S. Oakes St., Ste. J
San Angelo, TX 76903

Districts 8 and 8A
Telephone: 915-684-5581
The Petroleum Building, Ste 600
214 W. Texas
Midland, TX 79701-4619

District 9
Telephone: 940-723-2153
First Texas Bldg.
901 Indiana Ave., Ste 600
Wichita Falls, TX 76301-6798

District 10
Telephone: 806-665-1653
P.O. Box 941
201 W. Foster
Pampa, TX 79066-0941

Railroad Commission
Groundwater Issues

Environmental Services
Telephone: 512-473-7017
1701 N. Congress
Austin, TX 78711

Site Remediation
Telephone: 512-463-6765
1701 N. Congress
Austin, TX 78711

Permitting/Production Services
Telephone: 512-463-6838
1701 N. Congress
Austin, TX 78711

Office of General Counsel
Environmental Section
Telephone: 512-463-6977
1701 N. Congress
Austin, TX 78711

CONTACTS FOR
EMERGENCY/SPILL REPORTING

A. Local District Office

B. Railroad Commission 24 Hour
Emergency Number 512-467-6788

C. National Response Center
Telephone: 1-800-424-8802

APPENDIX II

WELL PLUGGING REGULATION 1899 – 1969

GENERAL:

* Plugging of abandoned wells has been required since 1899.
* A plugging report must be filed after any well is plugged. (required since July 26, 1919)
* A well must be filled with mud-laden fluid from total depth to ground surface. (required since July 26, 1919)
* File intent to plug notification with log and casing record attached. (required since July 26, 1919)
* Plug wells in such a way as to confine oil, gas, and water to the strata where they occur. (required since 11/12/21)
* Protect "fresh water" in general (required since March 1, 1923)
* Inactive wells (20 days after production ceases) must be plugged. (required since February 1, 1934)
* Cement plugs must be set through tubing or drill pipe under circulation (pump and plug method). (required since February 1, 1934)
* Cement plugs (20 foot, centered on top of zone) required above high pressure gas or water zones (required since February 1, 1934)
* Set and cement surface casing through all fresh water sands. (required since 05/30/57)
* File a completion report (Form W-2) within 30 days of completion, deepen, or workover (+/- 05/30/59)

SPECIFIC REQUIREMENTS AND SOURCES:

Passage of HB 542: March 29, 1899:

- Set casing to exclude fresh* water from oil and gas zones
- Place "rock, sediment, or mortar" ("mortar" = 2 parts sand, I part cement) plug to at least 200 foot above top of zones
- no enforcement authority, except to levy $100 fine

Rules and Regulations: OIL AND GAS CIRCULAR #7 - June 18, 1919:

- Rule 8 required intent to plug notification:
  - must include log of well
  - at least 5 days prior to plugging
- Rule 20 requires protection of fresh water from pollution

Passage of SB 350: OIL AND GAS CIRCULAR #11 - July 26, 1919 :

- Rule 10 stipulated the method of plugging and required that "dry or abandoned wells be plugged in such a way as to confine oil, gas, and water in the strata in which they are found and prevent them from escaping into other strata"
- Plugging by the use of mud-laden fluid or other method approved by the Commission
- Mud-laden fluid must be 25 % heavier than water (10.4 ppg for fresh water, 12 ppg for heavy brine)

- Use of cement and plugs may be used for cable tool wells
- Rule 9 required Intent to plug notification:
  - must include log and casing record
  - at least 24 hours prior to plugging
- Rule 11 required filing of plugging report and log

OIL AND GAS CIRCULAR #12 - March 1, 1923:
- Intent to plug notification required:
- must include log and casing record
  - three (3) days in advance if filed with Deputy supervisor (District office)
  - five (5) days in advance if filed with the Commission (Austin)
- Rule 20 adds: "Fresh water to be protected" language - no specifics
- Rule 23 adds: "Darmaged wells" must be plugged and abandoned immediately

Passage of Statewide Rule 10: February 1, 1934:
- Plugging required for well inactive for 20 days
- Place cement plugs through tubing or drill pipe under circulation - *i.e.* by today's "pump and plug" method
- Fill well from TD to ground surface with 10 lb/gallon mud laden fluid. (today, 9.5 ppg mud is specified)
- 20 foot cement plug required (10 ft above to 10 ft below) at top of high pressure gas or water zones

- In addition:
- Plug inside cemented production casing - cement plug through at least 50 ft above casing shoe
- Plug inside un-cemented production casing - cement plug through entire zone before breaking casing shoe seal
- Plug for wells with liners to be left in place - Cement plug through liner to 10 ft above top of liner
- Plug for dry holes without casing, or any high pressure gas or water zones: 10 ppg mud-laden fluid from TD to ground surface

Passage of Statewide Rule 12: (first appeared in Circular 16-B on 05/15/34):
- Surface casing must be set and cemented through all fresh water sands
- Production casing must be cemented with enough cement to fill the annulus behind the casing to a point 600 foot above the casing shoe
- Production casing must be pressure tested to a pressure equivalent to the hydrostatic' pressure of the fluid filled casing (0.43 psi times the depth in feet to the top of zone, with a 2,000 psi maximum)

- Passage of Statewide Rule 55: (03/19/56):
- Requires that all operations connected with oil and/or gas exploration, injection and disposal of fluids shall be carried out such that no pollution of the streams and water courses of this

State, including sub-surface, will occur as the result of the escape or release of crude petroleum oil, gas, salt water or other mineralized waters from such exploratory wells.

Memorandum dated May 30, 1957 (later became SWR 15 in 1964):

- Set and cement surface casing through all fresh water sands
- Surface casing shall remain in place at time of plug and abandonment Exceptions granted for
  1) "Short surface casing" with DV tool cemented through fresh water
  2) long string if cemented total depth to ground surface- Plugging requires 100 foot cement plug (50 foot above and below) fresh water depth, and 100 foot plug (50 foot above and below) shoe of "short" surface casing.

Passage of Statewide Rule 16: (+\- 05/30/59):

- File a completion report (Form W-2) and log, within 30 days of completion, deepen, or workover of well.

Sometime in 1961 or 1962.

- A "Coleman Junction plug" began being required by district director James Smith on all pluggings in district 7B. This intermediate plug was required to be set\ between 600 feet and 900 feet below ground surface. (per Phil Russell, the assistant district director at the time, personal communication on 12/12/94)

Recodification of Railroad Commission rules in 1964:

Passage of Statewide Rule 14 (effective 01/01/67):

- File application to plug, with proposed plugging procedure, within 5 days of plugging
- File plugging report within 30 days of plugging
- Cementer's affidavit required with plugging report - Manner of plugging:
- 100 foot cement plug required above each set of perforations (district director may allow bridge plugs)
- 100 foot cement plug (50 foot above and below) surface casing shoe if production casing is pulled
- 100 foot cement plug (50 foot above and below) "short" surface casing shoe, tagged by tubing or drill pipe, if necessary

Passage of Statewide Rule 8 (effective 01/01/69):

- merges SWR 20 with SWR 55
- Rule 20: almost verbatim of the 1911 version
- Rule 55: condensed and rewritten, but essentially the same

Source: Schultz, Ron *History of the Railroad Commission's Plugging Regulation for the Protection of Usable Quality Groundwater* June 28, 1984.

Biography
Dave Howe

Dave Howe is an Assistant City Attorney for the City of Dallas, and specializes in environmental legal issues. He has been practicing law for 19 years and has specialized in environmental law for the last 10 years.

Dave received his Bachelor of Arts degree from Dartmouth College, his Juris Doctorate cum laude from Creighton University and an MBA with honors from Columbia University. He served as law clerk to the Honorable J. Smith Henley of the United States Court of Appeals for the Eighth Circuit.

As an environmental lawyer, Dave has designed and helped implement Environmental Management Programs for a Fortune 50 company, and has been involved in virtually every sort of environmental activity, from environmental auditing of plants to legislative development in Washington D.C. He has served on the U.S. Chamber of Commerce's Environment Committee, as a Director of the Corporate Environment Enforcement Council, and as Chairman of the Environmental Liability and Enforcement Task Force for the National Association of Manufacturers.

Dave is pleased to say that in doing his bit for clean air quality, he has reduced his commute distance by 80%, so that he now travels only 4.8 miles to work.

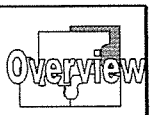
Slide 1

Environmental Issues Affecting Municipalities

Dave Howe
Assistant City Attorney
City of Dallas
August 3, 2000

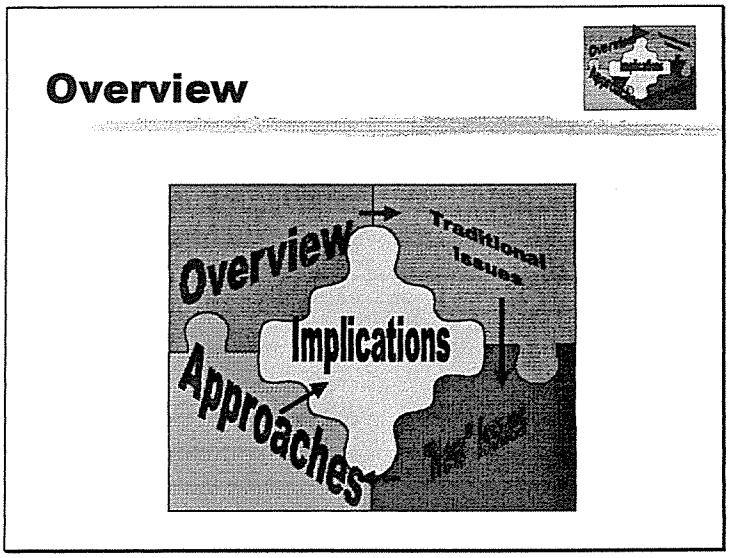
Slide 2

Overview

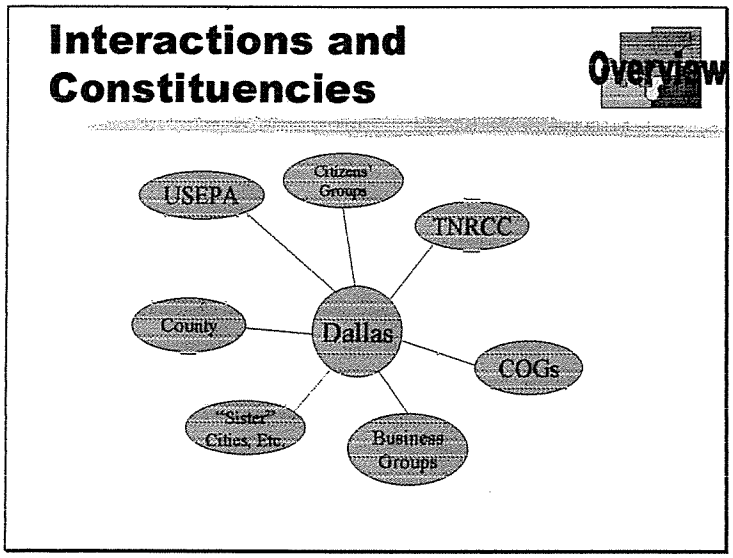


- Traditional Issues
  - Air, Water, Soil/Groundwater, Waste
  - Wetlands, Stormwater, Open Space & Parks
- "Newer" Issues
  - Smartgrowth and Brownfields
- Approaches To Issue Management
- Long Term Implications

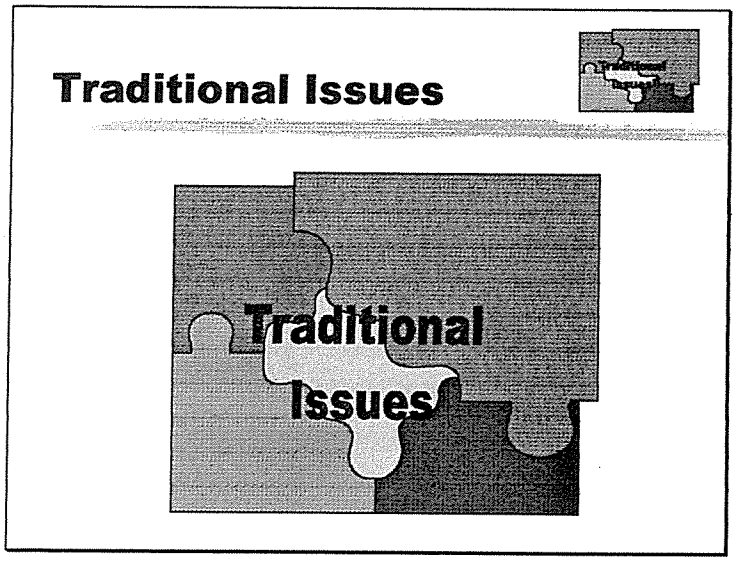
Slide 3


Overview
Overview
Traditional Issues
Implications
Approaches

Slide 4


Interactions and Constituencies
Overview
USEPA
Citizens' Groups
TNRCC
County
Dallas
COGs
"Sister" Cities, Etc.
Business Groups

Slide 5



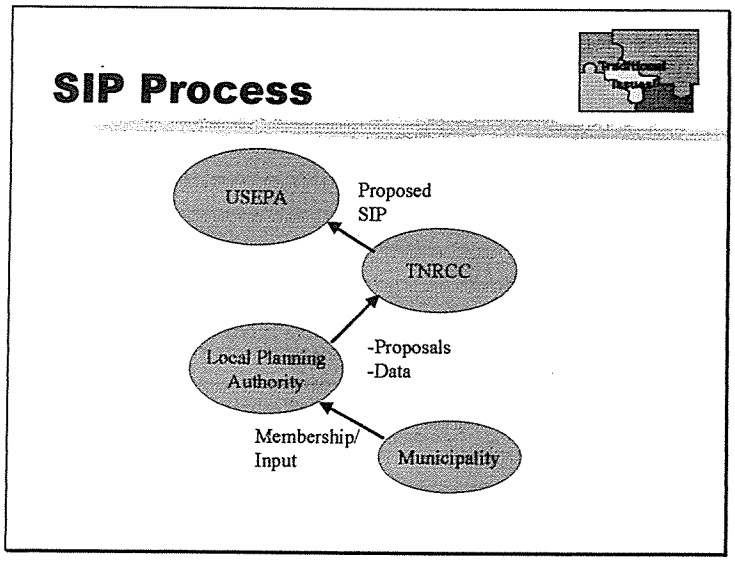
Slide 6

Regional Air Quality - Implications of NonAttainment and/or of Unapprovable Plans



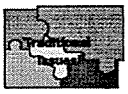
- Reclassification
  - Increased Offsets Required
  - NSPS Implications
  - Permitting Issues
- Federal Implementation Plan
- Highway Fund Implications
- Regional vs. Local Considerations

Slide 7


SIP Process
USEPA
Proposed
SIP
TNRCC
Local Planning
Authority
-Proposals
-Data
Membership/
Input
Municipality

Slide 8

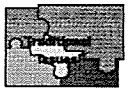
RAQ Areas Affected



- Economic Development
- Public Works and Transportation
- Equipment and Building Services
- Streets
- Sanitation
- Aviation

Slide 9

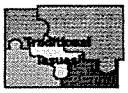
Water



- Resource Issues
  - Cost And Time To Develop Supply Sources
  - Will There/Won't There Be A Drought
  - Infrastructure Issues
- Contamination Issues (MTBE)
- Stormwater

Slide 10

Historic Contamination



- Eminent Domain/Easements/Foreclosure
- Adjoining Landowner Issues
  - Innocent Landowner Defense
  - Downgradient Property Owners' Rights
- Groundwater Management Districts
- Specific Issues
  - Property Reuse
  - Intergovernmental Issues Affecting Reuse

Slide 11

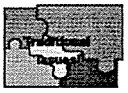
Contamination Issues (Areas Affected)



- Any Department that Acquires, Owns, Manages, Sells, Forecloses On or Digs Up Property
- Economic Development

Slide 12

Waste



- Landfill Capacity
- Disposal Cost
- Disposal Liability (CERCLA/RCRA)
  - Generator/Transporter
  - Operator

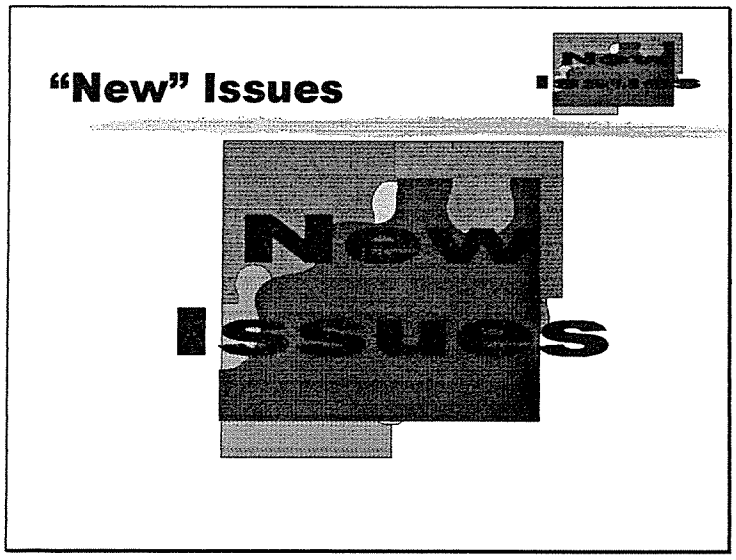
Slide 13

Other "Traditional" Issues



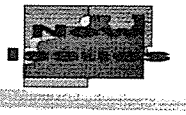
- NEPA (Environmental Impact Statements)
- Wetlands
- Trees
- Open Space
- Emergency Response
- Enforcement

Slide 14



Slide 15

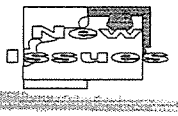
Smart Growth



- Transportation
  - Foster Practical Mass Transportation
  - Impediments
    - Existing Infrastructure
    - Cost
    - Lack of Natural Barriers
- Planning/Zoning
- Urban Reutilization
- Building Codes (Water, Air Emissions, Energy Efficiency)
- Clean Power

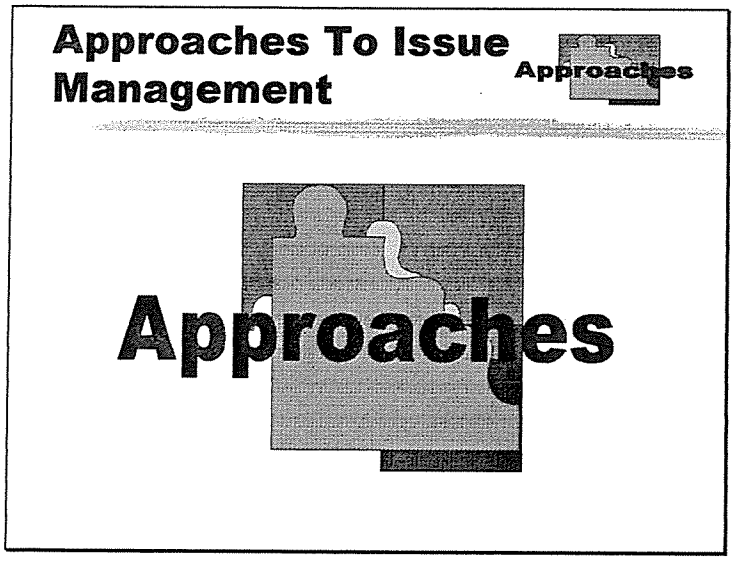
Slide 16

Urban Reutilization



- Brownfields Programs
- Groundwater Management Districts
- Encouragement of Urban Redevelopment
- Mixed Use Zoning and Overlay Districts
- Financial Incentives to Developers

Slide 17



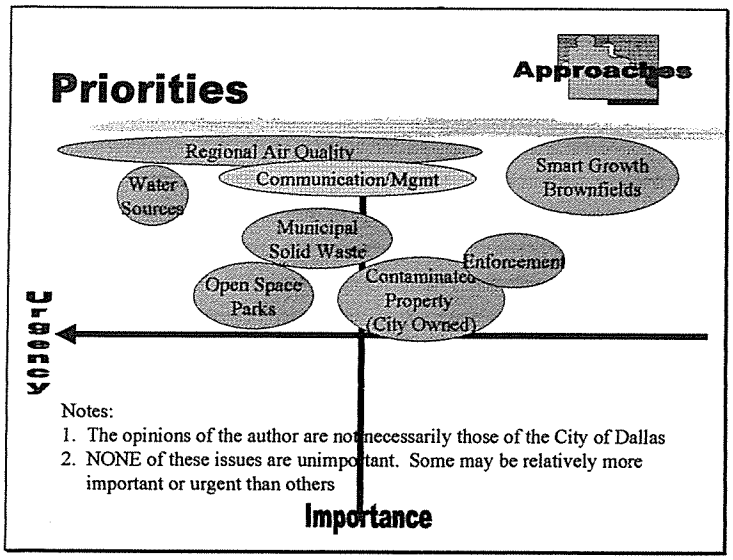
Slide 18

Approach Over The Long Term



- Prioritize Issues
- Development of Proactive Approaches
  - "Structural" Management & Prevention
  - Providing More Focus
  - Information/Communications Management
  - Planning Function
- Interactions With Other Agencies
- Enhance Outreach and Feedback Mechs.

Slide 19


Priorities
Approaches
Regional Air Quality
Water Sources
Communication/Mgmt
Smart Growth Brownfields
Municipal Solid Waste
Enforcement
Open Space Parks
Contaminated Property (City Owned)
Urgency
Notes:
1. The opinions of the author are not necessarily those of the City of Dallas
2. NONE of these issues are unimportant. Some may be relatively more important or urgent than others
Importance

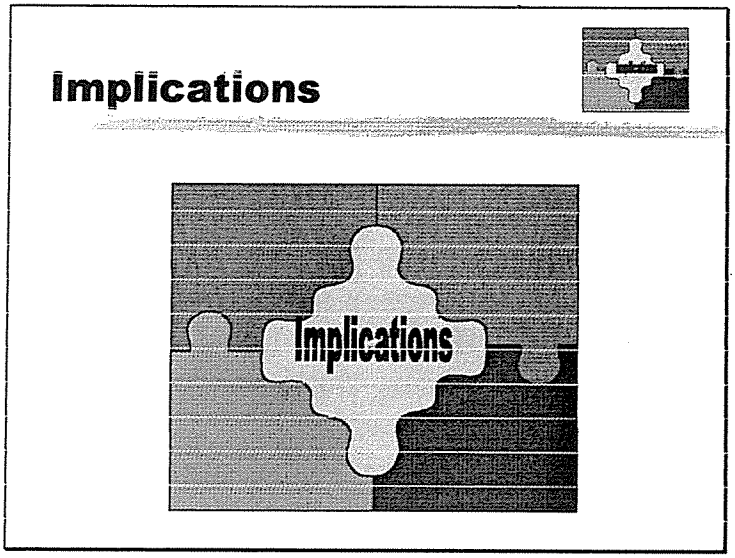
Slide 20

Problems Municipalities Will Face



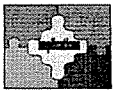
- Communications/Management Issues
- Diverse Constituencies
- Resource Issues
- Planning Concerns

Slide 21



Slide 22

Transportation and Growth



- Mass Transit Increasingly Emphasized
- Trend Away From Auto Dependent Planning and Zoning
- Resource Conservation Increasingly Emphasized In Building Codes
- Stormwater Planning Will Become Increasingly Important
- Urban Redevelopment Momentum

Slide 23

Urban and Other Redevelopment



- Financial Incentives/Partnerships
- Multiuse Zoning
- Overlay Districts For Rail Station Areas

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Recent Publications and Articles:

Negotiating and Drafting Environmental Provisions in Purchase and Sale Agreements – Issues and Solutions, Annual Meeting and Conference, American Association of Professional Landmen, New Orleans, Louisiana, June 21-23, 2000.
Environmental Defects: How to Draft and Negotiate Purchase and Sale Agreements that Minimize Confusion and Avoid Disputes, 17th Annual Advanced Oil, Gas & Mineral Law Course, Dallas, Texas, September 23-24, 1999.
Negotiating and Drafting Purchase and Sale Agreements to Address Environmental Issues, An Environmental Law Primer for the Oil and Gas Lawyer and Landman, Baton Rouge, Louisiana, August 26-27, 1999.
Current Environmental and Regulatory Issues Affecting Oil and Gas Operations, co-authored with Brenda L. Clayton, Houston Bar Association, Oil, Gas & Mineral Law Section, Houston, Texas, March 23, 1999.
Environmental Issues: Update on Environmental Regulation of Oil & Gas Activities and Related Litigation, 16th Annual Advanced Oil, Gas & Mineral Law Course, Houston, Texas, October 8-9, 1998.
Underground Injection Control (Chapter 9, co-authored with John Vay and Stephen Dickman), 45 Texas Practice – Environmental Law (West) (Civins, Hall & Sahs, eds., 1997).
Judicial Deference to an Agency's Interpretation of its Statute: The Doctrine's Rationale and Limits, co-authored with Judge Bea Ann Smith, 1997 Advanced Administrative Law Conference, sponsored by the State Bar of Texas, Austin, Texas, September 25-26, 1997 (nominated for Eighth Annual College of the State Bar Outstanding CLE Article Award).
Liabilities Arising from Ownership or Operation of Dead & Dying Oil Fields, 42 Rocky Mtn. Min. L. Inst. 17-1 (1996).

ENVIRONMENTAL CONCERNS IN TRANSACTIONS

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ENVIRONMENTAL CONCERNS IN TRANSACTIONS

I. The Common Sense Approach to Drafting Environmental Terms for Purchase and Sale Agreements

A. Step One – Quickly Scope the Environmental Issues

The best way to begin evaluating the environmental liabilities is to start with common sense. Look at the type of property being transferred, its location and its history. Some of the most useful information for evaluating environmental liability may be available without any help from environmental professionals. For example:

- Is the property greenfield or brownfield?
- What products or waste materials are produced on the property in significant volumes?
- What are the adjacent land uses?
- Have property owners ever filed regulatory complaints or lawsuits related to the property?
- What groundwater aquifers occur in the area, at what depths, and are they isolated from the surface by impermeable strata?
- What is the value of the transaction relative to the potential environmental liabilities?

Answering these questions can set the stage for environmental drafting and negotiations.

B. Step Two – Identify the Parties' Agreement Regarding Environmental Liabilities

The lawyer cannot effectively draft environmental terms in a purchase and sale agreement without knowing the parties' agreement regarding environmental liabilities. In the author's experience, however, the first draft of the environmental provisions is not carefully crafted to reflect negotiated terms. Why not? First, the environmental terms rarely are one of the primary "deal points" and often may receive little consideration or attention before the agreement is drafted. Often, it becomes the lawyer's job to focus the client's attention on environmental terms of the deal and suggest various options.

Once the parties begin to focus on environmental issues, they must first decide how the environmental risks and liabilities will be identified. Liabilities typically are identified through (1) representations and warranties and (2) environmental due diligence. Next, the parties must decide how the environmental risks will be allocated and/or remedied. For example, environmental defects or liabilities uncovered during due diligence can be remedied through active remediation before or shortly after the sale.

One common approach to allocating liabilities is an agreement that each party will bear liabilities that arise out of its period of ownership, allocating responsibility to the respective

owners before and after the closing date. A different approach provides for the buyer to assume all or most of the environmental liability in exchange for an indemnification or a purchase price adjustment from the seller. Often the parties negotiate an indemnity or purchase price adjustment for all the "environmental defects" that the buyer can identify before closing. This may seem to be a simple approach, but the devil is in the details. Some of the issues that should be reduced to writing are:

- What is the precise definition of an "environmental defect"?
- How soon, and with what specificity must the defects be identified?
- What level of environmental audit may the buyer conduct?
- What form of notice will be required for the identified defects?
- How will the "value" of a defect be determined?
- Can the buyer elect to have defects corrected by the seller?
- Can any defective property be "carved out" of the transaction?
- Will the parties involve state regulatory agencies, and who will control those contacts?
- Will the defect amount be subject to a deductible or a threshold?
- Can some of the defects be addressed through indemnification?
- Will future third-party claims be treated differently than other environmental defects?

All of these issues should be considered and addressed in the drafting and negotiating process.

C. Step Three – Drafting

The remainder of this paper discusses how the drafter might approach the environmental risks and address the myriad of questions they raise. As you examine the following legal issues, always keep your mind open to practical, creative, common-sense ways to simplify and manage the environmental concerns and related legal issues.

II. Identifying Environmental Liabilities

A. Representations and Warranties

1. Introduction

Without accurate information about the environmental condition of the target property, a party cannot intelligently allocate liability or determine the economic risks associated with a transaction. One source of information about the property is through contractual representations and warranties from the seller that the property meets certain conditions, for example that it is in compliance with all laws, has not been the site of a release of hazardous substances, or has all necessary permits. In fact, the buyer could use the seller's representations and warranties as an alternative to performing an environmental audit, but only where the representations and warranties cover all material environmental risks and the seller's indemnifications and financial integrity can back them up.

In general, environmental representations and warranties are enforceable promises that the property to be transferred meets certain standards defined in the agreement. Because these provisions almost always describe existing conditions or past actions, they are typically given by the seller. Buyers representations and warranties rarely address environmental conditions.

Representations and warranties also can be used as an environmental baseline from which to better evaluate risks. For example, if the seller warrants that, to the best of its knowledge, no environmental conditions exist that would require remediation under existing state laws, then the buyer could more narrowly focus its risk evaluation on those conditions that could result in liability, such as groundwater contamination, but which are not necessarily required by state law to be remediated (absent an agency order).

2. Knowledge Limitations

Representations and warranties usually consist of a mix of objective and subjective fact. Although ideal for buyers, few sellers are willing to give a representation or warranty that is a statement of objective fact, such as "there are no circumstances that can reasonably be expected to form the bases of any Environmental Claim." Sellers will instead negotiate a degree of subjectivity by adding a knowledge qualifier. The simplest knowledge qualifier, that the representation is true to the seller's "actual knowledge," may not provide the buyer with much comfort. Situations exist where the seller does not have "actual knowledge," but may have reason to believe that a certain condition exists.

Further, the standard selected may not place any duty on the seller to investigate its own files. A more buyer-favorable clause would read "to the best of seller's knowledge and belief after due inquiry, seller represents and warrants that there are no circumstances that can reasonably be expected to form the bases of any Environmental Claim."

Note that the more buyer-favorable clause set forth above may be a representation and warranty of the company, not the employees of the company who have had daily dealings with the property or the operational practice in question. For further assurance, a buyer may want the seller to define knowledge to include knowledge of field supervisors or specific people most likely to be knowledgeable.

3. Materiality

To avoid minor environmental claims, the seller may want to limit its liability for environmental conditions to breaches of representations and warranties that are "material" or that result in a "material adverse effect" on the value of the property. The materiality standard, along with its functional equivalents – the deductible and the threshold – can be heavily negotiated. To avoid misunderstandings, the definition of "material," typically defined by reference to a certain dollar amount, should specify that the number is (or is not) in the aggregate. Other issues regarding valuation, deductibles and thresholds will be discussed further below.

The materiality standard can be important to prevent the buyer from seeking to be reimbursed for trivial expenses caused by the seller's non-material breach of a representation or warranty. On the other hand, the buyer should be careful that the seller does not walk away from a significant liability it should have disclosed to the seller, unless that risk is carefully evaluated

as part of the transaction. The materiality standard is one risk-allocation method that strikes a balance between those two concerns.

4. Representations and Warranties

The following discussion provides several examples of environmental representations and warranties commonly found in purchase and sale agreements. Some of the sample provisions are followed by explanations and commentary.

> Representations and Warranties: Except as disclosed in Schedules _____, Seller, after reasonable inquiry, represents and warrants and covenants as follows: Compliance With Environmental Laws: Seller is and has been in compliance with all applicable Environmental Laws. [Alternative: The Property is and has been operated in compliance with all applicable Environmental Laws.]

An example of a more limited warranty of compliance with environmental laws, which also incorporates a warranty regarding environmental notices and a materiality standard, is:

> Compliance with Laws. To the best of Seller's knowledge, Seller is not in violation of, has not since _____ violated, is neither under investigation with respect to, nor has it been threatened to be charged with, nor given notice of any violation of, any law or regulations, or judgment, order or decree entered by any court or other governmental authority, applicable to the Assets or the operation thereof except for violations that have not had and could not reasonably be expected to have, individually or in the aggregate, a Material Adverse Effect.

From the perspective of the buyer, a broad representation and warranty that a facility complies with environmental laws is useful, but limited. Cleanup liability under CERCLA,[1] analogous state statutes, or the common law can arise independently of any statutory violations. For example, the existence of historical contamination, or even a Superfund site, is not necessarily a violation of law. Similarly, the mere presence of asbestos in buildings or as pipe insulation is not unlawful, although its subsequent disturbance or release can trigger costly regulatory requirements, including costs of handling and remediation, OSHA compliance[2] or even tort liability.

To address site conditions that carry potential environmental liability, but may not be violations of law, an additional warranties are needed, for example:

> On-Site Conditions: There has been no Release and there is no threat of Release of any Hazardous Materials on, onto, or from the Property that has resulted in or that could result in (i) a violation of any Environmental Law, (ii) the creation of liability or obligations, including without limitation, notification, deed recordation, or remediation, under any Environmental Law, or (iii) a diminution

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[1] Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. §§ 9601-9675 ("Superfund" or "CERCLA").

[2] Occupational Safety and Health Administration ("OSHA") regulations governing the worker safety standard for asbestos exposure can be found at 29 C.F.R. § 1910.1001.

> in value of the Property. The Property has not contained and contains no underground or aboveground storage tanks, no "PCBs" or "PCB items," as those terms are defined in 40 C.F.R. § 761.3, no naturally occurring Radioactive Material ("NORM") and no asbestos.

This warranty regarding on-site conditions provides the further assurances about the property's condition that are missing from the "compliance with all laws" provision. If the buyer is acquiring the corporate or individual liabilities of the seller, the buyer should request the same type of representation concerning off-site conditions. Generators of hazardous substances who have disposed of their wastes off-site have liability under CERCLA if the off-site disposal facility itself poses a threat to human health and the environment.[3] The buyer should carefully review the definitions and indemnity provisions of any purchase and sale agreement to make sure that it is not assuming the seller's off-site disposal liabilities without an intent to do so.

Examples of the definitions of "Release" and "Hazardous Materials," which would necessarily accompany this warranty, are:

> Release means depositing, spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing.
>
> Hazardous Material means "hazardous substance," "pollutant or contaminant," and "petroleum and natural gas liquids," as those terms are defined or used in Section 101 of the Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA").

Although short, the foregoing definition of Hazardous Material is inclusive because the Section 101 CERCLA definition of "hazardous substance" is broad, and includes those substances regulated under the Resource Conservation and Recovery Act ("RCRA"), the Clean Water Act ("CWA") and the federal Clean Air Act, to cover essentially all substances regulated under state and federal environmental cleanup laws.

In addition to a warranty as to on-site conditions, a buyer will also want the further assurance that no notices of administrative action or litigation have been received by the seller. One example is:

> Notice Of Environmental Problem Or Litigation: With regard to activities and conditions on the Property, Seller has not given, nor was it required to give, and has not received, any notice that: (i) the Seller has violated, or is about to violate, any Environmental Law; (ii) there has been a Release, or there is a threat of Release, of Hazardous Materials from the Property; (iii) the Seller may be or is liable, in whole or in part, for the costs of cleaning up, remediating, removing or responding to a release of Hazardous Materials; (iv) the Property is subject to a lien in favor of any governmental entity for any liability, costs or damages, under any Environmental Laws arising from or costs incurred by such governmental entity in response to a release of Hazardous Materials. In addition, the Seller knows of no circumstances that can reasonably be expected to give rise to any

[3] 42 U.S.C. § 9607(a)(1)-(4).

such notice, including, without limitation, with respect to any off-site disposal location presently or formerly used by the Company or any of its predecessors.

From the perspective of the buyer, it is useful to have a representation and warranty stating that there is no existing or threatened judicial or administrative litigation. The representation might go further, as this one does, and assert that the seller is aware of no facts that would give rise to litigation. This particular example, which includes representations regarding off-site liability, would be appropriate for a stock transfer.

The buyer also will want assurances about the existence and transfer of all permits necessary to operate the properties.

> Transfer Of Permits And Approvals: Seller has all permits, licenses, certificates, approvals, registrations, and applications (hereafter "Environmental Permits"), necessary to comply with applicable Environmental Laws. A complete list of all Environmental Permits is attached hereto as Schedule _____. Seller shall cooperate in obtaining the transfers of all Environmental Permits and agrees to satisfy all notice and approval requirements for such transfers.

If existing permits need to be transferred, it is important that the parties cooperate in the transfer. Because the transfer of permits may not be effected at the time of closing of the transaction, either the seller or the buyer may incur liabilities associated with an untransferred permit. Certain activities, such as discharges under the federal Clean Water Act, may be subject to a "general permit," rather than an individual permit, triggering notice requirements for the buyer. If certain permitted facilities are to be closed and/or not transferred, then the buyer also may want contractual assurances that such facilities have been closed in accordance with Environmental Laws, and may want to obtain closure letters from the state regulatory agencies with jurisdiction over the facilities before the sale.

B. Releases and Disclaimers of Warranties

1. The "As Is" Clause

The presence of an "as is" clause in a contract serves the opposite purpose of representations and warranties. As a risk allocation vehicle, the "as is" clause excepts certain risks the seller might otherwise retain by means of a representation or warranty. Proper use of the clause may preclude claims of fraud (except fraud in the inducement), negligence, breach of duty of good faith and fair dealing, and deceptive trade practice claims, in addition to contractual warranty claims brought by the buyer.[4] The seller should be aware that, although an "as is" clause might defeat claims based on breach of warranty, "as is" clauses may not defeat private Superfund claims brought by the buyer against the seller.[5] In addition, the "as is" clause would not be effective as a defense to claims by the mineral lessor for negligent property damage or for

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[4] *Prudential Ins. Co. v. Jefferson Assocs., Ltd.*, 896 S.W.2d 156, 161 (Tex. 1995).

[5] *M&M Realty Co. v. Eberton Terminal Corp.*, 977 F. Supp. 683, 687-88 (M.D. Pa. 1997); *Wiegmann & Rose Int'l Corp. v. NL Indus.*, 735 F. Supp. 957 (N.D. Cal. 1990) (holding that a party may not escape Superfund liability to another PRP by relying on "as is" provision); *Int'l Clinical Lab., Inc. v. Stevens*, 710 F. Supp. 466 (E.D.N.Y. 1989) (holding that a party's failure to inspect the property prior to the sale did not defeat its Superfund claims).

the breach of non-assignable lease covenants or other legal duties to restore the property to its original condition.

Typically, disclaimers of warranties are drafted to comply with the Uniform Commercial Code ("UCC") drafting requirements. In particular, the UCC provides that, to exclude or modify the implied warranty of **merchantability**, the exclusion must mention merchantability and, in the case of a writing, must be conspicuous.[6] The UCC further provides that, to exclude or modify any implied warranty of **fitness**, the exclusion must be in writing and conspicuous.[7] Accordingly, most drafters comply with these conspicuousness requirements by using bold and/or all capital letters. Although the UCC only applies to the sale of "goods," some goods typically are part of any purchase and sale agreement and, therefore, the drafter should comply with the conspicuousness requirements.

One example of an "as is" clause used for the transfer of equipment is:

> **THIS INSTRUMENT IS EXECUTED BY SELLER WITHOUT ANY WARRANTY OF TITLE, EITHER EXPRESS OR IMPLIED, AND WITHOUT ANY EXPRESS OR IMPLIED WARRANTY OR REPRESENTATIONS AS TO THE MERCHANTABILITY OF ANY OF THE EQUIPMENT OR ITS CONDITION OR FITNESS FOR ANY GENERAL OR SPECIFIC USE OR PURPOSE, AND WITHOUT ANY OTHER EXPRESS OR IMPLIED WARRANTY OR REPRESENTATION WHATSOEVER.**

The UCC further provides that, absent unusual circumstances, all implied warranties are excluded by expressions like "as is" or "with all faults." With regard to inspecting the goods, the UCC states that, if the buyer has examined the goods as fully as it desires, or has refused to examine the goods, then there is no implied warranty with regard to defects which an examination ought to have revealed. Perhaps because of this provision, or simply out of an abundance of caution, some sellers negotiate express statements that the buyer has had an opportunity to inspect. One example of this additional language is:

> Buyer acknowledges that it has been afforded the opportunity to inspect and test the Equipment and that Buyer has inspected the Equipment and the premises where same is located for whatever purpose deemed necessary or appropriate by Buyer and has satisfied itself as to the physical and environmental condition of the Equipment and accepts all of same in "as is, where is" condition. Buyer further acknowledges that neither Seller nor any of Seller's employees, agents or representatives has made any representations whatever regarding the condition, characteristics, standard, quality, grade, style, model or fitness for any general or particular use of any of the Equipment, all of which has been determined by Buyer solely based upon Buyer's inspection, testing and sole judgment.

Although a disclaimer of warranties can still be effective without the foregoing contractual provision, this language can serve as evidence that the buyer had an opportunity to inspect. It also can serve to impress upon the buyer the nature of the risks it is assuming, and

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6 *See* TEX. BUS. & COM. CODE § 2.316(b).

7 *Id.*

might discourage litigation over unpleasant surprises which are discovered after the sale, but which the buyer failed to look for or investigate before the sale.

2. Releases and Waivers

A seller can attempt to obtain a release or waiver from the buyer of any claims the buyer may have against the seller. Often the buyer will agree to release the seller from all claims for environmental conditions not identified during the due diligence period.[8] Although not effective with respect to third-party claims, such as tort and nuisance, a properly-drafted release clause can be a useful risk-allocation technique. A release and/or waiver of environmental liability should expressly state the intent to include environmental claims unless it is clear from the context of the provision. It also should comply with any local laws regarding fair notice requirements or other limitations on contractual releases of liability, which are discussed in Section V.C. in connection with indemnification.

C. Identifying the Environmental Condition through an Environmental Audit of the Property

Where representations and warranties do not provide enough information to make a sound business decision about environmental risks, the next step may be an on-the-ground inspection of the properties, combined with a review of the seller's files and relevant administrative agency information.

1. Objectives and Scope of the Audit

(a) Scope and Plan the Audit to Satisfy Contract Objectives and Identify Material Risks

An environmental audit should not begin until its specific objectives and goals are defined. Most often, the audit is prompted by a purchase and sale agreement that affords the buyer certain contractual remedies for identified "environmental conditions" that rise to the level of "defects." If the goal of the audit is to identify those "environmental conditions" as expressly defined in the purchase and sale agreement, then the audit needs to stay focused on satisfying the specific criteria necessary to comply with the contract terms. The final determination of whether a condition is also a "defect" may require a legal conclusion, such as whether the condition is a violation of law or exceeds applicable cleanup standards. If so, the consultant should work closely with the attorney in preparing the final report of all "defects."

Even if the purchase and sale agreement does not include remedies for "environmental conditions," an audit can help the buyer evaluate potential future environmental liabilities that may affect the business risks of the transaction. In addition, the audit can sometimes serve as a baseline for pre-existing conditions that can later be used to support or defeat claims for an indemnification. For example, the seller may want to use the results of the audit to defend against subsequent claims asserting pre-existing contamination. The buyer may want to use the results to document the pre-existing contamination that could later be subject to third-party claims indemnified by the seller.

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[8] *See*, Attachment 1 at 5:36-39.

An environmental audit can be conducted in one or more phases. Phase I may consist primarily of: agency file reviews; a due diligence review of the seller's environmental reports and related permit and compliance files; review of publicly-available information (such as aerial photos); a non-invasive walk-through of the property; and interviews of Seller's employees, former employees familiar with the property and agency personnel. Phase II, which typically is scoped to address concerns raised by the results of the Phase I investigation, commonly consists of a more thorough site investigation, including sampling and testing. However, the parties can scope the audits as necessary to meet the time constraints and/or level of investigation desired. There is no requirement that the first phase exclude sampling or invasive work, or that a second phase be performed. In some instances, the parties may even wish to perform a third round of sampling and testing, sometimes called "Phase III."

(b) Phase I ASTM Audit

An audit that complies with the American Society for Testing and Materials ("ASTM") standard[9] may allow the purchaser to assert a defense to a subsequent Superfund action. In fact, the ASTM audit is designed to satisfy the "all appropriate inquiry" standard of the innocent-purchaser defense to Superfund, allowing the buyer to assert that defense in appropriate circumstances.

The application of the ASTM Phase I audit works as follows. To assert a statutory defense to Superfund, a potentially responsible party ("PRP") must show that the conditions triggering liability were caused solely by an act of God, an act of war, or an act or omission of a third party.[10] To take advantage of this so-called "third party defense," a PRP must establish (among other things) not only that the conditions were caused solely by a third party, but also that the third party was not the PRP's employee, the PRP's agent, or one whose act or omission occurred in connection with a contractual relationship with the PRP. In response to some court and EPA interpretations that PRPs are subject to liability if they have any contractual relationship with the third party, including a conveyance contract, Congress amended Superfund to add the so-called "innocent-purchaser defense" – a subset of the third party defense.[11] The amendment clarified that the definition of "contractual relationship" does not include instruments transferring title or possession to real property **if** the real property on which the facility is located was acquired by the PRP after the disposal or placement of the hazardous substance ***and*** (1) if, at the time of acquisition, the PRP did not know and had no reason to know that any hazardous substance was disposed of at the facility or (2) the PRP acquired the facility by inheritance or bequest.[12]

To satisfy the first condition relating to purchasers – that the buyer did not know and had no reason to know of the presence of the hazardous substance resulting in the release – the purchaser must demonstrate that it undertook, at the time of acquisition, "all appropriate inquiry"

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[9] American Society for Testing and Materials, *ASTM Standards on Environmental Site Assessments for Commercial Real Estate, E 1527-93 and E 1528-93.*

[10] 42 U.S.C. § 9607(b).

[11] Technically, there are three categories of innocent landowners under CERCLA: innocent purchasers, governmental entities that acquire property by involuntary transfer, and those who acquire property via bequest or inheritance. 42 U.S.C. § 9601(35)(A)(i-iii). This discussion focuses on innocent purchasers.

[12] 42 U.S.C. § 9601(35)(A).

into the previous uses and ownership of the property.[13] Most purchasers in commercial transactions obtain a "Phase I" environmental audit, conducted pursuant to the ASTM Standard 1527, because it is designed to meet the "all appropriate inquiry" standard. The ASTM audit will protect that purchaser from becoming a PRP if CERCLA hazardous substances are later discovered on the property and if the audit contained no information that would put the purchaser on notice of the possibility that such a condition could occur, and if it had no reason to know, based on its knowledge and experience, that the type of operation that caused the contamination had been conducted on that property.[14] Keep in mind, however, that obtaining a Phase I assessment to satisfy the "all appropriate inquiry" standard may be pointless for the purchaser of industrial properties because the buyer may already have reason to know that hazardous substances associated with certain historical activities may be on the property and, therefore, cannot satisfy this condition, through an audit or otherwise.

Thus, the buyer should carefully consider whether to spend money on an ASTM Phase 1 audit for purposes of satisfying the "all appropriate inquiry" standard for a Brownfield site. Further, the ASTM audit protocol may not even be suited to some types of properties. The most cost-effective audit will likely be one tailored to the objectives of the transaction and scoped by an environmental professional familiar with the type of property being transferred.

2. Contracting for Permission to Conduct the Audit

Frequently, the parties agree that "Environmental Conditions" will be identified through an environmental audit conducted by, and at the expense of, the buyer. The parties often negotiate contract terms that address the following questions.

- What consultant can the buyer use? In some cases, the seller wants to reserve the right to approve the buyer's selection or know the consultants' identity in advance. Alternatively, the parties can agree on several consultants from which the buyer can choose. The buyer should confirm that the consultant has no relationship with the seller that would affect its ability to render an independent, unbiased opinion.

- Who can contact regulatory agencies, and what can be disclosed about the transaction and the properties to third parties? The parties may need to enter into a confidentiality agreement regarding information that can be disclosed to the regulatory authorities. The Seller may request that it be present during regulatory contacts, which can create significant logistic problems for the buyer's interview process, or dampen the willingness of agency personnel to speak openly about the seller's operations and reputation. Keep in mind that, without an agreement restricting agency contacts, agency records and personnel are fair game.

- What level of sampling and testing will be allowed? The seller may be concerned that the buyer's audit will disrupt its normal operations or damage the seller's

[13] 42 U.S.C. § 9601(35)(B).

[14] The statute provides that, in establishing that the defendant "had no reason to know," the court shall take into account the defendant's specialized experience or knowledge as well as the "obviousness of the presence or likely presence of contamination at the property and the ability to detect such contamination by appropriate inspection." *Id.* § 9601(35)(B).

property and equipment. To address this concern, the seller may attempt to limit the number of samples that can be taken or wells that can be drilled, seek to control the sample locations, or request the right to approve the consultant's sampling plan. The seller may also request the right to split samples. The buyer should resist the seller's attempts to control the number or location of samples, which the consultant should be free to locate based in its best professional judgment.

- Who can receive a copy of the consultants' report? The seller should request a copy of the analytical results and audit report. If buyer's contractual rights depend on the precise wording of its consultant's report, then the buyer should agree that it will provide the final report, but not drafts, which should be discarded upon issuance of the final report. The seller and buyer should be required to keep the report confidential and not disclose it to third parties.

In addition, the seller may (and should for its own protection) request an indemnification for any damages caused by the buyer or its consultants in the course of the audit. If requested to indemnify the seller, the buyer should negotiate an indemnification from the consultant that will be backed by the consultant's insurance, in the event of an accident or damages resulting from the audit.

3. Contracting with the Environmental Consultant

Once the buyer and seller agree on the scope of the environmental audit, the Buyer must select and contract with an appropriate consultant. The buyer's environmental counsel can be instrumental in this process. First, if the buyer does not already have an environmental consultant in mind, counsel should be able to identify several consultants with the requisite qualifications from which the buyer can choose. After a consultant is selected, counsel, in consultation with both the consultant and the client should help draft the scope of services to be performed and the indemnification from the consultant to the buyer. Third, counsel should participate in setting up the lines of communication between consultant, seller and buyer, and should take steps necessary to assure that any confidentiality or other contract requirements of the seller are understood and observed. Finally, counsel should assure that the consultant knows its precise goals, objectives, and authority in the field. This is typically done through both contract negotiations and a kick-off meeting.

One function of the contract with the consultant is to provide extra assurances that the consultant will perform in a professional manner, consistent with the standards in the industry. In high-dollar transactions, especially where the environmental risks may be significant, the contract should be backed with indemnifications as well as insurance, with the buyer-client listed as an additional insured. This is one more risk-shifting mechanism for protection against environmental liabilities.

III. Agreements to Remedy Environmental "Defects"

A. Introduction

The mechanism often selected to address environmental liabilities is a procedure established by contract, and set forth in the purchase and sale agreement, that follows this general outline:

- First, the buyer will identify the environmental conditions on the property, usually through one or more of the following methods: reviewing the seller's files, having in-house or outside environmental professionals inspect or test the property, interviewing field personnel; interviewing agency personnel and inspecting regulatory agency files.

- Second, the buyer determines which of the environmental conditions rises to the level of an environmental defect and sends a formal notice of the defects to the seller, usually in the form of a consultant's report and transmittal letter.

- Third, the seller chooses, or the buyer and seller agree to, a remedy from among those listed in the agreement for addressing the environmental conditions identified in the notice, usually selecting from among indemnification, remediation, an offset to the purchase price, or a combination of those.

To a business professional, this procedure sounds perfectly reasonable. On the surface, it appears that the risks and liabilities will be quantified, both parties will be apprised of them, and the liabilities will be addressed fairly, according to the agreement. The procedure appears to assure that there will be no surprises. Both parties think they understand what the procedure involves. And – more often than not – the seller is comfortable that its property is a typical industrial, manufacturing or commercial property, no better or worse than any other operation in the business.

And then the buyer's notice arrives with an exorbitant price tag – certainly a surprise for the seller. In response, the seller may become outraged and negotiations can quickly breakdown – a disappointing surprise for the buyer. In some situations where deal has already closed, battle lines are hastily drawn for litigation. What went wrong? Usually discovery of contamination combined with fear of the associated third-party liabilities, coupled with ignorance about regulatory remediation requirements, spurred on by confusion about the meaning of the contract terms. Environmental counsel can help head off or defuse these disputes by carefully drafting the governing contract terms and educating the client about environmental liability and regulatory obligations.

B. Defining an "Environmental Condition"

1. Violation of Law as an "Environmental Condition"

If allocation of liability is to hinge on the identification of "environmental conditions," it is absolutely imperative that the contract definition of that term be clear and precise. In fact, this term is often poorly defined, a shortcoming that can easily lead to litigation.

Most often the parties begin by defining an environmental condition as any condition that constitutes a violation of environmental laws. For example:

> Environmental Conditions means conditions(s) that, as of the time of notice thereof, are not in compliance with the then existing Environmental Laws.

Another variation, which includes a remediation requirement aspect is:

> Environmental Conditions means any condition involving the Properties that constitutes a violation of Environmental Laws in effect on the date hereof and requires remediation or correction under such laws.

If the definition stops here, confusion and misunderstanding is likely to ensue for the following reason. Although certain conditions constitute violations of law, such as friable asbestos, unplugged wells, disposal sites not property closed or known PCB contamination, much historical contamination does not violate the law, and no laws expressly require remediation. Thus, an environmental condition should be defined to include other types of conditions, regardless of whether they constitute violations of law.

2. Conditions Beyond Violations of Law

Tailoring the definition of environmental conditions to include conditions other than "violations" should be carefully considered depending on the circumstances of each transaction and the nature of the risks that the drafting party wants to include. For example, the parties may wish to address any conditions for which the agency with jurisdiction could issue a cleanup order. For properties under Railroad Commission jurisdiction, such a definition might state:

> Alleged Environmental Conditions means any condition involving the Properties that constitutes a violation of Environmental Laws in effect on the date hereof or which constitutes surface or subsurface contamination consisting of, or that could cause or allow, pollution of surface water or groundwater.

If using this approach, the drafter might also wish to include the RRC's definition of pollution of surface and groundwater, which is:

> Pollution of surface or subsurface water – The alteration of the physical, thermal, chemical, or biological quality of, or the contamination of, any surface or subsurface water in the state that renders the water harmful, detrimental, or injurious to humans, animal life, vegetation, or property, or to public health,

safety, or welfare, or impairs the usefulness of the public enjoyment of the water for any lawful or reasonable purpose.[15]

In addition, or in the alternative, specific standards or contaminant levels can be specified to more precisely define the scope of an "environmental condition." These standards might include:

- Soils or groundwater that exceed the Texas Natural Resource Conservation Commission ("TNRCC") Risk Reduction 2 Standards for commercial property;
- Groundwater that contains a measurable thickness of free product, or free product that exceeds 0.1 inch; or
- Groundwater that exceeds the Safe Drinking Water Act primary drinking water standards or maximum contaminant levels ("MCLs") for specific contaminants.[16]

If the property covers different types of environments, such as wetlands and non-wetlands, or some areas that overlie a shallow drinking-water aquifer and some that do not, then the parties may wish to establish different thresholds for different geographic areas of the Property.

Before finalizing the precise language that will establish the scope of an "environmental condition," the drafter is well-advised to ask its environmental consultant what conditions are likely to occur on the property that could subject the operator to liability for an expensive cleanup, either because the conditions could damage third parties or be the target of agency enforcement, and how to precisely describe those in the purchase and sale agreement.

3. Defining "Environmental Laws"

A definition of Environmental Laws also must be included to clarify the definition of an environmental condition that is associated with a violation of law. That definition can be fairly general, as in the following example.

> Environmental Laws means applicable federal, state, and local laws, including statutes, regulations and orders, ordinances, and common law, relating to protection of the public health, welfare, and the environment, including without limitation, those laws relating to storage, handling and use of chemicals and other hazardous materials, those relating to the generation, processing, treatment, storage, transport, disposal, or other management of waste materials of any kind, and those relating to the protection of environmentally sensitive areas.

The definition of environmental laws raises a few issues. One issues is whether the parties intend to refer to laws in effect on the closing date. If so, the contract should clearly state

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[15] 16 TEX. ADMIN. CODE § 3.8(a)(28).

[16] *See* 40 C.F.R. Part 141. Although Safe Drinking Water Act MCLs are not independently-enforceable cleanup standards, parties often argue that they are applicable to contaminated groundwater.

that intent, either in the definition of environmental laws or of environmental condition, or in the description of an environmental defect. When referring to remediation "required by" environmental laws, the parties may wish to refer to standards as they apply at the time of remediation, or otherwise clarify which party is assuming the risk that remediation standards may become more stringent if cleanup is delayed.

Another issue related to the definition of environmental laws is whether "laws" includes agency guidance or policy documents. Rarely are cleanup standards specified by statute, sometimes they are specified in formal rules, but enforcement policy and regulatory cleanup criteria may appear only in agency guidance. If guidance documents or policy statements are included in the definition of environmental laws, then the parties should specify that guidance includes only published or formal guidance, to avoid including staff memoranda, which may not provide consistent – or even accurate – interpretations of the applicable law.

C. Valuation of the Environmental Conditions

Once the buyer identifies environmental conditions, it often must determine a dollar "value" for each condition and/or for the aggregate of the conditions. That valuation can then be used, for example, to demonstrate that a claim has satisfied a deductible or a threshold, or to assert a claim for a specified reduction in the purchase price.

Typically, the valuation is addressed in the contract as the equivalent of a third-party cost to remediate the condition, as required by environmental laws. As noted above, however, environmental laws often do not require remediation, rendering this standard vague and ambiguous. Alternatively, the parties can provide that the value will be calculated as the cost to remedy the condition, assuming that a state or federal agency would require its remediation. But under this approach, or where the parties are relying on a definition of "Environmental Laws" that includes guidance documents, the parties can easily end up in a dispute over which agency guidance is applicable to each identified condition. To eliminate this dispute, the parties could specify in advance which guidance documents will apply to certain types of conditions or what action levels or cleanup standards will be used, at least with respect to certain contaminants.

Another difficulty can arise when one party, usually the buyer, develops a cost estimate based on an active remedy – such as groundwater pump-and-treat or off-site disposal of contaminated soils – when the contract specifies that the remedy to be applied will be the "lease cost alternative," and the seller believes that this requires consideration of natural attenuation or "passive" closure. Again, regulations and agency policy may provide little guidance on this subject. Such a dispute might be averted if the contract were to specify that the "least cost" remedy must apply risk assessment and requires the use of natural attenuation in appropriate circumstances.

The following is a valuation provision that attempts to address the issues discussed above:

> "Environmental Remediation Cost" shall mean the amount of money that would be incurred by a third party to cost-effectively remediate the Environmental Condition to the cleanup standards presently required for that condition by Environmental Laws. If no cleanup standard is expressly required for that

condition by Environmental Laws, then the amount shall be that amount of money that would be incurred by a third party to cost-effectively remediate the Environmental Condition to the standards presently imposed on cleanups of substantially-similar conditions by an agency having jurisdiction over the condition, and shall include monitored natural attenuation where appropriate. Consideration of whether a condition is substantially similar will include: the chemical characteristics and concentrations of the contaminants; the horizontal and vertical extent of the contamination; the contaminated media (e.g., soil or water); and geographic location, including proximity to population centers, sensitive environments and usable quality water (both depth and distance).

The specificity in this contract definition should reduce the likelihood that the parties will have a dispute over the level of effort required for the remediation. Nevertheless, without agreement on the specific cleanup levels or standards to be applied, it is not unusual for consultants' reports to recommend widely different cleanup standards or approaches to environmental cleanup.

D. Establishing the Requirements for an Environmental "Defect"

Under most contracts, every environmental condition cannot be presented to the buyer as a defect that must be remedied. Generally, certain conditions are excluded. The types of conditions that buyers and sellers often agree to exclude from the group of "defects" that the seller will attempt to remedy are:

- Conditions that the seller has already identified to the buyer in a schedule or in an environmental audit report provided before execution of the Purchase and Sale Agreement;
- Individual conditions that do not exceed a threshold amount, for example $10,000; or
- Conditions that, in the aggregate, do not meet a threshold value, for example, a percentage of the purchase price.

When addressing a "threshold" amount, the parties must consider whether the threshold functions as a deductible, or as a threshold that must be met before the entire amount becomes a defect. Sometimes these thresholds are called "baskets" or "basket agreements" because the seller must fill the "basket" with defects (which may include defects other than environmental defects, such as title defects) before the buyer is entitled to any purchase price adjustment or other remedy.

E. Providing Formal Notice of an Environmental Defect

The purchase and sale agreement typically requires that, after the buyer identifies "Environmental Defects," it must provide a notice of those defects to the seller. The key issue for both the buyer and the seller is the specificity of the notice. The notice must be sufficiently detailed to allow the Seller to determine whether the defect meets the contract requirements. If the notice does not allow the seller to determine the basis for the buyer's claims, then the parties

cannot possibly agree on the remediation cost. A vague notice, particularly one asserting costly defects, is guaranteed to provoke disagreement and possibly litigation.

Conversely, a notice that is too detailed could prompt the seller to attempt to exclude associated conditions that are not expressly identified in the notice. For example, suppose the notice for a manufacturing plant identifies only extensive soil contamination. If the groundwater also is contaminated by that same condition, but was not tested, the seller may take the position that the groundwater contamination is not included in the notice or entitled to a remedy. The notice should be very carefully worded so that it is specific enough to include all the contract elements necessary to satisfy the definition of an environmental condition, but not so specific as to exclude by omission conditions directly associated with those that it identifies.

To minimize disagreements, the contract should contain a notice provision that specifically states when the notice must be filed and what and it must contain. For example:

> As soon as reasonably practical, but in no event later than 5:00 p.m., Central Time, on _____, 20__, Buyer shall notify Seller, in writing, of any Environmental Defect(s). Buyer's notice of Environmental Defect(s) shall include, for each individual Property, a reasonably complete description of (i) each individual Environmental Defect (including the basis for Buyer's assertion that the condition satisfies the definition of an Environmental Defect and all supporting documentation), (ii) the Environmental Remediation Cost which Buyer, in good faith, estimates is attributable to the Environmental Defect and (iii) assumptions and itemized costs used in calculating the Remediation Cost.

The seller also may want to require that the notice include, to the extent that it is available, a delineation of the contamination and the alleged cause or source of the condition. This information can be helpful in verifying the appropriate remediation cost estimate. Often, the contract precludes the buyer from asserting claims for conditions not listed in the notice; if so, then the contract should include a provision that any defects not identified in the notice are waived.

Before submitting the notice, the buyer should have its attorney review the notice to assure that it complies with the contract requirements. The notice must be submitted within the deadlines provided in the contract or it likely will be considered ineffective and the right to assert the environmental defects waived.

F. Remedies for the Environmental Defect

The purchase and sale agreement typically contains a selection of remedies from which the seller can choose to respond to the environmental defects in the notice. These include:

- Seller will cure the defect (usually by remediating the condition to applicable regulatory agency standards), in exchange for a release and/or indemnification from the buyer for future claims;

- Seller will indemnify the buyer for the cost of remediation and future third-party claims;

- Seller will remove the individual property from the sale and adjust the purchase price by the allocated value of the affected asset;

- Seller will adjust the purchase price by a sum equal to the estimated cost of remediation, in exchange for a release and/or indemnification from the buyer for all future claims.

The seller may also have the option to delay closing for a specified time, for example 30 days, while the parties negotiate or submit the disputed claims to arbitration. In addition, the contract may give either party the contractual right, if the claims exceed a certain threshold amount, to cancel the agreement and walk away from the transaction.

IV. Indemnification

A. Introduction

An indemnification provision in a contract requires one party (the indemnitor) to hold another party (the indemnitee) harmless from, or reimburse the indemnitee for costs and/or losses occurring as a result of, a specific event or condition.[17] Often an indemnification shifts responsibility for liabilities that arise out of the seller's operations – even the seller's negligent operations – to the buyer. Keep in mind, however, that the indemnification received is only as good as the financial integrity of the indemnitor. A tough indemnification from a nearly-insolvent party may not be worth the paper it is written on. When faced with uncertainty about the indemnitors' assets, the indemnitee should pursue alternative mechanisms for risk shifting, such as purchase price adjustments or escrow funds.

Indemnifications should be carefully and clearly drafted. The courts may not enforce an assumption of liability unless the intent to assume the obligation is clearly expressed and apparent from the face of the document. In addition to carefully and specifically drafting the indemnification, the parties need to consider any statutory or common law limitations on indemnifications, as discussed further in Section V.C. below.

B. Sample Indemnification Provision

1. Basic Indemnity

The following is a sample indemnification clause drafted to include indemnification for damages that arise out of a breach of seller's environmental warranties.

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[17] Indemnification agreements have taken on particular significance in light of the statutory provision contained in CERCLA that allows parties to indemnify or release each other from CERCLA liability 42 U.S.C. § 9607(e)(1). Section 9607(e)(1) states:

> No indemnification, hold harmless, or similar agreement or conveyance shall be effective to transfer from the owner or operator of any vessel or facility or from any person who may be liable for a release or threat of release under this section, to any other person the liability imposed under this section. **Nothing in this subsection shall bar any agreement to insure, hold harmless, or indemnify a party to such agreement for any liability under this section.** (emphasis added).

> TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, SELLER AGREES TO INDEMNIFY AND DEFEND BUYER, ITS AFFILIATED COMPANIES, DIRECTORS, OFFICERS, STOCKHOLDERS, PARTNERS, EMPLOYEES, AGENTS, ATTORNEYS, CONSULTANTS, CONTRACTORS, SUCCESSORS AND ASSIGNS (COLLECTIVELY, "INDEMNITEES") WITH REGARD TO ANY AND ALL CLAIMS, LOSSES, DAMAGES, LIABILITIES, LIENS, FINES, SUITS, JUDGMENTS, ADMINISTRATIVE PROCEEDINGS, REMEDIATION REQUIREMENTS, ENFORCEMENT ACTIONS, AND ALL COSTS AND EXPENSES INCURRED IN CONNECTION THEREWITH (INCLUDING, BUT NOT LIMITED TO, ATTORNEYS' FEES AND EXPENSES, INCLUDING THOSE INCURRED BY SELLER IN ENFORCING THIS INDEMNITY), DIRECTLY OR INDIRECTLY ARISING OUT OF, CAUSED BY OR RESULTING FROM (IN WHOLE OR IN PART) ANY BREACH OF THIS CONTRACT, INCLUDING WITHOUT LIMITATION, ANY BREACH OF THE ENVIRONMENTAL REPRESENTATIONS, WARRANTIES, AND COVENANTS, EVEN IF SUCH BREACH ARISES FROM OR IS ATTRIBUTED TO THE SOLE OR CONCURRENT NEGLIGENCE OF ANY INDEMNITEE (COLLECTIVELY, "LIABILITIES").

Note that the indemnitees are not limited to the buyer, but can include directors, officers, employees, and affiliated companies. If the seller's financial integrity is in question, the indemnitees may want the definition of indemnitor to include the seller's parent company or other guarantors.

This indemnification could be written to include liabilities other than those arising out of a breach of warranty or breach of contract, for example damages that arise out of the existence of an "environmental condition" or "defect" on the property or liabilities associated with known conditions that the parties identify on a schedule attached to the purchase and sale agreement. But all parties should carefully review and understand the description of the "Liabilities" to be sure that they cover all intended – but no unintended – circumstances or causes of action. Consider this example. The buyer has agreed to indemnify the seller for all environmental liabilities associated with the properties in exchange for a significant reduction in purchase price. The buyer does not notice that the definition of liabilities includes liabilities associated with the disposal of all wastes generated on the property. A closer look at the relevant definitions reveals that this indemnification includes any liability for offsite disposal, potentially including decades-old wastes taken to a municipal landfill that is now a federal Superfund site. That indemnification, which appears reasonable on its face, actually goes far beyond the parties intent – and could exceed the value of the purchase price adjustment by an order of magnitude.

The indemnitor may want to place certain limitations on the indemnification obligation. These limits can include, but are not limited to, a threshold of costs that must be incurred to trigger the indemnity, a cap on the maximum indemnification obligation, a requirement that the parties share an indemnified remediation obligation, the right to participate in settlement negotiations with third parties, the right to control any remediation for which indemnity is claimed, or the right to pursue collateral sources, such as the indemnitee's insurance, for indemnification costs. In addition, as discussed below for third-party claims, the indemnitor likely will seek to limit the indemnification to claims asserted within a specified time period.

2. Indemnification for Third-Party Claims

Future third-party claims, for example, claims that may be brought by adjacent landowners for water well contamination, are not known at the closing date. Because the risk

that a third-party claim will be asserted is difficult to predict, and because the associated litigation costs can be enormous, buyers often seek indemnification for losses, including costs of litigation, arising out of third-party claims based on pre-closing activities.

Several issues arise in drafting an indemnity for third-party claims. The first, obviously, is the definition of third parties or third-party claims. It typically includes governmental agencies so that the indemnification will cover regulatory enforcement actions. The indemnitor also may want the definition to exclude claims that any indemnitee has instigated, for example, by notifying the agency (with the exception of submitting required notices) or by encouraging an adjacent landowner to file a lawsuit before the indemnification period expires. The definition also should exclude third parties that are related to or affiliated with the indemnitees. One example of a definition of third-party claims is:

> Third Party Claims shall mean any damages, penalties, fines, costs and expenses (including, without limitation, reasonable expenses of investigation and reasonable attorneys' fees and expenses in connection with any action, suit or proceeding), to the extent the same arise out of or result from any claim, demand or cause of action (or threatened cause of action) which (a) is at any time made, asserted or threatened against Buyer by a Person which is not Buyer or an Indemnitee and (b) has not been solicited or intentionally provoked by Buyer or an Indemnitee. A third-party claim will not be considered "intentionally provoked" if it was prompted by the filing of a notice required by law to be filed with a regulatory agency.

The contract also should specify what events will trigger the indemnification obligation with respect to a third-party claim. For example, the contract should state whether the triggering event must be a formal one, such as an agency "notice of violation" or a petition filed with the courthouse, or merely a demand letter or agency request for an investigation.

Another consideration is the expiration of the third-party claim indemnification obligation. The seller may take the position that the indemnification should apply only to claims for which it receives a notice within a specified time period, for example within two years of the closing date. In Texas, although two years is consistent with the statute of limitations for property damage, state and federal agencies generally are not subject to statutes of limitations for issuing cleanup orders, and this virtually-indefinite liability might justify a longer indemnification period.

3. Duty to Defend

The indemnification provision can specify which party will be responsible for controlling or directing the defense of any indemnified action or claim brought against the indemnitee. If the indemnitor is required to defend, the indemnitee should have the right to approve counsel and take over the defense under specified circumstances. Here is one example of a provision addressing these issues:

> Buyer shall promptly advise Seller in writing of any matter as to which this indemnification may apply, and Seller, at Seller's expense, shall assume on behalf of Buyer (and the other Indemnitees) and conduct with due diligence and in good

> faith the defense with counsel satisfactory to Buyer; provided, however, that any Indemnitee shall have the right, at its option, to be represented by advisory counsel of its own selection and at its own expense. In the event Seller fails to fully satisfy these responsibilities, Buyer, at its option, and without relieving Seller of its obligations, may so perform, and Seller shall reimburse Buyer for all costs and expenses incurred, together with interest from the date any such expense was paid by Buyer until reimbursed by Seller, at the rate of interest provided to be paid on judgements, by the law of the jurisdiction to which the interpretation of this agreement is subject.

This provision helps to clarify the procedures to be followed when an event occurs that triggers indemnification. Even if the parties choose not to include an express obligation to defend, the Seller is well-advised to require notice of such a triggering event which states the basis of the claim for the indemnification so that it can monitor the development of the claim and, along with the indemnitee, take steps to mitigate the damages, if possible.

C. Statutory and Common Law Limitations on Indemnification

Indemnifications are governed by state law, are strictly construed, and often disfavored by the courts because they alter traditional legal principles linking fault and liability. In addition, state law may impose specific requirements that must be met before an indemnity provision will be enforced by the courts.[18] Thus, the existence of special state requirements should be carefully investigated before final negotiation and execution of an indemnity agreement.

1. The Fair Notice Requirements in Texas

One of the more significant limitations on indemnifications in Texas is the judicially-created fair notice requirements of "express negligence" and conspicuousness. These fair notice requirements are applied to agreements that seek to hold the indemnitor responsible for liabilities arising out of the sole or concurrent negligence of any indemnitee.[19] The "express negligence" element of the fair notice doctrine requires that the contract expressly or affirmatively state the intention to indemnify for the indemnitee's own negligence. Typically, the express negligence requirement is satisfied with a statement that the indemnification is effective "even if such liabilities arise from or are attributable to the sole or concurrent negligence of the indemnitee." Without this statement, the indemnification clause may not be valid as to losses arising in whole or in part out of the indemnitee's own negligence.

The second fair notice requirement is conspicuousness. To satisfy this requirement, most practitioners insist that the indemnification provision be written in bolded or all-capitals typeface. The problem created by using all-capital letters is that the defined terms can no longer be identified. To preserve the ability to recognize the defined terms, a larger font, or a bolded large-and-small-capitals font may be preferred. Another alternative is to provide a separate line in the margin for initialing the indemnity provision.

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[18] For example, many states have "anti-indemnity" statutes that limit risk-shifting on the basis of public policy. TEX. CIV. PRAC. & REM. CODE ANN. §§ 127.001-127.007 (1997); LA. REV. STAT. § 9: 2780; N.M. STAT. ANN. § 56-7-2.

[19] *Dresser Indus., Inc. v. Page Petroleum, Inc.*, 853 S.W.2d 505, 508-09 (Tex. 1993); *Ethyl Corp. v. Daniel Const. Co.*, 725 S.W.2d 705, 707-08 (Tex. 1987) (the "express negligence" doctrine).

The Texas Supreme Court has held that the fair notice requirements apply to releases as well as indemnity agreements.[20] One Texas court has held that the express negligence doctrine applies despite the sophistication of the parties,[21] underscoring the fact that the conspicuousness requirement cannot be ignored.

2. Express Indemnification for CERCLA Claims

Some cases have suggested that indemnification is not effective to allocate Superfund liability unless expressly stated in the indemnification agreement.[22] Accordingly, some drafters add the following language to address this concern:

> **THIS INDEMNITY IS INTENDED, AMONG OTHER THINGS, TO ALLOCATE RESPONSIBILITY BETWEEN BUYER AND SELLER AS CONTEMPLATED BY SECTION 107(E)(1) OF CERCLA AND ANY SUCCESSOR FEDERAL STATUTE, RULE OR REGULATIONS OR COMPARABLE STATE STATUTE, RULE OR REGULATION.**

Keep in mind, however, that the state and federal regulatory agencies do not recognize contractual indemnification as a defense to statutory liability, only as a private agreement that a party could pursue to satisfy that liability.

V. Arbitration of Environmental Claims

Arbitration is a viable and frequently-desirable remedy for contractual disputes involving environmental contamination. Confidentiality is the primary reason to arbitrate rather than litigate environmental disputes. In litigation, the parties create a detailed public record of environmental contamination of their properties, which can invite third-party lawsuits against both buyer and seller. The buyer's attempt to prove that conditions on the properties violate the law or constitute serious threats to the environment are particularly troublesome for the parties involved and can set unfavorable legal precedent as well. If the property is particularly large, the use of class actions to leverage the litigation makes third-party access to evidence about the environmental conditions on the property a potentially disastrous problem.

In fact, the advantages of choosing arbitration over the courthouse are many and can include:

1. **Flexibility.** Arbitration gives the parties more control as to the date, time and place of the proceedings; the selection of the arbitrator (trier-of-fact); the scope of the arbitrator's authority; the type of relief to be awarded; and the finality of the award (binding or nonbinding).

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[20] *Dresser Indus.*, 853 S.W.2d 505, 508-09 (Tex. 1993).

[21] *Douglas Cablevision IV, L.P. v. Southwestern Electric Power Co.*, 992 S.W.2d 503 (Tex. App.—Texarkana 1999, writ denied). However, the doctrine does not apply to contractual provisions that simply shift economic damages for breach of contract, but not damages arising out of the indemnitee's negligence. *Green Int'l, Inc. v. Solis*, 951 S.W.2d 384, 387 (Tex. 1997).

[22] *But see Joslyn Mfg. Co. v. Koppers*, 40 F.3d 750, 754 (5th Cir. 1994) (broad indemnifications intending to cover all liabilities include CERCLA liability, without the requirement that it be expressly mentioned).

2. **Efficiency.** The arbitration process is not impeded by crowded court dockets, and is quicker than an ordinary trial. It can be scheduled at the earliest convenience of all the parties and the arbitrator.

3. **Cost Effectiveness.** There can be lower overall legal costs; due to less use of personal and staff time; and more efficient use of attorney, court and client resources.

4. **Informality.** Strict rules of evidence and formal rules of procedure are not applicable. The arbitrator may personally question the witnesses or personally inspect the site/scene involved in the dispute.

5. **Confidentiality.** The details of the proceeding generally may not be disclosed, even in subsequent litigation. The arbitrator is bound by procedural rules and professional ethics to maintain the confidentiality of the proceedings.[23]

With respect to confidentiality, arbitration – unlike litigation – is a private proceeding usually conducted in a manner which excludes attendance of the general public. A transcript of the proceeding is not required, unless requested by the parties. In Texas, for example, the confidentiality and privacy of an arbitration proceeding are governed by the Texas Alternative Dispute Resolution Procedures Act,[24] which provides in part:

> (a) . . . communication relating to the subject matter of any civil...dispute made by a participant in an alternative dispute resolution procedure, whether before or after the institution of formal judicial proceedings, is confidential, is not subject to disclosure, and may not be used as evidence against the participant in any judicial or administrative proceeding.
>
> (b) Any record made at an alternative dispute resolution procedure is confidential, and the participants or the third party facilitating the procedure may not be required to testify in any proceedings relating to or arising out of the matter in dispute or be subject to process requiring disclosure of confidential information or data relating to or arising out of the matter in dispute.[25]

However, there are some potential disadvantages to binding arbitration. Those disadvantages include:

1. **The unknown.** The arbitrator may not be required to have a legal background.

2. **Possible arbitrariness.** The arbitrator is not bound by substantive law.

3. **Few procedural safeguards.** The arbitration process lacks many of the procedural safeguards available through traditional litigation and the courts.

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[23] *See* James L. Branton & Jim D. Lovett, *Texas Alternative Dispute Resolution*, § 2-38 (1998). *See also Handbook of Alternative Dispute Resolution*, (Amy L. Greenspan ed.) (2nd Ed. 1990).

[24] TEX. CIV. PRAC. & REM. CODE § 154.073).

[25] *Id.*

4. **Virtually immune from review.** The opportunity for appeal and power to vacate an award in binding arbitration are limited. In Texas, before a trial court will set aside an arbitration award, it must determine that it is tainted with fraud, misconduct, or such gross mistake as to imply bad faith and a failure to exercise honest judgment.[26]

5. **No precedence.** The award lacks precedent setting value.[27]

The following is an example of an enforceable future dispute arbitration clause found in a written contract.

> **ARBITRATION.** The Buyer and the Seller agree that any controversy or claim between them arising out of or relating to this agreement shall be settled exclusively by arbitration. Such arbitration shall be conducted in accordance with the Commercial Arbitration Rules then in force of the American Arbitration Association. The decision of the arbitrator shall be a final and binding resolution of the disagreement which may be entered as a judgment by any court of competent jurisdiction. Neither party shall sue the other where the basis of the suit is this agreement other than for enforcement of the arbitrator's decision.[28]

The arbitration clause in the contract can be expressly limited to use in resolving the environmental issues, such as disagreements about what conditions constitute environmental defects, what constitutes a "violation" of law, what remediation obligations are required by law, or what value should be assigned to the environmental defect.

VI. Conclusion

Effective management of environmental risks requires planning the environmental investigation, collecting the relevant information, and clearly allocating the known and unknown liabilities. One must anticipate the issues that can affect information-gathering and precisely describe the requirements for asserting an "environmental defect." The key is clear drafting. Hopefully, this paper has prepared the reader to better anticipate environmental issues and more clearly draft the contract provisions that address them. Ultimately, the goal of the environmental provisions in any purchase and sale agreement is to facilitate commercial transactions and avoid litigation.

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[26] *Powell v. Gulf Coast Carriers, Inc.*, 872 S.W. 2d 22 (Tex. App.–Houston [14th Dist.] 1994, no writ).

[27] *See* James L. Branton & Jim D. Lovett, *Texas Alternative Dispute Resolution*, § 2-39 (1998). *See also Handbook of Alternative Dispute Resolution*, (Amy L. Greenspan ed.) (2nd Ed. 1990).

[28] *In Re Bruce Terminix Co.*, 988 S.W.2d 702, 706 n.1 (Tex. 1998).


ARE
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GAME ?

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BROWNFIELD REDEVELOPMENT: A BUYER'S CHECKLIST OF ENVIRONMENTAL LEGAL ISSUES

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BROWNFIELD REDEVELOPMENT: A BUYER'S CHECKLIST OF ENVIRONMENTAL LEGAL ISSUES

JOHN SLAVICH

The following checklist notes environmental legal issues to be considered by a buyer looking at redevelopment of contaminated property. The checklist does not purport to be all-inclusive, in part because brownfield issues are so site specific. I would be pleased to receive suggestions (by e-mail at slavich@guidaslavichflores.com) for additions to and refinements of the checklist, with the plan of sharing the evolving checklist with interested parties in the future.

I. Liability Exposure

A. Potential Liabilities
1. Remediation
2. Property damage
3. Personal injury
4. Natural resource damage
5. Post-closure obligations
6. Fines and penalties
7. Injunctive relief
8. Stigma damages
9. Contractual obligations
10. Covenants running with the land

B. Potential Complainants/Plaintiffs
1. State government
2. Federal government
3. Local government
4. Onsite persons
5. Offsite persons
6. Contract beneficiaries

C. Notification Obligations
1. Release reporting
2. Disclosure

II. Tools for Managing Liability Exposures

A. Old Tools
1. Environmental assessment/due diligence
2. Contractual risk allotment mechanisms
3. Cost recovery/contribution
4. Carve out of portions of tract

B. New Tools
1. Risk-based cleanups
2. Voluntary Cleanup Programs (VCP)
3. Innocent Owner/Operator Program (IOP)
4. EPA Prepurchase Agreements
5. EPA Memoranda of Agreement
6. EPA Policy Regarding Groundwater Contamination from Offsite Sources
7. EPA NFRAP designation
8. Environmental insurance
9. Lender liability protections
10. Economic incentives

III. Structuring Considerations

A. Form of Transaction

B. Tax Considerations

C. Post Acquisition Remediation

IV. Challenges/Barriers to Brownfield Redevelopment

A. Complexity

B. Timing

C. Lack of Certainty and Finality

D. Economics

E. Redevelopment Potential

F. Government's Role

G. Stakeholder Issues

H. Sufficiency of Data

I. Practicality of Addressing Issues

J. Acceptability of Cleanup Target

V. In-the-Field Issues

A. Type of Site
   1. Previously closed site
   2. Site remediation coordinated with redevelopment

B. Regulatory Issues
   1. Regulatory decisions
   2. Stormwater regulations
   3. Dredge and fill permits

C. Impact of Controls on Proposed Redevelopment
   1. Deed restrictions and other institutional controls
   2. Engineering controls

D. Impacted Media
   1. Soil
   2. Groundwater

E. Particular Site Issues
   1. Historic areas
   2. Particular contaminants

F. Cleanup Level Issues

VI. Redevelopment Team

A. Environmental attorney

B. Real estate/land use attorney

C. Environmental consultant

D. Remediation contractor

E. Construction team

F. Environmental/neighborhood liaison

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PUBLIC PARTICIPATION IN ENVIRONMENTAL PERMITTING: THE IMPLEMENTATION OF HB 801

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Public Participation in Environmental Permitting:
The Implementation of House Bill 801

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PUBLIC PARTICIPATION IN ENVIRONMENTAL PERMITTING: THE IMPLEMENTATION OF HOUSE BILL 801

Introduction

During the 1999 session, the Texas Legislature enacted House Bill (HB) 801 which substantially changed the structure and scope of public participation in Texas Natural Resource Conservation Commission (TNRCC) environmental permitting decisions.[1] The new procedures apply to applications for water quality permits, air permits, waste permits and underground injection well permits that: (1) afford an opportunity for a contested case hearing;[2] and (2) are declared administratively complete on or after September 1, 1999. With respect to air permits, the new statutory requirements are found in Texas Health & Safety Code §382.056. With respect to all other applications subject to HB 801, the applicable statutory provisions are found in Texas Water Code Chapter 5, Subchapter M., Environmental Permitting Procedures, §§ 5.551-5.556. In the fall of 1999, the TNRCC revised Chapters 39, 50, 55 and 80 of its procedural rules to implement the new public participation requirements.

HB 801 is intended to encourage (1) early public notice, (2) early public input, (3) public meetings and early access to the application to share information about proposed facility operations, (4) substantive responses to citizen concerns raised during the comment period, and (5) streamlined contested case hearings. There is an assumed nexus between establishing a dialogue with concerned citizens early in the process and achieving the goal of streamlined hearings. Indeed, a cornerstone assumption of the HB 801 process is that if the public is involved and informed early in the permitting process through public notice and comment procedures, the executive director and the applicant will be able to address and satisfy issues of concerns raised by the public. The hope is to achieve a "win-win" outcome and avoid the necessity of a contested case hearing.

In the event all concerned citizens are not satisfied by the outcome of the early notice and comment procedures, the assumption is that the new process will at least narrow the issues of concern appropriate for hearing and reduce the number of persons requesting a hearing. By narrowing the universe of affected persons who remain opposed to the proposed permit and focusing on specific issues, the assumption is that the contested case hearing process will be more efficient, saving time and expense for all parties. These are the assumptions upon which HB 801 is built. Whether these assumptions will be proven valid remains to be seen.

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[1] This paper expresses the individual views of the author, or where indicated, the position of the Office of the Public Interest Counsel with respect to certain issues. This paper is not intended to represent policy positions of the TNRCC.

[2] Some aspects of the notice and comment procedures apply to certain other applications where there is no opportunity for hearing, such as air applications for the initial issuance of voluntary emission reduction permits and for the initial issuance of electric generating facility permits.

I. Public Notice and Comment Procedures under HB 801

A. Notice of Receipt of Application and Intent to Obtain Permit

Early public notice is a key component of the new process. The applicant is required to publish in a local newspaper a "Notice of Receipt of Application and Intent to Obtain Permit" within 30 days after the application is declared administratively complete. For air applications, this notice must be published in a newspaper of general circulation in the municipality where the facility is proposed to be located. TEX. HEALTH & SAFETY CODE §382.056(a); 30 TAC ("TAC") §§39.405(f)(1), 39.418(b)(3) and 39.603(c). For waste and water applications, this notice must be published in the newspaper of largest general circulation in the county where the facility is proposed to be located. TEX. WATER CODE §5.552(b)(1); 30 TEX. ADMIN. CODE §§39.418(b)(1) and 39.405(f)(1).

While HB 801 created new notice requirements, it did not repeal any pre-existing statutory notice requirements. Therefore, waste and water notices may also need to be mailed or published in other ways to satisfy other statutory requirements. 30 TAC §39.418(b)(1) and (2); 30 TAC §39.405(f)(2). Also, sign posting is required for notices of air applications. 30 TAC §39.418(b)(3); 30 TAC §39.604.

The Notice of Receipt of Application and Intent to Obtain a Permit provides a brief description of the location and nature of the proposed activity, as well as agency and applicant contacts for obtaining additional information. The notice will also contain a description of the procedural rights and obligations of the public, including instructions for submitting comments on the application, instructions for requesting to be on the application's mailing list, and instructions for requesting a public meeting. The notice also includes information regarding the location in the county where a copy of the application may be viewed and copied. 30 TAC §39.411(b)(1)-(9).

For applications for air authorizations which may be subject to the contested case hearing process, this notice must also contain information on how to request a contested case hearing. 30 TAC §39.411(b)(10). The HB 801 process for air applications is very different from waste and water applications in one key respect: for air authorizations (other than the federal permits discussed in the next section), if no timely hearing request is received by the TNRCC in response to this first notice, there will be no further notice and no further opportunity to comment or to request a contested case hearing. TEX. HEALTH & SAFETY CODE §382.056(g); 30 TAC §39.419(e)(1)(A). With respect to air applications, this is perhaps the single most important thing to remember about the HB 801 process.

The Notice of Application and Intent to Obtain a Permit is intended to provide the public with access to as much information as possible about proposed operations as soon as possible after the application is filed and declared administratively complete. In the past, the TNRCC has been criticized because the agency had little communication with the public until technical review

was completed and a draft permit was issued. In contrast, because of the structure of the technical review process, there was a dialogue between staff and the applicant. Depending on the nature and complexity of the application, this dialogue -- established both through formal notices of deficiencies and informal communication -- could go on for months before a draft permit was issued and the public was given notice. Only at that point was the public invited to comment or request a hearing on the draft permit. This technical review structure sometimes created a perception that staff had a sense of investment in the draft permit, developed through months of its "working relationship" with the agency's "customer," the applicant. By encouraging the public to learn more about proposed operations and give comment while technical review is ongoing, HB 801 aims to change this perception. The goal of early notice is to start a dialogue between TNRCC staff and the public earlier in the process, before staff forms preliminary conclusions about the technical sufficiency of the application.

B. Notice of Application and Preliminary Decision

Following the initial notice, the application undergoes technical review by staff. Based on staff's technical review, the executive director makes a "Preliminary Decision" -- a term of art under HB 801 -- as to whether the application meets the applicable statutes and regulations of the agency. Then, the application may be subject to a second public notice, the "Notice of Application and Preliminary Decision," which provides additional opportunities for public participation.

Waste and water permit applications require this second notice. The following federal air permit applications require this second notice: Prevention of Significant Deterioration applications; Nonattainment applications; and Federal Clean Air Act §112(g) applications. 30 TAC §39.419(e)(3). Otherwise, this second notice is required for an air application (or a registration for a concrete batch plant permit by rule) only when a contested case hearing was requested during the first notice period, and such request has not been withdrawn before the date the Preliminary Decision is issued. 30 TAC §39.419(e)(1).

The Notice of Application and Preliminary Decision states that the executive director's staff has completed its technical review and made a preliminary decision as to whether the application meets the requirements of applicable law. The notice gives further information on how the public can comment on the Executive Director's Preliminary Decision and when the comment period ends. The notice also informs the public that, following the close of the comment period and the transmittal of the Executive Director's Decision and Response to Comments (discussed in Section II below), there will be an opportunity to request a contested case hearing or reconsideration of the executive director's decision. Similar to the first notice, this second notice identifies the location in the county where a copy of the complete and current application and the Executive Director's Preliminary Decision are available for review and copying by the public. The notice must also state that only relevant and material issues raised during the comment period can be considered if a contested case hearing is held on the application. 30 TAC §39.411(c).

C. Public Meetings

To facilitate early public awareness and input concerning applications, HB 801 has specifically provided for the possibility that an applicant, in coordination with the executive director, may hold an "early" public meeting while technical review of the application is ongoing. TEX. WATER CODE §5.552(f); TEX. HEALTH & SAFETY CODE §382.056(e); 30 TAC §55.154(b). Whether early in the comment period, or later in the process after the completion of technical review, the executive director must hold a public meeting on the request of a legislator representing the affected area or upon a determination that there is substantial public interest in the application. TEX. WATER CODE §5.554; TEX. HEALTH & SAFETY CODE §382.056(k); 30 TAC §55.154(c). The statutes specifically provide for the possibility that there may be more than one public meeting during the comment period. TEX. WATER CODE §5.554; TEX. HEALTH & SAFETY CODE §382.056(k).

The public comment period is automatically extended to the close of any public meeting. 30 TAC §55.152(b). Any formal comments received at a public meeting held by TNRCC will be answered in writing when the Executive Director's Decision and Response to Comments is filed with the Office of the Chief Clerk.

II. The Executive Director's Decision and Response to Comments

After the close of the comment period, the executive director is required to respond in writing to all "timely, relevant and material, or otherwise significant" comments. 30 TAC §55.156(b)(1). This curious language in the rule satisfies both HB 801, requiring responses to "relevant and material" comments (TEX. WATER CODE §5.555(a) and TEX. HEALTH & SAFETY Code §382.056(l)), as well as federal requirements that the agency respond to "significant" comments on applications processed under certain delegated or authorized programs.

The executive director's intent is to file the response to comments within the shortest practicable time, within 60 days following the close of the comment period. 30 TAC §55.156(b)(3). The chief clerk transmits the Executive Director's Decision, the Executive Director's Response to Comments, and instructions for requesting that the commission reconsider the executive director's decision or hold a contested case hearing to persons who submitted public comment and persons who have requested to be on the mailing list. TEX. WATER CODE §5.555(b), TEX. HEALTH & SAFETY CODE §382.056(m), 30 TAC §39.420, 30 TAC §55.156(c). There is no requirement to publish notice of the Executive Director's Decision and Response to Comments. Mailed notice under the statutory and regulatory provisions cited above is all that is required. Only those persons who have previously expressed interest in the application in written communication to the TNRCC will be given notice.

The chief clerk's mailing of the response to comments is a significant step in the HB 801 process. This point in the process signifies the close of the comment phase -- the phase which has developed the issues which may now be subject to a contested case hearing -- and the beginning

of the phase where issues are narrowed and possibly referred for a contested case hearing. Through the process of the executive director's review of and response to public comment, and any modifications to the proposed permit based on that review, the executive director's "Preliminary Decision" evolves into the executive director's "Decision" as to whether the permit should be issued. Rather than commenting on the Decision, the public has an opportunity at this point to request that the commission reconsider the Decision or hold a contested case hearing on specific issues. Requests for reconsideration or for a contested case hearing must be filed within 30 days of the mailing of the Executive Director's Decision and Response to Comments. 30 TAC §55.201(a).[3]

Here again, please note that air applications are different.[4] The only time that the transmittal of the Executive Director's Decision and Response to Comments on an air application must provide the opportunity to request reconsideration or request a contested case hearing is when a request for hearing was previously received during the first comment period following the Notice of Receipt of Application and Intent to Obtain Permit, and such request was not withdrawn before the issuance of the Preliminary Decision. TEX. HEALTH & SAFETY CODE §382.056(g); 30 TAC §39.420(c)(3).[5]

A. Requests for Reconsideration

HB 801 introduced a new procedural mechanism for the public to challenge the issuance of a permit – the "request for reconsideration." A request for reconsideration is a request that the commission review the Executive Director's Decision and come to a different conclusion as to whether the permit should be issued. For clarification, the executive director has not acted on the application and issued the permit at this point.[6] Rather, the executive director has made a decision

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[3] As stated above, only persons on the mailing list for the application will receive the Executive Director's Decision and Response to Comments with instructions on how to request a hearing; however, a timely filed request from anyone will be processed by the chief clerk.

[4] The reference to "air applications" is intended to include only those applications or registrations where there is an opportunity for contested case hearing under applicable law. Under other statutory provisions unrelated to HB 801, there is no opportunity for contested case hearing with respect to certain air permit applications, including (1) federal operating permits, (2) the initial issuance of voluntary emission reduction permits, (3) the initial issuance of electric generating facility permits, or (4) amendments, modifications or renewals of other air permits where there is no increase in emissions or no emission of new contaminants and no egregious compliance history. TEX. HEALTH & SAFETY CODE §§382.0519, 382.056(g),(h) and (o), and 382.0561; TEX. UTILITIES CODE §39.264.

[5] Otherwise, if no hearing request is filed in response to first notice and the application passes technical review, the executive director will act on the application as an uncontested matter and issue the permit. The Response to Comments will be transmitted with notice that the permit has been issued and is subject to the motion to overturn process. *See infra* note 6.

[6] Confusion often results because of the similarity of the terms "request for reconsideration" and "motion for reconsideration." The "motion for reconsideration" is a procedural mechanism used to request that the

as to whether the application meets the requirements of applicable law and the permit should be issued.

Unlike a request for a contested case hearing, anyone may request reconsideration of the Executive Director's Decision. This new mechanism provides an alternative to the contested case hearing for persons who may not qualify as "affected persons" entitled to a contested case hearing or persons who do not have the time or resources to devote to preparing for and participating in an evidentiary hearing. There are no stated standards for evaluating the request, but it should be as specific as possible in stating the reasons why the decision should be reconsidered. 30 TAC 55.201(e).

B. Requests for Contested Case Hearing

HB 801 changed not only the structure of the public comment period and the timing of requesting a hearing, but also changed the requirements for making such a request. Valid requests for hearing still can be made only by "affected persons" with a personal justiciable interest separate and apart from any interest shared with the general public. TEX. WATER CODE §5.115(a). However, the requirements that the request be "reasonable" and supported by "competent evidence" have been eliminated.

HB 801 places a new emphasis on the issues raised in a hearing request. This emphasis results, in part, from the fact that any commission order granting a hearing on an application must limit the number and scope of issues referred to the State Office of Administrative Hearings (SOAH). To facilitate the commission's deliberations concerning what issues, if any, should be referred to hearing, the rules ask that a hearing request specify any of the executive director's responses to comments which the requester disputes and the factual basis of the dispute. 30 TAC §55.201(d)(4).

1. Issues Raised During the Comment Period

HB 801 also emphasizes the need to raise concerns early in the process with the hope that the concerns can be addressed by the applicant and the executive director during the comment period. To ensure the early identification of issues of concern, HB 801 allows only issues raised during the comment period to form the basis of a valid hearing request. A request now must be based on issues that were raised during the comment period and not withdrawn prior to the filing of the executive director's response to comments. 30 TAC §55.211(b)(3)(A). There is no statutory requirement that the person making the request be the same person who made the comment, only that the issue raised in the request be an issue raised by someone during the public

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commission reverse the executive director's action in issuing an authorization which is uncontested or for which there is no right to a contested case hearing. For applications declared administratively complete on or after September 1, 1999, the name of this motion has been changed to "motion to overturn" in an effort to avoid using a name which is confusingly similar to "request for reconsideration." 30 TAC §50.139.

comment period. TEX. WATER CODE §5.556(d)(2).

2. Issues Which Involve a Disputed Question of Fact and Which are Relevant and Material to the Commission's Decision on the Application

The issues raised in the request for hearing must involve a "disputed question of fact" and be "relevant and material" to the commission's decision on the application. TEX. WATER CODE §5.556(d). As of the time this paper was submitted, the commission had not yet been required to make findings as to whether a request satisfies these conditions.[7] Determining whether these criteria are met is likely a more nebulous task than determining whether the requester's issues were raised during the comment period. While the commission's interpretation of these criteria will have to unfold on a case-by-case basis, the Office of Public Interest Counsel has considered these criteria and formed certain opinions as discussed below.

a. Disputed Issue of Fact

What is required to "dispute" an issue of fact? If a requester is concerned that wastewater discharged under a proposed permit will contaminate a waterway in which he has an interest, what must he do to dispute conclusions by the applicant and the executive director that permit conditions are adequately protective?

During the comment period on the amendments to the TNRCC procedural rules implementing HB 801, one commenter asked that the commission develop a definition of "disputed issue of fact." As summarized in the preamble adopting the amendments to the Chapter 55 rules, "[t]he commenter stated that the commission should explain that a 'disputed issue' is a discrete factual issue associated with the proposed project or activity, and that the rules should make clear that generalized objections to air pollution or potential threats to groundwater or surface water or personal perceptions or concerns which fail to identify a disputed factual issue will not be considered." 24 Tex. Reg. 9030 (October 15, 1999). The commission did not adopt the comment. While the commission agreed that "generalized objections" did not satisfy the intent of HB 801, the commission expressed no agreement with the idea that concerns about "potential threats" or "personal perceptions" of risk from a proposed facility cannot raise a disputed factual issue as to whether the permit is adequately protective. The OPIC submits that issues regarding the threat of specific types of contamination (air pollution, groundwater pollution, etc.) from a specific facility are not "generalized objections."

The dictionary definition of "dispute" is "to engage in argument," "to debate," "to question

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[7] The only hearing request subject to HB 801 that has come before the commission concerned a concrete batch plant permit-by-rule. The commission determined that none of the persons requesting a hearing lived within 440 yards of the proposed plant -- the statutory distance limitation for "affected persons". Thus, the commission did not reach the question of whether the request raised disputed questions of fact that were relevant and material to the commission's decision.

the truth or validity of, to doubt."[8] The Office of Public Interest Counsel submits that if an issue about surface water contamination, groundwater contamination or air pollution from a proposed facility is raised during the comment period and not addressed to a person's satisfaction in the responses elicited from the applicant or the executive director through the public comment process, that particular issue is the subject of argument, debate and doubt -- and therefore "disputed"-- when raised in the person's hearing request.[9] Furthermore, in the case of proposed new permits for new facilities, the likelihood of positive or negative impacts from a facility that does not yet exist, by necessity, always will be speculative. The potential environmental or health threat posed by a facility differs from other issues, such as the distance someone lives from a facility, which can be easily investigated, quantified and indisputably determined.

If the commission requires more of hearing requesters to "dispute" the position of the applicant or the executive director on issues such as the accuracy or reliability of modeling or other alleged indicators of potential impact, the commission may risk running afoul of recent Third Court of Appeal decisions in the cases of *Heat Energy Advanced Technology, Inc. v. West Dallas Coalition for Environmental Justice*, 962 S. W. 2d 288 (Tex. App.--Austin 1998, pet. denied) and *United Copper Industries, Inc. v. Grissom*, No. 03-99-00117-CV (Tex. App.--May 18,2000). Although these decisions involve pre-HB 801 commission decisions on hearing requests, the court's message in these cases is clear -- hearing requesters cannot be required to show they would prevail on the merits just to show that they have standing to request a contested case hearing. Accordingly, requiring requesters to "refute" (with evidence) rather than "dispute" executive director conclusions, applicant modeling, testing or studies, or applicant representations regarding likely impacts would appear to be inconsistent with these opinions.

Furthermore, placing a burden on the requester to refute applicant and executive director findings to be granted a hearing would be inconsistent with HB 801's *removal* of the requirement that hearing requests be supported by "competent evidence."

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[8] WEBSTER'S NINTH NEW COLLEGIATE DICTIONARY (1991); THE AMERICAN HERITAGE DICTIONARY OF THE ENGLISH LANGUAGE (1978).

[9] Of course, when a requester has specific information that may call into question the position of the applicant or the executive director, including such information in the request makes the request more compelling and increases the likelihood of having the request granted. The rules also request that such information be provided, when available, to assist the commission in narrowing the scope of disputed issues. See 30 TAC §55.201(d)(4) ("*To facilitate the commission's determination of the number and scope of issues to be referred to hearing*, the requester should, *to the extent possible*, specify any of the executive director's responses to comments that the requester disputes and the factual basis of the dispute . . . .") (emphasis added.) However, being asked to assist the commission in narrowing the issues when possible, is not the same as being required to refute the executive director's response to comments with specific evidence in order to receive a hearing.

b. Issues Relevant and Material to the Commission's Decision

When the procedural rules implementing HB 801 were proposed and published for public comment, the package included a proposed §55.206 intended to define "relevant and material" issues. The commission also invited comment on how the proposed standard could be refined and improved. Several commenters accepted this invitation and submitted further recommended definitions for relevance and materiality. After the comment period, however, the commission decided not to define this term and deleted the proposed rule from the adopted package. *See* 24 Tex. Reg. 9029 (October, 15, 1999) ("The specific meaning of the phrase 'relevant and material' will vary from case to case to reflect the peculiar facts of the particular permit at issue and of the statutes and rules applicable to that permit. Thus, the commission declines at this point to define the phrase either by definition or example since without experience implementing HB 801 with regard to a variety of permits, its definition or set of examples could be unnecessarily narrow or broad."). Though much attention has been focused on this standard, the Office of Public Interest Counsel submits that requiring a request to raise "relevant and material" issues may not be very different from requiring that pre-HB 801 requests be "reasonable."

Under 30 TAC §55.31 regarding the reasonableness of a pre-HB 801 hearing request, the commission is required to consider all "relevant" factors, including whether the concerns of the requester are within the commission's jurisdiction to address and whether such concerns can be addressed by the pending application. For example, if an affected person requests a hearing on a wastewater discharge application on the basis of concerns about flooding or decreased property value, this request would likely be denied on the grounds that the request was not "reasonable." Property value is a concern that is not within the commission's jurisdiction to address. Flooding, even though an issue which may be within the commission's jurisdiction under certain programs administered by the TNRCC,[10] is not a water quality issue addressed by Chapter 26 of the Water Code which governs a wastewater discharge application.

Likewise under HB 801, this requester's issues concerning property value and flooding probably would not be deemed "relevant and material" to the commission's decision on the application. The analysis would be similar to the analysis concluding that the request would not be "reasonable" under pre-HB 801 standards: The issues raised are not within the commission's jurisdiction to address, or otherwise cannot be addressed under the law governing this particular application. *See Anderson V. Liberty Lobby, Inc.*, 477 U.S. 242, 248-251(1986) (in discussing the standards applicable to reviewing motions for summary judgment the Court stated "[a]s to materiality, the substantive law will identify which facts are material . . . it is the substantive law's identification of which facts are critical and which facts are irrelevant that governs.")

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[10] The TNRCC is the state coordinator for the National Flood Insurance Program, and also has oversight authority with respect to certain matters concerning levee improvement districts and issues relating to dam safety.

III. Commission Action on Requests

A. Agenda Setting

New time frames have been established for the mailing of notice of the commission's consideration of requests and the briefing of requests. At least 35 days before the commission meeting, the chief clerk will mail notice of the date of the meeting when the commission will consider the requests to the applicant and all timely requesters. Consistent with pre-HB 801 practices, the applicant, the executive director and the public interest counsel each have the opportunity to respond to hearing requests (and now, requests for reconsideration) and make a recommendation to the commission as to whether the request satisfies applicable requirements and should be granted. The requester has the opportunity to reply. Any responses to the requests must be filed no later than 23 days prior to the commission meeting and any reply from the requester must be filed no later than 9 days prior to the meeting. 30 TAC §55.209(g).

During the commission meeting (or "agenda"), the commission will evaluate public comment, the executive director's response to comment, requests for reconsideration and requests for contested case hearing. The commissioners will also consider any written responses to the requests and any requesters' replies. Generally, the commissioners do not hear oral argument, but they may ask questions. The general counsel will inform the requester(s), the applicant, the executive director and the public interest counsel if oral argument will be heard.

The commission will decide: (1) whether to grant or deny any requests for reconsideration; (2) whether any hearing requests have been timely filed by affected persons; and (3) whether any such affected persons have based their request for hearing on relevant and material disputed issues of fact that were raised during the public comment period. If the commission decides to grant a contested case hearing, these are the only issues that can be referred to SOAH. TEX. WATER CODE §5.556(d); 30 TAC §50.115(c).

If the commission determines that no hearing requests meet the applicable requirements, the commission still has the ability to order a hearing "if it determines the public interest warrants doing so." TEX. WATER CODE §5.556(f); 30 TAC §55.211(d)(1). This is not new law; the commissioners had this ability prior to House Bill 801. No hearing has yet been granted on this basis after the commission has determined that there is no otherwise valid hearing request. Therefore, there is no reason to expect that the commission will grant many, if any, hearings on this basis in the future.

B. Commission Orders Referring Issues to SOAH

1. Issues Referred for Hearing

Under HB 801, any commission order granting a hearing request must limit the number and scope of the disputed issues to be addressed at hearing. TEX. WATER CODE §5.556(e). The

administrative law judge can expand the scope of the hearing beyond these issues identified in the commission's order only upon a showing of good cause. 30 TAC 80.4(c)(16). Thus, the commission order referring a case to hearing is yet another significant step in the HB 801 process where the issues on which the application can be challenged are further narrowed.

2. Expected Date of the Proposal for Decision

In any order referring issues to SOAH, the commission is also statutorily required to specify "the maximum expected duration of the hearing." TEX. WATER CODE §5.556(e)(2). The commission's order will satisfy this requirement by stating the date by which the administrative law judge is expected to issue a proposal for decision. The rules provide that no hearing is to last longer than one year from the date of the preliminary hearing to the date the proposal for decision is issued. 30 TAC §50.115(d).[11]

IV. The Contested Case Hearing Process

A. Discovery Limitations

In keeping with the intent to streamline hearings to focus on the issues identified and developed during the comment period, House Bill 801 amended the Administrative Procedure Act to require limits on the scope and level of discovery. TEX. GOV'T CODE §2003.047(h)(2).

There are two limitations on the scope of permissible discovery: (1) matters reasonably calculated to lead to the discovery of admissible evidence concerning the issues subject to the hearing; and (2) production of documents used in preparing the application or selecting a proposed facility site or relating to the ownership of the applicant or operator.

There are also two limitations on the level of discovery under Rule 190, Texas Rules of Civil Procedure ("TRCP"). Rule 30 TAC §80.152(c) provides that the level of discovery for all contested cases shall be Level 3 under TRCP Rule 190.4, giving the administrative law judge the opportunity to consider the nature and complexity of referred issues in setting the discovery schedule. Depositions and interrogatories, however, are subject to the limitations of Level 2 of TRCP Rule 190.4. Each party may propound 25 interrogatories per party and have 50 hours of deposition (with 6 additional hours per expert where there are more than 2 experts).

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[11] Under 30 TAC 55.209(e)(7), responses to hearing requests are required to "specifically address a maximum expected duration for the contested case hearing." Rather than stating a specific date when the proposal for decision should be expected, the Office of Public Interest Counsel plans to satisfy this requirement by stating a maximum expected time period from the date the preliminary hearing is held until the proposal for decision is issued. While commission orders must state a specific date for the proposal for decision to be issued, the Office of Public Interest Counsel will lack sufficient information about SOAH caseloads and docketing time frames to know when the preliminary hearing may be convened, which obviously affects the expected date when a proposal for decision could be expected.

B. No Public Comment

Another significant change in the hearing process is that the commission rules no longer authorize the taking of public comment at the hearing.[12] The commission's reasoning is that all public comment should be received prior to the hearing, during the public comment period. Only then can it be considered and addressed in the executive director's response to comments and affect the framing of the issues which can be referred to hearing.

Conclusion

The new public participation process for environmental permits issued by the TNRCC emphasizes early notice and the early solicitation of public input on permit applications. Theoretically, the benefit to the public is more access to information about the application and a better opportunity to make early, informed comments that affect the TNRCC staff's review and preliminary conclusions regarding an application. The corresponding burden on the public under the new process is that persons seeking to challenge a permit to the fullest extent possible through the contested case hearing process may need to do more homework to secure their opportunity for hearing. They must take advantage of the opportunities presented by the new notice and comment procedures to examine the application, make informed comment and develop issues that can be referred to hearing.

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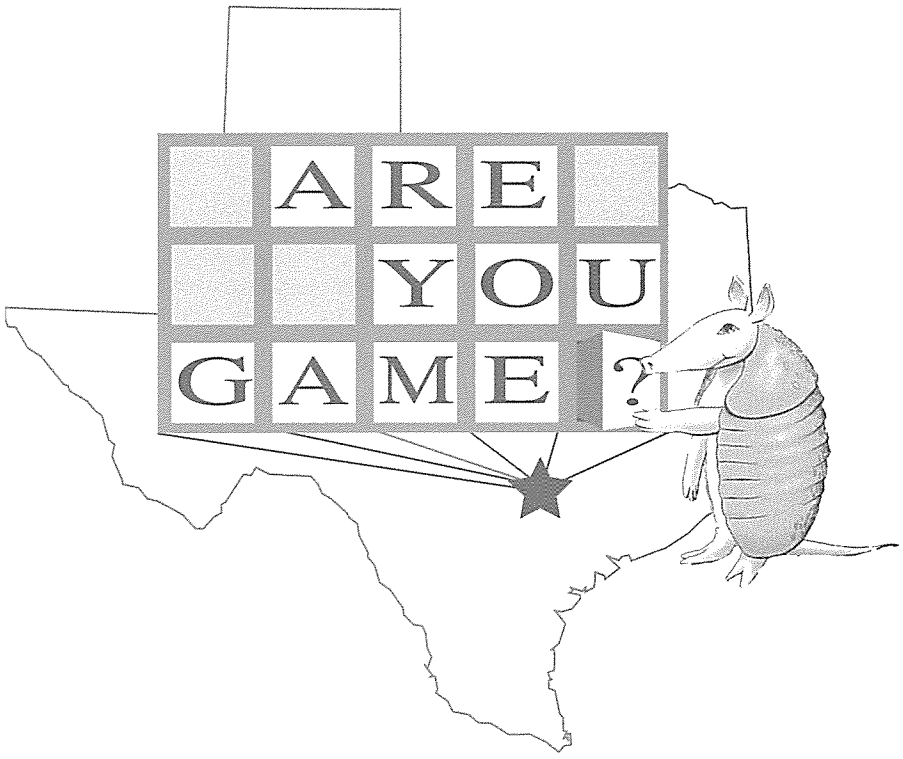
[12] The commission amended 30 TAC §§80.105, 80.109 and 80.111 to repeal requirements that the administrative law judge accept public comment in hearings, other than enforcement hearings.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D. BRUCE JONES

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PUBLIC PARTICIPATION IN PERMITTING

D. BRUCE JONES
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
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Introduction

EPA is committed to ensuring that its permitting actions and those permitting actions conducted by states implementing federal environmental programs provide for public participation as required by law. EPA is also actively encouraging its offices and the states to provide additional public participation activities relative to permitting actions, especially at facilities that have in the past generated a high degree of public interest.

Some of these additional public participation activities include ways to disseminate information about a facility's pending permitting action. These activities can include sending out project news letters or reports to interested persons, especially those on the facility's mailing list, which discuss a facility's pending permitting action. EPA also encourages the use of citizen briefings, presentations, exhibits and, where appropriate, even facility tours to provide information about the facility to the public and local community well before actually proposing a draft permit. EPA is encouraging activities to solicit views and opinions from members of the community regarding the permit application. In complex permitting actions it is important to provide forums for discussions between members of the community, the permitting agency, and the facility about issues related to the permit application. The facility or the permitting agency may do this by conducting informal interviews within the surrounding community to determine local interests and concerns. The facility or agency may want develop citizens advisory groups, develop stakeholders groups, and conduct community workshops to facilitate communications. These types of additional public participation activities will help develop an informed community better able to participate in these extremely complex permitting decisions.

EPA is currently developing a "Reference Guide for Public Participation Activities in the Permitting Process." This Guide will provide a comprehensive discussion of the nature of permitting programs, of the additional public participation activities discussed in the paragraph above, and of the specific legal requirements for public participation in permitting in the major environmental programs: CAA, CWA, RCRA, and SDWA. The discussion below of the "Required Public Participation Activities in the Permitting Process" was developed by a national EPA workgroup, of which I am a member, and will be included in the "Reference Guide" discussed above. I think this information will be particularly helpful to the attorneys involved in permitting actions and agency permit writers. It provides a detailed discussion of all the legal requirements for public participation in permitting.

Public Participation Activities in the Permitting Process

REQUIRED PUBLIC PARTICIPATION ACTIVITIES

The public participation activities summarized in this section are required by regulation and are divided into two categories: a) disseminating information and b) gathering and exchanging information. Activities summarized under the *disseminating information* category are used by permitting authorities and owners or operators of facilities seeking permits to distribute information about the facility, permit, permit status, or other aspect of the permit process to individuals and members of the community. The activities summarized under the *gathering and exchanging information* category are typically used by permitting authorities as a way to both solicit the views and opinions of members of the community and provide forums for discussions between members of the community and the permitting agency and facility about issues related to the permit application, the draft permit, and other aspects of the permit issuance process.

What Are Required Public Participation Activities for Disseminating Information?

The following are required activities for disseminating information to the public under many but not all permitting programs:

1. Public notice;
2. Mailing lists;
3. Fact sheets/statement of basis; and
4. Response to comments.

What are Required Public Participation Activities for Gathering and Exchanging Information?

The following are required activities for gathering and exchanging information:

5. Public comment periods;
6. Contact persons;and
7. Public hearings.

Each of these required activities is expanded on in the rest of this section.

Required Public Participation Activities for Disseminating Information

1. Public Notices

Public notices are required at various points in the public participation process for certain activities, both by the regulating agency and by facilities being regulated. Most notices contain essentially the same information, but differ in how and under what circumstances they are distributed.

■ What Are the Regulatory Requirements for Public Notices?

Below is a summary of public notice regulatory requirements for various permitting programs.

Resource Conservation and Recovery Act (RCRA) Hazardous Waste Facility Permits

Public notice is required under several situations: (1) the permitting agency issues a draft permit, grants an appeal, or holds a public hearing; (2) a prospective permit application plans a pre-application meeting; (3) a facility owner/operator proposes permit modifications (level of effort varies depending on class of modification); (4) the permitting agency initiates a permit modification; (5) the permitting agency requires a facility to establish an information repository; and (6) a facility conducts a trial burn or undergoes closure or post-closure.

Clean Air Act (CAA) State Operating Permits

The operating permits program is implemented by State and local permitting authorities. Public notices are required for permit issuance, renewal, reopenings, and all significant revisions (see 40 CFR 70.7(h)). However, administrative revisions may not require public notice. Notices must be published in a newspaper of general circulation in the area where the source is located or in a State publication designed to give general public notice. There is also an opportunity for public petition (see 40 CFR 70.8(d)).

CAA Prevention of Significant Deterioration (PSD)

Under PSD permitting requirements, an agency administrator is required to give notice of public opportunity to review a draft permit or denial of a draft permit. The notice should provide opportunity for public review and comment, and to request a public hearing. Public notices can be for the issuance or denial of more than one draft permit. No public notice is required when amendment, revision, revocation, reissuance, or termination has been denied. State PSD programs must provide for notice through a newspaper.

Clean Water Act (CWA) Section 404 Permits

Public notice is required under five circumstances: (1) a permit application has been denied; (2) a draft permit has been prepared; (3) a hearing has been scheduled; (4) a State Section 404 application has been received (i.e., no draft permit is prepared); and (5) a proposed determination has been made. Public notice is not required when a request for permit modification, revocation, reissuance, or termination is denied. In addition to the general public notice, copies of

fact sheets, the statement of basis (for EPA-issued permits), and the permit application (or draft) should be distributed to members of the mailing list.

When a proposed determination has been made, public notice must be made in a newspaper of general circulation, in the office of the municipality in which the defined area is located, and at the U.S. Post Office serving that area. Other members of the mailing list also must be informed of the determination.

CWA National Pollutant Discharge Elimination System Permits (NPDES) Permits

Public notice is required under five circumstances: (1) a permit application has been denied; (2) a draft permit has been prepared; (3) a hearing has been scheduled; (4) an appeal has been granted; and (5) an NPDES new source determination has been made. Public notice is not required when a request for permit modification, revocation, reissuance, or termination is denied. For EPA-issued permits, public notice of a draft permit should not be given until a draft Environmental Impact Statement (EIS), if necessary, has been issued. Since requirements in each State may differ, the permitting authority in the State where the facility is located should be consulted on their public notice requirements.

Safe Drinking Water Act (SDWA) Underground Injection Control (UIC)

Public notice is required under four circumstances: (1) a permit application has been denied; (2) a draft permit has been prepared; (3) a hearing has been scheduled; and (4) an appeal has been granted. Public notice is not required when a request for permit modification, revocation, reissuance, or termination is denied. In addition to the general public notice, copies of fact sheets, the statement of basis (for EPA-issued permits), and the permit application (or draft) should be distributed to members of the mailing list.

Marine Protection, Research, and Sanctuaries Act (MPRSA) Ocean Dumping Permits

Within 30 days after receiving any completed permit application, EPA must give public notice of the application, including a tentative determination of issuance or denial. Public notice should include both a brief statement of factors considered to reach any tentative determinations, and the reasons for the choice of the particular permit conditions selected. The type of permit determines where the notice will be published. For instance, notices for special, emergency, and research permits should appear in a daily newspaper in the State closest to the proposed dump site and the city where the permitting authority is located. For general permits, a notice should appear in the *Federal Register*.

Copies of the public notice may be sent to specific persons, State agencies, and other Federal Agencies. Failure to send copies of any public notice does not invalidate the notice or any further administrative proceedings. In addition, other agencies must respond to the public notice within 30 days. If comments are not received within 30 days, the permitting authority can proceed, with the understanding that the other agencies have no objection to the permit activity.

What Information Should Typically Appear in a Public Notice?

Public notices provide an official

announcement of proposed agency decisions or facility activities. Notices often provide the public with the opportunity to comment on a proposed action. Public notices usually contain the same types of information. However, it is always wise to consult the requirements of a specific permitting program if any doubt exists over whether additional information should be included. Listed below are several items that typically appear in a public notice:

- Name and address of the facility owner/operator;
- A brief description of the business conducted at the facility and the activity that is the subject of the notice;
- Name, address, and telephone number of an individual who can be contacted for further information on the activity;
- A brief description of the comment procedures and the date, time, and place of any hearing;
- The opening and closing dates for comment periods;
- The location of the administrative record and the times when it is open for public inspection; and
- Any additional information considered appropriate.

Organizations generally attempt to make sure that the date and time do not conflict with other public meetings, religious or nonreligious holidays, or other important community events.

The organization should provide ample notice of the permitting activity. Most programs require 30 days notice be given for public hearings and public comment periods. For instance, the RCRA permitting requirements specify that at least 45 days must be allowed for public comment. Public notice of a public hearing must be given at least 30 days prior to the hearing.

Where Can I Obtain Information on Proposed Agency Decisions or Facility Activities?

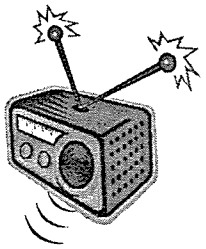
Most notices contain essentially the same types of information. Where they differ is in how they are distributed by the agency or the facility. Certain permitting programs require notices to be distributed to members of a mailing list, some require legal advertisements in the newspaper, and others require signs or radio advertisements. While some organizations will only conduct required activities, EPA encourages facilities and permitting agencies to make a good faith effort to reach all segments of the affected community with these notices. Organizations often attempt to identify the information pathways that will be most effective in a particular community. Public interest groups, the facility, and the permitting agency frequently seek community input on this topic because the citizens of that community are the most qualified people to explain what methods will work best. Organizations may conduct community interviews to learn more about how citizens communicate.

The list below identifies some of the most common ways that public notice is conducted. Look for information regarding the permitting activity in which you are interested in the

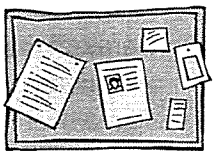
following places:



- **Newspaper Advertisements.** Traditionally, public notices appear as legal advertisements in the classified section of a newspaper. In addition, public notices may be placed in display advertisements (located along with other commercial advertisements).
- **Newspaper Inserts.*** Inserts stand out from other newspaper advertisements; they often come as a "loose" section of the newspaper (a format often used for glossy advertisements or other solicitations).
- **Free Publications and Existing Newsletters.*** Look for public notices in newsletters or bulletins sent by local governments to their entire population. In addition, planning commissions, zoning boards, or utilities often distribute regular newsletters; they may include information about permitting activities. Newsletters distributed by civic, trade, agricultural, religious, or community organizations are also used to disseminate information. Some organizations may rely on a free local flyer, magazine, or independent or commercial newspaper to share information.
- **Public Service Announcements.** Radio and television stations often broadcast announcements on behalf of charities, government agencies, and community groups. In particular, they are likely to run announcements of public meetings, events, or other opportunities for the public to participate. One drawback with public service announcements is that they may be aired at odd hours when the audience is relatively small.



- **Broadcast Announcements and Advertisements.*** A number of RCRA notices must be broadcast over radio or another medium. Notice is sometimes provided via a paid TV advertisement or over a local cable TV station. Some local access cable TV stations run a text-based community bulletin board.

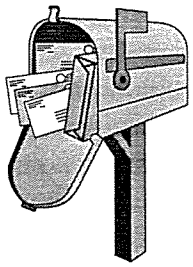


- **Signs and Bulletin Boards.*** Some notice requirements include posting of a visible and accessible sign. Signs are frequently posted at an existing or planned facility. If few people are likely to pass by the site, a sign may be posted at the nearest major intersection. Other areas where signs may be found include community bulletin boards in community centers, town halls, grocery stores, or on heavily traveled streets.
- **Telephone Networks or Phone Trees.*** This method provides an inexpensive, yet personal, manner of spreading information. The lead agency, facility, or organization calls the first list of people, who, in turn, are responsible for calling an additional number of interested people. As an alternative to calling the first tier, the lead agency, facility, or organization might



distribute a short written notice.

* *These would be more elaborate forms of public notice, perhaps where a State has requirements to go further than the minimum Federal requirements.*



2. Mailing Lists

In general, requirements for mailing lists under different permitting programs are very similar. Variation occurs in whether the list must contain only those who express an interest in being on the mailing list, or include all parties who may be affected by an agency activity. Some programs require specific agencies or organizations be contacted for public notices.

■ What Are the Regulatory Requirements for Mailing Lists?

Below is a summary of mailing list regulatory requirements for various programs.

RCRA Hazardous Waste Facility Permits

The permitting agency must establish and maintain the facility mailing list. The agency must develop the list by: (1) including people who request in writing to be on the list; (2) soliciting persons for "area lists" from participants in past permit proceedings in that area; and (3) notifying the public of the opportunity to be put on the mailing list through periodic publication in the public press and in such publications as Regional- and State-funded newsletters, environmental bulletins, or State law journals.

CAA State Operating Permits

The permitting authority must develop a mailing list to be used for providing notice of permit issuance, renewal, reopenings, and revisions. The list must include those who request in writing to be on the list (see 40 CFR 70.7(h)(1).

CAA PSD

Mailing lists need to be maintained for public notice of activities relating to public participation and appeals. A notice informing the public of the opportunity to be put on the mailing list must be periodically published in the public press and in such publications as Regional- and State-funded newsletters, environmental bulletins, or State law journals. The director of a permitting agency may remove people from the mailing list who do not respond to a request for a written indication of continued interest.

CWA Section 404 Permits

The permitting agency must develop and maintain a list of individuals or organizations that have an interest in any activity covered by the agency. The list should include those who have expressed an interest in, or those that may be affected by, the activity.

CWA NPDES Permits

A notice informing the public of the opportunity to be put on the mailing list must periodically be published in the public press

and in such publications as Regional- and State-funded newsletters, environmental bulletins, or State law journals. The director of a permitting agency may remove people from the mailing list who do not respond to a request for a written indication of continued interest.

SDWA UIC

A notice informing the public of the opportunity to be put on the mailing list must be published periodically in the public press and in such publications as Regional- and State-funded newsletters, environmental bulletins, or State law journals. The director of a permitting agency may remove people from the mailing list who do not respond to a request for a written indication of continued interest.

MPRSA Ocean Dumping Permits

Copies of notices must be mailed to any person or group upon request. Standing requests for copies of notices can be made by submitting a written request to the permitting agency.

National Environmental Policy Act (NEPA)

Agencies are required to develop and maintain a mailing list including individuals or organizations that have expressed an interest in, or may be affected by, relevant agency activities.

Why Are Mailing Lists Created?

Permitting agencies, facilities, and other organizations involved in the permitting process use mailing lists in order to inform all interested parties of developments as they occur during the permitting process. They are an important means of communication, and are the principle method by which many of the parties involved in public participation activities obtain their information. Mailing lists are used to reach both broad and targeted audiences. The better the mailing list, the better the public outreach and delivery of information.

Mailing lists typically include concerned residents; elected officials; appropriate Federal, State, and local government contacts; local media; organized environmental groups; civic, religious and community organizations; facility employees; and local businesses.

How Can I Be Included on a Mailing List?

There are a number of ways to be included on a mailing list. Public notice of permitting activities should include a contact for further information; call this person and asked to be placed on the mailing list. In addition, organizations will work to solicit names, addresses, and phone numbers of individuals to be included on the list. In general, they try to include the following individuals:

- People who put their names and addresses on the sign-in sheet at the preapplication meeting, if applicable;
- The people interviewed during community interviews, as well as other names these people recommend;
- All nearby residents and owners of land adjacent to the facility;
- Representatives of organizations with

a potential interest in an agency program or action (e.g., outdoor recreation organizations, commerce and business groups, professional or trade associations, environmental and community organizations, environmental justice networks, health organizations, religious groups, civic and educational organizations, State organizations, universities, local development and planning boards, emergency planning committees and response personnel, facility employees);

- Any individual who attends a public meeting, workshop, or informal meeting related to the facility, or who contacts the agency regarding the facility;
- Media representatives;
- City and county officials;
- State and Federal Agencies with jurisdiction over wildlife resources;
- Key agency officials; and
- The facility owner/operator.

Organizations will frequently send a letter or fact sheet to the preliminary mailing list developed. This letter or fact sheet informs potentially interested parties of activities and the status of upcoming permit applications or corrective actions. It may also ask whether an individual or organization wishes to receive further information about permitting activities at a particular facility. **It is important to respond to these written requests.** Some permitting programs allow the director of an agency to remove from the mailing list any individual or organization who does not respond.

In addition, responding promptly is considerate, because it eliminates the need for follow-up contact.

This is also an opportunity to provide accurate addresses and phone numbers of other people you think might be interested in the activity.

In general, mailing lists are updated at least annually to ensure they contain correct contact information. Organizations updating the lists may telephone each individual on the list, or use local telephone and city directories as references. A permitting agency may update its official mailing list from time to time by requesting written indication of continued interest from those listed. **Again, it is important to respond to these written requests; the agency may perceive no response as an indication of lack of interest and remove you from the mailing list.**

3. Notices of Decision

Requirements for notices of decision during the public participation process are generally very similar. This type of public notice serves as a record of an agency's final decision regarding permit issuance, denial, or modification.

■ What Are the Regulatory Requirements for Notices of Decision?

Below is a summary of notice of decision regulatory requirements for various programs.

RCRA Hazardous Waste Facility Permits

The permitting agency must send notices of decision to the permit applicant as well as any persons who submitted written comments or requested notice of the final permit decision. The notice of decision must include instructions for appealing the agency decision.

CAA PSD

Notice of decision must be given to the permit applicant, any affected State or local air pollution agency, and any person who requested notice of decision. The notice must be published in a newspaper of general circulation in the area where the pollutant source is located. The notice must include instructions for appealing the agency decision.

CWA Section 404 Permits

Notice of decision is required after the close of the public comment period. Notice must be made in a newspaper of general circulation, in the office of the municipality where the defined area is located, and at the U.S. Post Office serving that area. The permitting agency must also mail notification of the decision to members of the mailing list.

CWA NPDES Permits

Notice of decision must be sent to the permit applicant and any person who requested notification. Notice of decision must also be published in a newspaper of general circulation within the affected area. The notice must include instructions for contesting the agency decision.

SDWA UIC

After the close of a public comment period, notice of decision must be sent to the permit applicant as well as any person who requested notification. The notice is required to contain instructions for appealing the agency decision.

MPRSA Ocean Dumping Permits

Notice of decision for every completed permit application must be published in a newspaper of general circulation in the State closest to the proposed dumping site, as well as a newspaper of general circulation in the city where the permit application was made. Copies of the notice of decision must also be sent to the permit applicant, as well as any person who requests notice of decision.

NEPA

EPA is required to distribute a notice of determination, called a record of decision (ROD), to all people who participated in the environmental review process of the Environmental Impact Statement (EIS).

■ What Information Is Included in a Notice of Decision?

A notice of decision presents the agency's decision regarding permit issuance, denial, or modification of the permit to incorporate changes such as the corrective action remedy.

Notices of decision provide a clear, concise public record of a permitting agency's decision regarding whether to grant or modify a permit. Look for a brief statement of the agency's final decision, as well as a clear description for the basis of the decision. The notice of decision should also include procedures for appealing a decision.

In addition to the agency's permit decision, look for a response to comment document, which will identify any changes in the final

permit from the draft permit. Time frames vary for the final permit decision. For instance, the agency's decision may be affected by the quantity and substance of comments received during the public comment period.

In general, a final permit decision will become effective 30 days after the notice of decision. As noted above, instructions for appealing the agency decision should be included in the notice of decision.

■ How Can I Receive a Notice of Decision?

You should receive a notice of decision if you are the permit applicant, or if you submitted written comments, requested notification of the decision, or are on the agency mailing list. Notices of decision are public record. They are available at local document repositories.

4. Fact Sheets/Statements of Basis

Required fact sheets and statements of basis are produced throughout the permitting process and serve to inform the public about the regulatory process as well as technical issues surrounding a draft permit. They are helpful in creating a general community understanding of a project.

■ What Are the Regulatory Requirements for Fact Sheets/Statements of Basis?

Below is a summary of fact sheet/statement of basis regulatory requirements for various programs.

RCRA Hazardous Waste Facility Permits

The permitting agency is required to develop a fact sheet, or statement of basis when a fact sheet is not prepared, for every draft permit for major hazardous waste facilities or facilities raising significant public interest. The fact sheet/statement of basis must be sent to the permit applicant as well as any interested persons.

CAA State Operating Permits

After the draft permit is complete, a statement of basis describing the legal and factual justification for the permit must be sent to the EPA and any interested persons (see 40 CFR 70.7(a)(5)). The statement of basis must include references to the appropriate statutory or regulatory requirement.

CAA PSD

The permitting agency is required to produce a statement of basis for all PSD draft permits. In addition to describing the principal facts and considerations, the fact sheet must explain the allowable increase of ambient concentrations of a pollutant (without exceeding the NAAQS) expected to result from the operation of the activity. NAAQS are the National Ambient Air Quality Standards.

CWA Section 404 Permits

A fact sheet must be sent to the permit applicant and any interested persons. The fact sheet must present the principal facts as well as any factual, legal, methodological, or policy questions under consideration during the draft stage.

CWA NPDES Permits

The permitting agency is required to distribute a fact sheet to the applicant as well as any person who request a copy. In addition to describing the facts and considerations surrounding the basis for the application, fact sheets for NPDES permits also must include any calculations or explanations relevant to the source of specific effluent limitations, as well as conditions or standards for sewage sludge use or disposal. A fact sheet is required of permits listed in 124.8 (a) (NPDES major facilities and their sewage sludge land application plans) and is subject to widespread public review.

SDWA UIC

A fact sheet describing the conditions and basis for the draft permit must be sent to the permit applicant and any interested persons.

MPRSA Ocean Dumping Permits

In addition to a summary of the permit application, the permitting agency is required to produce a brief statement summarizing the factors considered in reaching a tentative permit decision. This information must be published in a newspaper of general circulation in the State closest to the proposed dumping site, as well as in a newspaper of general circulation in the city where the permit application was made. Copies of the statement must also be sent to the permit applicant, as well as any interested persons.

■ What Information Should Be Included in a Required Fact Sheet or Statement of Basis?

Fact sheets and statements of basis summarize the current status of a permit application. This required fact sheet (or statement of basis) is probably different than the commonly used informational fact sheets that most people recognize. Fact sheet/statements of basis must explain the principal facts and the significant factual, legal, methodological, and policy questions considered in preparing the draft permit. They can vary in length and complexity from simple 2-page documents to 12-page documents complete with illustrations and glossaries.

Permitting agencies will frequently publish fact sheets and statements of basis throughout the permitting process to summarize the status of a draft permit or permit application. Fact sheets are useful for informing all interested parties about the basis for the permitting agency's decision regarding a facility's permit activities. They ensure that information is distributed in a consistent fashion and that citizens understand the issues associated with permitting programs. Look for the following information on required fact sheets:

- A brief description of the type of facility or activity that is the subject of the draft permit;
- The type and quantity of wastes covered by the permit;
- A brief summary of the basis for the draft permit conditions and the reasons why any variances or alternatives to the proposed standards do or do not appear justified;
- A description of the procedures for reaching a final decision;
- The beginning and ending dates of the public comment period and the address

where you can send your comments;

- Procedures for requesting a public hearing; and
- Name and telephone number of an agency contact for additional information.

Statements of basis are generally shorter than fact sheets and summarize the basis for a permitting agency's decision. Statements of basis are prepared the same way as fact sheets.

Both fact sheets and statements of basis should be presented in a simple, easy-to-follow format. The permitting agency should avoid the use of bureaucratic jargon and technical language.

While fact sheets and statements of basis are required for draft permits, they can also be found during the various stages of the permitting process such as:

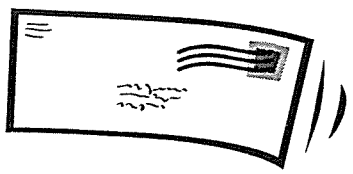
- during technical review of the permit application;
- at the beginning of a facility investigation;
- when findings of a facility investigation are available;
- before a meeting or hearing to provide background information;
- at the completion of the corrective action; and
- when the Notice of Decision is released.

Where Can I Receive Fact Sheets and Statement of Basis?

If you are on the facility mailing list, you should receive fact sheets and statements of basis by mail. Otherwise, you can find extra copies at the information repository or at public meetings and hearings. Fact sheets and statements of basis should contain the name and telephone number of a person to contact for additional information, comments, or questions.

5. Response to Comments

Response to comment documents should identify and describe public participation activities, and summarize the public's significant comments. In addition, the document should provide specific responses to the comments, in terms of modifications to the permit, or explain why comments were not incorporated into the permit.



What Are the Regulatory Requirements for Response to Comment Documents?

Below is a summary of response to comment document regulatory requirements for various programs.

RCRA Hazardous Waste Facility Permits

RCRA requires the permitting agency to prepare a response to comments when it issues a final permit decision. The agency must also issue a response to comments when making final decisions on requested Class 2 and 3 permit modifications and agency-initiated modifications.

CAA State Operating Permits

The permitting agency must keep a record of public comments and of issues raised during the public participation process. These records help the administrator determine whether a citizen petition should be granted. In addition, the records must be available to the public (see 40 CFR 70.7(h)(5)).

CAA PSD

The administrator must issue a response to all significant comments when a final permit decision is issued. In the response, the administrator should briefly describe or respond to relevant comments received on the permitting activity. The response to comments must be available to the public.

CWA Section 404 Permits

When a final permit decision is issued, the permitting agency must issue a response to all significant comments. The response must be available to the public.

CWA NPDES Permits

When a final permit decision is issued, the permitting agency must issue a response to comments. The response must be available to the public.

SDWA UIC

When a final permit decision is issued, the permitting agency must issue a response to comments. The response must be available to the public.

NEPA

The permitting agency must respond to comments in the final Environmental Impact Statement (EIS) document by preparing a "Responsiveness Summary." The summary must identify and describe the public participation activity, and summarize the public's views, significant comments, criticisms, and suggestions. In addition, the summary must provide specific responses to the comments, in terms of modifications to the permit, or explain why any comments were rejected.

What Information Is Provided in a Response to Comments Document?

A response to comments provides a clear record of community concerns. It provides the public with evidence that their input was considered in the decision process. The summary also is an aid in evaluating past public participation efforts and planning for subsequent activities. A response to comments identifies all provisions of the draft

permit or modification that were changed as a result of public comments and the reasons for those changes. It should also briefly describe and respond to all significant comments received during the comment period. The response to comments should be written in a clear and understandable style so that it is easy for the community to understand the reasons for the final decision and how public comments were considered.

■ How are Response to Comment Documents Organized?

The response to comments should state clearly any points of conflict or ambiguity. While their forms differ, all response to comment documents should include the following:

Overview

- Description of the number of meetings, mailings, public notices, and hearings at which the public was informed or consulted about the permitting activity;
- The extent to which citizen's views were taken into account in decision-making;
- A summary of commenters' major issues and concerns; and
- The specific changes, if any, in the permit design or scope that occurred as a result of citizen input.

Detailed Response

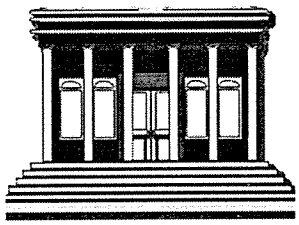
- Answers to specific legal and technical questions. Comments may be difficult to respond to at times, such as when the public raises new issues, questions, or technical evidence during the public comment period. The permitting agency may develop new materials to respond to these questions.

■ How Do I Obtain a Response to Comment Document?

Response to comment documents can take several forms. Some agencies prepare formal "Responsiveness Summaries." At other times, such as publication of a final rule, responses appear in a *Federal Register* notice. Response to comments documents should be sent to the facility owner/operator and each person who submitted written comments or requested notice of the final permit decision.

6. Information Repositories

An information repository is a collection of documents related to a permitting activity. A repository provides local officials, citizens, and the media with easy access to accurate, detailed, and current data about the permitting activity.



What Are the Regulatory Requirements for Information Repositories?

Below is a summary of information repository regulatory requirements for various permitting programs implemented by EPA.

RCRA Hazardous Waste Facility Permits

Permitting agencies are authorized to require a facility to establish an information repository during the permitting process or during the active life of a facility. An information repository is not required in every situation.

MPRSA Ocean Dumping Permits

The permitting agency must provide the location where interested persons can obtain further information on the proposed dumping, including copies of any relevant documents.

Are Information Repositories Required for Every Permitting Activity?

Information repositories are not mandatory activities in every situation. As mentioned above, RCRA regulations give the permitting agency the authority to require a facility to set up and maintain an information repository. The agency does not have to require a repository for every permitting activity. Alternatively, a facility or an environmental group may voluntarily set up a repository to make it easier for people in the community to access information.

The information that actually goes in the repository can differ from case to case, depending on why the repository was established. The agency will suggest which documents and other information must be included in the repository, depending on the specifics of permitting activity. For instance, multilingual fact sheets and other documents should be provided where there are many non-English-speakers in the affected community. Similarly, if the community needs assistance in understanding a very technical permitting situation, then the agency and the facility should provide fact sheets and other forms of information that are more accessible to the nontechnical reader.

Several factors affect the establishment of an information repository, including: the level of public interest; the type of facility; the presence of an existing repository; and the proximity to the nearest copy of the administrative record. Any of these other factors may indicate that the community already has adequate access to information. Repositories are resource-intensive, and permitting agencies will require them to be established only in cases where the community has a true need for additional access to information.

The permitting agency will try to gauge the public's interest in the permitting activity before making final decisions about an information repository. For instance, the permitting agency will consider turnout at public meetings and responses during community interviews. Other factors include level of media attention, level of community involvement in previous facility and/or local environmental matters, and whether an existing repository can be augmented with materials to meet the information needs of the current permitting activity.

Where Are Information Repositories Generally Located?

The information repository should be convenient and accessible for people in the community. Community residents should suggest locations to the facility. Typical locations include local public libraries, town halls, or public health offices.

A facility may choose to set up the repository at its own offices. Before doing so, the facility owner or operator should discuss his or her intent with community representatives and/or the agency. Members of the community should make sure they are comfortable about coming onto facility property. If members of your community feel uncomfortable at the facility, then you should ask that the repository be located in a suitable off-site location.

The public's ability to use the information repository is extremely important. It should be easily accessible by public transportation (if most people in the community rely on public transportation). Length of the trip should not be overly burdensome. The location should have adequate access for disabled users, and should be open after normal working hours at least one night a week or on one weekend day. Repositories should be well lit and secure.

A facility should also ensure that someone in its company and someone at the repository location are identified as the information repository contacts—to make sure that the information is kept up to date, orderly, and accessible.

What Information Should Be Included in the Repository?

The permitting agency will decide, on a case-by-case basis, what documents, reports, data, and information are necessary to help the repository fulfill its intended purposes, and to ensure that people in the community are provided with adequate information. The agency will provide a list of the materials to the facility. The agency may also consult the public regarding what materials would be most useful to members of the surrounding community.

The following are examples of materials that may be included in the information repository:

- Background information on the company or facility;
- Fact sheets on the permitting or corrective action process;
- Meeting summary from the preapplication meeting (if one was conducted);
- Public involvement plan (if developed);
- The draft permit;
- Reports prepared as part of the facility investigations;
- Fact sheets prepared on the draft permit or corrective action plan;
- Notice of decision;
- Response to comments;
- Copies of relevant guidance and regulations;

- A copy of the cooperative agreement, if the State is the lead agency for the project;
- Documentation of site sampling results;
- Brochures, fact sheets, and other information about the specific facility (including past enforcement history);
- Copies of news releases and clippings referring to the site;
- Names and phone numbers of a contact person at the facility and at the permitting agency who would be available to answer questions people may have on the materials in the repository; and
- Any other relevant material (e.g., published studies on the potential risks associated with specific chemicals that have been found stored at the facility).

Documents should be organized in binders that are easy to use and convenient. For projects that involve a large number of documents, separate file boxes should be provided as a convenience to the repository host to ensure that the documents remain organized.

If the permitting activity is controversial or raises a lot of community interest, several copies of key documents should be provided so that community members can check them out for circulation. In addition, the permitting agency should update the repository on a regular basis. New documents should be sent as they are generated.

How Is the Public Notified That an Information Repository Exists?

At a minimum, notice of the repository, identifying its location and hours of availability, should be sent to everyone on the facility mailing list. Other organizations that should be notified include local government officials, citizen groups, and the local media. Articles or notices about the repository published in newsletters of local community organizations and church groups are another means of notifying the public.

Required Public Participation Activities for Gathering and Exchanging Information

1. Public Comment Periods

Public comment periods are required after the issuance of a draft permit application. They allow citizens to comment on agency and facility proposals and to have their comments incorporated into the formal public record.



What Are the Regulatory Requirements for Public Comment Periods?

Below is a summary of public comment period regulatory requirements for various permitting programs implemented by EPA.

RCRA Hazardous Waste Facility Permits

The permitting agency is required to send notice of the public comment period to the permit applicant, members of the mailing list, all other agencies required to issue RCRA permits for the same facility or activity, as well as any interested persons. Citizens have 45 days to submit to the agency written comments on the draft permit or intent to deny a permit application. During this time, any interested person also may request a public hearing. After the close of the public comment period, the permitting agency must send a notice of decision to the permit applicant and any persons who submitted written comments.

CAA State Operating Permits

Following the issuance of a draft permit, the permitting agency is required to give notice of the public comment period to persons on a mailing list and by publication of a notice. From the date the notice is published, citizens have at least 30 days to submit written comments (see 40 CFR 70.7(h)(4)).

CAA PSD

Notice of the public comment period must be sent to the permit applicant, members of the mailing list, all other agencies required to issue PSD permits for the same facility or activity, all affected State and local air pollution control agencies and any interested person. The permitting agency must accept written comments for 30 days, beginning from the date of publication of the public notice.

CWA Section 404 Permits

The permitting agency is required to accept written comments on the permit application, since no draft permit is required, for 30 days, beginning from the date of publication of the public notice.

CWA NPDES Permits

After the permitting agency gives public notice of receiving a permit application, the public must have at least 30 days to comment. Notification of public comment periods must contain a brief description of the comment process, as well as a contact name and address where citizens should send their written comments. The name and address for the office processing the permit action and the permittee, and the facility location are required. Brief descriptions of the business conducted at the facility, as well as the comment procedures, are required.

SDWA UIC

The public has 30 days from the date of notification of the public comment period to submit written comments on a draft permit. Notification of the public comment period must be sent to the permit applicant, all other agencies required to issue UIC permits for the same facility or activity, Federal and State agencies, including Indian Tribes, with jurisdiction over fish, shellfish, and wildlife resources and over coastal management plans, State and local oil and gas regulatory agencies, State agencies regulating mineral exploration and recovery, members of the mailing list, and

any interested persons. The permitting agency also should update the required information repository on a regular basis, sending documents as they are generated.

What is the Purpose of a Public Comment Period?

A public comment period is a designated time period in which citizens can formally review and comment on the agency's or facility's proposed course of action or decision. Public comment periods are typically 30 to 45 days long. Public comment periods cannot begin until notice of the permitting activity is given. If you submit written comments during the public comment period, the permitting agency is required to discuss them in the response to comments.

Commenters can request a public hearing during the public comment period. Public hearings provide an opportunity to give formal comments and oral testimony on proposed permitting activities.

How Is the Public Notified about Public Comment Periods?

Notice of a public comment period should be announced in a local newspaper of general circulation and in some cases, on local radio stations. The notice should provide the beginning and ending dates of the public comment period and specify where the community can send their written comments and/or requests for a public hearing. As with all public notices, notification for public comment periods must contain a name and telephone number of the person to contact for additional information.

2. Contact Persons/Offices

A contact person assures that a permitting agency is actively listening to citizens' concerns and provides the community with consistent information from a reliable source. In general, requirements are very similar for contact persons/offices under different permitting programs. A contact person assures that a permitting agency is actively listening to citizens' concerns and provides the community with consistent information from a reliable source. In general, requirements are very similar for contact persons/offices under different permitting programs.

What Are the Regulatory Requirements for Contact Persons/Offices?

Below is a summary of contact person/office regulatory requirements for various programs.

RCRA Hazardous Waste Facility Permits

The permitting agency is required to include the name, address, and telephone number of a person to contact for additional information on all public notices, fact sheets, and statements of basis.

CAA State Operating Permits

The permitting agency is required to include the name, address, and telephone number of a person to contact for additional information on all public notices (see 40 CFR 70.7(h)(2)).

CAA PSD

The permitting agency is required to include the name, address, and telephone number of a

person to contact for additional information on all public notices, fact sheets, and statements of basis.

CWA Section 404 Permits

The name, address, and telephone number of the person interested parties should contact for additional information must be contained on every public notice, fact sheet, or statement of basis.

CWA NPDES Permits

The permitting agency is required to include the name, address, and telephone number of a person to contact for additional information on all public notices, fact sheets, and statements of basis.

SDWA UIC

A contact name, address, and telephone number must be included on all public notices, fact sheets and statements of basis.

MPRSA Ocean Dumping Permits

Notice of every complete application for general, special, interim, emergency, and research permits must include the location where interested persons can obtain further information on the proposed dumping.

NEPA

Public notification must contain the name of the person to contact for additional information.

What Is the Role of a Designated Contact Person?

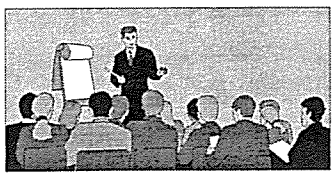
A contact person is a designated agency staff member who is responsible for responding to questions and inquiries from the public and the media. A contact person should be able to respond to any questions or concerns you may have about the permitting process. The same person should be your contact throughout the permitting process. If the contact person changes, the agency should notify you as soon as possible.

The agency contact also maintains a log book of all citizen requests and comments received during the process. This ensures that your requests are handled in a timely and efficient manner.

How Do I Locate the Contact Person?

Some organizations may distribute lists of contact persons who are responsible for answering questions in certain topic areas. Look for agencies to distribute news releases announcing the contact person to all local newspapers, radio stations, and television stations. The contact person's telephone number and mailing address should be included in all news releases, fact sheets, and mailings. Agencies may also choose to distribute self-mailers, which can be a separate flyer or a designated cutaway section of the fact sheet that is addressed to the contact person. This is a convenient way for you and other interested citizens to submit comments or request additional information at any point during the permitting process.

3. Public Meetings



A public meeting provides a forum where interested persons can ask questions and discuss issues outside of the formality of a public hearing. Public meetings are flexible tools that are open to everyone. Regulatory requirements for public meetings vary across different permitting programs.

■ What Are the Regulatory Requirements for Public Meetings?

Below is a summary of public meeting regulatory requirements for the RCRA hazardous waste facility permits.

RCRA Hazardous Waste Facility Permits

The permit applicant is required to conduct a preapplication meeting prior to submitting a permit application. This type of public meeting must be announced at least 30 days prior to the event.

■ What Is the Purpose of a Public Meeting?

Public meetings allow all interested parties to ask questions and raise issues in an informal setting.

A public meeting can provide a useful means of two-way communication at any significant stage during the permitting process.

■ What are the Differences Between Public Meetings and Public Hearings?

Public meetings are not public hearings. *Public hearings* are regulatory requirements that provide a formal opportunity for the public to present comments and oral testimony on a proposed agency action. *Public meetings*, on the other hand, are less formal, anyone can attend, there are no formal time limits on statements and the facility or the permitting agency, usually answers questions. The purpose of the meeting is to share information and discuss issues, not to make decisions. Due to their openness and flexibility, public meetings are preferable to hearings as a forum for discussing issues. Comments made during a public meeting do not become part of the official administrative record as they do during a hearing.

■ What Factors Should Be Considered When Planning a Public Meeting?

Public meetings can be arranged by the facility, the permitting agency, or a citizen's or community-based group. Interested citizen or community-based groups should consider the following when coordinating a public meeting:

- Community objectives, expectations, and desired results. If your community group decides to host a meeting, be sure to decide prior to the event what you want to accomplish and cover at the meeting.

- Schedule a convenient location and time for the meeting. The location of the public meeting should have seating, microphones, lighting, and recorders,

as well as handicapped access. If you feel the time or location of the meeting is in conflict with other community events, contact the agency representative to discuss an alternative time or location. Don't forget to provide a translator for community residents who do not speak English.

- **The meeting should be announced 30 days in advance.** Keep in mind that you will need to provide notice of the meeting in local newspapers, broadcast media, signs, and mailings. The permitting agency may be able to assist you by providing a mailing list. Don't forget to include the name and telephone number of a contact person on all notices and mailings.

  If a portion of the community does not speak English, consider producing multilingual notices.

- **All documents relevant to the permitting activity should be made available for review at the information repository or on-site office prior to the meeting.** If you have problems locating a document or do not have access to either the information repository or on-site office, the permitting agency may be able to obtain a copy for you.

- **Allow ample opportunity for citizens to submit written questions and comments prior to the meeting.** If you have specific questions or concerns that you'd like addressed by the permitting agency at the meeting, send them to the agency contact to ensure they get answered in a timely fashion. Public notices and mailings will give you the name, address, and telephone number of the contact person accepting questions and comments.

- **A sign-in sheet** should be posted so that attendees can voluntarily provide their names and addresses. The sign-in sheet will also be used by the permitting agency to update the mailing list.

Keep in mind that some citizens may be reluctant to speak up at a public meeting. If your community group is planning a meeting, ask the agency contact to set up an information table where people who may feel uneasy speaking during the meeting can ask questions and pick up project information.

How Do I Obtain Information About Public Meetings?

The meeting should be announced 30 days in advance. Notice of the meeting should be posted via local newspapers, broadcast media, signs, and mailings. The permitting agency may send notice to those individuals on the agency mailing list.

4. Public Hearings

A public hearing provides a record of communication so citizens can be sure that their concerns and ideas reach the permitting agency. Public hearings generally should not serve as the only forum for citizen input, since they usually occur at the end of the permitting process. Generally, regulatory requirements for public hearings under different permitting programs are very similar.

What Are the Regulatory Requirements for Public Hearings?

Below is a summary of public hearing regulatory requirements for various permitting programs implemented by EPA.

RCRA Hazardous Waste Facility Permits

The permitting agency is required to conduct a public hearing if requested in writing during the 45-day public comment period. The agency also will hold a hearing during the draft permit stage when there is a high level of public interest, or when the agency feels that the hearing might clarify relevant issues. Notification of the hearing must be given at least 45 days in advance. A tape recording or written transcript of the hearing proceedings must be made available to the public after the event.

CAA State Operating Permits

During the public comment period, anyone may make a request for a public hearing. Public notice of the hearing must be given at least 30 days in advance (see 40 CFR 70.7(h)(4)). Many agencies announce that a hearing will be held "on X date if one is requested" at the same time the agency announces the public comment period on the proposed permit. Therefore, it is important to note that there may not be an extended opportunity to prepare for a hearing; it may actually occur during the public comment period or immediately after the close of the public comment period.

CAA PSD

The permitting agency may conduct a public hearing if requested in writing during the 30-day public comment period. The agency may decide to hold a hearing if there is a high level of public interest. Notice of the hearing must be sent at least 30 days in advance to the permit applicant, members of the mailing list, all other agencies required to issue PSD permits for the same facility or activity, all affected State and local air pollution control agencies, and any interested persons.

CWA Section 404 Permits

During the 30-day public comment period, anyone may submit a written request for a public hearing. The permitting agency may also call a hearing if there is a high level of public interest or concern. Notification of the hearing must be given at least 30 days in advance. As soon as possible after the event, a tape recording or written transcript of the hearing must be made available to the public.

CWA NPDES Permits

The permitting agency may hold a public hearing when there is a significant degree of public interest in the draft permit, to clarify a permit decision, or when requested in writing during the public comment period. Public notice of the hearing must given at least 30 days prior to the event. A tape recording or written transcript of the hearing must be made available to the public.

SDWA UIC

During the 30-day public comment period, anyone may submit a written request for a public hearing. The permitting agency may also call a hearing if there is a high level of public interest or concern. Notification of the

hearing must be given at least 30 days in advance. A tape recording or written transcript of the hearing must be made available to the public.

MPRSA Ocean Dumping Permits

Within 30 days of notification of a completed application for a general, special, emergency or research permit, anyone may submit a written request for a public hearing. The request must contain the name of the person requesting the hearing, objections to the issuance or denial of the permit, and the proposed issues to be raised during the hearing.

■ What is the Purpose of Public Hearings?

Public hearings provide an opportunity for the public to provide formal comments and oral testimony on proposed agency actions. Occasionally the agency will present introductory information prior to receiving comments. All testimony received becomes part of the public record. Most hearings last between 2 and 5 hours; however, for very controversial topics, public hearings have been known to extend over a period of days.

Permittees and facility staff have no official role during a public hearing. Generally, a moderator will handle all the scheduling for the event, in addition to the orderly conduct of the hearing.

Public hearings are held:

- when requested by a member of the public during a public comment period;
- during the public comment period following the issuance of a draft permit, major permit modification, or at the selection of a proposed corrective measure; and
- when the level of community concern warrants a formal record of communication.

■ How Do Permitting Agencies Prepare for Public Hearings?

The following provides summary information on how permitting agencies prepare for public hearings:

- **Anticipating the audience and the issues of concern.** The audience's objectives, expectations, and desired results are identified through community feedback, such as telephone interviews or written comments. The agency should arrange for a translator for community members who do not speak English.
- **Scheduling a convenient location and time for the meeting.** The location of the public hearing should have seating, microphones, lighting, and recorders, as well as handicapped access. If you feel the time or location of the meeting is in conflict with other community events, contact the agency representative to discuss an alternative time or location.
- **Arranging for a court reporter to record and prepare a transcript of the hearing.** If you have prepared comments, bring extra copies to submit to the court reporter to be included in the public record.

- **Announcing the public hearing at least 30 days before the event.** Notice should be given in local newspapers and mailings to interested citizens and members of the mailing list.

- **Providing an opportunity for people to submit written comments.** The permitting agency recognizes that not all citizens will want to give oral testimony. Look for notification of where to send your written comments.

- **Preparing a transcript of all oral and written comments.** The permitting agency will announce when the transcript will be available for your review.

Keep in mind that all comments made during the hearing will become part of the public record, so comments must usually be kept to a minimum of 5 minutes or less. If you would like to make more detailed comments or share your ideas with the permitting agency, consider submitting them in writing or make arrangements to speak with an agency representative after the hearing.

■ How Do I Obtain Information About Public Hearings?

Most agencies will announce the public hearing at least 30 days before the event. Notice should be given in local newspapers and mailings to interested citizens and members of the mailing list.


ARE
YOU
GAME?

Jim Blackburn
Short Biography

Jim Blackburn is an environmental lawyer and scientist living in Houston, Texas. He is a partner in the law firm of Blackburn Carter and is a lecturer in environmental law and planning in the Environmental Science and Engineering Department at Rice University. He received B.S. (history, 1969) and J.D. (law, 1972) degrees from the University of Texas and an M.S. in environmental science from Rice University (1974).

Mr. Blackburn's private practice involves innovative legal and technical strategies for environmental improvement. Blackburn Carter's practice is restricted to environmental law, concentrating upon protection of the environment and neighborhoods. Mr. Blackburn is currently involved in federal litigation to protect the Colombia Bottomlands wetland system, in citizen protests before the state environmental agency involving solid waste disposal and in toxic tort litigation associated with hazardous air pollution. Mr. Blackburn worked for several years developing an air pollution control program for the City of Houston and is now representing several environmental groups on clean air issues.

Mr. Blackburn's teaching at Rice University is primarily in the Environmental Science and Engineering Department, where he teaches U.S. and global environmental law and sustainable development. In 1997, Mr. Blackburn helped organize the Delange*Woodlands Conference on Sustainable Development at Rice. His principal research area is sustainable development and collaboration.

Mr. Blackburn is also active in community issues. He is chair of the Galveston Bay Conservation and Preservation Association and is on the Board of Directors of Trees for Houston and The Texas Center for Policy Studies. Mr. Blackburn is the founding chairman of the Galveston Bay Foundation and is helping form the Matagorda Bay Foundation. Mr. Blackburn was awarded the Robert C. Eckhardt Lifetime Achievement Award of the General Land Office of the State of Texas in 1998 and has been awarded the Jesse L. Walls award for work in preserving waterways.

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H.B. 801 AND CONTESTED CASES THE PROTESTANTS GET GONGED

BY JIM BLACKBURN AND MARY CARTER

TEXAS ENVIRONMENTAL SUPERCONFERENCE
AUGUST 2000

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H.B. 801 AND CONTESTED CASES
THE PROTESTANTS GET GONGED

By Jim Blackburn and Mary Carter

I. INTRODUCTION

In 1999, the Texas Legislature seriously considered eliminating the contested case procedure for environmental permits. This threatened change was met by a storm of citizen opposition, leading Rep. Tom Uher of Bay City to convene a working group to advise him on changes that might address certain of the problems of the contested case system without eliminating that system. H.B. 801 was the result of that effort to compromise the desire of the regulated community to escape the burden of unnecessary and time-consuming contested case hearings with the need of the public to have a judicial process to address the health and property implications of environmental decisions.

H.B. 801 set in motion two major revisions to the contested case process. First, a much greater emphasis is placed upon proceedings occurring before the contested case hearing is begun. These preliminary proceedings are intended to provide a forum for the public to be heard and to allow both the agency and the permit applicant to address issues set out by the public. The purpose of this part of the process is to alter the permit to make it less objectionable to the opposing citizens. Second, the Commission is given much greater control over the scope and length of hearings than was previously the case. Here, the issues to be heard at the hearing as well as the discovery processes are determined by the Commission. The Commission is also given authority to set the length of time between the commencement of the hearing process and the delivery of a proposal for decision (PFD) by the administrative law judge.

This paper is written from the perspective of citizens who wish to object to a particular permit application. H.B. 801 poses new problems that must be addressed by citizens wishing to object to the issuance of a particular permit. These problems are set out in the paragraphs below.

II. NEED FOR EARLY LEGAL AND TECHNICAL ADVICE

H.B. 801 embraced the philosophy that problems arising from most permit applications can be resolved by public review and comment procedures. There is a strong bias in this bill and in the implementing regulations toward the pre-hearing resolution of conflicts. The bill sets out a process whereby public notice is issued and where the public must articulate the problems that exist with the application, either in a public meeting or in public comments. If the problems are not set out in these pre-hearing procedures, then the issues may not be raised in later proceedings.

Opponents proceeding from the standpoint that they are simply opposed to a particular facility at a particular location are likely to be displeased with this comment process. The goal of this comment process is to cause flaws in the application to be brought to the attention of the applicant and the TNRCC staff. No longer will opponents be able to "lie behind the log" and raise major objections in the contested case hearing process. Under the old procedures, major issues would have been fleshed out during the discovery process in the contested case hearing. Now, that process is accelerated by as much as six months to a year.

As a practical matter, most protestant groups do not "lie behind the log" and attempt to conceal information as indicated above. Instead, the more likely scenario is that groups are not well organized and have not invested in either legal or technical experts to assist them in these early stages of the permit application. Many opposition groups will lack either the technical know-how to evaluate these applications or will be caught in a time bind because of comment periods. If an adequate groundwork is not laid during this preliminary stage, then the contested case process could be very restricted if it occurs at all. **THIS IS A MAJOR CHANGE BROUGHT FORWARD IN HB 801.**

The end result of H.B. 801 will be to cause opponents to "lawyer-up" much earlier in the permit process than was the case under prior procedures. Opponent groups that are well-financed and well-organized and who can afford legal and technical expertise will fare much better in this process than will poorer groups that are unable to gain timely advice. However, that statement was also true of the old process. The key difference here is that more money and more organization are required to prevail under H.B. 801 than was the prior case. The downside risk to proceeding without legal advice is much greater under H.B. 801 than it was previously.

The specific provisions of H.B. 801 that are troublesome for protestants relate to the requirement that issues eligible for consideration in a contested case hearing must be raised in either comment letters or in the public meeting created by H.B. 801 (TNRCC Procedural Rules, 55.211(b)(3)(A)). Prior to H.B. 801, public meetings were held but they lacked the importance that is now associated with these meetings. The comment process and the public meeting process are now an essential element of citizen opposition. Careful consideration of the presentation of issues here is essential to effective citizen opposition.

From a practical standpoint, the biggest concern here is to protect issues. As a protestant, you want to be sure that all possible issues are raised in order to protect yourself later in the process. If you only raise two issues in the public comment and public meeting, you likely will be limited to those two issues in the hearing process. Processes do exist to add issues (80.4 (c)(16). However, granting of additional issues after Commission action is unlikely to be routine. It is the opinion of the authors that H.B. 801, rather than encouraging a limitation of issues, actually works in the opposite direction. Issues must be claimed in order to be preserved in the H.B. 801 process.

III. REQUIREMENT FOR EARLY ISSUE IDENTIFICATION

The biggest problem for protestants at the notice stage is determining what constitutes an issue and how to preserve it. There is virtually no experience to date in the H.B. 801 process and the detail and depth of issue identification has not been developed. Protestants should develop and articulate issues based upon the substantive rules that control permit issuance. There are many geologic, hydrologic, climatic and biologic features of a site location that are well known to local folks. A good knowledge of local facts should be an acceptable substitute for specific knowledge of rules and regulations. When in doubt, raise issues based on local knowledge.

On the other hand, it is impossible to get issues identified in a contested case hearing if the basic law does not allow the agency to consider it. For example, consider a cement batch plant that is proposed to be located on a small country road and is applying for a construction permit under the Texas Clean Air Act. The residents living near this facility know that many trucks will be coming and going from this facility and are concerned about the impact of these trucks on road safety, particularly with respect to their children and school buses. However, the Clean Air Act and the associated regulations do not allow the Commission to consider roadway impacts in permit decisions. On the other hand, such an issue would be relevant regarding an application for a municipal landfill.

The sequence that occurs under HB 801 is very important. First, citizens must file comments in response to the initial public notice. If the initial notice is for an air permit, then the request for public hearing must be made at this time. Second, there will be public meeting. If protestants do not raise specific issues either in the written comment process or in the public meeting, then these issues may be lost.

After the comments are compiled, the executive director shall prepare a response to the "timely, relevant, material or significant" public comments (TNRCC Procedural Rules, 55.156(b)) and shall specify which provisions of the draft permit have been changed in response to these comments. These responses are then sent to several people, including those who have made comments (55.156(c)(2)). The affected public then has the opportunity to respond by asking that the Commission hold a contested case hearing (55.156(c)) or, in a less contested setting, reconsider the executive director's decision. **THIS IS THE TIME WHEN PROTESTANTS MUST REQUEST A PUBLIC HEARING IN ALL PERMIT CASES EXCEPT AIR PERMITS.** Air permits require a request for public hearing to be submitted at the time the first notice is given of the application.

The request for a contested case hearing must be made in accordance with 55.201(c) and 55.201(d) after the issuance of the Executive Director's response to comments, except in the case of air permits. Of particular importance is 55.201(d)(4) which states as follows:

(d) A hearing request must . . . (4) list all relevant and material disputed issues of fact that were raised during the public comment period and that are the basis of the hearing request. To facilitate the commission's determination of the number and scope of issues to be referred to hearing, the requestor should, to the extent possible, specify any of the executive director's responses to comments that the requestor disputes and the factual basis of the dispute and list any disputed issues of law or policy . . .

This section puts a much greater burden on the public than was the situation prior to HB 801. Now, the public is asked to read and review the executive director's response and compare it with the initial comments that were submitted. Then, the requestor is asked to identify the responses that the requestor disputes and the factual basis of the dispute. Disputed issues of law and policy must also be identified. This step cannot be neglected because it provides the basis for the Commission's determination of the scope of the hearing if they choose to grant one.

Interestingly, this section also seems to put the public in an adversarial position with the executive director rather than the applicant. This rule may ultimately lead to a major change in the contested case proceeding where the applicant and the executive director are aligned parties. That certainly seems a reasonable interpretation. Stated differently, with the increased emphasis on pre-hearing procedures, the executive director has been placed in the position of advocating an application to the public. In this way, the public becomes adversarial with the executive director in order to obtain a hearing.

The Executive Director, the applicant and the public interest counsel have the opportunity to submit written responses to the "requestors" written response to the executive director's response. Here, the rules (55.209(d)(1-7)) specify the types of comments that can be filed, including challenges to a requestor's affected person status, the issues that are in fact disputed, whether questions of law or of fact are involved, whether the issues were raised during the public comment period, whether any of the public comment letters raising the issues have been withdrawn, whether the issues are material and relevant to a decision on the application and the maximum duration for the contested case hearing.

The requestors are allowed to file a reply to any written responses made by the executive director, the applicant and/or the public interest counsel. THIS RESPONSE TO THE RESPONSES OF THE EXECUTIVE DIRECTOR AND THE APPLICANT MAY BE THE MOST IMPORTANT SUBMISSIONS MADE BY THE REQUESTORS, ASSUMING THAT THE ISSUES WERE PROPERLY RAISED IN EARLIER HEARINGS.

IV. THE CONTESTED CASE HEARING BURDEN OF PROOF

Upon completion of the comment and the written response and reply process, the application proceeds to the Commission. Under 55.211(b), the Commission may grant or deny a hearing based upon public comment, the executive director's response and any

requests for contested case hearing. If the Commission determines that a hearing request meets the requirements of the regulations, the Commission must then determine if the request for hearing raises issues that were initially raised in the commenting process and were not withdrawn by the commenter and they must further determine if these issues are material and relevant to the commission's decision on the application. If the commission makes such findings, the rules further allow the commission to specify the number and scope of the specific factual issues to be referred to SOAH and to specify the expected duration of the hearing.

This new HB 801 process alters prior practice in the contested case proceeding. In the past, the applicant had the burden of proof with regard to an application. The applicant was responsible for proving the application met all aspects of the rules and regulations. A protesting party could take the position that every aspect of the application was subject to proof and cross-examination. If the applicant failed to prove-up any one of the various regulations that applied, then, in theory, the permit would be denied. These contested cases could be conducted by the protestant through the use of cross-examination alone. Although not many cases relying solely upon cross-examination were won by protestants, these cases certainly led to modifications of permits, if not outright denials.

This new practice effectively removes the "across-the-regulations" burden of proof. Once the applicant convinces the executive director that a permit application meets the regulations, the burden shifts to the "requestors" to identify disputed issues of fact and disputed issues of law and policy. These comments then come back to the executive director who must respond and then the requestor gets a reply that is then responded to by the applicant, the e.d. and the public interest counsel. If the "requestors" fail to raise disputed fact issues, then the hearing is denied and the permit is issued. In this manner, the burden of proof has been shifted to the protesting parties.

In this same manner, the burden of proof is limited in a hearing conducted under the new regulations. Under the new HB 801 procedures, the Commission determines the issues to be submitted to the hearing examiner. There is no burden of proof in the hearing for any issues that are not submitted. In other words, the scope of the hearing after HB 801 is limited to the issues specified by the Commission (unless new issues are added by the Administrative Law Judge). The burden of proof for the applicant, therefore, would relate only to the "disputed issues that are material and relevant". This is a major change from prior practice, at least in theory.

On the other hand, one may argue that this change may be more academic than practical. Few cases are won by protestants and virtually no cases are won by shotgun tactics and cross-examination only. Winning opposition cases certainly utilize cross-examination but it must be balanced by expert testimony on the side of the protesting parties. By the time a case gets to hearing, the staff of the TNRCC is convinced that the application meets the rules and the protestants are effectively opposing both the applicant and the TNRCC staff. Once the applicant and the staff testify at a hearing in support of

the application, the applicant will certainly argue that the burden of proof has been met, at least minimally.

Perhaps the biggest change here for protestants is found in the subtleties. Under prior practice, cross-examination could be used to expose the weaknesses of the applicant in many different areas, slowly diminishing the confidence of the Judge in the applicant's expertise or truthfulness. Then, a well-crafted expert report could reveal a flaw, magnified by other shortcomings revealed during cross-examination. Now, this context of prior cross-examination may not exist, altering the hearing dynamic to some extent.

V. CLAIMING AND PRESERVING ISSUES – EXAMPLES

The most important step for protestants (a.k.a. requestors) under the HB 801 process is to claim and preserve issues in order to be granted a hearing and in order to have subject matter at the hearing. Due to the absence of case law and virtually no examples of 801 cases before the Commission, this section on examples is hypothetical and prospective, guided by twenty years of prior experience before the TNRCC and its predecessor agencies.

Consider a situation where a permit application has been filed for a municipal type 1 solid waste disposal facility. Here, the TNRCC regulations establish a series of issues that must be addressed by the applicant, including land use considerations, drainage issues, site geology and various aspects of the engineering design for the landfill. Each of these subject areas are general issue categories. Each of these general issues has subcomponents and each of these subcomponents has subcomponents. At what level of detail must the requestor base their request?

Assume that a community has concerns about flooding and drainage issues associated with the site. These issues were raised in public comments and were discussed extensively at the public meeting. These public comments and public meeting statements were then addressed in response comments by the executive director and the applicant. Here, one might find the following language in the executive directors written response that is circulated to the commenters:

> "We have reviewed the flood plain analysis and it utilizes the official FEMA flood plain map. We have reviewed the drainage calculations and issued a notice of deficiency on drainage to the applicant. As a result of this notice, the applicant has redesigned the detention pond. These modifications are now part of the revised site development plan that is incorporated into the draft permit."

It is at this stage that the HB 801 process triggers unprecedented issues. Now, the protesting parties must request a hearing under section 55.201(d) of the TNRCC procedural rules and the Commission must determine which of the "disputed" issue upon which to grant a hearing, if any. At this time, there is no guidance as to how disputed issues are defined or triggered, except for the language in 55.201(d) that states that the requestor should state the factual basis of the dispute, if possible. It is the inclusion of the

"if possible" language that arguably gives great latitude to the requestor to be more general than specific. However, there is no indication how that phrase will be interpreted.

More generally, there is the question of how one "disputes" an issue. Is it sufficient to simply identify a subject area and label it "disputed"? Is it sufficient to question the integrity of the applicant or an engineering firm based on past compliance issues or past performance in hearings on applications, thereby disagreeing in general with a particular company's representations? While these may be valid arguments, the authors urge an abundance of legal care, particularly if "requestors" have the option of being more detailed. It is clear that HB 801 changed the prior process. It is clear that the Commission has been given authority to limit the scope of a hearing. As a general proposition, the Commissioners believe in their staff. The authors believe that the Commission will limit the scope of hearings based on HB 801and will be responsive to detail from the requestors.

On the other hand, at least one prior court decision has limited the extent of factual detail that could be required of protestants in order to gain a hearing from the Commission. This decision pre-dated 801 and was concerned with standing, arguably a more sensitive issue. (See Heat Energy Advance Technology Inc. vs. West Dallas Coalition for Environmental Justice, 962 S.W. 2d 288 (Tex. App.-Austin 1998)) However, it does indicate that the Austin court was concerned, and likely will be concerned, about the extent and fairness of the pre-hearing burden. But, the court also will certainly recognize that HB 801 is an enactment by the legislature that changed the rules of contested case hearings.

Therefore, a requestor is faced with a balancing issue – how much information and how much detail must be provided to convince the Commission that an issue is "disputed". At the least, requestors should identify any issue submitted to the Commission as "DISPUTED". The authors suggest identification of each issue as disputed issue 1, 2, etc. The authors suggest that these issues could be identified generally and then expanded in subcategories.

Take the flooding issue, for example. Assume that the requestors believe that there are flooding issues associated with the site. This concern arises from the fact that the area has experienced high water levels in the past, the surrounding streams have major flood problems and any addition of stormwater to the existing hydrologic system is considered to be a problem to the citizens. There are several aspects of the TNRCC landfill regulations that address drainage and flooding. Under 30 TAC 330.301, restrictions exist against locating landfills in floodplains unless certain precautions are taken. Usually, the Federal Emergency Management Agency published maps are used as the document that defines the 100-year flood event. However, these maps are known to be erroneous and many areas routinely flood that are not mapped by FEMA as 100-year flood plains. It would seem that lay knowledge of existing flood patterns could provide a basis for a factual "dispute" over whether or not a site is located in an area that floods. Here, it would seem that community knowledge; photographs and descriptions should be

sufficient to place this issue into dispute, particularly given that the definition of the floodplain does not incorporate the FEMA map into the definition.

Next, consider certain drainage issues. The Site Development Plan rules require that a solid waste management facility be designed to meet certain requirements. 30 TAC 330.55(b) requires that the site development plan contain sufficient information to document compliance with certain drainage requirements, including design, construction and maintenance of a run-on control system for the 25 year storm event, a run-off control system for the 24 hour, 25 year storm event and drainage calculations must be provided, including computer modeling in some cases and sample calculations to verify that the natural drainage patterns will not be significantly altered. In order to raise a disputed fact issue regarding drainage, it would seem that something more than general lay knowledge would be required.

One approach here is to engage an expert to prepare a short affidavit. This affidavit could simply state the credentials of the expert and an opinion stating that the expert disputes the responses to comments by the executive director. According to the TNRCC Procedural Rules, the requestor should to the extent possible specify the responses that are disputed and the factual basis of the dispute. In the case of an affidavit by an expert, it would seem that a general statement by the expert that she disputes certain issues and that additional study will be required on her part in order to be specific, but that on the basis of a cursory review, certain issues appear troublesome to her.

Keep in mind that there will have been no discovery at this point in time. The application materials should be available although support documents may be very difficult to obtain without discovery. Discs containing applicable computer models likely will not be available. It may be impossible to get into issues such as whether or not the underlying code has been manipulated prior to discovery. Therefore, there are certainly limits as to the extent of knowledge that requestors should be expected to obtain in order to get a hearing request granted.

On the other hand, to the extent that an expert has reviewed an application and has specific concerns, sufficient detail should be provided to alert the Commission that a true factual dispute exists. Here, our advice is to identify the specific rules that are violated. Certain rules require information. Other rules require compliance. Some rules are specific. Some are general. All of these rules should be identified if they are applicable to a specific issue. Under pre-801 practices, a more detailed identification of issues generally is required relatively early in the discovery process. This 801 process creates a new step that seems to be a hybrid between a general concern and specific detailed issue.

For example, with regard to drainage, assume that you have requested an expert to review the drainage calculations and she identifies concerns regarding virtually all of the calculations regarding run-on and runoff associated with the site. Here, we recommend that this information be stated, in summary fashion, in the affidavit. If you do not have an expert or do not wish to identify the expert that you have retained, then a detailed statement regarding the technical basis of concern should be simply written and

submitted. In addition to the factual description, we recommend clearly stating that 30 TAC 330.55(b) is violated by this (hypothetical) application, including 55(b)(2), 55(b)(3) and 55(b)(5). Additionally, we believe that violation of the general prohibitions should be included for completeness purposes, particularly 30 TAC 330.5(a)(1)(2) and (3) which prohibit discharges into the waters of the state without a permit, nuisances and the endangerment of human health and welfare or the environment, respectively.

The design of the 801 process seems designed to move from general to the specific. Citizen concerns and comments necessarily will be general and broad in the early stages of this comment process. There will have been little time to read and review an application, much less to organize and raise money. Experts, if retained at all, will have had little or no time to read materials. For this reason, citizens need to state their concerns often, broadly and comprehensively. If the issue is not raised in the public comment or the public meeting, it will be lost. An issue cannot be raised at the REQUEST FOR HEARING STAGE if it has not been raised at the comment stage. A general comment can be turned into a more detailed request for hearing. It may be difficult to turn a specific comment into a slightly different issue.

VI. RESPONDING TO THE RESPONSE TO THE REQUEST

There are two stages in the REQUEST FOR HEARING PROCESS. After the Requestors request the hearing, the executive director and the applicant, as well as the public interest counsel, have the opportunity to respond to the request for public hearing. The applicant may be expected to object to the hearing request and attack the request for hearing as lacking specificity sufficient to rebut the presumption that the application passes muster that they believe to be implicit in the executive directors response to comments.

More interesting will be the response of the executive director. In the opinion of the authors, the HB 801 process potentially changes the role of the agency into a proponent for the applicant and the application. If the executive director objects to the request for a hearing, the agency is clearly adversarial against the requestor at that point in time. In the past, the executive director has taken positions regarding whether groups have standing or not. However, HB 801 turns the agency into a defender of the substance of the application. While many of us may have felt that the agency took this position in the past, HB 801 makes the agency's defense of the application more apparent. The authors are concerned that this new agency role may further undermine public support for the TNRCC and exacerbate the public's lack of trust of the TNRCC. This new role for TNRCC should support a motion for alignment of the applicant and the TNRCC in the hearing process.

In our hypothetical, assume that the expert's affidavit has been submitted, stating in a somewhat conclusionary manner that she has reviewed the application and that she disputes the position of the executive director that the response to comments addressed the concern over drainage. This affidavit specifically identifies rules that are believed to be violated including all of those identified in the previous section. The applicant and the

executive director both respond that there is insufficient detail provided in the request for hearing and that the request should be denied.

If such a position is taken by either the applicant or the executive director, then the requestors have the opportunity to respond to these objections. Here, one last chance will exist to cure the alleged deficiency. At this point, it is not too late to submit an expert affidavit or other supporting documentation. However, it must be assembled and submitted quickly. If additional information exists that can be submitted on certain of these contested issues, then it may make sense to go ahead and lay out the full extent of the problem. At this last step, the process is almost to hearing and the discovery process would obtain disclosure of this information within three or four months. We recommended that Protestants holding additional information consider releasing it at this stage.

VII. CONCLUDING OBSERVATIONS

It is the opinion of the authors that the first "requestors: under the new 801 procedures should proceed cautiously unless you desire to be a test case. If you have a choice, we recommend that more, rather than less, detail be submitted in the request for hearing and response to the response..

The downside to providing details is that the applicant or the agency may take the comments to heart and change the application. Given the nature of the 801 process, however, it seems fair that the Commission should take certain steps to protect "requestors" that abide by this approach and make their comments in sufficient detail. It seems, given the extensive reliance of this process on identification of issues prior to the hearing, that the applicant should not be allowed to amend the application once a hearing has been set. The protestants will have been raising certain issues since the initial comment period and their concerns will have been ignored or deflected until, suddenly, the applicant realizes that they might lose in a hearing process. Restricting the ability of the applicant to amend after the initiation of the contested case proceeding would greatly help the goals of the 801 process to be met.

This new 801 process will be challenging to parties who wish to protest applications. However, we should keep in mind that 801 was passed as a compromise on a bill that would have eliminated the contested case proceedings. Both protestants and administrative law judges would have been out of the contested case business on TNRCC applications if the original bill had passed. We both should learn from that experience and work to make the contested case hearing effective and strong in producing fair results to all involved.

LYNNE LIBERATO

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She is past chair of the board of the State Bar Board of Directors (1996-97) and is a former president of the Houston Bar Association (1993-94). In addition, she is a former Trustee of the United Way of Texas Gulf Coast, chair of its Fund Distribution Committee and a member of the Community Impact Committee. She is a member of the American Law Institute, was Distinguished Alumna of the Year for South Texas College of Law, and was named one of Houston's 25 "power people" by *Inside Houston*.

ETHICAL ISSUES FACING ENVIRONMENTAL LAWYERS

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1. Introduction.

The ethical issues that environmental lawyers face often play a significant part in the ways that those lawyers conduct their cases and their practices. This paper will lay out some of those issues, focusing in particular on recent Texas decisions that may have an impact on lawyers' ethical obligations. While none of these issues is unique to environmental lawyers, they all apply in force in that area of practice.

2. Conflicts.

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At least for lawyers in private practice, the tension between conflict issues and the need to attract new business often presents serious ethical dilemmas. Inside a firm, conflicts decisions often raise difficult, divisive issues. Outside of the firm, it may often appear that lawyers dealing with conflicts dilemmas make what seem like arbitrary or unreasoned decisions about whom to represent. There is no magic formula for conflicts, but there are a number of issues to watch out for along the way.

A. Identifying the client.

Before lawyers can decide whether new representation conflicts with the interests of a previous clent, they have to know who the client is. Anyone who has dealt with conflicts matters knows that simply identifying the client is often a difficult process. An initial - and often surprisingly thorny - question is who gets to do the identifying, which is particularly important for lawyers who have changed employers. The Texas Supreme Court has ruled that, in this situation, the former firm may identify the client.[3]

The question of identifying the client in *EPIC Holdings* arose out of a suit over a merger. The problems started when American Medical International ("AMI") decided to divest itself of several subsidiaries and offered AMI vice-president Kenn George ("George") the chance to become CEO of the spin-off. George selected the firm of Johnson & Gibbs ("J&G") to document the transactions creating the spin-off, referred to here as EPIC, and to review his own compensation arrangement. Among others, three J&G lawyers, Watson, Jordaan, and Pennington, worked on the transaction; while the work was ongoing, several other lawyers, including McKool and Cunningham, were shareholders in J&G. The transaction was completed. At some time after that, Jordaan, Pennington, McKool, and Cunningham left J&G and went to other firms. Later still, EPIC decided to merge with another company, and a stockholder, Anderson, hired Jordaan, Pennington, McKool, and Cunningham to sue on claims related to the merger - claims that were, in part, adverse to George.[4]

The problems in Anderson's selection of counsel are obvious, but the interesting part of the opinion for purposes of this paper is the question of whether George was an individual client of J&G. One important piece of evidence on this point was the testimony

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[3] *In re EPIC Holdings*, 985 S.W. 2d 41 (Tex. 1998).

[4] *Id.* at 44-46.

of Watson, who had remained at J&G; Watson stated that George had indeed been a client individually.[5] Although Anderson's lawyers tried to dispute this characterization of the relationship between George and J&G, the Court, concerned about protecting a client's confidential information passed to its lawyers, disagreed:

> To allow one member of a law firm to dispute the existence of an attorney-client relationship acknowledged by another member of the same firm would put a client at a serious disadvantage in dealing with the firm.... To allow members of a firm to dispute another member's assertion of an attorney-client relationship would open an avenue for circumventing the presumption protecting client confidences.

Id at 49.

Obviously, this ruling could affect many attorneys who change jobs. If the former firm may characterize the relationship with its clients, the departing attorney has the responsibility to be aware of what those relationships are - a fact that is not always readily apparent. Departing attorneys may therefore need to verify the nature of their prior firm's representation in the course of checking conflicts at their new firms. This process is, of course, complicated by the fact that many firms are regrettably loose in their characterizations of who is a client and who is not. As one commentator noted, *EPIC Holdings* "again emphasizes the importance of engagement *and* 'I'm not your lawyer' letters."[6]

The Supreme Court recently wrote the postscript to *EPIC Holdings* in *In re George*, 2000 WL 898313 (Tex. July 6, 2000). In this action, the Court dealt with the issue of the extent to which a lawyer who takes over a matter after the original counsel is disqualified may have access to the disqualified lawyer's files. The Court quickly disposed of the issue of successor counsel's access to generally available material such as pleadings, discovery, and correspondence among the parties, ruling that access here was warranted. The question of disqualified counsel's work product, though, proved more problematic. Citing the danger that the work product had been tainted by client confidences that should not be disclosed,

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[5] *Id.* at 49.

[6] Karen K. Phillips, "Conflicts of Interest: 1998 The Year in Review," ALAS Loss Prevention Journal, January 1999, at 5.

the Court ruled that courts can limit that access to the first attorney's work product "to the extent that such a remedy furthers the purposes underlying the disqualification." *Id.* at *1. The next step was to determine whether to allow any successor counsel access to any of that work product. After reviewing and rejecting other states' solutions to this problem, the Court devised its own. "We begin with a rebuttable presumption that the work product contains confidential information," *id.* at *7, so that the burden to rebut the presumption lies with the party seeking access to the work product. The disqualified attorneys then must inventory the work product and describe the type of work, the subject matter, the claims it relates to, and any other relevant factor. *Id.* at *8. The court then uses the inventory to determine which items of work product are tainted. If the court cannot make that determination from the inventory, the court may use evidence presented by successor counsel to prove lack of taint, inspect the material *in camera*, or do both. If the court is still not satisfied that the material should be passed on to successor counsel, the material will be withheld. *Id.*

B. Staff conflicts.

But it is not only lawyer employment that can create conflicts. As the Texas Supreme Court reiterated in *In re American Home Prod. Corp.*, 985 S.W.2d 68 (Tex.1998), employment of staff may also raise conflicts issues and lead to disqualification - for the hiring lawyer, and possibly for that lawyer's co-counsel as well.

American Home Products involved the Norplant birth control litigation. At their simplest, the relationships worked like this: Gamez was local counsel for two defendants in some of the Norplant cases, and Palacios worked for Gamez. Palacios's job title in her work for Gamez was unclear, as was the question of whether she was Gamez's employee or an independent contractor. In the meantime, Herrera and Cherry, lawyers at two separate firms, represented the plaintiffs. Palacios worked on the Norplant litigation at Gamez's office, but while the case was still pending, she applied for a job at Herrera's firm. Concerned about possible conflicts, Herrera called Gamez, who assured him that Palacios had not worked for him and that she had not had access to privileged matters in the Norplant case. Herrera was satisfied with the reply and hired Palacios, and she went to work on the case. When they became aware of Palacios's new employment several months later, Gamez's clients then filed a motion to disqualify Herrera and his co-counsel, Cherry.[7]

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[7] *Id.* at 71-72.

The Court turned first to Herrera and ruled that the lower court had abused its discretion in refusing to disqualify him.[8] In so doing, the Court applied to independent contractors the test developed in assessing employee conflicts. Under this test, when an employee moves to an employer on the other side of a legal matter, an unrebuttable presumption arises that client confidences and secrets were imparted to the employee at his or her old job.[9]

The question then becomes whether the employee shared that information with the new employer, and a rebuttable presumption that such sharing occurred arises. The Court ruled that Herrera's testimony that Palacios did not share this information was not enough to rebut this presumption.[10] Instead, the Court explained that, in order to rebut the presumption, the new employer would have to prove that sufficient precautions (*e.g.*, a Chinese wall in the firm to shield Palacios from the Norplant litigation) had been taken to prevent these disclosures. In this case, Herrera had taken no such precautions, and he was therefore disqualified from representing the plaintiffs.[11]

The Court did not end its inquiry with Herrera, however, because the defendants also asked that his co-counsel, Cherry, be disqualified. Their theory was that Palacios could have communicated confidential information directly or via Herrera to Cherry.[12] Ultimately, the Court disagreed and refused to disqualify Cherry on the record before it, because the test for disqualification becomes more lenient as the relationship to the troublesome employee becomes more attenuated, but not without significant struggles as to how to proceed on these issues.

The Court expressed its concern that communications of a substantive nature could have occurred and struggled with the issue of so-called "re-imputation" of confidences from the employee to the co-counsel and considered several ways of dealing with this issue before settling on an approach.[13] In the end, the Court held that when dealing with indirect

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[8] *Id.* at 74.

[9] *Id.* at 76-77.

[10] *Id.* at 74-75.

[11] *Id.* at 76.

[12] *Id.* at 77.

[13] *Id.*

(e.g., Herrera to Cherry) contacts, the proper test is to shift the burdens between the parties arguing over disqualification. Initially, the party seeking disqualification has the burden to demonstrate that "there were substantive conversations between disqualified counsel and co-counsel, joint preparation for trial by those counsel, or the apparent receipt by co-counsel of confidential information."[14] If the proponent of disqualification makes any one of those showings, the presumption that confidential information was shared arises, and the party resisting disqualification must rebut the presumption "by providing probative and material evidence" that confidential information did not pass to the co-counsel.[15] Although it determined that the current record in this case did not support Cherry's disqualification, the Court specifically allowed the defendant leave to refile a motion to disqualify him and add information supporting such a motion.[16]

C. Joint defense arrangements.

Joint defense arrangements are often good ways to hold down costs and share valuable information - but they can also be good ways to generate conflicts issues in subsequent litigation.

One ethical problem involves representation of multiple defendants without a formal joint defense arrangement. In this situation, multiple parties who initially have an interest in sharing information as co-defendants on liability issues may later have divergent interests when damages are assessed and apportioned. For example, in an older case, the Fifth Circuit held that when co-defendants and their attorneys exchange information, an attorney who is the recipient of such information breaches his fiduciary duty if he later uses that information to the detriment of one of the co-defendants. Although the court remanded the case for formal findings of fact and conclusions of law to establish whether confidential information was actually exchanged and to establish whether the present controversy was substantially related to the prior one, the focus on conflicts in multiple representation was clear.[17]

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[14] *Id.* at 81.

[15] *Id.*

[16] *Id.* at 82.

[17] *Wilson P. Abraham Const. Corp. v. Armco Steel Corp.*, 559 F.2d 250 (5th Cir. 1977).

Formal joint defense agreements can also pose ethical problems. In Texas, the Supreme Court, following *Wilson P. Abraham*, decided that a joint defense agreement can cause disqualification.[18] In this case, Tomko and his firm represented a party to a joint defense agreement and therefore received confidential information from the parties to that agreement.[19] After that representation ended, other lawyers from Tomko's firm's sued parties to the agreement on similar issues, and the defendants in that suit moved to disqualify those lawyers.[20] The Supreme Court held that Tomko's representation disqualified his entire firm:

> There is, in effect an irrebuttable presumption that an attorney in a law firm has access to the confidences of the clients and former clients for other attorneys in the firm.....the attorney's duty to preserve confidences shared under a joint defense agreement is no less because the person to whom they belong was never a client. The attorney's promise places him in the role of a fiduciary, the same as toward a client.

Id. at 131-32.

Out-of-state courts have agreed with Texas's analysis. For example, in *GTE North, Inc. v. Apache Prods. Co.*, 914 F.Supp 1575 (N.D.Ill. 1996), several parties, each represented by separate counsel, signed a joint remedial cost sharing and investigation agreement. GTE and some of the other parties sued a non-party to the agreement; Chrysler, also a party to the agreement, chose not to participate in the suit. With Chrysler's consent, the non-party retained the counsel who previously represented Chrysler in the same (pre-litigation stage) matter for its own defense. The Court disqualified counsel from representing the non-party and held that an implied attorney-client relationship existed between the attorney and the client group, holding that once an attorney receives confidential information, a fiduciary duty exists with respect to the client who shared the information. In its ruling, the Court emphasized that the parties to the agreement shared their information with the belief that it was confidential and would not be used against the party from whom it originated at a later date.

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[18] *National Medical Enters., Inc. v. Godbey*, 924 S.W.2d 123 (Tex. 1996).

[19] *Id.* at 125.

[20] *Id.* at 125-26.

Not all courts agree with *GTE*, however. For example, in *Associated Wholesale Grocers, Inc. v. Americold Corp.*, No. 80,786 (Kan.3/5/99), the Kansas Supreme Court ruled that a law firm that entered a "joint agreement" to share information in one litigation matter did not have an implied attorney-client relationship that would disqualify it from later representing an adverse party in a related case. The Court reasoned that no attorney-client relationship existed because the plaintiffs had not sought or received legal advice from counsel, and the agreement did not provide that information shared under it would be kept confidential.

D. "Positional" conflicts of interest.

The lawyer's capacity for speaking out of both sides of the mouth is the stuff of legends. But appellate lawyers have a unique problem in this regard: "positional" conflicts. The ABA Model Rules of Prof. Conduct, Rule 1.7, cmt (9), ("Model Rules"), recognizes that appellate lawyers have the unique ability to argue for caselaw that will adversely affect other clients:

> A lawyer may represent parties having antagonistic positions on a legal question that has arisen in different cases, unless representation of either client would be adversely affected. Thus, it is ordinarily not improper to assert such positions in cases pending in different trial courts, but it may be improper to do so in cases pending at the same time in an appellate court.

Cmt (9), Model Rule 1.7. The ABA rule would forbid concurrent representation if the firm would have to argue contrary legal positions in the same jurisdiction, unless neither case is likely to lead to precedent harmful to the other. ABA Comm. on Ethics, Op. 93-377 (1993). *See generally*, J. Dzienkowski, *Positional Conflicts of Interest*, 71 TEX.L.REV. 457 (1993). Positional conflicts can substantially affect cases; for example, federal courts have disqualified class counsel for positional conflicts. *See e.g., Fiandaca v. Cunningham*, 827 F.2d 825, 829-31 (1st Cir. 1987)(conflict found where lawyer argued a remedy for one client that precluded remedy sought by other client).

Strictly interpreted, the concept applies only when the lawyer faces representing two clients simultaneously and arguing two different interpretations of law that will adverse affect one of them. J. Michael Medina, *Ethical Concerns in Civil Appellate Advocacy*, 43 SW. L. J. 677, 690 (1989)("Medina"). But the *Restatement (3d)*, § 209, cmt (f) takes a broader view. It refers to this problems as " [c]oncurrently taking adverse legal positions on behalf of different clients," and makes no distinction between trial and appellate courts. Instead, comment (f) requires consideration of whether a substantial risk that the actions in one case

will adversely effect the other, whether the issues are procedural or substantive, the client's reasonable expectations in retaining the lawyers, and the practical significance on each client's immediate and long-term interests. The focus is on whether the lawyer might downplay the legal arguments in one case to favor the other's outcome.

The risk of positional conflicts decreases somewhat by the economic fact of life that, in various fields, representation can become polarized, with law firms tending to gravitate towards representing one side in a particular field, e.g., banking/consumer, personal injury plaintiff/defense, legal aid, etc. Medina, p. 691. But conflicts arise in even the most focused practice; for example, increased *pro bono* work by the trial section of a large firm may create conflicts for the appellate section that represents banks, utilities, landlords, etc. It has been argued that a conflict in antagonistic values between existing clientele and the potential client may be so sharp as to trigger a duty to disclose to the client. Medina, p. 691. Clients are possessive of counsel's loyalties and may view representing rival interests as a violation of that loyalty. *Id.* However, in order to be an effective advocate, the legal professional must remain a detached professional, capable of arguing both sides. The *Restatement (3d)* therefore recognizes that law firms may take inconsistent positions in different courts at different times; a contrary rule would force law firms to specialize in one side of the docket. Sec. 209, cmt (f).

All lawyers- especially appellate lawyers- are urged to take positional conflicts seriously. Medina, p. 691. If one is perceived, the attorney must consult with the client and obtain consent to continue the potentially conflicting representation. It is permissible to ask the client to limit representation to avoid a conflict, e.g. eliminate legal arguments that would directly impact the other client. *Id.*, p. 690.

E. Waivers.

Most lawyers try to deal with conflicts issues, at least in part, through waiver letters. But these letters, although commonplace, are not bulletproof. Judge Briones grappled with the question of the validity of a client waiver letter in *City of El Paso v. Salas-Porras*.[21] In this case, Firm A provided tax advice to Firm B, which in turn passed that advice on to several individuals and their companies (together, "the Clients"); in the course of this work, Firm A received a great deal of the Client's confidential financial and tax information.[22] When the City of El Paso asked Firm A to help it recover payments for judgments from some of the

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[21] *City of El Paso v. Salas-Porras*, 6 F. Supp.2d 616 (W.D. Tex. 1998).

[22] *Id.* at 618-19.

Clients, Firm A asked the Clients who were about to be sued to sign a waiver letter allowing Firm A to take the case. These Clients conferred with an independent attorney and signed the letter, but they later moved to disqualify the firm, claiming that they had not been fully apprised of the scope of the pending litigation.[23]

In the end, the Court invalidated the waiver letter. Despite the fact that the Clients conferred with an independent lawyer before signing, the Court focused on one Client's testimony that he would not have signed if he had understood the magnitude of the litigation and ruled that the Client had not given the necessary informed consent. This ruling immediately precedes a discussion of what appears to be the Court's main concern, that is, that the appearance of impropriety "would raise public suspicion of the legal profession, cause the public to question the degree of an attorney's loyalty to clients, and invite skepticism as to the confidentiality of information given to an attorney."[24]

This case reminds all of us that a waiver letter is not enough by itself to clear a conflict. The courts will step in and disqualify counsel whose continued representation of a certain client could raise the public's eyebrows.

- Fees.

A. Fee contracts.

The Texas Supreme Court recently spoke to the issue of attorney fee contracts in *Lopez v. Munoz, Hockema & Reed,* 2000 WL 758457 (Tex. June 8, 2000). In this case, the plaintiffs signed a contingent fee contract that escalated the fee percentage if the case were "appealed to a higher court." *Id.* at *1. While finalizing a settlement in the case, the defendant filed a cash deposit in lieu of cost bond with the trial court in order to preserve its right to appeal if the settlement failed. It did not fail, though: the case settled, and the plaintiffs' lawyers took the escalated fee percentage. The plaintiffs complained that the lawyers should not have taken the escalated percentage, and the Court of Appeals agreed with them. The Supreme Court, however, ruled for the law firm. The Court applied ordinary rules of contract interpretation to the fee agreement and held that the case had indeed been appealed to a higher court, as stipulated in the contract. *Id.* at *2-*3. In so doing, the Court rejected the reasoning of the concurring and dissenting opinion, which focused on the plaintiffs' lack of knowledge that simply depositing cash triggered an appeal and advocated

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[23] *Id.* at 620.

[24] *Id.* at 625.

construing the contract against the attorneys because of the "special relationship between a lawyer and client." *Id.* at *7-*8.

B. Payment by third parties.

A lawyer may be paid by a third party rather than the client, provided the arrangement does not compromise loyalty to and zealous representation of the client. Model Rule 1.8(f); *Restatement (3d)*, § 215. Although this situation occurs most frequently in liability insurance cases, it can also arise when a relative agrees to pay for representation in criminal or family law matter, a corporation must defend a corporate officer/director, or where a defense must be lodged under an indemnity contract. Nancy Moore, *Ethical Issues in Third-Party Payment: Beyond the Insurance Defense Paradigm,* 16 REV. OF LITIG. 585, 602ff. (1997)

Model Rule 1.8(f), cmt (10), permits employment by third parties, with the client's consent, provided the employment does not compromise counsel's loyalty to the client or does not impair professional independence of judgment. The *Restatement (3d),* § 215(1), also permits third party employment, provided the client consents to any conditions imposed by the third party and § 202(2) does not prohibit employment despite consent (e.g., if it is reasonably likely lawyer cannot provide adequate representation).

Unlike Model Rule 1.8(f), *Restatement (3d)*, § 215(2) directly addresses control by the third party. Sec. 215(2) allows third party direction if it is reasonable in scope and character in accord with obligations borne by the third party and the client consents to such direction and/or limitations as provided in § 202. Sec. 215(2), cmt (d), makes it clear that the lawyer's professional judgment may not be controlled, but a third party may direct representation in a way that allows for effective representation. Comment (d) specifically permits reasonable limits on the costs of legal services by requiring adherence to a reasonable budget. However, the third party may not direct the representation without the client's consent if the third party does not bear substantially the same consequences of losing the litigation as does the client. Sec. 215, cmt (d).

One example of the type of limitation at issue here is third party billing guidelines on legal research expenses. ABA Model, Rule 1.1 requires that a lawyer provide "competent" representation, which includes preparation needed to represent the client. Comment 5 expressly notes that attention and preparation are determined in part by what is at stake, so that larger cases ordinarily require more elaborate treatment than matters in smaller cases. Therefore, Model Rule 1.1 expressly recognizes that the lawyer's ability to devote an adequate amount of preparation is part of competence.

ABA Model Rule 1.7(b) requires the lawyer to decline representation of one person if it reasonably appears that the lawyer's responsibilities to that client will be adversely limited by responsibilities or duties to a third person. Model Rule 1.7, cmt (4), clarifies that it applies when the lawyer may not be able to consider, recommend or carry out appropriate courses of action for one client because of the lawyer's responsibility to others. This conflict is condemned because it forecloses alternatives that would ordinarily be available to the client. Comment (4) states that the critical question is whether such potential conflict will materially or adversely affect the lawyer's independent professional judgment in considering alternatives or other courses of action that should reasonably be pursued.

The restrictions on research may interfere with the counsel's ability to provide competent opinions. In particular, without computer research, where the newest opinions are available, counsel cannot state with accuracy that the opinions cited are up-to-date. The lawyer's duty under Rule 1.01 to be adequately prepared will require undertaking the research. A requirement to obtain advance approval of all legal research may discourage necessary legal research on all but the most pressing issues. Likewise, in cases with evolving torts or controversial issues, counsel will be discouraged for trying to stay abreast of fast-breaking decisions. In particular, in federal courts, unpublished opinions can be cited; this means counsel cannot bill for obtaining opinions available only "on-line" that may be of value to the case.

Even if the guidelines require only pre-approval for research, the issue is whether counsel must accept the third-party's decision after consultation. The lawyer's duty is controlled by the Disciplinary Rules of Professional Conduct, not the billing guidelines. Ron Mallen, *Guidelines or Landmines?* FOR THE DEFENSE, p. 6 (August 1998). The duty to be competent, act diligently, and exercise independent judgment override any guidelines; overly restrictive guidelines threatens to make ethical rules irrelevant and require counsel to disregard them. Douglas Richmond, *Lost in the Eternal Triangle of Insurance Defense Ethics*, GEORGETOWN J. OF LEGAL ETHICS, Vol. 9, p. 533 (1996); John Tollefson, *The Law Shall Not Permit A Person Who Pays the Lawyer to Render Legal Services to Direct or Regulate the Lawyer's Professional Judgment*, COVERAGE, Vol 8, p. 19 (Sept. 1998). A provision in the guidelines that actions can be taken with pre-approval does not avoid the problem, unless the guidelines recognize that the lawyer must comply with ethical obligations. Mallen, p. 6. Without such safeguards, such guidelines could trump counsel's duties to the client.

C. Fee forfeiture.

Paying attention to ethical strictures is important for many reasons, not the least of which is attorney finances. Lawyers who breach ethical rules may end up forfeiting their fees, even if the client suffered no legal injury as a result of the ethical breach.[25]

- Issues related to the conduct of cases.

Litigation is a crucible, and one of the by-products is conflicts issues. Many decisions that lawyers make about how to conduct their cases are driven by ethical issues.

A. Duties of candor

In all cases where the duty to zealous represent the client collides with a duty to the court, the latter prevails. Medina, p. 694. The balance between advocate for client and an officer of the court will usually tilt in favor of candor to the court. Stephen Groves, Sr., *Appellate Ethics*, ABA TPI Appellate Advocacy Comm. News, p. 4 (Fall 1999)('Groves').

i. Representations concerning the record or proceedings below.

ABA Model Rule 3.3(a)(1) prohibits any false statement of material fact or law; Rule 3.3(a)(3) prohibits a failure to disclose material facts, when failure to disclose would permit the client to commit fraud; Rule 3.3(a)(4) prohibits the advocate from offering false evidence. If disclosure is required, Rule 3.3(b) requires disclosure of even protected confidences.

The attorney is not ordinarily required to disclose adverse facts. *Restatement (3d)*, Sec. 180. The lawyer does not personally vouch for the truth of the evidence submitted. Model Rule 3.3, cmt (1). However, the lawyer may make statements in open court only if counsel knows they are true or has made reasonable inquiry into them. Model Rule 3.3, cmt (2). Thus, the rule applies to motions, briefs, and oral argument.

A problem can arise when the appellate record already contains false testimony or documents. First, any duty of disclosure falls on the proponent of the evidence. Model Rule 3.3, cmt (11). Second, comment (11) places the onus on counsel to advise the client to do the right thing or to withdraw; if neither remedies the fraud, then the attorney must disclose the fraud to the tribunal. However, the client may controvert the lawyer's assertion.

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[25] *Burrow v. Arce*, 997 S.W.2d 229, 240 (Tex. 1999).

If the lawyer learns that the appellate record contains false testimony, a delicate question arises: Must the attorney withdraw, disclose, or remedy the situation? The confusion here is compounded in appellate practice, where technically, the appellant puts the record before the court, but either side may rely on testimony. One could say the "proponent" is the party that cites the evidence as support. However, the appellant is often expected to bring adverse evidence to the court's attention; this would allow appellee's counsel the benefit of false evidence without citing it. It may be better to say the appellee is proponent of the evidence that supports the trial court ruling under the standard of review, and the appellant is proponent of the evidence that attacks the finding.

The increase in appellate motions for immediate emergency relief (e.g., stays, temporary injunctions, etc.) require counsel to know the standards for ex *parte* motions. In many such cases, though appellee can respond, the need for prompt action by the court means motions are decided before appellee can respond. In an ex *parte* proceeding, ABA Model Rule 3.3(d) requires disclosure of all material facts known to the counsel that would enable the court to make an informed decision, whether those facts are adverse to the client or not. It is clear that appellate courts expect that any application for immediate or emergency relief contain a complete and accurate statement of all facts that may affect the ruling. Medina, pp. 700-01.

Briefing presents another area where the courts expect a complete, accurate statement. ABA Model rule 3.3(a)(2) prohibits any failure to disclose material facts if disclosure is necessary to avoid letting the client commit fraud. In some cases, a failure to disclose can be an affirmative misrepresentation. Model Rule 3.3, cmt (2).

This problem is particularly acute on appeal. Appellate courts usually require the brief contain a statement of facts; appellate courts expect it to contain a full statement of all relevant evidence in the record. Medina, p. 698; Groves, p. 8. Unlike the jury, which hears all the evidence, the appellate court does not expect to conduct an independent review of the record. Id., p. 703. Courts universally expect full and accurate quotes of testimony, documents and rulings. Medina, p. 699. They also universally condemn selective cropping. *Id.*, p. 700. Inferences from evidence should be clearly identified as deductions, not as the actual evidence in the record. *Id.*, p.702.

ii. Disclosure of adverse precedent.

One of the most confounding aspects of litigation is the requirement to, in essence, argue against your own case in briefing. But anyone who doubts the need to cite adverse precedent should read In re Colonial Pipeline Co., 960 S.W.2d 272 (Tex.App.-Corpus

Christi 1997, orig. proceeding), in which the judges lambast lawyers who (apparently on purpose) failed to do so. As a result, a review of the rules or citing adverse authority is in order.

ABA Model Rule 3.3(a)(1) forbids misquoting cases, but a more difficult problem is the outright failure to even mention controlling legal authority. Even for diligent counsel, what cases to cite is a vexing problem. First, universal page limitations require counsel budget discussion of the caselaw. Second, the standards about what cases counsel *must* cite are somewhat murky. Medina, p. 704ff.

On its face, the standard is simple enough. ABA Model Rule 3.3(a)(3) required counsel to disclose directly adverse legal authority in the controlling jurisdiction when the opposing counsel does not disclose it. Comment (3) stated the intent was to avoid dishonesty with the tribunal. *Restatement (3d) of the Law Governing Lawyers,* (T.D. #8, 1997), § 171, adopts the same standard. Sec. 171, cmt (c), refines the intent - representing the client within the bounds of the law means sharing a common reference point with the court and opposing counsel. The commentary attempts to flesh out "directly adverse,'""legal precedent," and "controlling jurisdiction."

Sec. 171, cmt (c) defines "legal authority" to include caselaw, statutes, regulations, and ordinances. A lawyer determines whether authority is "directly adverse" by consulting the forum court's jurisprudence; it includes decisions "directly on point," but not dicta. *Id.* It also includes disclosing the precedential value of cases counsel cites, e.g., their subsequent history. Sec. 171, cmt (b); Medina, p. 714. A practical definition of "adverse" is the pain it causes to discuss it, i.e., the more painful to disclose - the more it is "directly adverse." *Id.*, p. 708.

Under § 171, cmt (d), legal authority is within the "controlling jurisdiction" according to the established hierarchy of legal authority in the federal system. Thus, in federal district court, adverse decisions by the U.S. Supreme Court and the local circuit court of appeals on federal law must be disclosed. Medina, pp. 709-10. Decisions on federal law of other circuits or other districts are probably not, unless local law treats them as controlling. Sec. 171, cmt (d); Medina, p. 710. In federal court on issues of state law, it is the relevant state's decisions as shown by the established hierarchy of law under that state's law. Sec. 171, cmt (d). Certainly, that state's supreme court decisions are controlling. Intermediate appellate court decisions may be "controlling" if they are precedent under that state's law. Medina, p. 709. However, in diversity cases where the federal court must make an *Erie* guess on state law, intermediate court decisions can and should be cited to assist the court. *Id.*

In state courts on state law issues, one must consult local law to determine the hierarchy; usually this will not include decisions by federal courts or other states. *Id.*, p. 712. In state court on federal law issues, one must cite U.S. Supreme Court decisions; one must consult the forum state law to determine the precedential value of decisions from other federal appellate courts. *Id.*

Electronic research has created an additional wrinkle, the unpublished opinion. It has been suggested that whether an unpublished decision from the controlling jurisdiction must be cited turns on that venue's treatment of such an opinion's value; if that jurisdiction does not allow citation of unpublished cases or limits their precedential value, then counsel has no ethical obligation to cite them in that jurisdiction or in other ones. Medina, p. 711-12.

Perhaps the most potent argument for erring on the side of caution is the effect of being caught. In many cases, the briefing clerks or the judges will discover that directly adverse case, if the opposing party does not. This discovery may well convince the appellate court that the primary reason counsel did not cite it was that the case was both damning and decisive. *Id.*, p. 715. Disclosure of adverse precedent gives the advocate the court's confidence in the advocate's arguments against the precedent's reasoning or value.

iii. Violations of court orders.

Because clients sometimes violate court orders, the ABA Standing Committee on Ethics and Professional Responsibility issued Formal Opinion 98-412 on September 9, 1998. This opinion involved a lawyer who actually knew that a client had violated a court order prohibiting that client from transferring or disposing of assets. The Committee opined that a lawyer who discovers that a client has violated a court order prohibiting or limiting a transfer of assets:

(1) must reveal that fact to the court if necessary to avoid or correct an affirmative misrepresentation by the lawyer to the court;

(2) must disclose the client's conduct or, in the alternative, withdraw from continued representation of the client in the litigation if necessary to avoid assisting the client in a fraud on the court; and

(3) upon withdrawing from the representation, must make a disclosure sufficient to avoid continued reliance by the court on prior representations of the

lawyer that now are known to be untrue; absent such a necessity, the lawyer may not disclose the client's misconduct to the court or successor counsel without the client's consent.

Thus, in general, unless disclosure is necessary to avoid a false statement by the lawyer to the court or to avoid assisting a client in a criminal or fraudulent act, the lawyer is bound by the obligation of confidentiality and may not reveal the client's misconduct to the court without the client's consent.

iv. Duty to notify regarding insurance coverage.

Some non-Texas courts have recently held that it may be malpractice for a lawyer to fail to advise a client to check into possible insurance coverage for a claim the lawyer is defending. And as increasing numbers of clients buy both general insurance and more specialized environmental insurance products, these issues should continue to grow.

The most well-known case in this regard is *Darby & Darby v. VSI Int'l, Inc.,* No. 6043256/96 (N.Y. Sup. Ct.). In this case, the firm of Darby & Darby was hired to defend VSI in a patent infringement action. After several years and VSI's failure to pay its lawyers, the firm withdrew and sued VSI to recover outstanding legal fees. At the insistence of its new counsel, VSI contacted its insurer and discovered that its comprehensive general liability policy would have covered the previous litigation costs; however, the carrier denied coverage for expenses incurred before the claim was filed. VSI then counterclaimed against Darby & Darby for its failure to advise about insurance coverage. The Court denied a motion to dismiss this claim. *See also Larochelle v. Cyr,* 707 A. 2d 799 (Me. 1998) (although court assumed that attorneys have a duty to advise clients about insurance coverage for litigation costs, it refused to hold the lawyers liable for damages because the clients failed to prove coverage actually existed); *Ross v. Briggs & Morgan,* 540 N.W. 2d 843 (Minn. 1995). *But see Weissman, Dervishi v. Techmedia Computer Sys.,* No. 97-3739-CIV (S.D. Fla., March 3, 1998) (apparently disagreeing with *Darby* and *Jordache*).

While there are no cases imposing such a duty, as a practical matter, lawyers may want to consider advising clients with insurable risks to consider obtain appropriate coverage. Any decision to buy a policy is the client's business decision, however, and the lawyer should explain that in a written disclaimer.

v. Duties to disclose confidential information.

B. Handling information.

i. E-mails and other electronic communications.

Although the Texas courts have not addressed these issues, using new technologies to communicate with clients raises confidentiality and privilege issues. Obvious examples are the widespread use of cell phones and e-mails to discuss privileged information. Some legal commentators have questioned whether conducting these discussions on a cell phone, where transmissions can be easily intercepted by design or accident, is akin to an attorney and client loudly talking over privileged matters in a public place, which could waive any applicable privileges. Likewise, the use of unencrypted e-mail that may be intercepted has interested many legal scholars. Most of these scholars and several of the state bars that have looked at the issue agree that in countries like the US, where such interception is illegal,[26] e-mailers probably have a reasonable expectation of privacy. However, the transmission of e-mails to and from countries where interception of e-mail is not a criminal offense may not offer the same expectation of privacy.[27] So at the very least persons or companies that send privileged communications across borders may find themselves in legal difficulties with regard to the attorney-client privilege.[28]

ii. Spoliation of evidence.

Spoliation of evidence is not a new concept, but Texas lawyers should be aware of two new twists in this area of the law.

First, in *Trevino v. Ortega,*[29] Texas declined to recognize an independent cause of action for the tort of spoliation of evidence. The Supreme Court rejected the arguments that

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[26] *See* 18 U.S.C. § 2517 (4).

[27] *See, e.g.*, Kentucky Op. E-403 (July 1998); Dist. Of Columbia Op. 281 (Feb. 12, 1998); Penn. Op. 970130 (Sept. 1997); S.C. Op. 97-08 (June 1997); Ill. Op. 96-10 (May 1997).

[28] *See, e.g.*, Tenn. Op. 98-A-650 (May 1998). *Cf.* Iowa Op. 96-01 (August 1996), *modified*, Op. 97-01 (Sept. 1997); S.C. Op. 94-27 (Jan. 1995), *overruled,* Op. 97-08 (June 1997).

[29] 969 S.W.2d 950 (Tex. 1998). This paper refers to the defendant as "Trevino" because the Supreme Court styles the case that way. The opinion, however, refers to the defendant as "Trevio."

persuaded states like California, Florida, and Ohio to find that such a tort exists.[30] In its rejection, the Court focused on several policy arguments that it found persuasive:

- Spoliation is not an independent injury; rather, it is only one component of a lawsuit.
- Damages for spoliation are speculative.
- Texas does not recognize similar acts, such as perjury, as torts.
- Spoliation may be redressed in the suit in which it occurs.[31]

But while it refused to find an independent tort of spoliation, the Court strongly voiced its disapproval of that practice. The Court took pains to remind would-be spoliators that courts can and should impose sanctions for the destruction of evidence.[32] In the most serious instances, courts should dismiss the case or grant a default judgment, depending on which side of the v. the wrongdoer inhabits. If lesser punishment is warranted, the courts may instruct the jury regarding spoliation, choosing one of two alternative instructions. The more severe of the two typically involves situations where the nonspoliating party cannot prove up its prima facie case without the destroyed evidence. In this instance, the court may instruct the jury on a rebuttable presumption to the effect that "the spoliating party has either negligently or intentionally destroyed evidence and, therefore, the jury should presume that the destroyed evidence was unfavorable to the spoliating party on the particular fact or issue the destroyed evidence might have supported."[33] Then, "the court should instruct the jury that the spoliating party bears the burden to disprove the presumed fact or issue."[34] In less severe cases, the court may allow the jury to draw an adverse presumption that the destroyed evidence "would have been unfavorable to the spoliating party."[35]

But ironically, as the courts continue to punish spoliators, the risk of permitting spoliation to happen has never been greater, especially with regard to electronic

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[30] *Id.* at 952.

[31] *Id.* at 952-53.

[32] *Id.* at 958-59 (Baker, J. concurring).

[33] *Id.* at 960.

[34] *Id.*

[35] *Id.*

information. It is the rare company that does not now have its data on computer and communicate at least in part by e-mail, and many individuals have followed suit. However, the destruction of that data is just as common; for example, the simplest of home computers overwrites its data periodically, and websites are routinely updated. Thus, the inertia that keeps many companies from the sheer physical effort of dumping paper records disappears when the touch of a button will do the job. In light of the *Trevino* Court's emphasis on the need to preserve evidence, lawyers should advise clients on electronic information retention when litigation looms.

iii. Receipt of opponents' privileged material.

Texas courts spoke twice in 1998 to the issue of counsel's receipt of opponents' privileged information, and the resulting opinions give some guidance as to what to do when this material appears.

In the earlier case, *In re Meador*, 968 S.W.2d 346, the Supreme Court was confronted with the question of misappropriated documents. In this case, the misappropriating was done by Peterson, an executive assistant to the president of a company that was a defendant in a sexual harassment lawsuit filed by Meador, an ex-employee. When Peterson came upon privileged documents pertaining to the alleged harasser, she secretly copied them. Some time later, she too left the company and then hired Peterson's lawyer to sue it for her. Peterson gave the copied documents to her lawyer, who produced them in her case and Meador's. The company demanded the return of the documents and sought to force their return and disqualify the lawyer. The lower courts agreed with the company.

The Supreme Court agreed that the documents were properly returned to the company, but it allowed the lawyer to continue on the case. The Court viewed the case as one where the lawyer had come into possession of the documents through no wrongdoing of his own, putting it somewhere on the continuum between affirmatively improperly getting documents and receiving them through inadvertent disclosure by the other side. Viewing the case this way, the Court elected to look at the following factors in deciding whether the lawyer had to go:

1) whether the material was privileged;

2) the promptness with which the attorney notifies the opposing side that he or she has received its privileged information;

3) the extent to which the attorney reviews and digests the privileged information;

4) the significance of the privileged information; *i.e.*, the extent to which its disclosure may prejudice the movant's claim or defense, and the extent to which return of the documents will mitigate that prejudice;

5) the extent to which movant may be at fault for the unauthorized disclosure; and

6) the extent to which the non movant will suffer prejudice from the disqualification of his or her attorney.

Id. at 351-52. In this case, the Court balanced the factors and decided that, on the whole, the company had suffered little or no practical harm from the copying episode, but that the plaintiff would not be able to get another lawyer if the present one had to leave the case. Thus, the lawyer took a black eye for his actions, but was able to stay in the case.

In contrast, a lawyer who refused to return documents was disqualified in *In re Marketing Investors Corp.*, 1998 WL 909895 (Tex.App.-Dallas, Dec. 31, 1998). In that case, a former executive of the company took privileged documents with him when he was fired. The documents surfaced when the executive sued his former employer. The company demanded their return, but the executive's lawyer refused.[36] Looking to the same factors as the *Meador* Court had used, the *Marketing Investors* Court struck the balance differently. The court focused in particular on the refusal to return the documents and the lawyer's intention to use them at trial, and here there was no countervailing harm to the plaintiff shown to balance out the harm to the company.

Meador and *Marketing Investors* demonstrate that a lawyer who comes into possession of the opponents' privileged materials through means other than inadvertent production typically should return those documents as a first step. The recalcitrance of the lawyer in *Marketing Investors* seems to have been especially important.

C. Conduct toward other lawyers.

Part of the nature of the litigation process is to criticize. Counsel must attack the rationale of opponents and, in some instances, various court decisions. In important cases,

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[36] *Id.* at 1.

there are hard feelings. However, there is a substantive difference between a professional critique of a line of reasoning on one hand, and emotional outbursts or personal attacks on the other. Whenever the advocate thinks that clever rhetoric can veil an insult, she should recall the old adage that even a dog knows whether he was kicked deliberately or stumbled over.

In *Merrill-Dow Pharm., Inc. v. Havner,* 907 S.W.2d 535 (Tex. App.-Corpus Christi 1994), *writ granted, judgm't rcv'd*, 953 S.W.2d 706 (Tex. 1997), *cert. denied,* 118 S. Ct. 1799 (1998), the court of appeals first reversed a substantial verdict for the Havners in a products liability case involving pre-natal birth defects. 907 S.W.2d at 548. During the motions for rehearing, the Havner's lead counsel wrote a scathing reply brief implying violations of the judicial conduct code. *Id.* at 566. Although the court of appeals did not describe the language, trade journals reported that Havner's counsel implied the opinion's author had been "seduced" by Merrill Dow's female appellate counsel. The court of appeals *en banc* reinstated the verdict. *Id.* at 557. However, it wrote a separate opinion censuring counsel and striking the brief. *Id.* at 566.

The Texas Supreme Court reversed and rendered, finding that the Havner's experts' opinions failed on *Daubert* grounds. On rehearing, the same counsel again wrote a motion that was highly critical of the justices. Trade journals reported that the motion referred to the justices as the nine "nutty professors" for second-guessing scientific experts. The Court's written opinion did not describe the language; instead, the Court issued a show cause order why Havner's appellate lawyers should not be sanctioned and referred to their local grievance committees. 953 S.W.2d at 732-33. Two lawyers were later referred. 41 Tex.S.Ct.J. 154 (Tex., Dec. 11, 1997). One justice dissented on the grounds disrespectful criticism could be handled in other ways than to refer counsel to grievance committees. 956 S.W.2d at 532.

The appellate advocate should also be wary of comments about opposing counsel. *See, e.g., Favaloro v. Comm'n for Lawyer Discipline*, 994 S.W.2d 815 (Tex. App.-Dallas 1999, pet. pending.). There, in a petition for writ of mandamus in the Texas Supreme Court, Attorney Favaloro casually mentioned that respondent's counsel arguments were not only false, but he had filed a grievance against respondent's counsel for the same conduct previously. Favaloro was successfully prosecuted for violating the grievance committee confidentiality rules.

5. Conclusion.

Many difficult ethics issues face the practicing lawyer, and this paper touches only a few of them. All of these issues may have a substantial impact on the way in which environmental lawyers handle their work. If there is one theme in this discussion, however, it would be that lawyers can avoid most ethical problems simply by being aware of where they may lie and acting to prevent them - before the lawyers and the problems end up in court and then in somebody's CLE paper.

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THE FEDERAL CLEAN AIR ACT
A Mandate for State/Federal Cooperation.[1]

Refineries and chemical plants are a significant source of the volatile organic compounds (VOCs) which are released into the ambient air.[2] A chemical reaction involving VOCs and nitrogen oxides creates ground level ozone which has been identified as a criteria air pollutant by the EPA under authority granted to it by the Clean Air Act.[3]

The EPA has developed national ambient air quality standards (NAAQS) for ozone which put limits on the levels of ozone which must be attained and maintained to protect the public health.[4] Geographic areas within the United States which exceed the NAAQS are"nonattainment" areas.[5] For example, the Beaumont/Port Arthur area is classified as a moderate nonattainment area for ozone.[6] Certain VOCs, like benzene, are also regulated under the Clean Air Act as hazardous air pollutants (HAPS).[7]

The Clean Air Act mandates a partnership between the states and the federal government to assure that national air quality standards are achieved. Under the Act, the federal government has final authority to define what constitutes air pollution, to develop pollution limits, to develop control standards for sources that contribute to air pollution and to assure nationwide compliance; primary responsibility for implementing the federal standards by preventing and controlling air pollution at its source rests with the states.[8]

The Clean Air Act identifies the State Implementation Plan (SIP) as a primary mechanism for realizing the cooperative effort between the states and United States government envisioned by the Act. The SIP is a collection of regulations, orders, letters, agreements and other tools adopted by a state and approved by the EPA.[9] The Clean Air Act requires a SIP to include certain mandatory elements, like regulations which prohibit emissions that could either contribute significantly to nonattainment or interfere with the maintenance of attainment.[10] State regulations approved as part of the SIP are enforceable by the United States.[11]

VOCs play a central role in the formation of ozone, so certain mandatory SIP elements focus on controlling VOC releases. A SIP must include technological controls for equipment and structures that can release VOCs into the ambient air.[12] The SIP must have a means to set limits on new or modified emission sources.[13] Approved new or modified sources are then subject to New Source Performance Standards developed by the EPA.[14]

The Texas SIP requires the state to prepare a base year inventory (which must be updated every three years) which identifies all actual emissions from all sources.[15] The SIP requires major sources in nonattainment areas within the state to submit

annual emission statements which report the actual amount of VOC and nitrogen oxide emissions from the source.[16]

The Clean Air Act authorizes the EPA to fund the cost of "implementing" state programs which prevent and control air pollution or which help implement NAAQS.[17] 105 grants fund a wide range of enforcement and inspection activities in Texas. In addition to promoting compliance with and enforcement of state and federal air rules, regulations and permits, the 105 grant program generates data which is used to measure the effectiveness of approved regulations in achieving the goals of the Clean Air Act and to develop priorities and targeting strategies so that limited federal funds can be used where they were needed the most. Many of the enforcement and inspection activities funded with 105 grants are carried out by personnel from TNRCC regional offices.

The EPA has a mandate under an executive order issued by President Clinton to determine whether poor people and minorities are unfairly burdened by the effects of pollution.[18] Agency activity under the Order has revealed that many environmental justice areas are located in close proximity to refineries and chemical plants.[19] Agency experience has shown that citizen complaints are the primary source of enforcement information in environmental justice areas.[20] Significant resources have been committed by both the State of Texas and the United States to determine the state of ambient air quality in identified environmental justice areas.

The system of state and federal interaction created by the Clean Air Act is a topic which deserves more space and time than is available for this paper. However, it should be clear from the brief summary above that truthful information about VOCs is relevant to the EPA's statutory jurisdiction, its regulatory jurisdiction, and the priorities it sets to guide its exercise of that jurisdiction; and, that much of the information about VOCs required by the Act will likely come from someone within the regulated community and will be given to a state inspector at the local level.

The connection between state and federal enforcement built into the fabric of the Clean Air Act is important because the fact that a false statement is made or delivered to a local state inspector does not mean that a federal crime has not been committed.

18 U.S.C. §1001

18 U.S.C. §1001 prohibits the making of materially false statements concerning any matter within the jurisdiction of the executive branch of the United States.

The scope of agency jurisdiction embraced by §1001 includes all the functions an agency is authorized to perform.[21] A statement is material if it has a natural tendency to influence, or is capable of influencing, the agency to which it is made.[22] To

convict under §1001, the government does not have to prove that an agency was actually misled by the false statement.[23] A misrepresentation (as compared to concealment of a material fact) can be material even if its disclosure is not required by law.[24] In a prosecution under §1001, a jury may consider statutes, regulations, interpretative rules, related agency documents and testimony to determine whether a statement is material or false.[25]

The term "statement" includes both oral and written statements.[26] The statute applies to unsworn, as well as sworn, statements.[27]

By its express terms, Title 18 United States Code, Section 1001 applies to statements made directly to a federal agency.[28] In an era of federal delegation and shared jurisdiction between the states and federal government, false statements to state and local agencies can also fall within the sweep of the statute.[29]

Liability for a misrepresentation under 18 U.S.C. §1001 rests on proof that the defendant made a statement he knew was false for the purpose of misleading the agency to which the statement was made.[30] A defendant may not avoid responsibility for a statement he knows to be false by claiming that the agency was not entitled to the information.[31] The government does not have to prove that a defendant knew a federal agency had jurisdiction over the subject matter of his statement, or that he knew his misrepresentation violated a specific regulation or statute.[32]

Finally, the 5th Circuit has recognized that a defendant may be convicted of knowing that a statement is false when he acts with a reckless disregard for the truth and with the purpose of avoiding the truth.[33] Proof that a defendant knew a statement was false which rests on evidence of such "willful blindness" cannot be established merely by demonstrating that the defendant was negligent, careless, or foolish.[34]

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1. This paper summarizes the legal research and opinions of the author and is not offered as a statement of official policy on behalf of the United States of America or any of its departments or agencies.

2. The TNRCC website reports that the agency conducted a survey of companies which were required to submit a 1997 emission inventory to determine the operating status of the equipment at the facilities. Nonmethane VOC emissions from grandfathered, permitted and exempt sources were summarized as follows: Houston/Galveston (57,084 tons per year), Beaumont/Port Arthur (32,113 tons per year) and Dallas/Fort Worth (7,238 tons per year).

EPA Region 6 adopted a strategic plan for the period 1994 to 1999 to assist it in setting priorities for the agency in the states of Texas, Louisiana, Oklahoma, Arkansas and New Mexico. The plan identifies the

petrochemical industry as a sector which is causing environmental problems. Forty percent (40%) of all the industries in this sector are located in Region 6.

3. 42 U.S.C. §7408 (a)(1); 58 Fed. Reg. 13008-13009. Pollutants subject to identification under Sec. 7408 are those, "which may reasonably be anticipated to endanger public health or welfare." Sunlight and high temperatures also enhance the formation of ozone.

4. 42 U.S.C. §7409 (a) and (b)(1).

5. 42 U.S.C. §7407 (4) and §7511 (a)(1).

6. On March 3, 1978, Hardin, Jefferson and Orange counties (BPA) were designated as nonattainment for ozone by the EPA under the Clean Air Act. 61 Fed. Reg. 14496 (a history of BPA's ozone nonattainment status is found in this 1996 notice). The 1990 amendments to the Clean Air Act required the EPA to reclassify ozone nonattainment areas based on the severity of the nonattainment problem using categories ranging from marginal to extreme. 42 U.S.C. §7511 (a)(1). On November 6, 1991, the EPA classified the BPA ozone nonattainment as serious under this mandate. 61 Fed. Reg. 14496. On June 3, 1996, the ozone nonattainment classification for BPA was changed from serious to moderate. 40 C.F.R. §81.344.

7. 42 U.S.C.§7412 (b).

8. 42 U.S.C. §§7401(a), 7407, 7408, 7409 and 7511; *Train v. Natural Resources Defense Council, Inc.*, __ U.S. __, 95 S.Ct. 1470, 1474-75 (1975) (The 1970 amendments to the Clean Air Act limited the discretion of the states to exercise"primary responsibility" for assuring air quality: "[t]he difference under the [1970] Amendments was that the States were no longer given any choice as to whether they would meet this responsibility. For the first time they were required to attain air quality of specified standards, and to do so within a specified period of time"); *United States v. Ford Motor Co.*, 814 F.2d 1099, 1102 (6th Cir.), *cert. denied*, __ U.S. __, 108 S.Ct. 83 (1987) ("Although it is clear that the Clean Air Act contemplates very significant participation in air pollution control by state air pollution control agencies, it is equally clear that final authority is vested in the United States Environmental Protection Agency and the courts of the United States"); *United States v. Marine Shale Processors*, 81 F.3d 1329, 1355 n.14 (5th Cir. 1996)("Some commentators have questioned the 'race to the bottom' rationale for federal enforcement. See, e.g. David Shapiro, Federalism: A Dialogue (1995) (collecting and discussing sources). While these arguments may have considerable force in some areas, their persuasive value is less in an area fraught with the externialities associated with air pollution").

9. 42 U.S.C. §7410 (a); 57 Fed. Reg. 13498 ("State Implementation Plans; General Preamble for the Implementation of the Clean Air Act Amendments of 1990").

10. 42 U.S.C. §7410 (a)(2)(D); 40 C.F.R. §§51.210 and 211; Regulations addressing the duty to control, report and correct conditions leading to emissions have been a feature of the Texas SIP for many years. On June 22, 1973 the EPA approved four TACB rules as part of the Texas SIP which address the issue of emissions which could contribute to nonattainment: (a) Rule 5 (Nuisance) generally prohibits emissions which could injure or "adversely affect" humans or the environment or which could "interfere with the normal use and enjoyment of animal life, vegetation, or property." 38 Fed. Reg 16568, (b) Rule 7 (Notification of Major Upset) generally requires that the state be notified of any "excessive emission" that contravenes the Texas Clean Air Act or agency rule. *Id.* , (c) Rule 8 (Notification of Maintenance) parallels the major upset rule and requires advance written notification of "planned maintenance, start-up or shut-down" activities. *Id.*, and (d) Rule 12 (Exemptions) provides that emissions which occur during a major upset covered by Rule 7 will not be counted against allowable emission

levels set by agency rules provided that the notification requirements of Rule 7 are met and a determination is made by the agency after consultation with "appropriate" local officials and "officials of the subject source" that "the upset conditions were unavoidable and that a shutdown or other corrective actions were taken as soon as possible. *Id.*

11. 42 U.S.C. §7413; *Marine Shale*, 81 F.3d 1354-55.

12. 42 U.S.C. §7502(c)(1), §7511a (a)(2)(A) and §7511b.

13. 42 U.S.C. §7503 (c), §7511a (a)(4), (b)(5) and (c)(10).

14. 42 U.S.C. §7411; 40 C.F.R. Part 60.

15. 42 U.S.C. §7502 (c)(3), §7511a (a)(1), (b) and (c).

16. 42 U.S.C. §7511a (a)(3)(B), (b) and (c). On August 26, 1994 the EPA published a notice in the Federal Register approving the regulation submitted by Texas to implement the emissions statement requirement as part of the SIP for Texas. 59 Fed. Reg. 44036. The TACB had adopted the regulation requiring emissions statements on September 18, 1992. 17 Tex. Reg. 6452 ("The new emissions inventory statements are mandated in the 1990 amendments to the Federal Clean Air Act").

17. 42 U.S.C. §7405 (a)(1)(A) ("For the purpose of this section, 'implementing' means any activity related to the planning, developing, establishing, carrying-out, improving, or maintaining of such programs").

18. Exec. Order No. 12,898, 59 Fed. Reg. 7629 (1994) (The order was intended to improve the internal management of the executive branch).

19. EPA Region 6 in Dallas, Texas maintains maps of areas which have been identified as environmental justice neighborhoods, because the residents exceed the state average in one or more of the following categories: percentage of minority residents, percentage of residents over age 55 and percentage of residents earning less than $15,000 a year.

20. Complaints about VOC releases typically come to the TNRCC or EPA as "odor" complaints.

21. *United States v. Rodgers*, __U.S. __, 104 S.Ct. 1942, 1946 (1984); *Bryson v. United States*, __U.S. __, 90 S.Ct. 355, 359 (1969) ("A statutory basis for an agency's request for information provides jurisdiction enough to punish fraudulent statements under §1001").

22. *United States v. Gaudin*, __U.S.__, 115 S.Ct. 2310, 2313 (1995).

23. *Brogan v. United States*, __ U.S. __, 118 S.Ct. 805, 808-09 (1998) ("We find no basis for the major premise that only those falsehoods that pervert governmental functions are covered by §1001"); *United States v. Swaim*, 757 F.2d 1530, 1534 (5thCir.), *cert. denied*, __ U.S. __, 106 S.Ct.81 (1985) ("A statement may be material even if it is ignored or never read by the agency receiving the misstatement . . . the effect on the federal agency need not be direct . . . the ultimate authority to see that federal funds are properly spent provides the necessary link between deception of the non-federal agency and effect on the federal agency [internal quotation marks omitted]").

24. *United States v. Ross*, 77 F.3d 1525, 1544-46 (7th Cir. 1996) ("The Court's holding [in *Bryson v. United States*, __ U.S. __, 90 S.Ct. 355 (1969)] does not limit the application of §1001 to false statements submitted directly to a department or agency that are statutorily mandated"); *United States v. Gaudin*, 28 F.3d 943 (9th Cir. 1994), *cert. granted*, __ U.S.__, 115 S.Ct. 713, 130 L.Ed.2d 621 (1995), *aff'd*, __U.S.__, 115 S.Ct. 2310,(1995) ("[M]ateriality is a 'fact-bound' inquiry. One cannot look at a particular statute or regulation to determine what would affect the decision of HUD to insure an FHA loan. False statements of age, address, gaps in employment history, or inaccuracies in a financial statement may be of no importance to some agency decisions, but crucial to others"); *United States v. Corsino*, 812 F.2d 26, 31 (1st Cir. 1987) ("That a statement was not required to be made to the agency does not make the statement any less material - a statement may be material where it is made 'in the hope of influencing the pending investigation']"); *United States v. Notarantonio*, 758 F.2d 777, 787 (1st Cir.1985) ("the contingent responsibility generated by a loan guarantee is sufficient to bring the matter within the jurisdiction of the SBA"); *United States v. Lawson*, 809 F.2d 1514, 1518 (11th Cir. 1987) (jurisdiction based on annual contributions contract between HUD and city housing authority); *United States v. Dick*, 744 F.2d 546, 553 (7th Cir. 1984) ("That a statement was not required to be made to the agency does not make the statement any less material"); *United States v. Diaz*, 690 F.2d 1352, 1358 (11th Cir. 1982) ("§1001 prohibits false statements generally not just those required by law or regulation").

United States v. Tobon-Builes, 706 F.2d 1092 (11th Cir.1983). (Generally, only concealment offenses require a showing that the statements are "required by statute, government regulation, or form").

25. *Lutz*, 154 F.3d 587-89 (the issues of falsity and materiality were determined by reference HUD Form 2900 and a handbook); *United States v. Calhoon*, 97 F.3d 518, 524-29 (11th Cir.1996), *cert. denied*, __U.S.__, 118 S.Ct.44 (1997) (the issues of falsity and materiality were determined by reference to the Medicare statute, regulations adopted under the authority of the Act, the Provider's Reimbursement Manual which sets forth agency guidance, and a cost report form); *United States v. Brittain*, 931 F.2d 1413, 1417 (10th Cir. 1991) (the materiality of the false Discharge Monitoring Reports was determined by reference to the Clean Water Act, a regulation adopted under the authority of the CWA, and the legislative history of the Clean Water Act); *United States v. Gardner*, 894 F.2d 708, 710-12 (5th Cir. 1990) (the materiality of the defendant's false statements concerning ownership of vehicles imported into the United States was determined by reference to §7522 of the Clean Air Act, a regulation adopted under the authority of the CAA, an interpretative document titled,"United States EPA, Automotive Imports Fact Sheet," and EPA Form 3520-1); *Weiss*, 914 F.2d 1515-23 (issues of falsity and materiality determined by reference to the Medicare statute, *Medicare Carriers Manual*, a private newsletter prepared by Medicare carriers and a Commerce Clearinghouse publication); *United States v. Hartness*, 845 F.2d 158, 160-61 (8th Cir.), *cert. denied*, __ U.S. __, 109 S.Ct.308 (1988) (in a case which involved a false estimate of future income, the issues of falsity and materiality were determined by reference to regulations adopted by HUD); *Lawson*, 809 F.2d 1518 (materiality of documents provided by the defendant to a city housing authority in a deposition were determined by reference to an annual contributions contract between HUD and the housing authority); *Notarantonio*, 758 F.2d 785-787 (the materiality and falsity of loan disbursement requests were determined by reference to a loan agreement, SBA guarantee agreement and loan trust agreement); *Baker*, 626 F.2d 513-15 (the materiality of false time sheets submitted to a local housing authority was determined by reference to testimony about HUD's Target Project Program, quarterly reports submitted by the local agency to HUD and the effect payment would have on the depletion of federal funds for the program).

26. *United States v. Beacon Brass Co.*, 344 U.S. 43, 46 (1952); *United States v. Massey*, 550 F.2d 300, 305 (5th Cir. 1977).

27. *United States v. Adler*, 380 F.2d 917, 922 (2nd Cir.), *cert. denied*, 389 U.S. 1006 (1967); *Massey*, 550 F.2d 305.

28. *United States v. Gardner*, 894 F.2d 708, 712 (5th Cir. 1990) (the defendant submitted false forms required by the federal Clean Air Act); *United States v. Brittain*, 931 F.2d 1413 (10th Cir. 1991) (False DMRs filed with EPA).

29. As discussed above, under the Clean Air Act, the authority to define what constitutes air pollution, to develop national air standards which set limits on the amount of pollutants which can be in the air and to assure nationwide compliance with those standards rests with the federal government, while primary responsibility for implementing the federal standards by preventing and controlling air pollution at its source rests with the states. The Clean Air has established a network of state and federal cooperation to assure that the mandate of the Act is met. *United States v. Marine Shale Processors*, 81 F.3d 1329 at 1355 (5th Cir. 1996)("[S]tandards for purification of the ambient air simply cannot be set along the boundaries of our 50 states. The winds, of course, recognize no such boundaries. The 50 states of this union compete intensely with one another for industry. As Congress has recognized, if state control of ambient air emissions were final, in short order, major shifts of smoke stack industries to states with the most lenient pure air standards would inevitably take place. Absent final authority in the United States EPA, the attainment goal of the Clean Air Act would prove ephemeral").

Examples of prosecutions under 18 U.S.C. §1001 based on statements to state and local government include the following:

United States v. Baker, 626 F.2d 512, 513-15 (5th Cir. 1980)(false time sheets were submitted to a local housing authority which received funds from HUD); *United States v. Suggs*, 755 F.2d 1538, 1542 (11th Cir. 1985) (The defendant submitted false travel vouchers to the Georgia Department of Labor); *United States v. Harmas*, 974 F.2d 1262, 1265-66 (11th Cir. 1992) (conspiracy to defraud the Department of Education achieved by presenting backdated records concerning loan collection efforts to a private company hired to manage student loans guaranteed by the DOE included charges of presenting false claims in violation of §1001); *United States v. Stanford,* 589 F.2d 285, 297 (7th Cir. 1978) (The defendant submitted false claims for AFDC benefits to the Illinois Department of Public Aid); *United States v. Wright*, 988 F.2d 1036 (10th Cir. 1993) (prosecution under §1001 for false statements filed with local department of health required as part of a program under the Clean Water Act which had been delegated by the United States to the state of Oklahoma); *United States v. Lutz*, 154 F.3d 581, 587 (6th Cir. 1998) ("courts have upheld §1001 convictions for false statements made to private entities receiving federal funds or subject to federal regulation or supervision [internal citations omitted]").

30. *United States v. Guzman*, 781 F.2d 428, 431 (5th Cir.), *cert. denied*, __ U.S. __, 106 S.Ct. 1798(1986) ("The requirement that the false representation be made 'knowingly and willfully' is satisfied if the defendant acts deliberately and with the knowledge that the representation is false"; *United States v. Puente*, 982 F.2d 156, 159 (5th Cir. 1993) ("A conviction under § 1001 requires proof that a defendant had the specific intent to make a false or fraudulent statement 'deliberately or at least with reckless disregard of the truth and with the purpose to avoid learning the truth.' [internal citations omitted] . . . A defendant who deliberately avoids reading the form he is signing cannot avoid criminal sanctions for any false statements contained therein. Any other holding would write § 1001 completely out of existence").

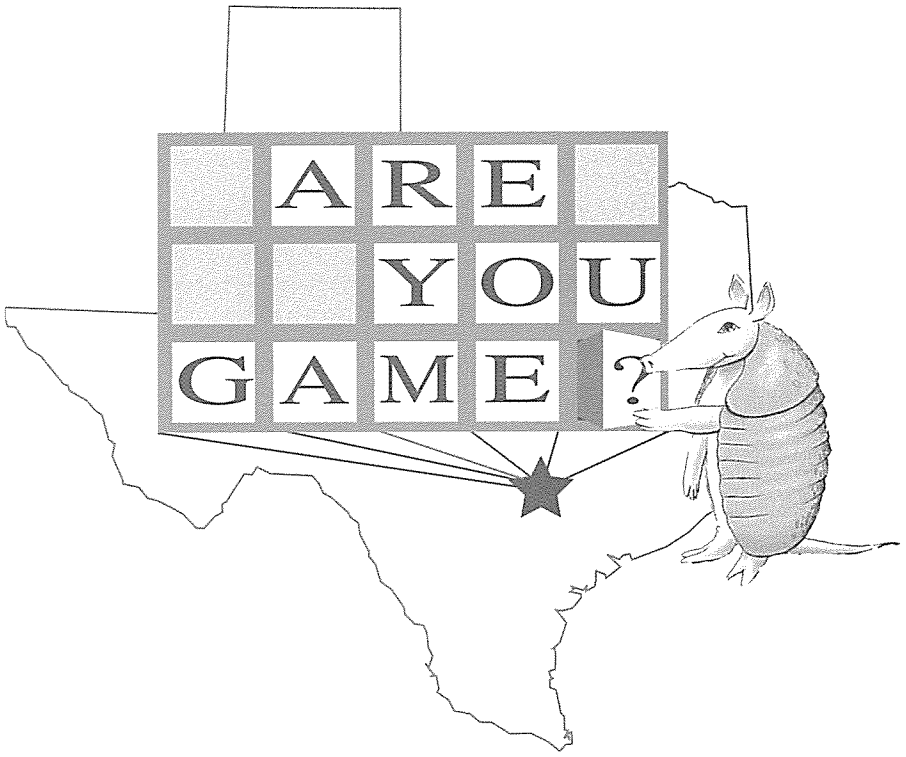
31. *Bryson v. United States*, 396 U.S. 64, 68-72, 90 S.Ct. 355, 358-360 (1969) ("One who elects [fraud] as a means of self-help may not escape the consequences by urging that his conduct be excused because the statute he sought to evade is [invalid] . . . After *Dennis* it cannot be thought that as a general principle of law a citizen has a privilege to answer fraudulently a question that the Government should not have asked. Our legal system provides methods for challenging the Government's right to ask questions - lying is not one of them. A citizen may decline to answer a question, or answer it honestly, but he cannot with impunity knowingly and willfully answer with a falsehood"); *United States v. Weiss*, 914 F.2d 1514, 1520-23 (2nd Cir. 1990), *cert. denied,* __U.S.__, 111 S.Ct. 2888 (1991) ("[I]t is no defense to a charge of filing false statements that the government document that prescribed the details

of the filing had not been approved by the Director of the Office of Management and Budget as the Paperwork reduction Act allegedly required").

32. *United States v. Yermian*, __ U.S.__, 104 S.Ct.2936, 2940 (1984) ("On its face, therefore, §1001 requires that the Government prove that false statements were made knowingly and willfully, and it unambiguously dispenses with any requirement that the Government also prove that those statements were made with actual knowledge of federal agency jurisdiction"); *Brogan v. United States*, 522 U.S. 398, 118 S.Ct. 805, 811-12,139 L.Ed.2d 830 (1998) ("Courts may not create their own limitations on legislation, no matter how alluring the policy arguments for doing so, and no matter how widely the blame may be spread"); *United States v. Rodriguez-Rios*, 14 F.3d 1040, 1044-45 (5th Cir. 1994)(*en banc*).

33. *United States v. Puente*, 982 F.2d 156, 159 (5th Cir. 1993) ("A conviction under § 1001 requires proof that a defendant had the specific intent to make a false or fraudulent statement 'deliberately or at least with reckless disregard of the truth and with the purpose to avoid learning the truth.' [internal citations omitted] . . . A defendant who deliberately avoids reading the form he is signing cannot avoid criminal sanctions for any false statements contained therein. Any other holding would write §1001 completely out of existence").

34. Id.


ARE
YOU
GAME ?

GEORGE SHIPLEY
Partner - Houston
BAKER BOTTS L.L.P.

George Shipley is a trial lawyer based in the Houston office of Baker Botts L.L.P. He has handled a variety of litigation matters, including commercial disputes (contracts, construction, business torts, antitrust, trade secrets, Lanham Act), product liability, personal injury and insurance disputes.

For over ten years, a significant portion of Mr. Shipley's practice has included toxic tort and environmental litigation, in which he has represented clients in numerous trials throughout Texas, including cases involving innovative mass consolidations and class action proceedings. The cases have involved a wide range of substances--solvents, lubricants, asbestos, heavy metals, aromatic hydrocarbons, electromagnetic fields and acids--and a wide array of injuries, including different forms of cancer, respiratory injury, neurological and neuropsychological injury, blood disorders and damage to the immune system. He has also represented clients involved in litigation with various federal and state entities, including CERCLA and state enforcement actions.

Mr. Shipley is Board Certified in Civil Trial Law and in Personal Injury Trial Law by the Texas Board of Legal Specialization. He received his J.D., with honors, in 1982 from Baylor University School of Law, where he served as Research and Topics Editor of the *Baylor Law Review*. He joined the Firm in 1982.

BAKER BOTTS L.L.P.

CRIMINAL ENVIRONMENTAL ENFORCEMENT TRENDS:

QUESTIONS IN THE WAKE OF RECENT DEVELOPMENTS

CASE SELECTION CRITERIA

THE PROSECUTOR'S PERSPECTIVE

THE DEFENSE LAWYER'S PERSPECTIVE

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Mary Spearing
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Matt Kuryla (Moderator)
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Education:	1976 - Bachelor of Science 1982 - Master of Business Administration
Work Experience:	1976-1981 - U.S. Naval Officer 1981-1984 - Pfizer Laboratories 1984-1992 - U.S. Drug Enforcement Administration 1992-1995 - U.S. Courts 1995-Present - U.S. EPA, Criminal Investigation Division
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JOE MAGLIOLO
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Education:	1971 - B.S., Psychology, University of Houston 1978 - J.D. , South Texas College of Law
Work Experience:	1978 -1980 - Private Practice 1980 - 1991 - Assistant District Attorney, Harris County 1991 - 1999 - U.S. Attorney's Office, Prosecuting Drug Organizations 1999 - Present - Assistant U.S. Attorney , Southern District of Texas, Environmental Criminal Prosecutions

MARY C. SPEARING
Partner - Washington, D.C.
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Mary C. Spearing is a partner in the Washington office of Baker Botts L.L.P. She concentrates her practice in the area of white collar defense, corporate compliance and internal investigations . She has extensive experience with a broad spectrum of federal enforcement matters and regulatory issues resulting from an 18 year tenure with the Justice Department where she served in key leadership positions.

Ms. Spearing most recently served as the Chief of the Fraud Section at the U.S. Department of Justice, Criminal Division from 1994 to June 1998, where she supervised over seventy-five lawyers in the investigation and prosecution of white collar crime. The Fraud Section has jurisdiction over securities fraud, bank fraud, health care fraud, telemarketing fraud and the Foreign Corrupt Practices Act. Among the investigations she supervised were the HCA/Columbia healthcare case, the criminal investigation into the tobacco industry, and the investigation into Archer Daniel Midland's key executive Mark Whitacre. In addition, as the premier litigating section in the Criminal Division, the Fraud Section coordinated with the Environmental Division, the Antitrust Division and the Tax Division on matters of policy and in managing related investigations. Ms. Spearing led the Attorney General's Council on White Collar Crime which developed enforcement initiatives for the law enforcement community, including the Securities and Exchange Commission, the Treasury Department, the Federal Bureau of Investigation, and the Environmental Protection Agency. Ms. Spearing worked closely with the Attorney General's Advisory Committee of U.S. Attorneys, a representative body of the 94 U.S. Attorneys, to develop initiatives and set priorities in the area of White Collar Crime.

Prior to joining the Fraud Section, Ms. Spearing served in two other leadership positions in the Criminal Division, as Chief of the General Litigation Section, where she supervised 45 lawyers who prosecuted cases including obstruction of justice, perjury, Indian gaming, and regulatory offenses, such as OSHA and NRC violations, and as Deputy Chief of the Child Exploitation Section where she led the investigation and prosecution of the country's most significant RICO/obscenity case. From 1981 to late 1988, Ms. Spearing served as an Assistant U.S. Attorney in both the Eastern and Middle Districts of Pennsylvania where she prosecuted numerous cases involving a broad range of federal criminal violations.

Ms. Spearing received a B.A. from Vassar College in 1972 and a J.D. from Fordham Law School in 1976, where she served as Articles Editor of the *Fordham Urban Law Journal.*

MATTHEW KURYLA
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Matthew L. Kuryla is a partner in the Environmental Practice Group and Trial department of the Firm's Houston Office. His broad-based environmental practice encompasses regulatory counseling, transactional advice, litigation and alternative dispute resolution. He has represented clients before state and federal courts in a variety of environmental actions. He has assisted clients in coordinating multiple-facility responses to the emerging requirements of the Clean Air Act Amendments of 1990, the Toxic Substances Control Act and other environmental laws. In 1995, Mr. Kuryla served on loan to a major international tire manufacturing company as its principal environmental compliance lawyer. Mr. Kuryla received his J.D. in 1989 from the University of Virginia School of Law, where he was a member of Phi Beta Kappa. He was also Executive Editor of the *Virginia Environmental Law Journal*. He received his B.A. in 1986, with Highest Distinction, from the University of Virginia. Mr. Kuryla is a member of the State Bar of Texas and the Houston Young Lawyers Association. He is admitted to practice in Ohio (1989) and Texas (1997).

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF CRIMINAL ENFORCEMENT, FORENSICS, & TRAINING
CRIMINAL INVESTIGATION DIVISION
HOUSTON AREA OFFICE
1919 Smith Street, Suite 925
Houston, Texas 77002-8049

January 24, 2000

Attendees of Baker Botts' Environmental Seminar:

On August 1, 1999, I became the Special Agent in Charge of the U.S. Environmental Protection Agency - Criminal Investigation Division ("EPA-CID") Houston Area Office. The Houston office covers Arkansas, Louisiana, and Southern Texas.

The mission of the EPA-CID is to investigate the most significant and egregious violators of environmental statutes. Undoubtedly, a strong environmental crimes program, including criminal prosecution when appropriate, is necessary to any successful environmental protection strategy. The EPA-CID is committed to reaching this goal through partnerships with other federal, state and local law enforcement and regulatory agencies.

The EPA-CID's decision to initiate a criminal investigation is generally based on the following criteria: egregiousness of the crime, environmental impact, mens rea, and regulatory history of the alleged violator(s). Other important considerations include matters such as venue, and the identification and commitment of investigative, laboratory, and prosecutorial resources. The decision to prosecute violations of federal environmental statutes ultimately rests with the U.S. Attorney's Office.

To supplement Assistant U.S. Attorney ("AUSA") Joseph C. Magliolo's and my presentation on federal criminal enforcement and the federal case selection process, we have enclosed the following reference material. We hope you find this information useful. If you have any questions, please don't hesitate to contact either AUSA Magliolo or me at (713) 567-9347 and (713) 209-4900, respectively.

Sincerely,

Donald P. Sims
Special Agent in Charge

BAKER BOTTS

Annual Environmental Seminar

January 24, 2000

Federal Environmental Crimes

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FEDERAL ENVIRONMENTAL CRIMES

A. Clean Water Act

1. Misdemeanor Offense-Negligent pollution of a navigable water of the United States, without a permit, or in violation of the terms of a permit. Also applies to discharges to publicly owned treatment works. 33 U.S.C. § 1319(c)(1).

2. Felony Offense-Knowing violations. 33 U.S.C. § 1319(c)(2).

3. Knowing Endangerment-Knowing violations by a defendant who know he is placing another person in imminent danger of death or serious bodily injury. 33 U.S.C. § 1319(c)(3).

4. False Statements in Reports, and Tampering with Monitoring Devices or Methods. 33 U.S.C. § 1319(c)(4).

B. Clean Air Act

1. Felony Offense-Knowing violation of a substantive provision of the Act. 42 U.S.C. § 7413(c)(1).

2. Misdemeanor Offenses-Negligent Endangerment; Failure to Pay Fees. 42 U.S.C. § 7413(c)(3) and (4).

3. Knowing Endangerment-Release of hazardous air pollutant by a defendant who knowingly places another in imminent harm of death or serious injury. 42 U.S.C. § 7413(c)(5)(A).

4. False Statements. 42 U.S.C. § 7413(c)(2).

2. Registrants, producers and commercial applicators are subject to one year maximum misdemeanors for knowing violations. 7 U.S.C. § 136(1)(b)(1).

3. Private Applicators are subject to a 30 day maximum for knowing violations. 7 U.S.C. § 136(1)(b)(2).

F. Other Statutes

1. Toxic Substances Control Act. 15 U.S.C. § 1201, 2615.

2. Ocean Dumping Act. Outlaws unauthorized dumping of material in waters of the United States, or transportation of material through waters of the United States for the purpose of dumping it. 33 U.S.C. § 1411, 1415.

3. Act to Prevent Pollution from Ships. 33 U.S.C. §§ 1901-1912.

4. Federal Lands Offenses.

   a. Injuring property of the United States. 18 U.S.C. § 1361.

   b. Miscellaneous offenses. 18 U.S.C. §§ 1851-1864.

5. Wildlife Offenses.

   a. Migratory Bird Act. 16 U.S.C. § 703.

   b. Endangered Species Act. 16 U.S.C. § 1531.

6. General Federal Criminal Provisions.

   a. Conspiracy to Commit an offense or to Defraud the United States. 18 U.S.C. § 371.

CORPORATE LIABILITY

A. General Rule

1. "[A]s a general rule a corporation is liable...for the acts of its agents in the scope of their employment, even though contrary to general corporate policy and express instructions to the agent." United States v. Hilton Hotels Corp., 467 F.2d 1000, 1007 (9th Cir 1972), cert. denied, 409 U.S. 1125 (1973).

2. Acts of an agent are within the scope of his employment if done for the purpose of benefitting the principal. Id.; United States v. Beusch, 596 F.2d 871, 877 (9th Cir. 1979).

3. Nearly all environmental crimes will have benefitted the corporation economically, either by delaying capital expenditures for waste treatment, or evading the cost of disposal through outside contractors.

B. Corporate Policies as a Defense

1. Strict Liability Theory

a. If a regulatory criminal statute requires only general intent, corporation will be bound by the actions of its employee, even if a superior has expressly instructed employee not to engage in the conduct constituting the offense. Hilton Hotels.

b. "Thus, the general policy statements of

subdividing the elements of specific duties and operations into smaller components. The aggregate of those components constitutes the corporation's knowledge of a particular operation." United States v. Bank of New England, 821 F.2d 844, 856 (1st Cir. 1987), cert. denied, 484 U.S. 943 (1988).

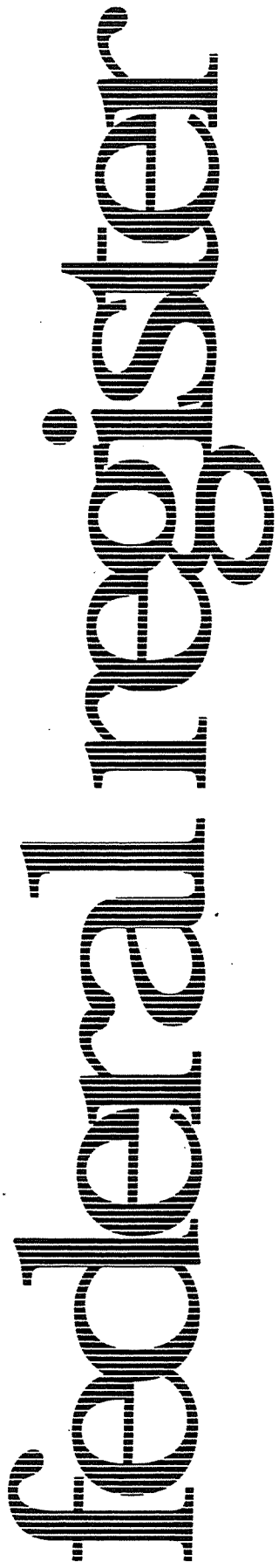
2. "[I]f employee A knows one facet of the currency reporting requirement, B knows another facet of it, and C a third facet, the bank knows them all." Id. at 855.

3. Proof must also establish that organization's failure to comply with its obligations resulted from "some flagrant organizational indifference." Relevant considerations would be organizations efforts to inform employees of the law and to check on their compliance. Id.

4. This rule has some support in Ninth Circuit law. In Hilton Hotels, corporate liability was upheld despite acquittal of the hotel manager. The court held the company bound by the actions of its employees, regardless whether those actions were sufficient to convict the employee. "A fortiori, it is irrelevant that the employee was charged with the offense and acquitted." 467 F.2d at 1008.

the government would not need to show that a responsible corporate officer had acted with the statutory intent; rather the intent of the actor would be imputed to him. United States v. Brittain, 931 F.2d 1413, 1419 (10th Cir. 1991). But because this theory was not presented to the jury in that case, and because the court found evidence sufficient to establish that statutory intent, the importance of this interpretation is limited.

E. The doctrine does not apply to RCRA offenses, which lack the language noted above. United States v. MacDonald & Watson Waste Oil Co., 933 F.2d 35 (1st Cir. 1991) (government conceded defendant lacked actual knowledge of the violation).



Friday
December 22, 1995

Part III

Environmental Protection Agency

Incentives for Self-Policing: Discovery, Disclosure, Correction and Prevention of Violations; Notice

ENVIRONMENTAL PROTECTION AGENCY

[FRL-5400-1]

Incentives for Self-Policing: Discovery, Disclosure, Correction and Prevention of Violations

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final Policy Statement.

SUMMARY: The Environmental Protection Agency (EPA) today issues its final policy to enhance protection of human health and the environment by encouraging regulated entities to voluntarily discover, and disclose and correct violations of environmental requirements. Incentives include eliminating or substantially reducing the gravity component of civil penalties and not recommending cases for criminal prosecution where specified conditions are met, to those who voluntarily self-disclose and promptly correct violations. The policy also restates EPA's long-standing practice of not requesting voluntary audit reports to trigger enforcement investigations. This policy was developed in close consultation with the U.S. Department of Justice, states, public interest groups and the regulated community, and will be applied uniformly by the Agency's enforcement programs.

DATES: This policy is effective January 22, 1996.

FOR FURTHER INFORMATION CONTACT: Additional documentation relating to the development of this policy is contained in the environmental auditing public docket. Documents from the docket may be obtained by calling (202) 260-7548, requesting an index to docket #C-94-01, and faxing document requests to (202) 260-4400. Hours of operation are 8 a.m. to 5:30 p.m., Monday through Friday, except legal holidays. Additional contacts are Robert Fentress or Brian Riedel, at (202) 564-4187.

SUPPLEMENTARY INFORMATION:

I. Explanation of Policy

A. Introduction

The Environmental Protection Agency today issues its final policy to enhance protection of human health and the environment by encouraging regulated entities to discover voluntarily, disclose, correct and prevent violations of federal environmental law. Effective 30 days from today, where violations are found through voluntary environmental audits or efforts that reflect a regulated entity's due diligence, and are promptly disclosed and expeditiously corrected, EPA will not seek gravity-based (i.e., non-economic benefit) penalties and will generally not recommend criminal prosecution against the regulated entity. EPA will reduce gravity-based penalties by 75% for violations that are voluntarily discovered, and are promptly disclosed and corrected, even if not found through a formal audit or due diligence. Finally, the policy restates EPA's long-held policy and practice to refrain from routine requests for environmental audit reports.

The policy includes important safeguards to deter irresponsible behavior and protect the public and environment. For example, in addition to prompt disclosure and expeditious correction, the policy requires companies to act to prevent recurrence of the violation and to remedy any environmental harm which may have occurred. Repeated violations or those which result in actual harm or may present imminent and substantial endangerment are not eligible for relief under this policy, and companies will not be allowed to gain an economic advantage over their competitors by delaying their investment in compliance. Corporations remain criminally liable for violations that result from conscious disregard of their obligations under the law, and individuals are liable for criminal misconduct.

The issuance of this policy concludes EPA's eighteen-month public evaluation of the optimum way to encourage voluntary self-policing while preserving fair and effective enforcement. The incentives, conditions and exceptions announced today reflect thoughtful suggestions from the Department of Justice, state attorneys general and local prosecutors, state environmental agencies, the regulated community, and public interest organizations. EPA believes that it has found a balanced and responsible approach, and will conduct a study within three years to determine the effectiveness of this policy.

B. Public Process

One of the Environmental Protection Agency's most important responsibilities is ensuring compliance with federal laws that protect public health and safeguard the environment. Effective deterrence requires inspecting, bringing penalty actions and securing compliance and remediation of harm. But EPA realizes that achieving compliance also requires the cooperation of thousands of businesses and other regulated entities subject to these requirements. Accordingly, in May of 1994, the Administrator asked the Office of Enforcement and Compliance Assurance (OECA) to determine whether additional incentives were needed to encourage voluntary disclosure and correction of violations uncovered during environmental audits.

EPA began its evaluation with a two-day public meeting in July of 1994, in Washington, D.C., followed by a two-day meeting in San Francisco on January 19, 1995 with stakeholders from industry, trade groups, state environmental commissioners and attorneys general, district attorneys, public interest organizations and professional environmental auditors. The Agency also established and maintained a public docket of testimony presented at these meetings and all comment and correspondence submitted to EPA by outside parties on this issue.

In addition to considering opinion and information from stakeholders, the Agency examined other federal and state policies related to self-policing, self-disclosure and correction. The Agency also considered relevant surveys on auditing practices in the private sector. EPA completed the first stage of this effort with the announcement of an interim policy on April 3 of this year, which defined conditions under which EPA would reduce civil penalties and not recommend criminal prosecution for companies that audited, disclosed, and corrected violations.

Interested parties were asked to submit comment on the interim policy by June 30 of this year (60 FR 16875), and EPA received over 300 responses from a wide variety of private and public organizations. (Comments on the interim audit policy are contained in the Auditing Policy Docket, hereinafter, "Docket".) Further, the American Bar Association SONREEL Subcommittee hosted five days of dialogue with representatives from the regulated industry, states and public interest organizations in June and September of this year, which identified options for strengthening the interim policy. The changes to the interim policy announced today reflect insight gained through comments submitted to EPA, the ABA dialogue, and the Agency's practical experience implementing the interim policy.

C. Purpose

This policy is designed to encourage greater compliance with laws and regulations that protect human health and the environment. It promotes a higher standard of self-policing by waiving gravity-based penalties for

violations that are promptly disclosed and corrected, and which were discovered through voluntary audits or compliance management systems that demonstrate due diligence. To further promote compliance, the policy reduces gravity-based penalties by 75% for any violation voluntarily discovered and promptly disclosed and corrected, even if not found through an audit or compliance management system.

EPA's enforcement program provides a strong incentive for responsible behavior by imposing stiff sanctions for noncompliance. Enforcement has contributed to the dramatic expansion of environmental auditing measured in numerous recent surveys. For example, more than 90% of the corporate respondents to a 1995 Price-Waterhouse survey who conduct audits said that one of the reasons they did so was to find and correct violations before they were found by government inspectors. (A copy of the Price-Waterhouse survey is contained in the Docket as document VIII–A–76.)

At the same time, because government resources are limited, maximum compliance cannot be achieved without active efforts by the regulated community to police themselves. More than half of the respondents to the same 1995 Price-Waterhouse survey said that they would expand environmental auditing in exchange for reduced penalties for violations discovered and corrected. While many companies already audit or have compliance management programs, EPA believes that the incentives offered in this policy will improve the frequency and quality of these self-monitoring efforts.

D. Incentives for Self-Policing

Section C of EPA's policy identifies the major incentives that EPA will provide to encourage self-policing, self-disclosure, and prompt self-correction. These include not seeking gravity-based civil penalties or reducing them by 75%, declining to recommend criminal prosecution for regulated entities that self-police, and refraining from routine requests for audits. (As noted in Section C of the policy, EPA has refrained from making routine requests for audit reports since issuance of its 1986 policy on environmental auditing.)

1. Eliminating Gravity-Based Penalties

Under Section C(1) of the policy, EPA will not seek gravity-based penalties for violations found through auditing that are promptly disclosed and corrected. Gravity-based penalties will also be waived for violations found through any documented procedure for self-policing, where the company can show that it has a compliance management program that meets the criteria for due diligence in Section B of the policy.

Gravity-based penalties (defined in Section B of the policy) generally reflect the seriousness of the violator's behavior. EPA has elected to waive such penalties for violations discovered through due diligence or environmental audits, recognizing that these voluntary efforts play a critical role in protecting human health and the environment by identifying, correcting and ultimately preventing violations. All of the conditions set forth in Section D, which include prompt disclosure and expeditious correction, must be satisfied for gravity-based penalties to be waived.

As in the interim policy, EPA reserves the right to collect any economic benefit that may have been realized as a result of noncompliance, even where companies meet all other conditions of the policy. Economic benefit may be waived, however, where the Agency determines that it is insignificant.

After considering public comment, EPA has decided to retain the discretion to recover economic benefit for two reasons. First, it provides an incentive to comply on time. Taxpayers expect to pay interest or a penalty fee if their tax payments are late; the same principle should apply to corporations that have delayed their investment in compliance. Second, it is fair because it protects responsible companies from being undercut by their noncomplying competitors, thereby preserving a level playing field. The concept of recovering economic benefit was supported in public comments by many stakeholders, including industry representatives (see, *e.g.*, Docket, II–F–39, II–F–28, and II–F–18).

2. 75% Reduction of Gravity

The policy appropriately limits the complete waiver of gravity-based civil penalties to companies that meet the higher standard of environmental auditing or systematic compliance management. However, to provide additional encouragement for the kind of self-policing that benefits the public, gravity-based penalties will be reduced by 75% for a violation that is voluntarily discovered, promptly disclosed and expeditiously corrected, even if it was not found through an environmental audit and the company cannot document due diligence. EPA expects that this will encourage companies to come forward and work with the Agency to resolve environmental problems and begin to develop an effective compliance management program.

Gravity-based penalties will be reduced 75% only where the company meets all conditions in Sections D(2) through D(9). EPA has eliminated language from the interim policy indicating that penalties may be reduced "up to" 75% where "most" conditions are met, because the Agency believes that all of the conditions in D(2) through D(9) are reasonable and essential to achieving compliance. This change also responds to requests for greater clarity and predictability.

3. No Recommendations for Criminal Prosecution

EPA has never recommended criminal prosecution of a regulated entity based on voluntary disclosure of violations discovered through audits and disclosed to the government before an investigation was already under way. Thus, EPA will not recommend criminal prosecution for a regulated entity that uncovers violations through environmental audits or due diligence, promptly discloses and expeditiously corrects those violations, and meets all other conditions of Section D of the policy.

This policy is limited to good actors, and therefore has important limitations. It will not apply, for example, where corporate officials are consciously involved in or willfully blind to violations, or conceal or condone noncompliance. Since the regulated entity must satisfy all of the conditions of Section D of the policy, violations that caused serious harm or which may pose imminent and substantial endangerment to human health or the environment are not covered by this policy. Finally, EPA reserves the right to recommend prosecution for the criminal conduct of any culpable individual.

Even where all of the conditions of this policy are not met, however, it is important to remember that EPA may decline to recommend prosecution of a company or individual for many other reasons under other Agency enforcement policies. For example, the Agency may decline to recommend prosecution where there is no significant harm or culpability and the individual or corporate defendant has cooperated fully.

Where a company has met the conditions for avoiding a recommendation for criminal prosecution under this policy, it will not face any civil liability for gravity-based penalties. That is because the same conditions for discovery, disclosure, and correction apply in both cases. This represents a clarification of the interim policy, not a substantive change.

4. No Routine Requests for Audits

EPA is reaffirming its policy, in effect since 1986, to refrain from routine requests for audits. Eighteen months of public testimony and debate have produced no evidence that the Agency has deviated, or should deviate, from this policy.

If the Agency has independent evidence of a violation, it may seek information needed to establish the extent and nature of the problem and the degree of culpability. In general, however, an audit which results in prompt correction clearly will reduce liability, not expand it. Furthermore, a review of the criminal docket did not reveal a single criminal prosecution for violations discovered as a result of an audit self-disclosed to the government.

E. Conditions

Section D describes the nine conditions that a regulated entity must meet in order for the Agency not to seek (or to reduce) gravity-based penalties under the policy. As explained in the Summary above, regulated entities that meet all nine conditions will not face gravity-based civil penalties, and will generally not have to fear criminal prosecution. Where the regulated entity meets all of the conditions except the first (D(1)), EPA will reduce gravity-based penalties by 75%.

1. Discovery of the Violation Through an Environmental Audit or Due Diligence

Under Section D(1), the violation must have been discovered through either (a) an environmental audit that is systematic, objective, and periodic as defined in the 1986 audit policy, or (b) a documented, systematic procedure or practice which reflects the regulated entity's due diligence in preventing, detecting, and correcting violations. The interim policy provided full credit for any violation found through "voluntary self-evaluation," even if the evaluation did not constitute an audit. In order to receive full credit under the final policy, any self-evaluation that is not an audit must be part of a "due diligence" program. Both "environmental audit" and "due diligence" are defined in Section B of the policy.

Where the violation is discovered through a "systematic procedure or practice" which is not an audit, the regulated entity will be asked to document how its program reflects the criteria for due diligence as defined in Section B of the policy. These criteria, which are adapted from existing codes of practice such as the 1991 Criminal Sentencing Guidelines, were fully discussed during the ABA dialogue. The criteria are flexible enough to accommodate different types and sizes of businesses. The Agency recognizes that a variety of compliance management programs may develop under the due diligence criteria, and will use its review under this policy to determine whether basic criteria have been met.

Compliance management programs which train and motivate production staff to prevent, detect and correct violations on a daily basis are a valuable complement to periodic auditing. The policy is responsive to recommendations received during public comment and from the ABA dialogue to give compliance management efforts which meet the criteria for due diligence the same penalty reduction offered for environmental audits. (See, *e.g.*, II–F–39, II–E–18, and II–G–18 in the Docket.)

EPA may require as a condition of penalty mitigation that a description of the regulated entity's due diligence efforts be made publicly available. The Agency added this provision in response to suggestions from environmental groups, and believes that the availability of such information will allow the public to judge the adequacy of compliance management systems, lead to enhanced compliance, and foster greater public trust in the integrity of compliance management systems.

2. Voluntary Discovery and Prompt Disclosure

Under Section D(2) of the final policy, the violation must have been identified voluntarily, and not through a monitoring, sampling, or auditing procedure that is required by statute, regulation, permit, judicial or administrative order, or consent agreement. Section D(4) requires that disclosure of the violation be prompt and in writing. To avoid confusion and respond to state requests for greater clarity, disclosures under this policy should be made to EPA. The Agency will work closely with states in implementing the policy.

The requirement that discovery of the violation be voluntary is consistent with proposed federal and state bills which would reward those discoveries that the regulated entity can legitimately attribute to its own voluntary efforts.

The policy gives three specific examples of discovery that would not be voluntary, and therefore would not be eligible for penalty mitigation: emissions violations detected through a required continuous emissions monitor, violations of NPDES discharge limits found through prescribed monitoring, and violations discovered through a compliance audit required to be performed by the terms of a consent order or settlement agreement.

The final policy generally applies to any violation that is voluntarily discovered, regardless of whether the violation is required to be reported. This definition responds to comments pointing out that reporting requirements are extensive, and that excluding them from the policy's scope would severely limit the incentive for self-policing (see, *e.g.*, II–C–48 in the Docket).

The Agency wishes to emphasize that the integrity of federal environmental law depends upon timely and accurate reporting. The public relies on timely and accurate reports from the regulated community, not only to measure compliance but to evaluate health or environmental risk and gauge progress in reducing pollutant loadings. EPA expects the policy to encourage the kind of vigorous self-policing that will serve these objectives, and not to provide an excuse for delayed reporting. Where violations of reporting requirements are voluntarily discovered, they must be promptly reported (as discussed below). Where a failure to report results in imminent and substantial endangerment or serious harm, that violation is not covered under this policy (see Condition D(8)). The policy also requires the regulated entity to prevent recurrence of the violation, to ensure that noncompliance with reporting requirements is not repeated. EPA will closely scrutinize the effect of the policy in furthering the public interest in timely and accurate reports from the regulated community.

Under Section D(4), disclosure of the violation should be made within 10 days of its discovery, and in writing to EPA. Where a statute or regulation requires reporting be made in less than 10 days, disclosure should be made within the time limit established by law. Where reporting within ten days is not practical because the violation is complex and compliance cannot be determined within that period, the Agency may accept later disclosures if the circumstances do not present a serious threat and the regulated entity meets its burden of showing that the additional time was needed to determine compliance status.

This condition recognizes that it is critical for EPA to get timely reporting of violations in order that it might have clear notice of the violations and the opportunity to respond if necessary, as well as an accurate picture of a given facility's compliance record. Prompt disclosure is also evidence of the regulated entity's good faith in wanting

to achieve or return to compliance as soon as possible.

In the final policy, the Agency has added the words, "or may have occurred," to the sentence, "The regulated entity fully discloses that a specific violation has occurred, or may have occurred * * *." This change, which was made in response to comments received, clarifies that where an entity has some doubt about the existence of a violation, the recommended course is for it to disclose and allow the regulatory authorities to make a definitive determination.

In general, the Freedom of Information Act will govern the Agency's release of disclosures made pursuant to this policy. EPA will, independently of FOIA, make publicly available any compliance agreements reached under the policy (see Section H of the policy), as well as descriptions of due diligence programs submitted under Section D.1 of the Policy. Any material claimed to be Confidential Business Information will be treated in accordance with EPA regulations at 40 C.F.R. Part 2.

3. Discovery and Disclosure Independent of Government or Third Party Plaintiff

Under Section D(3), in order to be "voluntary", the violation must be identified and disclosed by the regulated entity prior to: the commencement of a federal state or local agency inspection, investigation, or information request; notice of a citizen suit; legal complaint by a third party; the reporting of the violation to EPA by a "whistleblower" employee; and imminent discovery of the violation by a regulatory agency.

This condition means that regulated entities must have taken the initiative to find violations and promptly report them, rather than reacting to knowledge of a pending enforcement action or third-party complaint. This concept was reflected in the interim policy and in federal and state penalty immunity laws and did not prove controversial in the public comment process.

4. Correction and Remediation

Section D(5) ensures that, in order to receive the penalty mitigation benefits available under the policy, the regulated entity not only voluntarily discovers and promptly discloses a violation, but expeditiously corrects it, remedies any harm caused by that violation (including responding to any spill and carrying out any removal or remedial action required by law), and expeditiously certifies in writing to appropriate state, local and EPA authorities that violations have been corrected. It also enables EPA to ensure that the regulated entity will be publicly accountable for its commitments through binding written agreements, orders or consent decrees where necessary.

The final policy requires the violation to be corrected within 60 days, or that the regulated entity provide written notice where violations may take longer to correct. EPA recognizes that some violations can and should be corrected immediately, while others (*e.g.*, where capital expenditures are involved), may take longer than 60 days to correct. In all cases, the regulated entity will be expected to do its utmost to achieve or return to compliance as expeditiously as possible.

Where correction of the violation depends upon issuance of a permit which has been applied for but not issued by federal or state authorities, the Agency will, where appropriate, make reasonable efforts to secure timely review of the permit.

5. Prevent Recurrence

Under Section D(6), the regulated entity must agree to take steps to prevent a recurrence of the violation, including but not limited to improvements to its environmental auditing or due diligence efforts. The final policy makes clear that the preventive steps may include improvements to a regulated entity's environmental auditing or due diligence efforts to prevent recurrence of the violation.

In the interim policy, the Agency required that the entity implement appropriate measures to prevent a recurrence of the violation, a requirement that operates prospectively. However, a separate condition in the interim policy also required that the violation not indicate "a failure to take appropriate steps to avoid repeat or recurring violations"—a requirement that operates retrospectively. In the interest of both clarity and fairness, the Agency has decided for purposes of this condition to keep the focus prospective and thus to require only that steps be taken to prevent recurrence of the violation after it has been disclosed.

6. No Repeat Violations

In response to requests from commenters (*see, e.g.*, II–F–39 and II–G–18 in the Docket), EPA has established "bright lines" to determine when previous violations will bar a regulated entity from obtaining relief under this policy. These will help protect the public and responsible companies by ensuring that penalties are not waived for repeat offenders. Under condition D(7), the same or closely-related violation must not have occurred previously within the past three years at the same facility, or be part of a pattern of violations on the regulated entity's part over the past five years. This provides companies with a continuing incentive to prevent violations, without being unfair to regulated entities responsible for managing hundreds of facilities. It would be unreasonable to provide unlimited amnesty for repeated violations of the same requirement.

The term "violation" includes any violation subject to a federal or state civil judicial or administrative order, consent agreement, conviction or plea agreement. Recognizing that minor violations are sometimes settled without a formal action in court, the term also covers any act or omission for which the regulated entity has received a penalty reduction in the past. Together, these conditions identify situations in which the regulated community has had clear notice of its noncompliance and an opportunity to correct.

7. Other Violations Excluded

Section D(8) makes clear that penalty reductions are not available under this policy for violations that resulted in serious actual harm or which may have presented an imminent and substantial endangerment to public health or the environment. Such events indicate a serious failure (or absence) of a self-policing program, which should be designed to prevent such risks, and it would seriously undermine deterrence to waive penalties for such violations. These exceptions are responsive to suggestions from public interest organizations, as well as other commenters. (See, *e.g.*, II–F–39 and II–G–18 in the Docket.)

The final policy also excludes penalty reductions for violations of the specific terms of any order, consent agreement, or plea agreement. (See, II–E–60 in the Docket.) Once a consent agreement has been negotiated, there is little incentive to comply if there are no sanctions for violating its specific requirements. The exclusion in this section applies to violations of the terms of any response, removal or remedial action covered by a written agreement.

8. Cooperation

Under Section D(9), the regulated entity must cooperate as required by EPA and provide information necessary to determine the applicability of the policy. This condition is largely unchanged from the interim policy. In the final policy, however, the Agency has added that "cooperation" includes

assistance in determining the facts of any related violations suggested by the disclosure, as well as of the disclosed violation itself. This was added to allow the agency to obtain information about any violations indicated by the disclosure, even where the violation is not initially identified by the regulated entity.

F. Opposition to Privilege

The Agency remains firmly opposed to the establishment of a statutory evidentiary privilege for environmental audits for the following reasons:

1. Privilege, by definition, invites secrecy, instead of the openness needed to build public trust in industry's ability to self-police. American law reflects the high value that the public places on fair access to the facts. The Supreme Court, for example, has said of privileges that, "[w]hatever their origins, these exceptions to the demand for every man's evidence are not lightly created nor expansively construed, for they are in derogation of the search for truth." *United States* v. *Nixon,* 418 U.S. 683 (1974). Federal courts have unanimously refused to recognize a privilege for environmental audits in the context of government investigations. See, *e.g., United States* v. *Dexter,* 132 F.R.D. 8, 9–10 (D.Conn. 1990) (application of a privilege "would effectively impede [EPA's] ability to enforce the Clean Water Act, and would be contrary to stated public policy.")

2. Eighteen months have failed to produce any evidence that a privilege is needed. Public testimony on the interim policy confirmed that EPA rarely uses audit reports as evidence. Furthermore, surveys demonstrate that environmental auditing has expanded rapidly over the past decade without the stimulus of a privilege. Most recently, the 1995 Price Waterhouse survey found that those few large or mid-sized companies that do not audit generally do not perceive any need to; concern about confidentiality ranked as one of the least important factors in their decisions.

3. A privilege would invite defendants to claim as "audit" material almost any evidence the government needed to establish a violation or determine who was responsible. For example, most audit privilege bills under consideration in federal and state legislatures would arguably protect factual information—such as health studies or contaminated sediment data—and not just the conclusions of the auditors. While the government might have access to required monitoring data under the law, as some industry commenters have suggested, a privilege of that nature would cloak underlying facts needed to determine whether such data were accurate.

4. An audit privilege would breed litigation, as both parties struggled to determine what material fell within its scope. The problem is compounded by the lack of any clear national standard for audits. The "*in camera*" (i.e., non-public) proceedings used to resolve these disputes under some statutory schemes would result in a series of time-consuming, expensive mini-trials.

5. The Agency's policy eliminates the need for any privilege as against the government, by reducing civil penalties and criminal liability for those companies that audit, disclose and correct violations. The 1995 Price Waterhouse survey indicated that companies would expand their auditing programs in exchange for the kind of incentives that EPA provides in its policy.

6. Finally, audit privileges are strongly opposed by the law enforcement community, including the National District Attorneys Association, as well as by public interest groups. (See, *e.g.,* Docket, II–C–21, II–C–28, II–C–52, IV–G–10, II–C–25, II–C–33, II–C–52, II–C–48, and II–G–13 through II–G–24.)

G. Effect on States

The final policy reflects EPA's desire to develop fair and effective incentives for self-policing that will have practical value to states that share responsibility for enforcing federal environmental laws. To that end, the Agency has consulted closely with state officials in developing this policy, through a series of special meetings and conference calls in addition to the extensive opportunity for public comment. As a result, EPA believes its final policy is grounded in common-sense principles that should prove useful in the development of state programs and policies.

As always, states are encouraged to experiment with different approaches that do not jeopardize the fundamental national interest in assuring that violations of federal law do not threaten the public health or the environment, or make it profitable not to comply. The Agency remains opposed to state legislation that does not include these basic protections, and reserves its right to bring independent action against regulated entities for violations of federal law that threaten human health or the environment, reflect criminal conduct or repeated noncompliance, or allow one company to make a substantial profit at the expense of its law-abiding competitors. Where a state has obtained appropriate sanctions needed to deter such misconduct, there is no need for EPA action.

H. Scope of Policy

EPA has developed this document as a policy to guide settlement actions. EPA employees will be expected to follow this policy, and the Agency will take steps to assure national consistency in application. For example, the Agency will make public any compliance agreements reached under this policy, in order to provide the regulated community with fair notice of decisions and greater accountability to affected communities. Many in the regulated community recommended that the Agency convert the policy into a regulation because they felt it might ensure greater consistency and predictability. While EPA is taking steps to ensure consistency and predictability and believes that it will be successful, the Agency will consider this issue and will provide notice if it determines that a rulemaking is appropriate.

II. Statement of Policy: Incentives for Self-Policing

Discovery, Disclosure, Correction and Prevention

A. Purpose

This policy is designed to enhance protection of human health and the environment by encouraging regulated entities to voluntarily discover, disclose, correct and prevent violations of federal environmental requirements.

B. Definitions

For purposes of this policy, the following definitions apply:

"Environmental Audit" has the definition given to it in EPA's 1986 audit policy on environmental auditing, i.e., "a systematic, documented, periodic and objective review by regulated entities of facility operations and practices related to meeting environmental requirements."

"Due Diligence" encompasses the regulated entity's systematic efforts, appropriate to the size and nature of its business, to prevent, detect and correct violations through all of the following:

(a) Compliance policies, standards and procedures that identify how employees and agents are to meet the requirements of laws, regulations, permits and other sources of authority for environmental requirements;

(b) Assignment of overall responsibility for overseeing compliance with policies, standards, and procedures, and assignment of specific responsibility for assuring compliance at each facility or operation;

(c) Mechanisms for systematically assuring that compliance policies, standards and procedures are being carried out, including monitoring and auditing systems reasonably designed to detect and correct violations, periodic evaluation of the overall performance of the compliance management system, and a means for employees or agents to report violations of environmental requirements without fear of retaliation;

(d) Efforts to communicate effectively the regulated entity's standards and procedures to all employees and other agents;

(e) Appropriate incentives to managers and employees to perform in accordance with the compliance policies, standards and procedures, including consistent enforcement through appropriate disciplinary mechanisms; and

(f) Procedures for the prompt and appropriate correction of any violations, and any necessary modifications to the regulated entity's program to prevent future violations.

"Environmental audit report" means the analysis, conclusions, and recommendations resulting from an environmental audit, but does not include data obtained in, or testimonial evidence concerning, the environmental audit.

"Gravity-based penalties" are that portion of a penalty over and above the economic benefit., i.e., the punitive portion of the penalty, rather than that portion representing a defendant's economic gain from non-compliance. (For further discussion of this concept, see "A Framework for Statute-Specific Approaches to Penalty Assessments", #GM–22, 1980, U.S. EPA General Enforcement Policy Compendium).

"Regulated entity" means any entity, including a federal, state or municipal agency or facility, regulated under federal environmental laws.

C. Incentives for Self-Policing

1. No Gravity-Based Penalties

Where the regulated entity establishes that it satisfies all of the conditions of Section D of the policy, EPA will not seek gravity-based penalties for violations of federal environmental requirements.

2. Reduction of Gravity-Based Penalties by 75%

EPA will reduce gravity-based penalties for violations of federal environmental requirements by 75% so long as the regulated entity satisfies all of the conditions of Section D(2) through D(9) below.

3. No Criminal Recommendations

(a) EPA will not recommend to the Department of Justice or other prosecuting authority that criminal charges be brought against a regulated entity where EPA determines that all of the conditions in Section D are satisfied, so long as the violation does not demonstrate or involve:

(i) a prevalent management philosophy or practice that concealed or condoned environmental violations; or

(ii) high-level corporate officials' or managers' conscious involvement in, or willful blindness to, the violations.

(b) Whether or not EPA refers the regulated entity for criminal prosecution under this section, the Agency reserves the right to recommend prosecution for the criminal acts of individual managers or employees under existing policies guiding the exercise of enforcement discretion.

4. No Routine Request for Audits

EPA will not request or use an environmental audit report to initiate a civil or criminal investigation of the entity. For example, EPA will not request an environmental audit report in routine inspections. If the Agency has independent reason to believe that a violation has occurred, however, EPA may seek any information relevant to identifying violations or determining liability or extent of harm.

D. Conditions

1. Systematic Discovery

The violation was discovered through:

(a) an environmental audit; or

(b) an objective, documented, systematic procedure or practice reflecting the regulated entity's due diligence in preventing, detecting, and correcting violations. The regulated entity must provide accurate and complete documentation to the Agency as to how it exercises due diligence to prevent, detect and correct violations according to the criteria for due diligence outlined in Section B. EPA may require as a condition of penalty mitigation that a description of the regulated entity's due diligence efforts be made publicly available.

2. Voluntary Discovery

The violation was identified voluntarily, and not through a legally mandated monitoring or sampling requirement prescribed by statute, regulation, permit, judicial or administrative order, or consent agreement. For example, the policy does not apply to:

(a) emissions violations detected through a continuous emissions monitor (or alternative monitor established in a permit) where any such monitoring is required;

(b) violations of National Pollutant Discharge Elimination System (NPDES) discharge limits detected through required sampling or monitoring;

(c) violations discovered through a compliance audit required to be performed by the terms of a consent order or settlement agreement.

3. Prompt Disclosure

The regulated entity fully discloses a specific violation within 10 days (or such shorter period provided by law) after it has discovered that the violation has occurred, or may have occurred, in writing to EPA;

4. Discovery and Disclosure Independent of Government or Third Party Plaintiff

The violation must also be identified and disclosed by the regulated entity prior to:

(a) the commencement of a federal, state or local agency inspection or investigation, or the issuance by such agency of an information request to the regulated entity;

(b) notice of a citizen suit;

(c) the filing of a complaint by a third party;

(d) the reporting of the violation to EPA (or other government agency) by a "whistleblower" employee, rather than by one authorized to speak on behalf of the regulated entity; or

(e) imminent discovery of the violation by a regulatory agency;

5. Correction and Remediation

The regulated entity corrects the violation within 60 days, certifies in writing that violations have been corrected, and takes appropriate measures as determined by EPA to remedy any environmental or human harm due to the violation. If more than 60 days will be needed to correct the violation(s), the regulated entity must so notify EPA in writing before the 60-day period has passed. Where appropriate, EPA may require that to satisfy conditions 5 and 6, a regulated entity enter into a publicly available written agreement, administrative consent order or judicial consent decree, particularly where compliance or remedial measures are complex or a lengthy schedule for attaining and maintaining compliance or remediating harm is required;

6. Prevent Recurrence

The regulated entity agrees in writing to take steps to prevent a recurrence of the violation, which may include improvements to its environmental auditing or due diligence efforts;

7. No Repeat Violations

The specific violation (or closely related violation) has not occurred previously within the past three years at the same facility, or is not part of a pattern of federal, state or local violations by the facility's parent organization (if any), which have occurred within the past five years. For the purposes of this section, a violation is:

(a) any violation of federal, state or local environmental law identified in a judicial or administrative order, consent agreement or order, complaint, or notice of violation, conviction or plea agreement; or

(b) any act or omission for which the regulated entity has previously received penalty mitigation from EPA or a state or local agency.

8. Other Violations Excluded

The violation is not one which (i) resulted in serious actual harm, or may have presented an imminent and substantial endangerment to, human health or the environment, or (ii) violates the specific terms of any judicial or administrative order, or consent agreement.

9. Cooperation

The regulated entity cooperates as requested by EPA and provides such information as is necessary and requested by EPA to determine applicability of this policy. Cooperation includes, at a minimum, providing all requested documents and access to employees and assistance in investigating the violation, any noncompliance problems related to the disclosure, and any environmental consequences related to the violations.

E. Economic Benefit

EPA will retain its full discretion to recover any economic benefit gained as a result of noncompliance to preserve a "level playing field" in which violators do not gain a competitive advantage over regulated entities that do comply. EPA may forgive the entire penalty for violations which meet conditions 1 through 9 in section D and, in the Agency's opinion, do not merit any penalty due to the insignificant amount of any economic benefit.

F. Effect on State Law, Regulation or Policy

EPA will work closely with states to encourage their adoption of policies that reflect the incentives and conditions outlined in this policy. EPA remains firmly opposed to statutory environmental audit privileges that shield evidence of environmental violations and undermine the public's right to know, as well as to blanket immunities for violations that reflect criminal conduct, present serious threats or actual harm to health and the environment, allow noncomplying companies to gain an economic advantage over their competitors, or reflect a repeated failure to comply with federal law. EPA will work with states to address any provisions of state audit privilege or immunity laws that are inconsistent with this policy, and which may prevent a timely and appropriate response to significant environmental violations. The Agency reserves its right to take necessary actions to protect public health or the environment by enforcing against any violations of federal law.

G. Applicability

(1) This policy applies to the assessment of penalties for any violations under all of the federal environmental statutes that EPA administers, and supersedes any inconsistent provisions in media-specific penalty or enforcement policies and EPA's 1986 Environmental Auditing Policy Statement.

(2) To the extent that existing EPA enforcement policies are not inconsistent, they will continue to apply in conjunction with this policy. However, a regulated entity that has received penalty mitigation for satisfying specific conditions under this policy may not receive additional penalty mitigation for satisfying the same or similar conditions under other policies for the same violation(s), nor will this policy apply to violations which have received penalty mitigation under other policies.

(3) This policy sets forth factors for consideration that will guide the Agency in the exercise of its prosecutorial discretion. It states the Agency's views as to the proper allocation of its enforcement resources. The policy is not final agency action, and is intended as guidance. It does not create any rights, duties, obligations, or defenses, implied or otherwise, in any third parties.

(4) This policy should be used whenever applicable in settlement negotiations for both administrative and civil judicial enforcement actions. It is not intended for use in pleading, at hearing or at trial. The policy may be applied at EPA's discretion to the settlement of administrative and judicial enforcement actions instituted prior to, but not yet resolved, as of the effective date of this policy.

H. Public Accountability

(1) Within 3 years of the effective date of this policy, EPA will complete a study of the effectiveness of the policy in encouraging:

(a) changes in compliance behavior within the regulated community, including improved compliance rates;

(b) prompt disclosure and correction of violations, including timely and accurate compliance with reporting requirements;

(c) corporate compliance programs that are successful in preventing violations, improving environmental performance, and promoting public disclosure;

(d) consistency among state programs that provide incentives for voluntary compliance.

EPA will make the study available to the public.

(2) EPA will make publicly available the terms and conditions of any compliance agreement reached under this policy, including the nature of the violation, the remedy, and the schedule for returning to compliance.

I. Effective Date

This policy is effective January 22, 1996.

Dated: December 18, 1995.

Steven A. Herman,

Assistant Administrator for Enforcement and Compliance Assurance.

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ENVIRONMENTAL CRIMES UPDATE

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I. INTRODUCTION

The criminal enforcement of federal environmental crimes continues to evolve. Recent decisions have altered and clarified important aspects environmental crimes and limited Clean Water Act jurisdiction. New legislation has been introduced to increase penalties and strengthen criminal enforcement. There is now a structured process in place for companies to voluntarily disclose environmental crimes and receive potentially significant benefits from the government. EPA and Justice Department working groups are addressing significant legal issues relating to protecting EPA's regulatory system when electronic reporting becomes mandatory in 2003. These developments are summarized below.

II. RECENT DECISIONS

A. CWA Knowing Discharge Violations- Whither *Ahmad?*

By now every federal environmental prosecutor and defense attorney who practices in the Fifth Circuit should be aware of *United States* v. *Ahmad,* 101 F.3d 386 (5th Cir. 1996).

Attique Ahmad was prosecuted for pumping gasoline from a leaking underground storage tank to the street in front of his convenience store in Conroe, Texas. The gasoline flowed along the curb line into a storm drain which empties into to a creek which flows to the San Jacinto River which empties into Lake Houston. When neighbors discovered Ahmad's activities, he removed the discharge hose from the street, placed it in a manhole and pumped the gasoline to the city sewage treatment plant. An estimated 4,690 gallons of gasoline were pumped from the tank during this nighttime activity. The next morning the fire department declared an emergency and ordered the evacuation of two schools and non-essential workers at the sewer plant.

Ahmad was charged in three Clean Water Act (CWA) counts: knowingly discharging a pollutant from a point source into navigable waters without a permit, knowingly discharging to a POTW in violation of pretreatment standards and knowing endangerment. Ahmad's defense was that he thought he was pumping only water which had leaked into the tank and settled at the bottom; that is, while he was knew what he was doing (i.e., discharging), he was not aware that he was discharging gasoline. The court instructed the jury that, with respect to knowledge, the government only had to prove that Ahmad was aware of his acts of discharging. Ahmad argued unsuccessfully that the government also had to prove that he knew that what he was discharging was gasoline. The jury convicted on the first two counts and deadlocked on the third which the court dismissed.

The Fifth Circuit reversed and remanded for a new trial, holding that the knowledge instruction was defective. The court held that, in addition to proving the defendant knew the nature of his acts, the government had to prove he knew the substance he was discharging was a pollutant. The court further held that the *mens rea* of "knowingly" applied to each element of the offenses charged in counts one and two, except "purely jurisdictional elements." 101 F.3d at 391. This aspect of the court's ruling was based in part on the conclusion that CWA offenses are not public welfare offenses. The court provided no indication of what additional proof of knowledge might be necessary as to the other elements or which of those elements were "purely jurisdictional."

The requirement that a discharge be to "navigable waters" is a purely jurisdictional

element. *United States* v. *Riverside Bayview Homes, Inc.*, 474 U.S. 121 (1985). The point source requirement is arguably jurisdictional because it is intended to limit the regulatory reach of the CWA. *United States* v. *Plaza Health Laboratories, Inc.*, 3 F.3d 643 (2d Cir. 1993), *cert. denied*, 512 U.S. 1245 (1994). *See* 42 U.S.C. § 6903(27)(separating RCRA and CWA jurisdiction over solid waste).

If the point source element is not jurisdictional and the discharge device is not one of those enumerated in the statutory definition of "point source," as was the case in *Ahmad*, must the government prove the defendant knew the discharge device was a "discernible, confined and discrete conveyance?" *See* 33 U.S.C. § 1362(14).

With respect to the non-jurisdictional elements, must the government prove the defendant knew the material discharged was a "pollutant" within the statutory definition or that there was no permit authorizing the discharge? In cases where a pollutant reaches water by an indirect route, must the government prove the defendant knew the discharge would likely reach water? In a pretreatment case, must the government prove the defendant knew the discharge would reach a public sewer system?

The Fifth Circuit has not resolved these questions. The only reported Fifth Circuit case citing *Ahmad* added to the confusion by describing *Ahmad* as a case where the court read a statute as requiring specific intent. *United States* v. *Myers*, 104 F.3d 76, 81 n. 4 (5th Cir.), *cert. denied*, 520 U.S. 1218 (1997). Other circuits citing *Ahmad* have not discussed its holding regarding CWA *mens rea*. The Sixth Circuit declined to follow *Ahmad*, holding that CWA offenses "fit squarely within the public welfare doctrine." *United States* v. *Kelley Technical Coatings, Inc.*, 157 F.3d 432, 439 n. 4 (6th Cir. 1998). In *United States* v. *Sinskey*, 119 F.3d 712, 717 (8th Cir. 1997), the Eighth Circuit distinguished *Ahmad* as a mistake-of-fact case. In *United States* v. *Wilson*, 133 F.3d 251, 262 (4th Cir. 1997), the court cited *Ahmad* as supporting the mistake-of-fact principle that one who thought he was discharging water would not be guilty of knowingly violating the CWA offense prohibiting the discharge of pollutants. More significantly, *Wilson* held that knowledge must be proven as to all the essential elements of a CWA offense but did not rely on *Ahmad* in doing so.

Ahmad continues as the leading Fifth Circuit case defining the *mens rea* of felony CWA discharge violations.

B. CWA Misdemeanors - What standard for negligence?

In the first reported appellate decision on the issue, the Ninth Circuit recently held that a misdemeanor CWA discharge violation requires proof of ordinary negligence, not "criminal" negligence or gross negligence. *United States* v. *Hanousek*, 176 F.3d 1116 (9th Cir. 1999). While using a backhoe bucket to move rocks from railroad tracks, the defendant struck a pipeline, causing a discharge of heating oil into a navigable water. Following a jury trial Hanousek was convicted of negligently discharging oil into a navigable water in violation of 33 U.S.C. §§ 1319(c)(1)(A) and 1321(b)(3).

On appeal Hanousek argued that the district court erred in refusing to instruct that the government had to prove criminal negligence, defined by the defendant as "a gross deviation from the standard of care that a reasonable person would observe in the situation." Instead, the court instructed that the government only had to prove that the defendant failed to use reasonable care and that his negligence had a direct and substantial connection to the discharge. The Ninth Circuit upheld these instructions, concluding that, based on the language of the statute, Congress intended that one who acts with ordinary negligence be subject to criminal penalties under the misdemeanor provisions of the

CWA.

C. CWA Jurisdiction-Isolated Intrastate Waters Not Within CWA

The CWA defines "navigable waters" as "waters of the United States, including the territorial seas." 33 U.S.C. § 1362(7). In the Federal Water Pollution Control Act Amendments of 1972, Congress directed the Executive Branch to assert jurisdiction over all waters of the United States subject to federal constitutional authority, primarily, the authority of the Commerce Clause. To carry out this mandate the Army Corps of Engineers promulgated a regulation at 33 C.F.R. § 328(a) defining "waters of the United States." Included in the definition are waters traditionally used or susceptible to use in interstate or foreign commerce, all interstate waters and "all other waters such as intrastate lakes . . . the use, degradation or destruction of which *could affect* interstate or foreign commerce" and wetlands adjacent to such waters. 33 C.F.R. § 328.3(a)(emphasis added).

In 1996 a jury in Baltimore, Maryland, convicted land developer James Wilson and three companies of knowingly discharging fill material and excavated dirt into wetlands without a permit in violation of the CWA. The wetlands consisted of four parcels of land in St. Charles, Maryland, located between the Potomac River and Chesapeake Bay. The government presented substantial evidence showing that the tracts were "wetlands" and that water from the parcels flowed in a drainage pattern through ditches, intermittent streams and creeks and ultimately into the Potomac River, a tributary of Chesapeake Bay. The evidence also showed, however, that the tracts were more than six miles from the Potomac River, more than ten miles from Chesapeake Bay and hundreds of yards from the nearest creeks. Based on 33 C.F.R. § 328.3(a)(3), which defines "waters of the United States" as including intrastate wetlands which *could affect* interstate commerce, the district court instructed the jury that, if they found that the tracts were "wetlands" and their use, degradation or destruction could affect interstate commerce, then, as a matter of law, the tracts were "waters of the United States."

On appeal the defendants argued that in promulgating section 328.3(a)(3) the Corps of Engineers exceeded its congressional authorization under the CWA. The Fourth Circuit agreed and reversed and remanded for a new trial. *United States* v. *Wilson*, *supra*. The court found that the regulation purported to extend coverage of the CWA "to a variety of waters that are intrastate, nonnavigable, or both, solely on the basis that the use, degradation, or destruction of such waters could affect interstate commerce" without any substantial effect on or nexus with interstate commerce. 133 F.3d at 257. The court struck down the jury instruction because it "intolerably stretches the ordinary meaning of the word 'adjacent' and the phrase 'waters of the United States' to include wetlands remote from any interstate or navigable waters." 133 F.3d at 258.

D. Responsible Corporate Officer Doctrine -A Step Closer To Vicarious Criminal Liability?

The principal CWA criminal provision [33 U.S.C. § 1319(c)], as is typical, states offenses in terms of a "person" committing a violation. Section 1319(c)(6) states, "For the purpose of [subsection 1319(c)] the term 'person' means, in addition to the definition contained in section 1362(5) of this title, any responsible corporate officer." The Clean Air Act (CAA) has a substantially identical provision. 42 U.S.C. § 7413(c)(6). Neither statute defines "responsible corporate officer" and the legislative history provides no clear indication of Congress' intent in adding the term to the definition of "person" for the specific purpose of criminal enforcement.

Until recently, only one court of appeals had addressed the meaning of section 1319(c)(6).

In *United States* v. *Brittain*, 931 F.2d 1413 (10th Cir. 1991), the Tenth Circuit held that inclusion of "responsible corporate officer" in the definition of "person" did not mean that only a person in such a position could be criminally liable for permit violations. Another court of appeals had dealt with the concept in a RCRA case where the government relied on a responsible corporate officer doctrine articulated in several Supreme Court decisions. There, the First Circuit reversed the conviction of a company president because the district court instructed the jury that, if they found that the defendant was a responsible corporate officer, they could find him guilty, though there was no proof that he had actual knowledge of the hazardous waste shipments underlying the indictment. *United States* v. *MacDonald & Watson Waste Oil Company*, 933 F.2d 35 (1st Cir. 1991).

Last December the Ninth Circuit affirmed the CWA convictions of a former company president on the basis that he "caused" discharges to a sewer system because he knew about the discharges and failed to prevent them. *United States* v. *Iverson*, 162 F.3d 1015 (9th Cir. 1998).

Thomas Iverson was president and chairman of the board of CH2O, Inc., a Olympia, Washington, company which blended chemicals to make various products, including acid cleaners and heavy-duty alkaline compounds. The products were shipped in drums which customers returned to CH2O where they were cleaned and reused, generating waste water contaminated with chemical residue. In the 1980s, after the local POTW had refused to allow the company to discharge the waste water to the sewer system, the defendant personally discharged and ordered others to discharge the waste water on the plant property and to sewer drains at the defendant's home and an apartment complex he owned. From 1988 to 1991 CH2O had the waste water disposed of by a waste disposal company at considerable expense.

In 1992 Iverson announced his retirement from CH2O. Thereafter, however, he continued to receive money from the company, conduct business on the company premises and give orders to employees. The company continued to list Iverson as president on documents filed with the state. The employee who ran the drum-cleaning operation reported directly to the defendant.

Shortly after Iverson's retirement, the company resumed its drum-cleaning operation at a warehouse which the defendant had purchased. During the next four years the contaminated waste water was discharged from the warehouse to the sewer system. Iverson was sometimes present when drums were cleaned and on those occasions was aware of the nature of the waste water generated. The drum-cleaning business terminated in 1995 when the company became aware that it was under investigation.

Iverson was charged and convicted for knowingly causing the discharge of pollutants from the warehouse to the POTW in violation of pretreatment standards. The prosecution relied on the responsible corporate officer doctrine to prove that Iverson was liable for the discharges, though he did not participate in the discharges or order others to do so. The district court instructed the jury that "in addition to a defendant who discharges or causes the discharge of pollutants directly, the Clean Water Act also holds accountable 'responsible corporate officers.'" The jury was further instructed that the defendant could be found guilty if the government proved beyond a reasonable doubt that (a) he knew that pollutants were being discharged by company employees, (b) he had the authority and capacity to prevent the discharges and (c) he failed to prevent the on-going discharges.

On appeal Iverson contended that the instructions were erroneous because the district court misinterpreted the scope of responsible corporate officer liability, arguing that the a corporate officer is liable only when

the officer in fact exercises control over the activity causing the discharge or has an express corporate duty to oversee the activity. The Ninth Circuit rejected this argument, holding that the instructions accurately stated CWA criminal liability under the responsible corporate officer doctrine. Since the CWA does not define the term "responsible corporate officer" in section 1319(c)(6), the court looked to the dictionary definition of "responsible" and concluded that "'any corporate officer' who is 'answerable' or 'accountable' for the unlawful discharge is liable under the CWA." 162 F.3d at 1023. The court found that in enacting section 1319(c)(5) Congress intended to adopt the "responsible corporate officer doctrine" formulated by the Supreme Court in two strict liability cases under the Federal Food, Drug and Cosmetic Act. The court further relied on its own interpretations of tax statutes imputing civil liability to corporate officers to support its holding regarding the scope of a corporate officer's liability under the CWA.

E. Parallel Proceedings and Double Jeopardy-*Halper* Overruled

In *United States* v. *Halper*, 490 U.S. 435 (1989), the Supreme Court held that a civil penalty which serves the goals of punishment, rather than only a remedial purpose, is "punitive" and constitutes "punishment" under the double jeopardy clause. Thus, as in *Halper*, where a defendant had been convicted in a criminal case, the subsequent imposition of a "punitive" civil sanction for the same violation and conduct was barred. Federal courts interpreting *Halper* uniformly held that reversing the sequence made no difference; a subsequent criminal prosecution was barred if the defendant had been subjected to a "punitive" civil penalty for the same violation and conduct.

Halper's imprecise guidance as to which civil sanctions would constitute "punishment" created confusion and conflicts among lower courts, resulting in double jeopardy challenges to a wide variety of civil sanctions as "punitive." These included challenges to the FAA's revocation of a commercial pilot's license, debarment proceedings for securities fraud, a general discharge from the military based on a drug conviction, debarment from government contracting, eviction from federally subsidized housing based on a drug conviction and prison disciplinary proceedings based on a prison escape.

Uncertainty over *Halper* also caused regulatory agencies to suspend civil enforcement proceedings in some cases until a parallel criminal investigation or prosecution was concluded. The concern over *Halper* extended to parallel proceedings involving a state civil enforcement action and a federal criminal investigation or prosecution. Though the dual sovereign doctrine would normally render the double jeopardy clause inapplicable to this situation, there was concern that *Halper* might apply, if a court found that the state was acting as an agent of the federal government by enforcing an EPA-delegated program, thus rendering the two sovereigns one for double jeopardy purposes. *See, e.g., United States* v. *Louisville Edible Oil Products, Inc.*, 926 F.2d 584 (6th Cir.1991).

These concerns all but disappeared in December, 1997, with the decision in *Hudson* v. *United States*, 522 U.S. 93 (1997). In that case the Comptroller of the Currency imposed monetary penalties and debarment on three bank directors for making illegal loans. The bankers were then indicted on the same violations. The district court dismissed the indictment, holding that the monetary penalties constituted "punishment" under *Halper*. The court of appeals reversed, concluding that the civil fines were not so disproportional to the proven damages as to be "punitive."

The Supreme Court overruled *Halper* and affirmed the judgment of the court of appeals. The court said that *Halper* had deviated from longstanding double jeopardy principles, that

such deviation was "ill-considered" and that *Halper's* test for determining whether a particular civil sanction was punitive had proven "unworkable." The court held that, under pre-*Halper* decisions, a two-stage test was to be applied, as exemplified in *United States* v. *Ward*, 448 U.S. 242 (1980). Applying that test, the court found that the monetary penalty statutes expressly provided that the penalties were labeled and thus intended by Congress to be "civil" and there was "little evidence, much less the clearest proof that we require, suggesting that either OCC money penalties or debarment sanctions are 'so punitive in form and effect as to render them criminal despite Congress' intent to the contrary.'" 118 S.Ct. at 495.

In its only published post-*Hudson* decision addressing this issue, the Fifth Circuit considered whether a conviction barred imposition of an IRS civil penalty for the same conduct and violation. In *BickhamLincoln-Mercury Incorporated* v. *United States*, 168 F.3d 790 (5th Cir. 1999), the defendant car dealer pled guilty to failing to file IRS Forms 8300 reporting cash receipt transactions of more than $10,000. A year later the IRS imposed a civil penalty of $27,000 for the same violations. The defendant contended that the civil penalty amounted to "punishment" was therefore barred by the double jeopardy clause. In rejecting this argument, the Fifth Circuit did not specifically apply *Hudson* but, instead, relied on several *Halper* principles and a 1938 Supreme Court case holding that IRS civil sanctions are not criminal.

III. RECENT ENVIRONMENTAL CRIMES LEGISLATION

On February 25, 1999, Senator Schumer of New York introduced Senate Bill 481, entitled, the "Environmental Crimes and Enforcement Act of 1999."

The bill (a) authorizes a court to order a defendant convicted of an environmental crime to reimburse a state, local or tribal government for the costs incurred in assisting in federal investigation and prosecution of the case, (b) provides for 20 years imprisonment and a fine of $500,000 for an individual and a fine of $2,000,000 for an organization where a defendant is convicted of an environmental crime which is the proximate cause of serious bodily injury to or the death of a person, (c) directs EPA to establish a state, local and tribal criminal enforcement training program, (d) creates a special statute of limitations for environmental crimes, allowing a prosecution for up to eight years after commission of the offense, (e) creates attempt offenses for environmental crimes, (f) amends 18 U.S.C. § 3663(b) to allow a court to order a defendant to pay restitution for the removal and remediation of environmental pollution or damage resulting from the defendant's conduct and (g) on motion of the government showing probable cause, authorizes a court, at the time an indictment or information is filed, to issue an order freezing a defendant's property to secure the payment of the restitution described in paragraph (f) above.

IV. VOLUNTARY DISCLOSURE POLICY

On December 22, 1995, EPA published its policy relating to voluntary disclosures of environmental violations, entitled, "Incentives for Self-Policing: Discovery, Disclosure, Correction and Prevention of Violations." 60 Fed. Reg. 66706 (1995). The policy became effective on January 22, 1996.

Two EPA guidance documents on the policy are available on the Internet: a memorandum of Steven Herman, the Assistant Administrator for the Office of Enforcement and Compliance Assistance, is published at http://es.epa.gov/oeca/auditpol.html and a memorandum from Earl Devaney, Director of the Office of Criminal Enforcement, Forensics and Training (OCEFT), is published at http://es.epa.gov/oeca/oceft/audpol2.html.

The policy applies to companies only; it does not apply to individuals. Thus, if a company meets all the conditions of the policy, only the company may receive the benefits of disclosure. In a criminal case the potential benefit is that EPA will not recommend to the Justice Department or other prosecuting authority that the company be prosecuted on the basis of the disclosed violations. This benefit, however, is not available where, for example, the violation demonstrates (a) a prevalent management philosophy or practice that concealed or condoned violations or (b) the conscious involvement in or willful blindness of high-level corporate officials or managers. The benefit also is not available for the voluntary disclosure of violations that cause serious harm or pose imminent and substantial endangerment to human health or the environment.

Disclosures of criminal violations may be made directly to the Voluntary Disclosure Board which will make a recommendation to the Director of OCEFT. Disclosures may also be made through an EPA Criminal Investigation Division (CID) Special Agent in Charge or through regional enforcement personnel.

Except in cases where a criminal violation is readily apparent, CID will conduct an investigation to develop facts sufficient to support the Board's recommendation that benefits be granted or denied. The OCEFT Director will ultimately make a recommendation to the Justice Department regarding criminal prosecution. Whatever the recommendation, the Justice Department is free to exercise its full prosecutorial discretion.

V. ELECTRONIC REPORTING

In 1998 Congress passed the Government Paperwork Elimination Act (Act), Title XVII, Pub. L. 105-277, codified at 44 U.S.C. § 3506, effective October 21, 1998. The Act provides for federal agencies, by October 21, 2003, to give persons who are required to maintain, submit or disclose information the option of doing so electronically when practicable as a substitute for paper, and to use electronic authentication (electronic signature) methods to verify the identity of the sender and integrity of electronic content.The Office of Management and Budget (OMB) has published a notice requesting public and agency comment on proposed procedures and guidance to implement the Act. 64 Fed. Reg. 10896 (March 5, 1999). OMB's notice is available on the Internet at http://www.whitehouse.gov/wh/eop/omb/.

The effective functioning of a regulatory agency relies in large part on information submitted by regulated entities. The accuracy and integrity of such information is crucial to the proper functioning of the regulatory scheme, particularly with respect to information required by law to be provided to the agency. To ensure that the agency may rely on such information, there must be accountability for the accuracy of information and penalties for submitting false information. To achieve maximum deterrence and compliance, accountability for submitting false information must be personal, not merely organizational.

The conversion from paper to electronic reporting raises fundamental questions relating to the continued effectiveness of the environmental regulatory scheme. Not only is there the issue of whether personal accountability is feasible with an electronic signature, but also the question of whether events which are electronically recorded can be as fully and accurately reconstructed as an event documented by paper. Are electronically recorded documents more susceptible to alteration or destruction without the means to determine who altered or destroyed the document? Does an electronically filed statement create a "written statement" in the hands of the agency?

Other issues are apparent. What are the

implications of electronic reporting under the current rules of evidence? Will admissibility of electronically filed information require a preliminary showing that the technical equipment and process used by the sender and receiver were reliable? What foundational evidence would be necessary to establish authenticity; for example, to show that an electronically filed document in the hands of a government agency is the same as the document transmitted by the sender and that the document has not been altered while in the government's possession? Is it possible to prove that an electronically created document was not altered while in the hands of a third party, the defendant's environmental consultant, for example? Will the average juror be able to comprehend technical evidence introduced to establish the foundation for the admissibility of electronically created documents?

These and other issues relating to electronic reporting are being reviewed by EPA and Justice Department personnel involved in the criminal enforcement of environmental laws. See Greenwald, *An Environmental Prosecutor's Caution About Electronic Transmissions of Environmental Reports*, National Environmental Enforcement Journal (Sept. 1998).Their review may well lead to recommendations that the false statement provisions of environmental statutes and federal rules of evidence be modified to assure that effective criminal enforcement is available to punish and deter violations which undermine the environmental regulatory system.

JUSTICE DEPARTMENT GUIDANCE ON PROSECUTIONS OF CORPORATIONS

U.S. Department of Justice

Office of the Deputy Attorney General

June 16, 1999

MEMORANDUM

TO: Heads of Department Components
All United States Attorneys

FROM: Eric H. Holder, Jr.

SUBJECT: Bringing Criminal Charges Against Corporations

More and more often, federal prosecutors are faced with criminal conduct committed by or on behalf of corporations. The Department is committed to prosecuting both the culpable individuals and, when appropriate, the corporation on whose behalf they acted.

The attached document, *Federal Prosecution of Corporations*, provides guidance as to what factors should generally inform a prosecutor in making the decision whether to charge a corporation in a particular case. In believe these factors provide a useful framework in which prosecutors can analyze their cases and provide a common vocabulary for them to discuss their decision with fellow prosecutors, supervisors, and defense counsel. These factors are, however, not outcome-determinative and are only guidelines. Federal prosecutors are not required to reference these factors in a particular case, nor are they required to document the weight they accorded specific factors in reaching their decision.

The factors and the commentary were developed through the hard work of an *ad hoc* working group coordinated by the Fraud Section of the Criminal Division and made up of representatives of United States Attorneys' Offices, the Executive Office of United States Attorneys, and Divisions of the Department with criminal law enforcement responsibilities. Experience with these guidelines may lead to changes or adjustments in the text and commentary. Therefore, please forward any comments about the guidelines, as well as instances in which the factors proved useful or not useful in specific cases to Shirah Neiman, Deputy United States Attorney, Southern District of New York, and Philip Urofsky, Trial Attorney, Fraud Section, Criminal Division. I look forward to hearing comments from the field as to the application of these factors in practice.

FEDERAL PROSECUTION OF CORPORATIONS

I. Charging Corporations: General

A. *General Principle:* Corporations should not be treated leniently because of their artificial nature nor should they be subject to harsher treatment. Vigorous enforcement of the criminal laws against corporate wrongdoers, where appropriate, results in great benefits for law enforcement and the public, particularly in the area of white collar crime. Indicting corporations for wrongdoing enables the government to address and be a force for positive change of corporate culture, alter corporate behavior, and prevent, discover, and punish white collar crime.

B. *Comment:* In all cases involving corporate wrongdoing, prosecutors should consider the factors discussed herein. First and foremost, prosecutors should be aware of the important public benefits that may flow from indicting a corporation in appropriate cases. For instance, corporations are likely to take immediate remedial steps when one is indicted for criminal conduct that is pervasive throughout a particular industry, and thus an indictment often provides a unique opportunity for deterrence on a massive scale. In addition, a corporate indictment may result in specific deterrence by changing the culture of the indicted corporation and the behavior of its employees. Finally, certain crimes that carry with them a substantial risk of great public harm, *e.g.*, environmental crimes or financial frauds, are by their nature most likely to be committed by businesses, and there may, therefore, be a substantial federal interest in indicting the corporation.

Charging a corporation, however, does not mean that individual directors, officers, employees, or shareholders should not also be charged. Prosecution of a corporation is not a substitute for the prosecution of criminally culpable individuals within or without the corporation. Further, imposition of individual criminal liability on such individuals provides a strong deterrent against future corporate wrongdoing.

Corporations are "legal persons," capable of suing and being sued, and capable of committing crimes. Under the doctrine of *respondeat superior*, a corporation may be held criminally liable for the illegal acts of its directors, officers, employees, and agents. To be held liable for these actions, the government must establish that the corporate agent's actions (i) were within the scope of his duties and (ii) were intended, at least in part, to benefit the corporation. In all cases involving wrongdoing by corporate agents, prosecutors should consider the corporation, as well as the responsible individuals, as potential criminal targets.

Agents, however, may act for mixed reasons — both for self-aggrandizement (both direct and indirect) and for the benefit of the corporation, and a corporation may be held liable as long as one motivation of its agent is to benefit the corporation. Thus, in *United States v. Automated Medical Laboratories*, 770 F.2d 399 (4th Cir. 1985), the court affirmed the corporation's conviction for the actions of a subsidiary's employee despite its claim that the employee was acting for his own benefit, namely his "ambitious nature and his desire to ascend the corporate ladder." The court stated, "Partucci was clearly acting in part to benefit AML since his advancement within the corporation depended on AML's well-being and its lack of difficulties with the FDA." Similarly, in *United States v. Cincotta*, 689 F.2d 238, 241-42 (1st Cir. 1982), the court held, "criminal liability may be imposed on the corporation only where the agent is acting within the scope of his employment. That, in turn, requires that the agent be performing acts of the kind which he is authorized to perform, and those acts must be motivated—at least in part—by an intent to benefit the corporation." Applying this test, the court upheld the corporation's conviction, notwithstanding the substantial personal benefit reaped by its miscreant agents, because the fraudulent scheme required money to pass through the corporation's treasury and the fraudulently obtained goods were resold to the corporation's customers in the corporation's name. As the court con-

cluded, "Mystic—not the individual defendants—was making money by selling oil that it had not paid for."

Moreover, the corporation need not even necessarily profit from its agent's actions for it to be held liable. In *Automated Medical Laboratories*, the Fourth Circuit stated:

> [B]enefit is not a "touchstone of criminal corporate liability; benefit at best is an evidential, not an operative, fact." Thus, whether the agent's actions ultimately redounded to the benefit of the corporation is less significant than whether the agent acted with the intent to benefit the corporation. The basic purpose of requiring that an agent have acted with the intent to benefit the corporation, however, is to insulate the corporation from criminal liability for actions of its agents which be inimical to the interests of the corporation or which may have been undertaken *solely* to advance the interests of that agent or of a party other than the corporation.

Id. at 407 (emphasis added; quoting *Old Monastery Co. v. United States*, 147 F.2d 905, 908 (4th Cir.), *cert. denied*, 326 U.S. 734 (1945)).

II. Charging Corporations—Factors to Be Considered

A. *General Principle:* Generally, prosecutors should apply the same factors in determining whether to charge a corporation as they do with respect to individuals. *See* U.S.A.M. § 9-27.220, *et seq.* Thus, the prosecutor should weigh all of the factors normally considered in the sound exercise of prosecutorial judgment: the sufficiency of the evidence, the likelihood of success at trial, the probable deterrent, rehabilitative, and other consequences of conviction, and the adequacy, of non-criminal approaches. *See id.* However, due to the nature of the corporate "person," some additional factors are present. In conducting an investigation, determining whether to bring charges, and negotiating plea agreements, prosecutors should consider the following factors in reaching a decision as to the proper treatment of a corporate target:

1. The nature and seriousness of the offense, including the risk of harm to the public, and applicable policies and priorities, if any, governing the prosecution of corporations for particular categories of crime (*see* section III, *infra*);
2. The pervasiveness of wrongdoing within the corporation, including the complicity in, or condonation of, the wrongdoing by corporate management (*see* section IV, *infra*);
3. The corporation's history of similar conduct, including prior criminal civil, and regulatory enforcement actions against it (*see* section V, *infra*);
4. The corporation's timely and voluntary disclosure of wrongdoing and its willingness to cooperate in the investigation of its agents, including, if necessary, the waiver of the corporate attorney-client and work product privileges (*see* section VI, *infra*);
5. The existence and adequacy of the corporation's compliance program (*see* section VII, *infra*);
6. The corporation's remedial actions, including any efforts to implement an effective corporate compliance program or to improve an existing one, to replace responsible management, to discipline or terminate wrongdoers, to pay restitution, and to cooperate with the relevant government agencies (*see* section VIII, *infra*);
7. Collateral consequences, including disproportionate harm to shareholders and employees not proven personally culpable (*see* section IX, *infra*); and
8. The adequacy of non-criminal remedies, such as civil or regulatory enforcement actions (*see* section X, *infra*).

B. *Comment:* As with the factors relevant to charging natural persons, the foregoing factors are intended to provide guidance rather than to mandate a particular result. The factors listed in this section are intended to be illustrative of those that should be considered and not a complete or exhaustive list. Some or all of these factors may or may not apply to specific cases, and in some cases one factor may override all others. Further, national law enforcement policies in various enforcement areas may require that more or less weight be given to certain of these factors than to others.

In making a decision to charge a corporation, the prosecutor generally has wide latitude determining when, whom, how, and even whether to prosecute for violations of Federal criminal law. In exercising that discretion, prosecutors should consider the following general statements of principles that summarize appropriate considerations to be weighed and desirable practices to be followed in discharging their prosecutorial responsibilities. In doing so, prosecutors should ensure that the general purposes of the criminal law — assurance of warranted punishment, deterrence of further criminal conduct, protection of the public from dangerous and fraudulent conduct, rehabilitation of offenders, and restitution for victims and affected communities — are adequately met, taking into account the special nature of the corporate "person."

III. Charging a Corporation: Special Policy Concerns

A. *General Principle:* The nature and seriousness of the crime, including the risk of harm to the public from the criminal conduct, are obviously primary factors in determining whether to charge a corporation. In addition, corporate conduct, particularly that of national and multi-national corporations, necessarily intersects with federal economic, taxation, and criminal law enforcement policies. In applying these principles, prosecutors must consider the practices and policies of the appropriate Division of the Department, and must comply with those policies to the extent required.

B. *Comment:* In determining whether to charge a corporation, prosecutors should take into account federal law enforcement priorities as discussed above. *See* § 9-27.230. In addition, however, prosecutors must be aware of the specific policy goals and incentive programs established by the respective Divisions and regulatory agencies. Thus, whereas natural persons may be given incremental degrees of credit (ranging from immunity to lesser charges to sentencing considerations) for turning themselves in, making statements against their penal interest, and cooperating in the government's investigation of their own and others' wrongdoing, the same approach may not be appropriate in all circumstances with respect to corporations. As an example, it is entirely proper in many investigations for a prosecutor to consider the corporation's pre-indictment conduct, *e.g.*, voluntary disclosure, cooperation, remediation or restitution, in determining whether to seek an indictment. However, this would not necessarily be appropriate in an antitrust investigation, in which anti-

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trust violations, by definition, go to the heart of the corporation's business and for which the Antitrust Division has therefore established a firm policy, understood in the business community, that credit should not be given at the charging stage for a compliance program and that amnesty is available only to the first corporation to make full disclosure to the government. As another example, the Tax Division has a strong preference for prosecuting responsible individuals, rather than entities, for corporate tax offenses. Thus, in determining whether or not to charge a corporation, prosecutors should consult with the Criminal, Antitrust, Tax, and Environmental and Natural Resources Divisions, if appropriate or required.

IV. Charging a Corporation: Pervasiveness of Wrongdoing Within the Corporation

A. *General Principle:* A corporation can only act through natural persons, and it is therefore held responsible for the acts of such persons fairly attributable to it. Charging a corporation for even minor misconduct may be appropriate where the wrongdoing was pervasive and was undertaken by a large number of employees or by all the employees in a particular role within the corporation, *e.g.*, salesmen or procurement officers, or was condoned by upper management. On the other hand, in certain limited circumstances, it may not be appropriate to impose liability upon a corporation, particularly one with a compliance program in place, under a strict *respondent superior* theory for the single isolated act of a rogue employee. There is, of course, a wide spectrum between these two extremes, and a prosecutor should exercise sound discretion in evaluating the pervasiveness of wrongdoing within a corporation.

B. *Comment:* Of these factors, the most important is the role of management. Although acts of even low-level employees may result in criminal liability, a corporation is directed by its management and management is responsible for a corporate culture in which criminal conduct is either discouraged or tacitly encouraged. As stated in commentary to the Sentencing Guidelines:

> Pervasiveness [is] case specific and [will] depend on the number, and degree of responsibility, of individuals [with] substantial authority . . . who participated in, condoned, or were willfully ignorant of the offense. Fewer individuals need to be involved for a finding of pervasiveness if those individuals exercised a relatively high degree of authority. Pervasiveness can occur either within an organization as a whole or within a unit of an organization.

U.S.S.G. § 8C2.5, comment. (n.4).

V. Charging the Corporation: The Corporation's Past History

A. *General Principle:* Prosecutors may consider a corporation's history of similar conduct, including prior criminal, civil, and regulatory enforcement actions against it, in determining whether to bring criminal charges.

B. *Comment:* A corporation, like a natural person, is expected to learn from its mistakes. A history of similar conduct may be probative of a corporate culture that encouraged, or at least condoned, such conduct, regardless of any compliance programs. Criminal prosecution of a corporation may be particularly appropriate where the corporation previously had been subject to non-criminal guidance, warnings, or sanctions, or previous criminal charges, and yet it either had not taken adequate action to prevent future unlawful conduct or had continued to engage in the conduct in spite of the warnings or enforcement actions taken against it. In making this determination, the corporate structure itself, *e.g.*, subsidiaries or operating divisions, should be ignored, and enforcement actions taken against the corporation or any of its divisions, subsidiaries, and affiliates should be considered. *See* U.S.S.G. § 8C2.5(c) & comment. (n. 6).

VI. Charging the Corporation: Cooperation and Voluntary Disclosure

A. *General Principle:* In determining whether to charge a corporation, that corporation's timely and voluntary disclosure of wrongdoing and its willingness to cooperate with the government's investigation may be relevant factors. In gauging the extent of the corporation's cooperation, the prosecutor may consider the corporation's willingness to identify the culprits within the corporation, including senior executives, to make witnesses available, to disclose the complete results of its internal investigation, and to waive the attorney-client and work product privileges.

B. *Comment:* In investigating wrongdoing by or within a corporation, a prosecutor is likely to encounter several obstacles resulting from the nature of the corporation itself. It will often be difficult to determine which individual took which action on behalf of the corporation. Lines of authority and responsibility may be shared among operating divisions or departments, and records and personnel may be spread throughout the United States or even among several countries. Where the criminal conduct continued over an extended period of time, the culpable or knowledgeable personnel may have been promoted, transferred, or fired, or they may have quit or retired. Accordingly, a corporation's cooperation may be critical in identifying the culprits and locating relevant evidence.

In some circumstances, therefore, granting a corporation immunity or amnesty may be considered in the course of the government's investigation. In such circumstances, prosecutors should refer to the principles governing non-prosecution agreements generally. *See* USAM § 9-27.600-650. Specifically, these principles permit a non-prosecution agreement in exchange for cooperation when a corporation's "timely cooperation appears to be necessary to the public interest and other means of obtaining the desired cooperation are unavailable or would not be effective." Prosecutors should note that in the case of national or multi-national corporations, multi-district or global agreements may be necessary. *See* USAM § 9-27.641.

In addition, the Department, in conjunction with regulatory agencies and other executive branch departments, encourages corporations, as part of their compliance programs, to conduct internal investigations and to disclose their findings to the appropriate authorities. Some agencies, such as the SEC and the EPA, as well as the Department's Environmental and Natural Resources Division, have formal voluntary disclosure programs in which self-reporting, coupled with remediation and additional criteria, may qualify the corporation

for amnesty or reduced sanctions.[1] Even in the absence of a formal program, prosecutors may consider a corporation's timely and voluntary disclosure in evaluating the adequacy of the corporation's compliance program and its management's commitment to the compliance program. However, prosecution and economic policies specific to the industry or statute may require prosecution notwithstanding a corporation's willingness to cooperate. For example, the Antitrust Division offers amnesty only to the first corporation to agree to cooperate. This creates a strong incentive for corporations participating in anti-competitive conduct to be the first to cooperate. In addition, amnesty, immunity, or reduced sanctions may not be appropriate where the corporation's business is permeated with fraud or other crimes.

One factor the prosecutor may weigh in assessing the adequacy of a corporation's cooperation is the completeness of its disclosure including, if necessary, a waiver of the attorney-client and work product protections, both with respect to its internal investigation and with respect to communications between specific officers, directors, and employees and counsel. Such waivers permit the government to obtain statements of possible witnesses, subjects, and targets, without having to negotiate individual cooperation or immunity agreements. In addition, they are often critical in enabling the government to evaluate the completeness of a corporation's voluntary disclosure and cooperation. Prosecutors may, therefore, request a waiver in appropriate circumstances.[2] The Department does not, however, consider waiver of a corporation's privileges an absolute requirement, and prosecutors should consider the willingness of a corporation to waive the privileges when necessary to provide timely and complete information as only one factor in evaluating the corporation's cooperation.

Another factor to be weighed by the prosecutor is whether the corporation appears to be protecting its culpable employees and agents. Thus, while cases will differ depending on the circumstances, a corporation's promise of support to culpable employees and agents, either through the advancing of attorneys fees,[3] through retaining the employees without sanction for their misconduct, or through providing information to the employees about the government's investigation pursuant to a joint defense agreement, may be considered by the prosecutor in weighing the extent and value of a corporation's cooperation. By the same token, the prosecutor should be wary of attempts to shield corporate officers and employees from liability by a willingness of the corporation to plead guilty.

Finally, a corporation's offer of cooperation does not automatically entitle it to immunity from prosecution. A corporation should not be able to escape liability merely by offering up its directors, officers, employees, or agents as in lieu of its own prosecution. Thus, a corporation's willingness to cooperate is merely one relevant factor, one that needs to be considered in conjunction with the other factors, particularly those relating to the corporation's past history and the role of management in the wrongdoing.

VII. Charging a Corporation: Corporate Compliance Programs

A. *General principle:* Compliance programs are established by corporate management to prevent and to detect misconduct and to ensure that corporate activities are conducted in accordance with all applicable criminal and civil laws, regulations, and rules. The Department encourages such corporate self-policing, including voluntary disclosures to the government of any problems that a corporation discovers on its own. However, the existence of a compliance program is not sufficient, in and of itself, to justify not charging a corporation for criminal conduct undertaken by its officers, directors, employees, or agents. Indeed, the commission of such crimes in the face of a compliance program may suggest that the corporate management is not adequately enforcing its program. In addition, the nature of some crimes, *e.g.*, antitrust violations, may be such that national law enforcement policies mandate prosecutions of corporations notwithstanding the existence of a compliance program.

B. *Comment.* A corporate compliance program, even one specifically prohibiting the very conduct in question, does not absolve the corporation from criminal liability under the doctrine of *respondeat superior*. *See United States v. Basic Construction Co.*, 711 F.2d 570 (4th Cir. 1983) ("a corporation may be held criminally responsible for antitrust violations committed by its employees if they were acting within the scope of their authority, or apparent authority, and for the benefit of the corporation even if . . . such acts were against corporate policy or express instructions."). Thus, in *United States v. Hilton Hotels Corp.*, 467 F.2d 1000 (9th Cir. 1972), *cert. denied*, 409 U.S. 1125 (1973), the Ninth Circuit affirmed antitrust liability based upon a purchasing agent for a single hotel threatening a single supplier with a boycott unless it paid dues to a local marketing association, *even though the agent's actions were contrary to corporate policy and directly against express instructions from his superiors.* The court reasoned that Congress, in enacting the Sherman Antitrust Act, "intended to impose liability upon business entities for the acts of those to whom they choose to delegate the conduct of their affairs, thus stimulating a maximum effort by owners and managers to assure adherence by such agents to the requirements of the Act."[4] It concluded that "general policy statements" and even direct instructions from the agent's superiors were not sufficient;

[1] In addition, the Sentencing Guidelines reward voluntary disclosure and cooperation with a reduction in the corporation's offense level. *See* U.S.S.G. § 8C2.5(g).

[2] This waiver should ordinarily be limited to the factual internal investigation and any contemporaneous advice given to the corporation concerning the conduct at issue. Except in unusual circumstances, prosecutors should not seek a waiver with respect to communications and work product related to advice concerning the government's criminal investigation.

[3] Some states require corporations to pay the legal fees of officers under investigation prior to a formal determination of their guilt. Obviously, a corporation's compliance with government law should not be considered a failure to cooperate.

[4] Although this case and *Basic Construction* are both antitrust cases, their reasoning applies to other criminal violations. In the *Hilton* case, for instance, the Ninth Circuit noted that Sherman Act violations are commercial offenses "usually motivated by a desire to enhance profits," thus bringing the case within the normal rule that a "purpose to benefit the corporation is necessary to bring the agent's acts within the scope of his employment." 467 F.2d at 1006 & n.4. In addition, in *United States v. Automated Medical Laboratories*, 770 F.2d 399, 406 n.5 (4th Cir. 1985), the Fourth Circuit stated that *Basic Construction* states a generally applicable rule on corporate criminal liability despite the fact that it addresses violations of the antitrust rules."

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"Appellant could not gain exculpation by issuing general instructions without undertaking to enforce those instructions by means commensurate with the obvious risks." *See also United States v. Beusch*, 596 F.2d 871, 878 (9th Cir. 1979) ("[A] corporation may be liable for the acts of its employees done contrary to express instructions and policies, but . . . the existence of such instructions and policies may be considered in determining whether the employee in fact acted to benefit the corporation."); *United States v. American Radiator & Standard Sanitary Corp.*, 433 F.2d 174 (3rd Cir. 1970) (affirming conviction of corporation based upon its officer's participation in price-fixing scheme, despite corporation's defense that officer's conduct violated its "rigid anti-fraternization policy" against any socialization (and exchange of price information) with its competitors; "When the act of the agent is within the scope of his employment or his apparent authority, the corporation is held legally responsible for it, although what he did may be contrary to his actual instructions and may be unlawful.").

While the Department recognizes that no compliance program can ever prevent all criminal activity by a corporation's employees, the critical factors in evaluating any program are whether the program is adequately designed for maximum effectiveness in preventing and detecting wrongdoing by employees and whether corporate management is enforcing the program or is tacitly encouraging or pressuring employees to engage in misconduct to achieve business objectives. The Department has no formal guidelines for corporate compliance programs. The fundamental questions any prosecutor should ask are: "Is the corporation's compliance program well designed?" and "Does the corporation's compliance program work?" In answering these questions, the prosecutor should consider the comprehensiveness of the compliance program, the extent and pervasiveness of the criminal conduct, the number and level of the corporate employees involved, the seriousness, duration, and frequency of the misconduct, and any remedial actions taken by the corporation, including restitution, disciplinary action, and revisions to corporate compliance programs.[5] Prosecutors should also consider the promptness of any disclosure of wrongdoing to the government and the corporation's cooperation in the government's investigation.

Prosecutors should therefore attempt to determine whether a corporation's compliance program is merely a "paper program" or whether it was designed and implemented in an effective manner. In addition, prosecutors should determine whether the corporation has provided for a staff sufficient to audit, document, analyze, and utilize the results of the corporation's compliance efforts. In addition, prosecutors should determine whether the corporation's employees are adequately informed about the compliance program and are convinced of the corporation's commitment to it. This will enable the prosecutor to make an informed decision as to whether the corporation has adopted and implemented a truly effective compliance program that, when consistent with other federal law enforcement policies, may result in a decision to charge only the corporation's employees and agents.

Compliance programs should be designed to detect the particular types of misconduct most likely to occur in a particular corporation's line of business. Many corporations operate in complex regulatory environments outside the normal experience of criminal prosecutors. Accordingly, prosecutors should consult with relevant federal and state agencies with the expertise to evaluate the adequacy of a program's design and implementation. For instance, state and federal banking, insurance, and medical board, the Department of Defense, the Department of Health and Human Services, the Environmental Protection Agency, and the Securities and Exchange Commission have considerable experience with compliance programs and can be very helpful to a prosecutor in evaluating such programs. In addition, the Fraud Section of the Criminal Division, the Commercial Litigation Branch of the Civil Division, and the Environmental Crimes Section of the Environment and Natural Resources Division can assist U.S. Attorneys' Offices in finding the appropriate agency office and in providing copies of compliance programs that were developed in previous cases.

VIII. Charging the Corporation: Restitution and Remediation

A. *General Principle:* Although neither a corporation nor an individual target may avoid prosecution merely by paying a sum of money, a prosecutor may consider the corporation's willingness to make restitution and steps already taken to do so, as well as other remedial actions such as implementation an effective corporate compliance program, improving an existing one, and disciplining wrongdoers, in determining whether to charge the corporation.

B. *Comment:* In determining whether or not a corporation should be prosecuted, a prosecutor may consider whether meaningful remedial measures have been taken, including employee discipline and full restitution.[6] A corporation's response to misconduct says much about its willingness to ensure that such misconduct does not recur. Thus, corporation that fully recognize the seriousness of their misconduct and accept responsibility for it should be seen to be taking steps to implement the personnel, operational, and organizational changes necessary to establish an awareness among employees that criminal conduct will not be tolerated. Among the factors prosecutors should consider and weigh are whether the corporation appropriately disciplined the wrongdoers and disclosed information concerning their illegal conduct to the government.

Employee discipline is a difficult task for many corporations because of the human element involved and sometimes because of the seniority of the employees concerned. However, while corporations need to be fair to their employees, they must also be unequivocally committed, at all levels of the corporation, to the highest standards of legal and ethical behavior. Effective internal discipline can be a powerful deterrent against improper behavior by a corporation's employees. In evaluating a corporation's response to wrongdoing, prosecutors may evaluate the willingness of the corpo-

[5] For a detailed review of these and other factors concerning corporate compliance programs, see United States Sentencing Commission, Guidelines Manual, § 8A1.2, comment. (n.3(k)) (Nov. 1997). *See also* U.S.S.G. § 8C2.5(f).

[6] For example, the Antitrust Division's amnesty policy specifically requires that "[w]here possible, the corporation [make] restitution to injured parties. . . . "

ration to discipline culpable employees of all ranks and the adequacy of the discipline imposed. The prosecutor should satisfy himself or herself that the corporation's focus is on the integrity and credibility of its remedial and disciplinary measures rather than on the protection of the wrongdoers.

In addition to employee discipline, two other factors in evaluating a corporation's remedial efforts are restitution and reform. As with natural persons, the decision whether or not to prosecute should not depend upon the target's ability to pay restitution. A corporation's efforts to pay restitution even in advance of any court order is, however, evidence of its "acceptance of responsibility" and, consistent with the practices and policies of the appropriate Division of the Department entrusted with enforcing specific criminal laws, may be considered in determining whether to bring criminal charges. Similarly, although the inadequacy of a corporate compliance program is a factor to consider when deciding whether to charge a corporation, that corporation's quick recognition of the flaws in the program and its efforts to improve the program are also factors to consider.

IX. Charging the Corporation: Collateral Consequences

A. *General Principle:* Prosecutors may consider the collateral consequences of a corporate criminal conviction in determining whether to charge the corporation with a criminal offense.

B. *Comment:* One of the factors in determining whether to charge a natural person or a corporation is whether the likely punishment is appropriate given the nature and seriousness of the crime. In the corporate context, prosecutors may take into account the possible substantial consequences to a corporation's officers, directors, employees, and shareholders, many of whom may, depending on the size and nature (*e.g.*, publicly *vs.* closely held) of the corporation and their role in its operations, have played no role in the criminal conduct, have been completely unaware of it, or have been wholly unable to prevent it. Further, prosecutors should also be aware of non-penal sanctions that may accompany a criminal charges, such as potential suspension or debarment from eligibility for government contracts or federal funded programs such as health care. Whether or not such non-penal sanctions are appropriate or required in a particular case is the responsibility of the relevant agency, a decision that will be made based on the applicable statutes, regulations, and policies.

Virtually every conviction of a corporation, like virtually every conviction of an individual, will have an impact on innocent third parties, and the mere existence of such an effect is not sufficient to preclude prosecution of the corporation. Therefore, in evaluating the severity of collateral consequences, various factors already discussed, such as the pervasiveness of the criminal conduct and the adequacy of the corporation's compliance programs should also be considered in determining the weight to be given to this factor. For instance, the balance may tip in favor of prosecuting corporations in situations where the scope of the misconduct in a case is widespread and sustained within a corporate division (or spread throughout pockets of the corporate organization). In such cases, the possible unfairness of visiting punishment for the corporation's crimes upon shareholders may be of much less concern where those shareholders have substantially profited, even unknowingly, from widespread or pervasive criminal activity. Similarly, where the top layers of the corporation's management or the shareholders of a closely-held corporation were engaged in or aware of the wrongdoing and the conduct at issue was accepted as a way of doing business for an extended period, debarment may be deemed no collateral but a direct and entirely appropriate consequence of the corporation's wrongdoing.

The appropriateness of considering such collateral consequences and the weight to be given them may depend on the special policy concerns discussed in section III, *supra.*

X. Charging a Corporation: Non-Criminal Alternatives

A. *General Principle:* Although non-criminal alternatives to prosecution often exist, prosecutors may consider whether such sanctions would adequately deter, punish, and rehabilitate a corporation that has engaged in wrongful conduct. In evaluating the adequacy of non-criminal alternatives to prosecution, *e.g.*, civil or regulatory enforcement actions, the prosecutor may consider all relevant factors, including:

1. The sanctions available under the alternative means of disposition;
2. the likelihood that an effective sanction will be imposed; and
3. the effect on non-criminal disposition on Federal law enforcement interests.

B. *Comment.* The primary goals of criminal law are deterrence, punishment, and rehabilitation. Non-criminal sanctions may not be an appropriate response to an egregious violation, a pattern of wrongdoing, or a history of non-criminal sanctions without proper remediation. In other cases, however, these goals may be satisfied without the necessity of instituting criminal proceedings. In determining whether federal criminal charges are appropriate, the prosecutor should consider the same factors (modified appropriately for the regulatory context) considered when determining whether to leave prosecution of a natural person to another jurisdiction or to seek non-criminal alternatives to prosecution, *i.e.*, the strength of the regulatory authority's interest, the regulatory authority's ability and willingness to take effective enforcement action, the probable sanction if the regulatory authority's enforcement action is upheld, and the effect of a non-criminal disposition on Federal law enforcement interests. *See* USAM § § 9-27.240, 9-27.250.

XI. Charging a Corporation: Selecting Charges

A. *General Principle:* Once a prosecutor has decided to charge a corporation, the prosecutor should charge, or should recommend that the grand jury charge, the most serious offense that is consistent with the nature of the defendant's conduct and that is likely to result in a sustainable conviction.

B. *Comment:* Once the decision to charge is made, the same rules as govern charging natural persons apply. These rules require "a faithful and honest application of the Sentencing Guidelines" and a "individualized assessment of the extent to which particular charges fit the specific circumstances of the case, are consistent with the purposes of the Federal criminal code, and maximize the impact of Federal resources on crime." *See* USAM § 9-27.300. In making this determination, "it

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is appropriate that the attorney for the government consider, *inter alia*, such factors as the sentencing guideline range yielded by the charge, whether the penalty yielded by such sentencing range . . . is proportional to the seriousness of the defendant's conduct, and whether the charge achieves such purposes of the criminal law as punishment, protection of the public, specific and general deterrence, and rehabilitation." *See* Attorney General's Memorandum, dated October 12, 1993.

XII. Plea Agreements with Corporations

A. *General Principle:* In negotiating plea agreements with corporations, prosecutors should seek a plea to the most serious, readily provable offense charged. In addition, the terms of the plea agreement should contain appropriate provisions to ensure punishment, deterrence, rehabilitation, and compliance with the plea agreement in the corporate context. Although special circumstances may mandate a different conclusion, prosecutors generally should not agree to accept a corporate guilty plea in exchange for non-prosecution or dismissal of charges against individual officers and employees.

B. *Comment:* Prosecutors may enter into plea agreements with corporations for the same reasons and under the same constraints as apply to plea agreements with natural persons. *See* USAM § § 9-27.400-500. This means, *inter alia*, that the corporation should be required to plead to the most serious, readily provable offense charged. As is the case with individuals, the attorney making this determination should do so "on the basis of an individualized assessment of the extent to which particular charges fit the specific circumstances of the case, are consistent with the purposes of the federal criminal code, and maximize the impact of federal resources on crime. In making this determination, the attorney for the government consider, *inter alia*, such factors as the sentencing guideline range yielded by the charge, whether the penalty yielded by such sentencing range . . . is proportional to the seriousness of the defendant's conduct, and whether the charge achieves such purposes of the criminal law as punishment, protection of the public, specific and general deterrence, and rehabilitation." *See* Attorney General's Memorandum, dated October 12, 1993. In addition, any negotiated departures from the Sentencing Guidelines must be justifiable under the Guidelines and must be disclosed to the sentencing court. In addition, corporations should be made to realize that pleading guilty to criminal charges constitutes an admission of *guilt* and not merely a resolution of an inconvenient distraction from its business. Thus, as with natural persons, pleas should be structured so that the corporation may not later "proclaim lack of culpability or even complete innocence." *See* USAM § § 9-27.420(b)(4), 9-27.440, 9-27.500. Thus, for instance, there should be placed upon the record a sufficient factual basis for the plea to prevent later corporate assertions of innocence.

A corporate plea agreement should also contain certain provisions that recognize the nature of the corporate "person" and ensure that the principles of punishment, deterrence, and rehabilitation are met. In the corporate context, punishment and deterrence are generally accomplished by substantial fines, mandatory restitution, and institution of appropriate compliance measures, including, if necessary, continued judicial oversight or the use of special masters. *See* U.S.S.G. § § 8B1.1, 8C2.1, *et seq.* In addition, where the corporation is a government contractor, permanent or temporary debarment may be appropriate. Where the corporation was engaged in government contracting fraud, a prosecutor may not negotiate away an agency's right to debar or to list the corporate defendant.

In negotiating a plea agreement, prosecutors should also consider the deterrent value of prosecutions of individual within the corporation. Therefore, one factor that a prosecutor may consider in determining whether to enter into a plea agreement is whether the corporation is seeking immunity for its employees and officers or whether the corporation is willing to cooperate in the investigation of culpable individuals. Generally, prosecutors should rarely negotiate away individual criminal liability in a corporate plea.

Rehabilitation, of course, requires that the corporation undertake to be law-abiding in the future. It is, therefore, appropriate to require the corporation, as a condition of probation, to implement a compliance program or to reform an existing one. As discussed above, prosecutors may consult with the appropriate state and federal agencies and components of the Justice Department to ensure that a proposed compliance program is adequate and meets industry standards and best practices. *See* section VII, *supra*.

In plea agreements in which the corporation agrees to cooperate, the prosecutor should ensure that the cooperation is complete and truthful. To do so, the prosecutor may request that the corporation waive the attorney-client and work product privileges, make employees and agents available for debriefing, disclose the results of its internal investigation, file appropriate certified financial statements, agree to government or third-party audits, and take whatever other steps are necessary to ensure that the full scope of the corporate wrongdoing is disclosed and that the responsible culprits are identified and, if appropriate, prosecuted. *See generally* section VIII, *supra*.

Barbara Pederson is speaking today as a representative of the chemical industry. She is employed by DuPont as an advisor on environmental regulatory issues, both in regulatory development and implementation. She has worked for DuPont for 21 years in a variety of roles including engineering design, construction, manufacturing, and consulting. She holds a B.S. Civil Engineering from Rice University and M.S. Civil Engineering from the University of Oklahoma.

Environmental Manager Responsibilities
You Bet Your Life

In a manufacturing setting, compliance with safety, health, and environmental regulations is every employee's responsibility as a condition of employment. However, distinct roles and responsibilities emerge at every level and position in a company, and accountability for compliance may be defined or assumed through various mechanisms, such as organizational charts, environmental systems, job descriptions, operating procedures, or compliance plans. Each company and each manufacturing site may have a different structure, but the ultimate goal is to achieve compliance, and to operate in a manner that is safe for the employees, the community, and the environment.

This presentation will address some key aspects of an environmental manager's role, and how that role is related to other leaders' responsibilities at a manufacturing site. Is this clarification of roles essential to understanding a company's approach to environmental compliance? *You bet your life* it is!

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- Interviewing Skills (speech), May 2000, EPA Region VI RCRA Workshop.
- Depositions: A Practical Guide for Investigators (speech), May 2000, EPA Region VI RCRA Workshop.
- Introduction to the Law of Hazardous Waste Management (speech), June 1999, TNRCC Litigation Division Training Program.
- Selected Topics - Ethical Issues in Litigation (speech), January 2000, TNRCC Litigation Division Training Program.

Professional Activities

College of the State Bar of Texas, Member since 1998

Environmental and Natural Resources Section, Law School Committee

ENFORCEMENT DO'S AND DON'T'S:

Keys to Understanding and Navigating the TNRCC Enforcement Process

by Nathan Block[1]

Outline:

I. Communication
   - A. Help the TNRCC Understand Your Client's Position
   - B. Honesty
   - C. Going Up the Chain of Command
   - D. Contacts with Agency Staff Once Litigation is Initiated

II. Enforcement Process
   - A. NOV - Timely Response and Penalty Deferral
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IV. SEPs

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   - B. Enviro Mentor
   - C. Compliance Commitment Partnership (C2)

I. Communication

A. Help the TNRCC Understand Your Client's Position

Nothing is more important to fair and expeditious resolution of enforcement actions than open, honest and clear communication. Since the enforcement process is an "adversarial" process it is often difficult for some attorneys and many in the regulated community to be inclined to have open dialogue with agency staff. There is often a great deal of anxiety and fear associated with

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[1] This paper reflects the opinions of its author and does not necessarily reflect the opinions of the TNRCC, its Executive Director or its commissioners.

the process and that trepidation can lead to a breakdown in communication. Despite this fear, open and effective communication with staff is never more important than when one is under enforcement.

Some examples of why communication is important:

(1) Incorrect citations: It is not uncommon for there to be misunderstandings of the facts or circumstances related to an investigation, a penalty calculation or a recommended remedial ordering provision. A common example is a citation for failing to keep required records. Sometimes it is the case that the facility was keeping the records but that someone had taken them home to work on them and they simply were not available at the facility on the day of the inspection. If that information is communicated to staff early in the enforcement process, preferably no later than in response to the notice of violation (NOV), we can make appropriate adjustments.

(2) Avoiding or reducing penalties: Communicating with the agency can make the inevitable much less painful. For example, if a company forgets to make annual certifications at several facilities, once the mistake is discovered, if the company notifies the TNRCC, the impact will be greatly reduced. If the company self discloses all of the violations it will likely receive a substantial reduction in the penalty for its good faith effort to comply and will be able to deal with all of the violations in one order. If the company fails to disclose the violations, each time a violation is discovered by an investigation, they will likely each result in a separate enforcement action. Additionally, each enforcement action will count toward an enhancement in the penalty, based on culpability, to each successive enforcement action.

B. Honesty

Attorneys realize their duty to be honest in communications. However, some members of the regulated community need to reminded of this requirement from time to time. Unfortunately, it is not uncommon for regulated entities to submit incomplete, contradictory or even falsified information. Aside from subjecting the respondent to potential criminal liability or additional civil penalties, a lack of candor in communications with agency staff creates distrust between the respondent and the agency. With the vast majority of enforcement actions being resolved by Agreed Order, it is impossible to overstate the need for honesty and credibility on both sides of an enforcement action.

C. Going Up the Chain of Command

Going up the chain of command can be effective if used judiciously. The practice is most likely to be helpful when, on behalf of a client, you must advocate for a change in or exception to agency policy. Typically, the staff attorneys do not have the authority to vary widely from agency policy and are not likely to advocate for an exception unless there is a compelling reason to do so. If faced with the extraordinary situation in which you must go up the chain of command, it is recommended that you first notify the staff attorney of your intentions. It can be seriously damaging to a respondent's credibility and ability to work effectively with agency staff attorneys if the respondent frequently seeks to negotiate with upper management rather than with the staff attorney.

D. Contacts with Agency Staff Once Enforcement is Initiated

Tex. Disciplinary R. Prof. Conduct 4.02 (Non-Client Relationships) generally prohibits an attorney from directly contacting an opposing party who is represented by counsel without prior consent of the other attorney or some legal authorization to do so. In the context of government enforcement action this issue can be problematic. As a general rule, TNRCC staff is directed to be as responsive as possible to all requests for information from the public. However, once an enforcement case has been referred to the Litigation Division, some, but not all, of the agency personnel who may be involved in the case are considered to be "represented by counsel" such that direct contact by a Respondent's attorney is inappropriate. Applicable guidance is found in Comment 4 of rule 4.02:

> In the case of an organization or entity of government, this Rule prohibits communications by a lawyer for one party concerning the subject of the representation with persons having a managerial responsibility on behalf of the organization that relates to the subject of the representation and with those persons presently employed by such organization or entity whose act or omission may make the organization or entity vicariously liable for the matter at issue, without the consent of the lawyer for the organization or entity of government involved. This Rule is based on the presumption that such persons are so closely identified with the interests of the organization or entity of government that its lawyers will represent them as well. If, however, such an agent or employee is represented in the matter by his or her own counsel that presumption is inapplicable. In such cases, the consent by that counsel to communicate will be sufficient for purposes of this Rule. Compare Rule 3.04(f). Moreover, this Rule does not prohibit a lawyer from contacting a former employee of a represented organization or entity of a government, **nor from contacting a person presently employed by such an organization or entity whose conduct is not a matter at issue but who might possess knowledge concerning the matter at issue.** (Emphasis added)

The real issue then becomes who is a person "presently employed by such organization or entity whose act or omission may make the organization or entity vicariously liable for the matter at issue"? While the comment does not directly apply to the agency enforcement context, the principle is applicable. Essentially, any member of the agency staff directly involved in and enforcement action is a person who should not be contacted regarding the subject matter of the enforcement action without prior approval of the staff attorney. This rule extends to the investigators and enforcement coordinators involved and may also include technical specialists, members of management and many others. Since virtually any agency staffer could be a person whose act or omission may make the organization liable in the matter at issue, it is always advisable to contact the staff attorney to obtain permission before contacting any agency employee about a matter that is the subject of an enforcement action.

Not only is contact by opposing counsel with a represented party a potential problem, contacts between the parties themselves without prior approval of counsel can also be problematic. Texas Professional Ethics Committee Opinion No. 339 determined that counsel must use their best efforts to prevent clients from communicating with the other party without consent of opposing counsel. This requirement can be a bit cumbersome when you consider how many aspects of any given business can be touched by TNRCC regulation. Since a business can have air issues which are completely unrelated to its waste issues, the client is likely safe in contacting the agency, without prior approval of counsel, so long as the contact is not regarding the subject matter of an ongoing enforcement action.

II. Enforcement Process

The formal enforcement process begins with a notice of violation (NOV) based upon the findings of an inspection or a review of records. A chart outlining the basic steps in the enforcement process is included as Attachment 1. TNRCC regulatory guidance document RG 344 "TNRCC Has Inspected Your Business: What Does This Mean to You?" is included at Attachment 2. RG 344 is provided to all businesses during inspections to explain the enforcement process.

A. NOV - Timely Response and Penalty Deferral

A timely response to the notice of violation is important. Depending on the type and severity of the violation most NOVs allow for 14 days to correct a violation. With some less severe violations, if they are corrected within the 14 days allotted, no additional enforcement actions will be pursued. If the violations are not corrected, the agency will provide the Respondent with a Draft Agreed Order. If the Respondent chooses to settle at this time, a deferral, contingent upon timely completion of all of the ordering provisions, may be offered as an inducement to quick settlement. The decision as to wether or not to offer a deferral is may dependent upon the culpability and compliance history of the respondent. The deferral is not offered in situations where the violation is particularly serious or when the respondent has prior

findings orders for serious non-compliance.

B. NOE

A notice of enforcement (NOE) is an alternative to the NOV for cases in which the agency finds it necessary to refer a respondent directly to the enforcement process without attempting to first resolve the violations or where the respondent failed to respond to an NOV. The direct referral to enforcement is usually reserved for serious violations such as actual discharges of hazardous wastes. The NOE serves as notice to the respondent who did not receive an NOV. If the case is serious enough to result in a direct NOE there will likely not be a penalty deferral offered.

C. RIOs and Settlement with Enforcement Division

An enforcement case can be initiated at one of the regional offices or by the central office staff. Many cases are initiated and processed entirely by the regional offices, still others are initiated by the regional offices and then referred to the central office Enforcement Division. Cases which are originated at and processed by the regional offices are known as regionally initiated orders (RIOs). Each of the regional offices has at least one enforcement coordinator to process cases in formal enforcement. The agency has established criteria for determining which track any particular case will follow.

D. EDPR

If a case cannot be settled through the RIO process or by the Enforcement Division, the case will be referred to the Litigation Division for the preparation of an Executive Director's Preliminary Report (EDPR)[2]which initiates the hearing process pursuant to 30 TEX. ADMIN. CODE ch. 70, subchapter C. After a case is referred to the Litigation Division, the staff attorney has 60 days in which to either settle the case or file and EDPR. An answer to the EDPR must be filed within 20 days of service to protect the right to a hearing on the violations.[3] If no answer is received the Commission may issue a default order requiring payment of a penalty and corrective actions.[4]

E. Referral to SOAH

If the EDPR is answered, the case will be referred to the State Office of Administrative

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[2]30 TEX. ADMIN CODE § 70.101.

[3]30 TEX. ADMIN CODE § 70.105.

[4] 30 TEX. ADMIN CODE § 70.106.

Hearings (SOAH) no earlier than 30 days after the answer is filed with the Chief Clerk of the TNRCC.[5] The rules do provide the Commissioners with the power to hear a contested enforcement case without referral to SOAH, however, that process is very rarely invoked and the vast majority of hearings are held by SOAH.[6]

III. SOAH Process

Once a case is referred to SOAH both the TNRCC and SOAH rules apply.[7] Additionally, TNRCC and SOAH have an agreement designed to expedite the processing of enforcement cases. It is stated policy that enforcement cases will be set for evidentiary hearing within 30 days of the preliminary hearing. This policy is difficult to rigidly apply particularly when the parties have a genuine need for extensive discovery. However, even if the hearing cannot realistically be held within 30 days of the preliminary hearing, the schedule of the vast majority of cases is very expeditious. The short times frames allowed in the process create unique timing issues regarding discovery and the filing of dispositive motions which must be carefully considered.

A. Procedural Schedules for Enforcement Hearings

Typically, a preliminary hearing is scheduled within four to six weeks from the time the TNRCC refers the case to SOAH. SOAH is now using a "docket call" style preliminary hearing. The preliminary hearings are held every other Thursday. The docket call style preliminary hearing is designed primarily to enter the jurisdictional documents into the record, allow SOAH to take jurisdiction over the case, and to set a schedule for discovery and the evidentiary hearing. As such, SOAH will, in the appropriate instances, allow appearances via telephone upon motion of a party.[8] It is not uncommon that the preliminary hearing will provide the first opportunity for the respondent and the staff attorneys to meet face to face and can provide a good opportunity for settlement negotiation. However, if the parties have determined that such a meeting would not be productive and can agree on a procedural schedule with a proposed date for the hearing, SOAH will allow a waiver of appearance at the preliminary on agreed motion of the parties.

As mentioned above, the TNRCC and SOAH intend that enforcement hearings be held within 30 days of the preliminary hearing. When 30 days is not sufficient to complete discovery and adequately prepare for a hearing, the parties should attempt to negotiate a justifiable discovery schedule which can be defended as being as expeditious as possible under the circumstances.

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[5] 30 TEX. ADMIN CODE § 70.109.

[6] 30 TEX. ADMIN CODE § 70.108.

[7] 1 TEX. ADMIN CODE ch. 155.

[8] 1 TEX. ADMIN CODE § 155.45.

B. Discovery and Dispositive Motions

Discovery in TNRCC enforcement actions is managed pursuant to the Texas Rules of Civil Procedure.[9] Because of the expedited hearing schedule, discovery is typically conducted pursuant to Level III discovery control plans. Assuming that written discovery is necessary and that depositions will not be taken, a typical discovery schedule would allow for two weeks to promulgate discovery requests and two weeks to answer discovery with the evidentiary hearing scheduled two weeks after the close of written discovery. This kind of scheduling can create conflicts with TNRCC or SOAH rules outside of the discovery context. For example, the rules require that motions for summary disposition must be filed at least 21 days before the date of the evidentiary hearing.[10] If the hearing is on a six week schedule, the scheduling conflict with this rule would require that the motion be made before discovery is completed. These issues should be considered when proposing a procedural schedule for a case. If the parties reasonably anticipate making dispositive motions, time for those motions should be built into the schedule.

IV. SEPs

The Supplemental Environmental Project (SEP) program provides a mechanism to direct penalties for environmental violations toward environmentally beneficial projects in the community where the violation occurred, rather than being paid into the Texas General Revenue Fund. The Commission strongly favors the use of SEPs and encourages all respondents to consider their use. Also, the Commission urges the use of SEPs for local governments who find themselves in the enforcement process because an SEP is an excellent way to invest those penalty dollars in the enhancement of the environment in the community where the violation occurred. For respondents who may not have the resources or otherwise care to create their own project, the TNRCC maintains agreements with third parties which will accept the SEP dollars to fund on-going environmental projects.

A basic summary of the SEP program is included as Attachment No. 3. The Litigation Division encourages all respondents to consider using SEPs and to not wait until the end of the enforcement process to propose an SEP. The staff attorneys in the Litigation Division can provide additional information and can assist in generating ideas for SEP proposals.

The SEP Policy is currently undergoing some revisions to make it more efficient and user friendly. The revised SEP policy will be available on the TNRCC web site in late July or early August of 2000. Additional information can be obtained on the TNRCC web site at http://www.tnrcc.state.tx.us or by contacting Toni Toliver, SEP Coordinator, Litigation Division

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[9] 30 TEX. ADMIN CODE § 80.151.

[10] 30 TEX. ADMIN CODE § 80.137(a).

at (512) 239-6122.

V. Compliance Assistance

A. Small Businesses

The Small Business and Environmental Assistance Division provides many important services. The primary focus of the division's efforts is to promote voluntary compliance and to assist small businesses in achieving compliance. The Division provides, amongst other services, a site visit program and a confidential assistance hotline.

1. Site Visit Program: The TNRCC offers free, confidential on-site environmental compliance assessments (site visits) to independently owned and operated businesses with no more than 100 employees. The site visits are conducted by an environmental consultant under contract with the TNRCC. The consultant will generate a report that outlines compliance will provide recommendations on how to achieve full compliance

2. Hot Line: Assistance is provided to small business through a hot line, which is staffed Monday through Friday from 8:00 a.m. - 5:00 p.m. by program specialists who can provide answers to environmental questions about air, water, and waste. The Hot Line provides confidential help with regulatory compliance and can help small businesses gain a better understanding of the enforcement process. The Hot Line number is 1-800-447-2827.

B. Enviro Mentor

The Small Business Assistance Program has developed a volunteer mentoring program to assist small businesses in complying with environmental regulations. The Texas Enviro Mentor Program is designed to recruit qualified volunteer professionals that provide limited, free, and confidential assistance to small businesses in Texas.

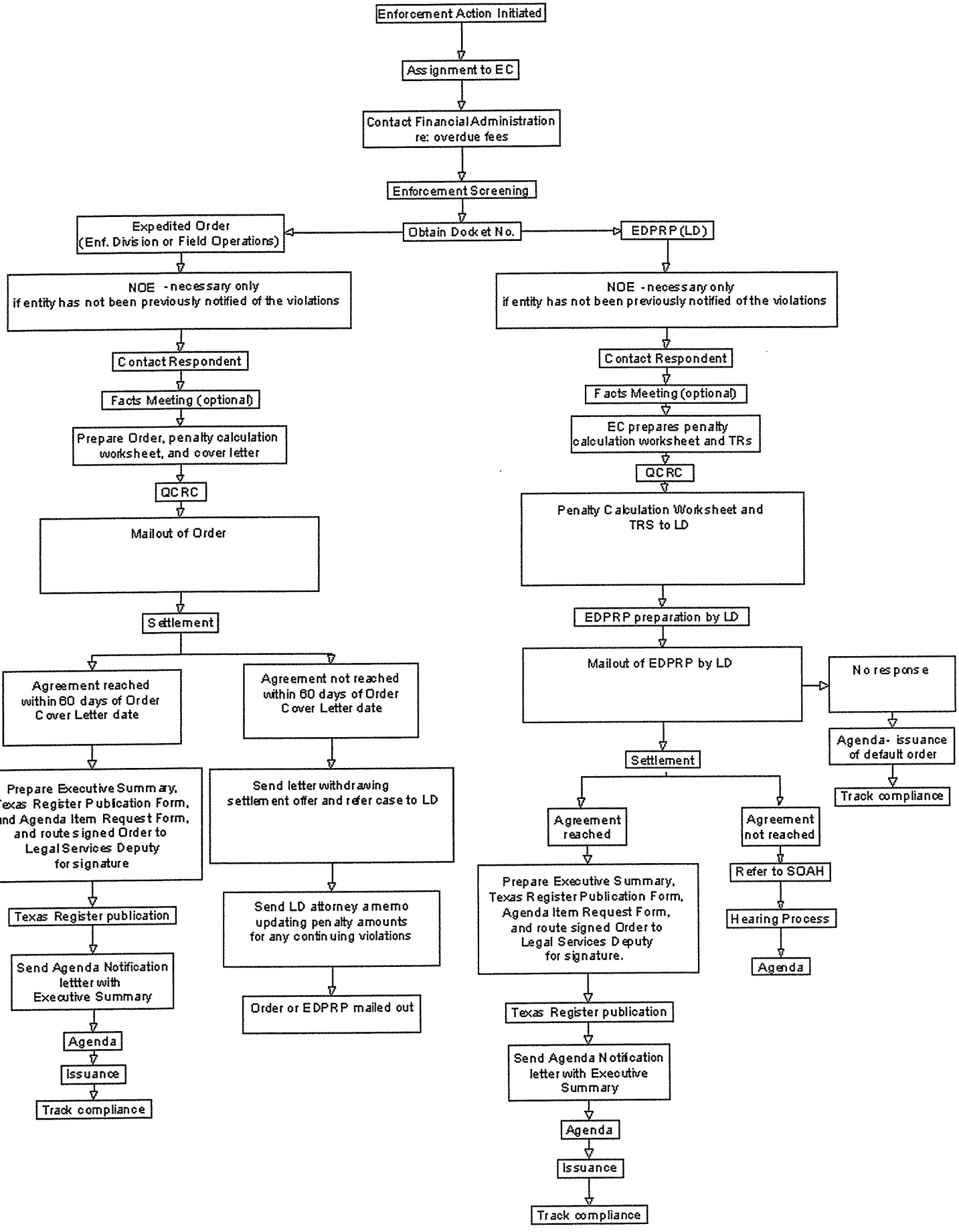
C. Compliance Commitment Partnership (C2)

Small businesses that elect to participate in the TNRCC's Small Business Site Visit Program may earn a one-year exemption from routine TNRCC inspections by correcting all compliance deficiencies identified during a site visit. Businesses that fulfill the C2 Partnership requirements receive a certificate of recognition from the TNRCC that entitles the business to a one-year exemption from routine scheduled inspections. It should be noted that the program only applies to routinely scheduled inspections. The program will not exempt a company from inspections related to complaints received by the agency or in cases of imminent threat or danger to human health and the environment. To be eligible to participate a company must meet the following criteria:

1. Employ no more than 100 total employees at all sites.
2. Be independently owned and operated.
3. Participate in a site visit.
4. Work with the TNRCC from the date of the site visit to correct all compliance deficiencies in accordance with mutually agreed upon due dates. The applicant must also provide the consultant and the TNRCC written confirmation that deficiencies have been corrected including a detailed list of specific actions.

Additional information about all of the Small Business and Environmental Assistance Division's programs can be obtained at the TNRCC's web site.

Attachment 1


Enforcement Action Initiated
Assignment to EC
Contact Financial Administration re: overdue fees
Enforcement Screening
Obtain Docket No.
Expedited Order (Enf. Division or Field Operations)
EDPRP (LD)
NOE - necessary only if entity has not been previously notified of the violations
NOE - necessary only if entity has not been previously notified of the violations
Contact Respondent
Facts Meeting (optional)
Prepare Order, penalty calculation worksheet, and cover letter
QCRC
Mailout of Order
Settlement
Agreement reached within 60 days of Order Cover Letter date
Agreement not reached within 60 days of Order Cover Letter date
Prepare Executive Summary, Texas Register Publication Form, and Agenda Item Request Form, and route signed Order to Legal Services Deputy for signature
Send letter withdrawing settlement offer and refer case to LD
Texas Register publication
Send LD attorney a memo updating penalty amounts for any continuing violations
Send Agenda Notification letter with Executive Summary
Order or EDPRP mailed out
Agenda
Issuance
Track compliance
Contact Respondent
Facts Meeting (optional)
EC prepares penalty calculation worksheet and TRs
QCRC
Penalty Calculation Worksheet and TRS to LD
EDPRP preparation by LD
Mailout of EDPRP by LD
No response
Agenda- issuance of default order
Track compliance
Settlement
Agreement reached
Agreement not reached
Prepare Executive Summary, Texas Register Publication Form, Agenda Item Request Form, and route signed Order to Legal Services Deputy for signature.
Refer to SOAH
Hearing Process
Agenda
Texas Register publication
Send Agenda Notification letter with Executive Summary
Agenda
Issuance
Track compliance

Attachment 2

ENFORCEMENT

The TNRCC Has Inspected Your Business

▼ ▼ ▼ ▼ ▼

What Does This Mean to You?



TEXAS NATURAL RESOURCE
CONSERVATION COMMISSION

RG-344 (Rev. 9/99)

The TNRCC Has Inspected Your Business.

What Does This Mean to You?

An inspector has just finished inspecting your place of business for the Texas Natural Resource Conservation Commission (TNRCC). You probably have a few questions about what this inspection means—and about what you can expect to happen in the next few days, weeks, or months. This booklet answers many of the questions you may have.

In this booklet, questions are written as you might ask them. In the answers to these questions, "we" or "us" means the TNRCC.

Why was my facility inspected?

Under the law, the TNRCC must adopt and enforce rules that protect the people and environment of Texas. We have designed these rules to reduce and prevent pollution and to ensure that public health is protected.

Part of our job is to find out whether the people we regulate are complying with these rules. One way we do this is to inspect facilities on a regular schedule. We also may inspect a facility in response to a specific complaint or a spill.

We require our inspectors to go over their findings with you in an exit interview. You will find out in this interview whether the inspector found any violations. If the inspector finds no problems, you will also receive a letter called a "general compliance letter" within several weeks.

The inspector found a violation. What happens next?

The law requires us to respond to all the violations our inspectors find. This response is called our "enforcement process" and is intended to ensure that your facility complies with the rules.

In this case, the inspection is the first of several steps in the enforcement process. The second step has also already occurred—that is, the inspector has told you of one or more alleged violations.

If your facility does not or cannot comply with the rules within 14 calendar days, the next step will begin. In some cases, we must take this step even if you have complied. In this step, we will send you a letter called a "notice of violation," or NOV. The NOV is a formal statement of the specific violations the inspector found. In the NOV, either we will ask you to send us a written schedule that shows when and how you plan to correct each of these alleged violations or we will give you a schedule you must follow.



For all but the least serious violations, we also must begin a step called "formal enforcement" immediately—even if you are able to correct these violations within 14 calendar days. For more information about this step, see "What if my case goes to 'formal enforcement?'" on page 5.

What if I don't agree with the inspector's findings?

Ask to meet with the inspector as soon as possible. See "Put It in Writing!" in the box inside the back cover. **Don't** put it off.

Use this meeting to discuss the inspector's findings and present your point of view.

If I receive an NOV, what should I do?

You must respond to the NOV in writing. You may also call us or meet with us, but you **must** respond in writing by the **deadline given in the letter.** Whatever you do, **don't** ignore the NOV, and **don't** wait for us to call you first. If you're not sure what to do, call one of the numbers in "Confused? Find Help Here:" at the top of the next page.

Call Us!

As well as listing each violation, the NOV will tell you the name and phone number of our contact person for your case. You may call this contact person as soon as you get the NOV. Discuss your concerns. Ask any questions you may have.

Meet with Us!

If you wish, ask to meet with our contact person to discuss these violations. Often, having a face-to-face meeting can help.

Write Us a Letter!

In this required letter, let us know that you have received our letter. Respond to each point the NOV raised. And if you have already corrected the violations, tell us.

What happens if I don't respond?

If you don't respond to the NOV by the deadline or to any other letter we send you about an enforcement action, you could give up some of your rights under the law. For one thing, the TNRCC commissioners might eventually have to issue a "default order." The default order could require you to pay a fine—even if you have corrected the violations without telling us.

Confused? Find Help Here:

For answers to questions about:	Call this TNRCC office:	At:
The enforcement process, hearings, and your legal rights	Office of Public Interest Counsel	512/239-6363
General information, technical assistance, or guidance	Small Business and Environmental Assistance Division *or* your TNRCC regional office	1-800-447-2827 See your NOV

What if I don't understand the letter or what I'm required to do?

Ask to meet with the contact person identified in the letter to clear up anything you don't understand. Call us at the phone number listed in the letter, or call one of the numbers listed in "Confused? Find Help Here:" above. Whatever you do, be sure to protect your rights by answering the letter **in writing** by the deadline given in the letter.

What if my case goes to "formal enforcement"?

"Formal enforcement" is the process we use to seek an order and a fine.[1] This process may even include a hearing, if you

[1] These fines are called "administrative penalties." For the sake of simplicity, we have called them "fines" in this booklet.

request it. If your case does go to formal enforcement, you may want to consider consulting with an attorney.

Some violations are directly referred to formal enforcement—even if the violations are corrected. Still, if you correct the violations before formal enforcement is completed, you might face a smaller fine.

You can still call or meet with us *at any time* during this process.

How will I know whether formal enforcement has begun?

When formal enforcement begins, we will send you a letter called a "notice of enforcement" (NOE). The NOE tells you clearly that we are beginning formal enforcement. **Don't** ignore this notice—respond to it **right away.** See "Put It in Writing" inside the back cover for more information about contacting us.

What happens during formal enforcement?

Formal enforcement could result in any one of three kinds of commission orders:

- You may work out an agreement with us to correct the violations and probably pay a fine. The TNRCC commissioners approve this agreement by issuing an "agreed order."
- You may request a formal hearing before a judge from the State Office of Administrative Hearings (SOAH). Following this hearing, the TNRCC commissioners will issue an administrative order. This order could force you to pay a fine and will instruct you to correct the violations.
- If you stop communicating with us, the TNRCC commissioners will eventually issue a default order. In

other words, because you did not respond, you have given up your chance to state your case and must pay a fine and correct all violations.

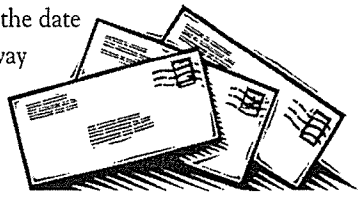
Once you have complied with the order issued, the enforcement process ends.

How do I reach an agreement with the TNRCC?

We will send you a letter along with a settlement offer. We call this offer a "draft agreed order." This order will give you the following information:

- how much you must pay in fines;
- what you must do to correct the violations;
- a time frame to correct the violations, also known as the "ordering provisions."

If you agree to the terms of this order, just sign it without making any changes and return it along with payment of the fine within 60 calendar days of the date of the cover letter. This is the way to settle your case without an attorney or a formal hearing.



If you disagree with the terms of this draft agreed order, then you can and should speak with the contact person named in the cover letter. Ask to set up a meeting to discuss your questions.

How much could my fine be?

You can find the guidelines the commissioners use to set the amounts of these fines in TNRCC publication RG-253, *Penalty Policy*. To get a free copy of RG-253, fax your order to 512/239-4488, call TNRCC Publications at 512/239-0028, or go to "Publications" on our Web site:

Put Part of Your Fine to Work at Home!

Instead of paying part of your fine, you might be able to do something good for the environment in your community!

This option is called a "supplemental environmental project," or SEP. You may be able to use up to half of your fine to do or support a SEP. Even small businesses can participate by contributing to a fund that will be used to pay for a SEP.

Doing a SEP does not reduce your out-of-pocket expense, but does give you some choice about where the money goes. To find out about eligibility for this program, call the SEP coordinator at 512/239-3400.

What if I can't afford to pay a fine?

If you don't think you can afford the proposed fine, you may ask our staff to consider one or more of three possible solutions—a reduced fine, a payment plan, or a deferred fine. But bear in mind that the TNRCC commissioners make the final decision on these fines. They may approve, deny, or adjust any fines you work out with our staff.

A Reduced Fine

If you can't pay all or part of the proposed fine, then you may claim "financial inability to pay." To find out how to make this claim, contact the person named in the letter with the draft agreed order **right away.** We will send you a list of the documents that you must send us before we can evaluate your claim.

If our accountants agree that you cannot pay the proposed fine, then we will change the draft agreed order to make the fine reasonable according to your documents. You still must correct the violations in the time frame given in the order—*and* let us know when you have made these corrections. If you do not comply with the order, then you must pay the remaining portion of the original fine.

A Payment Plan

If you can't pay the assessed fine in a single payment, you may ask us to revise the order to arrange for 12 monthly installments.

A Deferred Fine

When we defer a fine, we agree to wait until a date stated in the order to collect the fine from you. On that date, if you have met certain requirements stated in your order, we will waive part or all of the fine.

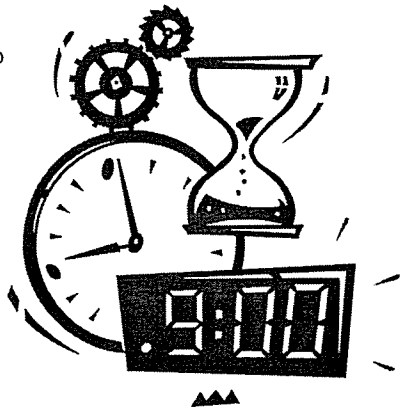
We can offer deferrals in some—but not all—cases. To find out whether you qualify for a deferred fine, contact the person named in the letter with the draft agreed order **right away.**

If we can't reach an agreement, can I get a hearing?

You have 60 calendar days from the date on the draft agreed order's cover letter to work out an agreement with us. If we can't agree by then, we will assign your case to an attorney in our Litigation Division. This attorney will draft a document called an "executive director's preliminary report and petition" (EDPRP). This document is your signal that we are preparing for a hearing—*if* you request one—or that we are going to ask the commissioners to issue an order against you.

We will send you the EDPRP with a cover letter. This cover letter will advise you of your legal rights. When you

receive the EDPRP, you have 20 calendar days to ask for a hearing. Your request **must** be in writing—for example, "I request a hearing." If you don't ask for this hearing within this 20-day period, the TNRCC commissioners may issue a default order against you.



This hearing will be held before a judge from SOAH and is formal—much like a civil trial. Each side will present its case, may call witnesses, and may question the other side's witnesses.

If I ask for a hearing, do I lose my chance to settle?

No. Even if you ask for a hearing, you can still discuss your case with us over the phone or in a meeting. We will keep trying to work out a settlement. If you and our staff still cannot settle your case, we will ask SOAH to schedule the hearing you requested.

What happens at the end of the hearing?

After the hearing, the presiding judge makes a recommendation to the TNRCC commissioners about an enforcement order. The TNRCC commissioners consider this recommendation and then make the final decision whether to issue, deny, or modify an enforcement order.

Bottom line: How do I avoid any unpleasant surprises?

Stay in touch with us until your case is settled. We know that enforcement is not easy to endure, but we do our best to reach decisions that are well-informed and fair. Whether we are able to do that depends to a large extent on whether you tell us when and how you correct the violations.

And remember—our Small Business and Environmental Assistance Division (SBEA) or your regional office can even give you technical assistance if you need it to bring your facility into compliance with the rules. Call either the SBEA at 1-800-447-2827 or your regional office to find out more about the free help we can offer. You don't need to be under enforcement to take advantage of this assistance.

Put It in Writing!

You can—and should—call us to get a faster response, but a phone call won't protect your legal rights.

Whenever you call us about your enforcement case, follow your phone call with a letter. In your letter, cover the main points of your phone call—for example:

> This letter confirms that in my phone call of *[time and date]* we agreed to meet on *[date]* to discuss the results of your inspection of my facility. I disagree with these points in the inspection report: *[list them]*

A follow-up letter is one simple way to confirm that you called us—and for both of us to be sure we understood what was said.

Confused? Find Help Here:

For answers to questions about:	Call this TNRCC office:	At:
The enforcement process, hearings, and your legal rights	Office of Public Interest Counsel	512/239-6363
General information, technical assistance, or guidance	Small Business and Environmental Assistance Division or your TNRCC regional office	1-800-447-2827 See your NOV

Disclaimer

We intend for this booklet to give you an overview of the TNRCC's enforcement process. Because every case is unique, we could not cover all the details that might apply to your case here. Read this booklet for a basic understanding of your rights and responsibilities in this process, but please understand that there are sometimes exceptions to these rules.

The TNRCC is an equal opportunity/affirmative action employer. The agency does not allow discrimination on the basis of race, color, religion, national origin, sex, disability, age, sexual orientation or veteran status. In compliance with the Americans with Disabilities Act, this document may be requested in alternate formats by contacting the TNRCC at (512)239-0028, Fax 239-4488, or 1-800-RELAY-TX (TDD), or by writing P.O. Box 13087, Austin, TX 78711-3087.

printed on recycled paper using soy-based ink

Attachment 3

Index
Agency
Search
Home

See Also:

SEP Main

SEP Law and Policy

SEP Proposal Guideline for Respondents

SEP Proposal Guidelines for Independent Projects

Ongoing Independent SEPs

SEP Statistics

Supplemental Information Sheet

What is a Supplemental Environmental Project?

A Supplemental Environmental Project (SEP) is a project that prevents pollution, reduces the amount of pollution reaching the environment, enhances the quality of the environment, or contributes to public awareness of environmental matters. A respondent in an enforcement action may negotiate an agreement to perform an SEP in return for a reduction in the administrative penalty. If the director of the TNRCC's Litigation Division approves the inclusion of a particular SEP in an agreed order, it will be presented to the commission for consideration. Potential SEPs include such diverse projects as cleanups of abandoned illegal dump sites; community household hazardous waste collections; and on-site pollution prevention projects that exceed regulatory requirements.

What is the commission's approach to SEPs?

The executive director issued a policy statement on October 26, 1995 on the discretionary use of SEPs in agreed orders. Among the key featureso f the policy are the following:

- 50 percent is generally the maximum approvable penalty reduction;
- a 1:1 ratio of the cost of the SEP to the amount of the penalty reduction is possible for projects that directly remediate environmental contamination or reduce pollutants entering the environment; projects that clearly benefit the respondent or that have indirect environmental benefits will generally be acceptable only at higher ratios;
- SEP approval cannot be considered for projects that are required to bring the respondent into compliance with the law; and
- preference is given to SEPs that directly benefit the environment in the community where the violation occurred.

Why should I consider an SEP?

The SEP Program was developed as an innovative approach to resolving enforcement actions and improving environmental quality. For respondents who wish to contribute directly to the environmental improvement of their communities, the SEP policy provides an alternative to payment of the full amount of an administrative penalty.

What is the process for getting an SEP approved?

If you are interested in negotiating an SEP, you should request a copy of the SEP Policy Statement, an SEP Proposal Guideline, and other materials from

the SEP Coordinator, a Litigation Division attorney, or Enforcement Division staff. These documents will explain the process further and provide examples of SEPs that have been approved. After reviewing these materials, please contact the SEP Coordinator at 512/239-3400 if you have additional questions. You are encouraged to begin discussing SEP possibilities early in the enforcement process. However, work on a proposed SEP should not commence until the commission has made its final determination.

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Texas Water Code, Chapter 7

Sec. 7.067. Supplemental Environmental Projects.

(a) The commission may compromise, modify, or remit, with or without conditions, an administrative penalty imposed under this subchapter. In determining the appropriate amount of a penalty for settlement of an administrative enforcement matter, the commission may consider a respondent's willingness to contribute to supplemental environmental projects that are approved by the commission, giving preference to projects that benefit the community in which the alleged violation occurred. The commission may approve a supplemental environmental project with activities in territory of the United Mexican States if the project substantially benefits territory in this state in a manner described by subsection (b). The commission may not approve a project that is necessary to bring a respondent into compliance with environmental laws or that is necessary to remediate environmental harm caused by the respondent's alleged violation.

(b) In this section, "supplemental environmental project" means a project that prevents pollution, reduces the amount of pollutants reaching the environment, enhances the quality of the environment, or contributes to public awareness of environmental matters. The term does not include projects that are necessary to bring the respondent into compliance with environmental laws or that are necessary to remediate the environmental harm caused by the alleged violation.

Added by Acts 1997, 75th Leg., ch. 1072, Sec. 2, eff. Sept. 1, 1997.

Environmental Enforcement Policy Statement

October 26, 1995

TO: TNRCC Employees
FROM: Dan Pearson, Executive Director
SUBJECT: Use of Supplemental Environmental Projects in Settlements

Outline

- Reduction of Penalty
- Situations In Which SEPs May Be Appropriate
- Projects Which May be Accepted
- Additional Requirements
- Deviation from this Policy

This memorandum amends and replaces an earlier memorandum dated April 8, 1994, and presents the Executive Director's policy on the discretionary use of supplemental environmental projects ("SEPs") in agency agreed enforcement orders. A respondent's willingness to make voluntary contributions to such projects may be considered by the TNRCC staff in the settlement of enforcement actions. The specific project must be accepted by the Director of the Litigation Support Division under the guidelines described herein, before the agreed enforcement order is presented to the commission for consideration.

This guideline does not create any rights on behalf of respondents. The approval of any particular proposed agreed order, SEP and related conditions is wholly subject to commission's discretion.

Reduction of Penalty

The final administrative penalty amount (without considering the amount approved for any SEPs) must be sufficient (1) to have a deterrent effect on the individual violator and on other violators in similar positions, and (2) to the extent possible, recapture the economic benefits of noncompliance plus some appreciable portion of the gravity component of the penalty computation.

In general, an SEP will not justify more than a fifty percent reduction of the recommended administrative penalty and a reduction of less than fifty percent should be the norm. In addition, at least a $1.00 expenditure for an SEP will be required to justify a $1.00 reduction in penalties. Projects that directly remediate environmental contamination or reduce pollutants entering the environment may be acceptable at a 1:1 ratio. However, some projects may only be acceptable at a higher ratio. For example, projects that have indirect environmental benefits, or which clearly benefit the respondent, may only be acceptable at a rate of $3.00 or $4.00 expended for every $1.00 reduction in the penalty amount.

The general guidelines stated in the paragraph above are subject to the following exceptions:

1. Governmental entities, meaning: a state agency or department; a district, authority, county, municipality, or other political subdivision of the state; or a public utility owned by a governmental entity, are eligible for 100% reductions in their penalties on the basis of SEP expenditures, as well as a ratio of a $1.00 reduction in penalty for every $1.00 spent on an accepted SEP; and

2. Any respondent in an enforcement case is eligible to obtain a $1.00 reduction in penalty for every $1.00 spent on an SEP that is specifically determined by the Director of Litigation Support to result in a discernible beneficial change in the environment. This would include projects that go beyond any legal requirement and result in direct reductions of pollutants entering the environment or actual remediation of contaminated sites. Reductions in air emissions resulting from SEPs may not be used by a respondent for offsetting or netting purposes.

Situations In Which SEPs May Be Appropriate

The TNRCC Director of Litigation Support will consider submitting for commission approval as part of an enforcement order a supplemental environmental project if (1) all violations are corrected through actions to ensure future compliance; (2) any pollution resulting from such violations has been remediated or will be remediated by the implementation of the terms of the agreed enforcement order; (3) both general and specific deterrence objectives are served; and (4) there is an appropriate relationship between the nature of the violation and the environmental benefits to be derived from the project or there is an overriding public and environmental good to be served by implementation of the project.

Projects Which May be Accepted

Preferred projects are those that will directly benefit the environment in the community where the alleged violation occurred. Projects that confer a direct benefit to the respondent are not preferred.

Acceptable projects are those which prevent pollution, reduce the amount of pollutants reaching the environment, enhance the quality of the environment, or contribute to public awareness of environmental matters. In addition, respondents must agree to publicly state that the project was undertaken as part of the settlement of an enforcement action brought by the state. Projects that are not acceptable are those that would be required to bring the violator into compliance with the law.

The following types of projects would be appropriate SEPs.

1. Pollution prevention and/or reduction projects in which the amount of pollutants reaching the environment is decreased beyond any amount required to comply with environmental laws or other commitments;

2. Environmental restoration projects that go beyond repair to the enhancement of the environment in the vicinity of the violating facility;

3. Environmental projects that provide significant and meaningful technical assistance to other TNRCC-regulated entities who are faced with economic and/or technological hardships;

4. Projects that provide significant and meaningful environmental education and/or engineering assistance to members of the regulated community or the public;

5. Projects to fund public works for a neighboring municipality or county that will benefit the environment in a way that is beyond ordinary compliance with the law; and

6. Projects to clean up illegal municipal and industrial solid waste dumps.

Additional Requirements

1. **Compliance History of Respondent.** The history of compliance and the resources of the violator to complete the project it has committed to do must be considered. The respondent must report all

environmental orders that have been issued and the compliance status of each. Repeat offenders are less appropriate for such favorable treatment. It may not be appropriate for respondents that are out of compliance with previous agency orders, in any agency program, to receive such favorable treatment.

2. **Performance**. Respondent must show that it and any intended recipient are ready, willing, and able to perform the proposed SEP before any such agreement is presented to the commission. Respondent must also provide a written report to the TNRCC to show that the SEP has been properly implemented, within a time period to be stated in the order. Any dollars that are not spent for the approved SEP within a duration to be stated in the order shall be forfeited to the general revenue fund of the State of Texas.

3. **Oversight/tracking.** Additional staff resources will be required to monitor performance. Every effort should be made to ensure that the respondent provides sufficient and timely data to facilitate any required staff efforts. If third-party oversight is necessary, these costs must be borne by the respondent.

Deviation from this Policy

Consistent with the legislative intent and statutory provisions authorizing the use of SEPs, the Executive Director may deviate from the guidelines set forth above in extraordinary and limited circumstances where there is an unquestionable benefit to human health or the environment that outweighs the considerations resulting in the development of this policy. These extremely limited situations will be evaluated on a case by case basis by the Executive Director or a delegate and will only be considered where the direct beneficial impact of the project is exceptional and falls to the individuals, community or area potentially or actually affected by the violations.

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SEP Proposal Guideline for Respondents

This proposal guideline is intended for the use of respondents in TNRCC enforcement actions. In order for the executive director's staff to begin its evaluation of a proposed SEP, the information specified below is required. A respondent must be willing and able to provide detailed documentation to demonstrate all statements made in a proposal within one week of a follow-up request from TNRCC staff. If you have questions regarding this guideline, please contact the SEP Coordinator in the Litigation Division at 512/239-3400.

1. **Enforcement Action** - Indicate the name of the entity and the location of the site associated with the enforcement action. Include the city and county as well as the applicable watershed and/or nonattainment area.

2. **Regulatory Information** - Provide a brief summary of all environmental enforcement orders, including compliance status, relating to the site identified above. For on-site projects, provide all TNRCC and EPA permit and account numbers related to this facility for all media.

3. **Name of Project**

4. **Project Implementer** - Provide the name, mailing address, telephone number, and fax number for the project director, organization conducting the project, and the person who will be responsible for submitting status reports (if different from the project director). If the project will be conducted by a third party to the TNRCC enforcement action, the proposal should be accompanied by a letter or resolution from the appropriate board, governing body, or executive staff expressing the organization's commitment to the project if approved.

5. **TNRCC Contact Person** - Provide the name, division, and telephone number of any TNRCC staff person who has assisted with the development of this project.

6. **Geographical Area to Benefit From Project** - Identify cities, counties, and watersheds and/or nonattainment areas that would be affected by the project.

7. **Type of Project** - See the list below.

8. **Project Description** - Describe the project including the following information: the need for the project; the availability of other similar services or projects in the area; and project implementation tasks such as technology, operation, or process changes.

9. **Expected Environmental Benefits** - Explain the expected environmental benefits of this project and quantify the environmental benefits to the extent practical.

    - For pollution prevention or reduction projects - Quantify the amount of each pollutant that is expected to be reduced beyond the level required for environmental compliance. Specify the media (air, water, land) to be affected.

    - For all other types of projects - Quantify the number of participants, programs offered, sites cleaned, types of contamination contained/removed, acres restored or affected, etc.

10. **Project Budget** - Provide projected initial and annual project costs with specific subcategories. Costs must be clearly and solely attributable to the proposed SEP.

11. **Rate of Return Analysis** - Provide an analysis of annual financial returns on the project.

12. **Project Schedule** - Provide a proposed schedule that addresses project implementation and the submittal of status reports to the TNRCC. Project implementation must not commence until after the commission has approved the SEP in an agreed order.

13. **Accounting** - Describe how SEP contributions would be accounted for if a third party is the proposed project implementer.

14. **Reporting** - Describe the information and documentation that would be included in project status reports. Project reports must provide sufficient information for the TNRCC to monitor the project implementation status, to verify and document the proper expenditure of SEP funds, and to evaluate the effectiveness and benefits of the SEP.

15. **Prior Commitments and/or Regulatory Requirements** -

    - Identify any applicable local, state, or federal regulations that would require implementation of this project or any part of this project.

    - Identify any binding private commitments to implement this project or any part of this project.

    - Identify whether this project is part of:

        - a pollution prevention commitment identified in a plan developed pursuantto the state's Waste Reduction Policy Act (WRPA);

        - a commitment made under the Clean Texas Program; or

        - the U.S. Environmental Protection Agency's Project XL or any other incentive or regulatory flexibility program.

- Indicate the time frame for implementation of the project under any identified commitments.

16. **Certification of Expenditures by Respondent** - Provide a separate certification that the proposed SEP is solely attributable to the settlement of the current enforcement action and that no funding has been budgeted to the project prior to the approval of the project, nor is the proposed project funded by grants, donations, low interest loans, or other sources of funding not attributable to the respondent's normal budgetary process. Also certify that the proposed project is not being done, nor will receive credit, as part of an environmental incentive or awards program.

Supplemental Environmental Project Categories

The commission's SEP policy identifies the six types of projects listed below as appropriate SEPs. The inclusion of any particular proposed SEP and related conditions in an agreed order presented to the commission is subject to the executive director's discretion. The executive director has delegated the authority to accept SEPs to the director of the Litigation Division. The final decision regarding the approval of any such agreed order rests wholly with the commission. For additional guidance on SEPs, please see the Executive Director's Environmental Enforcement Policy Statement dated October 26, 1995.

The following types of projects would be appropriate SEPs:

1. Pollution prevention and/or reduction projects;
2. Environmental restoration projects that go beyond repair to the enhancement of the environment in the vicinity of the violating facility;
3. Technical assistance to other TNRCC-regulated entities who are faced with economic and/or technological hardships;
4. Environmental education and/or engineering assistance to members of the regulated community or the public;
5. Projects to fund public works for a neighboring municipality or county that will benefit the environment in a way that is beyond ordinary compliance with the law; and
6. Projects to clean up illegal municipal and industrial solid waste dumps.

JERRY DAVENPORT

Jerry Davenport is Of Counsel to Shipley, Jennings & Champlin in Tulsa, Oklahoma where he practices environmental and corporate law. Prior to joining the firm, Jerry worked for several major corporations including at Browning Ferris in Houston where he was the manager of the environmental law section of the law department and at MAPCO, Inc. in Tulsa where he was the Assistant General Counsel – Environmental.

Jerry has long been active in audit issues. He is a long time member of the Environmental, Health and Safety Auditing Roundtable serving as Chair of the Legal Issues Committee and co-founding the South Central Region of the Roundtable which covers Arkansas, New Mexico, Oklahoma and Texas. He chaired a committee of the Environmental Law Section of the Oklahoma Bar Association which assisted the development of its self reporting penalty policy by the Oklahoma Department of Environmental Quality. Jerry then represented the State of Oklahoma in the joint ABA/EPA task force that developed EPA's self reporting penalty policy.

Jerry graduated from the University of Michigan in 1971 with a degree in physics and from the University of Texas School of Law in 1975.

WHAT'S MY LINE?

A Primer on Types of Audits Used to Obtain Answers to Different Questions

By

Jerry Davenport
Shipley, Jennings & Champlin
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What's My Line? Guests would appear on this 60's game show with a unique tidbit about there hobbies, work or accomplishments and a regular panel would ask questions to discover their "line." The ability to ask the right questions was crucial to solving the puzzle. In particular, it was important first to know the general topic of the secret so that the questions could be narrowed to guess the secret of the guest. Environmental audits are similar: It is critical to an effective audit to first determine the type of information sought based on the nature of the transaction or inquiry before one can choose the most effective type of audit to develop the information sought. Typical audits include compliance audits, management systems audits, due diligence audits and third-party contractor audits among others, each of which address very different concerns by using very different approaches.

Most audits follow the same basic structure: Site selection, audit team selection, review of audit protocol, pre-audit review of relevant information, on-site opening meeting and orientation, on-site audit, exit conference, preparation of reports, establishment of action plans and employing procedures to assure closure of action items. These procedures and the associated audit techniques are adapted to the different types of audits based on the focus of the particular audit. For example, while this structure is followed in virtually all compliance audits where compliance with regulations and company policy are in issue but is greatly modified for most management audits which measure performance against policy issues such as management support for the program, training and other global management issues.

Compliance Audits

Compliance audits seek to assess a facility's level of compliance with applicable regulations and company policies. An audit may cover all regulated media or focus on specific areas. The first determination to make is whether the audit will be performed under the direction and control of an attorney and be subject to the attorney-client privilege and/or the attorney work product doctrine. If so, the requisite steps must be taken at the outset to provide the legal basis for asserting the privilege. Once the

determination on attorney-client privilege is made, the typical audit will start with the selection of the site or group of sites to be audited, the audit team, and the environmental media to be assessed. At that point, the audit team and audit team leader will collect information concerning applicable permits, regulations and company policies applicable to the site.

Because audit findings can discover violations which are subject to disclosure to appropriate regulatory agencies and can result in significant penalties, a preliminary determination must be made to establish an accelerated review of serious matters requiring prompt reporting to the appropriate agencies. If EPA is the primary regulatory agency for any of the programs in question, these accelerated review procedures are necessary to allow reporting of violations in accordance with EPA's Audit Policy to take advantage of any penalty relief available under the Audit Policy. In particular, EPA's Audit Policy was recently revised to allow 21 days to promptly disclose potential violations. However, the 21 days begins from the date when "any officer, director, employee or agent of the facility has an objectively reasonable basis for believing that a violation has, or may have, occurred" (65 FR 19626, April 11, 2000) which would include discovery by an auditor, whether the auditor is a company employee or a third party contractor. State audit privilege and disclosure laws and policies generally allow more flexibility than the EPA Audit Policy though it is still important to promptly disclose and address serious matters whether disclosure is to EPA or to a state or local agency. Even if a company performs the audit under the attorney-client privilege or under a state audit privilege law, the company must understand in advance that reportable violations will still be subject to reporting requirements even if the audit findings of the violations are privileged.

After the sites and environmental media to be assessed are chosen, the audit team selected and pre-audit information is assembled and analyzed, the audit team will prepare a protocol to be used in the audit. Matters covered by the protocol will be the documents to be reviewed, persons to be interviewed, processes and control technology to be observed, and samples, if any, to be taken. It is important to note that a compliance audit does not investigate the nature and extent of any contamination that may be onsite. Samples for analysis are rarely taken in conjunction with a compliance audit and even then they are only taken to confirm compliance with permit or regulatory limitations. It is also important to note that when reviewing compliance with company policies, the matters reviewed are those which can be readily measured such as compliance with internal reporting requirements, with appropriate approvals for actions, records of training for employess, etc. Global corporate policies such as those declaring the intent of the organization to fully comply with all applicable laws and regulations are not readily susceptible to assessment by compliance audit techniques.

When the audit team arrives at the site, the team holds an initial conference with appropriate site personnel to outline the audit schedule, identify persons and records to be interviewed and reviewed, obtain information about facility expectations for the audit and obtain health and safety instructions while onsite followed by a site tour. In particular, facility personnel should be advised during the initial conference if the audit is being

conducted under any privilege and, if so, how the privilege is to be protected. Auditors then perform the audit. The auditors must be instructed to notify counsel if significant findings which could be subject to the EPA Audit Policy or a state equivalent to allow sufficient time for timely reporting. In the alternative, particularly if the site has not been audited for some time and it is in a highly regulated industry, a daily debriefing can be scheduled.

In preparing written audit findings, it is vitally important that the auditors identify only the facts observed together with the regulation or policy applicable to the finding. Auditors must not draw legal conclusions. It is not at all uncommon to determine that an apparent violation is not, in fact, a violation after a thorough review of all the pertinent facts. Therefore, findings that state that the facility violated a certain regulation or permit condition must be reworded to state the facts found by the auditor and the regulation or permit condition to which the finding pertains.

After completion of the onsite audit, the team meets with the key facility personnel to give a preliminary review of the findings. It is important for the facility to understand that a final review of the working papers and pertinent regulations or permit conditions can change the nature and number of the findings. Feedback can also be given to the facility in the exit interview regarding peripheral matters observed such as practices that can be improved. If the audit team has experience with similar facilities, they will be aware of best management practices employed by other facilities to address similar issues.

Upon return to their office, the audit team reviews their notes in their working papers and prepares the audit report. Legal review of the report can be very helpful in avoiding findings that draw legal conclusions and in identifying issues which promptly must be reported to the appropriate agencies. Although it varies from program to program, the audit team typically prepares only the findings while the facility in concert with company management, review and prepare the action plan. Occasionally, best management practices are included in the audit findings though some report them separately if at all. The action plan prepared to respond to the audit findings identify the specific response, the person responsible for implementing the response and the date by which the response will be completed.

Although tracking systems vary widely, it is vitally important that the action plans be tracked to assure completion. This usually takes the form of a tickler system where the facility must identify its progress on a regular basis. While this generally does not involve repeat visits to the site, a verification audit can be useful to audit randomly selected sites to confirm that the action items have been completed as stated. As long as all sites know that they can be selected for a verification audit, the integrity of the system will be preserved. Verification audits are generally performed in a specific window of time such as 1, 3 or 5 years after the initial audit.

Management Systems Audits

Management systems range from clearly stated and regularly communicated management support of the environmental management program to the assignment of the specific responsibility of remaining current with regulatory changes affecting a facility at federal, state and local levels. Such matters as management support, clear assignment of authority and responsibility, training, communicating incidents both with in the organization and with external stakeholders are the key to a successful management program. Some management systems, of course, apply specifically to complying with applicable regulations and permit conditions. Problems with systems to assure compliance can be obtained from compliance auditing findings through root cause analysis and other techniques. The root cause analysis will evaluate whether the compliance system are functional (i.e., if they accomplish the goals established for the system) and whether they are sustainable (i.e., if the systems can continue to accomplish the goals despite changing personnel or other circumstance). Other management systems are evaluated more effectively in a much different way. For example, evaluating the effectiveness of corporate polices, communication of the policies, organizational structure (such as whether the system is too centralized or too decentralized) and other systems are better reviewed through methods such as having an independent consultant review like an ISO 14000 assessment, conducting an internal review such as with short term quality teams or conducting Control Self Assessments similar to those used by financial auditors.

The methods used to effectively assess management systems vary widely. The most recent addition is based on the ISO 14000 standard for environmental management programs. ISO 14000 is a set of environmental management standards established after thorough international debate by the International Standards Organization. Many organizations are adopting ISO 14000 and are requiring their suppliers to be ISO 14000 compliant. The ISO14001 standard specifies requirements for an environmental management system by establishing environmental policies, determining environmental aspects and impacts of the products, activities and services of the organization, planning environmental objectives and measurable targets, implementing and operating the program to meet identified objectives and targets, assessing the implementation of the program, taking corrective action on identified shortcomings, and establishing a regular management review of the program. Compliance can be self assessed or can be assessed by an independent certified ISO 14000 auditor.

Many other methods are also used to assess the effectiveness of management systems. Trade associations have developed mandatory or voluntary systems to evaluate implementation of environmental management systems such as the Chemical Manufacturing Association's Responsible Care program and the American Petroleum Institute's STEP program. Many organizations have developed systems to assess various business processes and management systems through the implementation of total quality management programs. These systems can be readily adapted to evaluating the environmental management programs of the organization and have the additional advantage of being an integral part of the organization's culture. Some systems use one

person to gather information and perform the assessments while others conduct meetings with cross-functional teams to identify strengths and weaknesses. Some rely on documentation while others rely on feedback from those affected by the program.

However the assessment of management systems are conducted, they must all recognize differences between the various business units in an organization. For example, a petroleum refinery must focus on staying up-to-date on applicable regulations while training is not usually as difficult because of the more stable work force. On the other hand, retail gasoline marketers do not face a regularly changing regulatory scheme but training is a very difficult issue to address do to the high level of employee turnover. Each of these different business units will develop different management processes to address the environmental issues faced by their operations. An assessment program must take these differences into account to provide a useful analysis of the effectiveness of the environmental management program.

A management systems assessment starts with determining the functions to be assessed. Examples include components of an ISO 14000 compliant program or the elements of the corporate policy. Once the functions to be assessed is determined, the method of assessment is determined. Key determinations to be made are whether the assessment is to be document based (reviewing documents to determine if various policy elements are being effectively implemented) or team based (considering the operation of the function through benchmarking with cross-functional teams implementing or effected by the function). The second key determination is whether the assessment will be performed by a person such as a certified ISO 14000 auditor or by a collaborative team. Finally, the audience for the information should be determined and the format of the report to be used. For example, if the information is to be presented to senior management or a committee of the Board of Directors, the information should be reported in a format similar to those used in other assessments to facilitate effective communication and decision-making.

Once the assessment is performed, a report is prepared which contains general conclusions concerning the effectiveness of the program and specific observations concerning strengths and weaknesses identified. Action plans to address the weaknesses are included though they are frequently more global than those found in compliance audits. (For example, after one management assessment, the company that conducted the assessment found that the corporate environmental policy did not adequately cover health and safety issues. The action plan included establishing a team to review and revise the corporate policy.) Finally, all action items must be tracked to assure completion of the agreed tasks.

Due Diligence Reviews

When buying a property or business it is critical to understand the potential liabilities associated with the property or business. Contractual indemnities together with the attendant representations and warranties are important in allocating responsibility but every buyer must understand that if the seller is unable or unwilling to respond to

environmental liabilities, the buyer as owner of the property or business will be required to do so regardless of contractual provisions to the contrary. Likewise, it is important to know if the business can continue to run as it has been operated after the transaction or if new equipment or repairs to existing control equipment will be necessary to continue current operations. In addition for stock purchase transactions, it is necessary to know whether the operation is in compliance with applicable regulations. In short, in the acquisition of a business, business assets or property it is important to know the full cost of the acquisition. As a consequence, due diligence reviews focus primarily on the potential for undisclosed contamination on the property and the need for improvements or additional permits to continue to operate the business.

Due diligence transactions looking for potential contamination are typically styled Transaction Screens, Phase I investigations and Phase II investigations. Transaction Screens seek to assess the need for a more thorough investigation to determine whether the property is likely to be contaminated. The ASTM Transaction Screen standard, ASTM E-1528, is the transaction screen used in low risk transactions. The screen consists of a questionnaire which is used to identify potential issues through past and present uses of the property and potential problems with properties in proximity with the target property. If concerns are raised, the buyer will typically proceed either to a Phase I or Phase II investigation.

Phase I investigations involve a thorough review of information concerning the site to determine the potential for contamination. Phase I investigations do not include physical testing of the site. The ASTM Standard Practice for Environmental Site Assessments, ASTM E-1527, is the standard Phase I protocol. The investigation will include, past property ownership and use investigations through past aerial photograph review and other historical use information, interviews with current and former personnel concerning potential contamination or operations which could lead to contamination if not properly managed, and reviews of governmental records, such as environmental agency records, to identify past releases and potential compliance issues.

If a Phase I or Transaction Screen identifies potential contamination onsite, a Phase II investigation is conducted. There are few standards applicable to Phase II investigations because each investigation must be tailored to the specific concerns of each site. The purpose of a Phase II investigation is to determine if contamination can be found in the areas most likely to be contaminated. If contamination is found then the parties can address necessary reporting issues, if any, and further investigations into the nature and extent of the contamination. After necessary reporting issues have been resolved, the information obtained is then used to allocate responsibility for resolving issues associated with the contamination.

When obtaining a Phase I investigation, the buyer should determine whether the ASTM standard investigation is sufficient. The buyer must first consider whether lead and/or asbestos assessments should be added to the investigation. These matters are considered optional in the ASTM standard review. Secondly, the buyer should review the extent to which compliance reviews should be performed. When buying only assets, the primary

compliance concern is whether all necessary control equipment is in place and whether it requires significant repairs or maintenance. If the stock of a business is being acquired then a thorough compliance review may be appropriate so that any outstanding potential violations can be addressed in conjunction with the change in control. Even if this compliance review is not done prior to the transaction, it may be advisable to perform it shortly after the transaction to both clear any past potential violations and to educate operating personnel about the policies and procedures expected by the buyer.

Third Party Contractor Audits

With potential generator liability for the releases at third-party disposal facilities and potential liability for work that has been contracted out, third party contractor audits are performed. For work that has been outsourced, such as the third party operation of facilities, a typical compliance audit would be performed. For third party disposal, however, the issues are somewhat different than those addressed in a normal compliance audit. The primary concern is to select sites that have appropriate controls, preferably engineering controls, to prevent releases to the environment. Handling procedures and training are also important components in a facility to avoid releases to the environment.

When auditing a potential disposal facility, the audit team will obtain information through a pre-audit questionnaire similar to that used for a compliance audit. The review of the information differs in that the team seeks to identify shortcomings in the design of the facility that can lead to greater impact from releases and to review compliance matters to get a sense of the care and concern of the management and operating personnel in the operation of the facility.

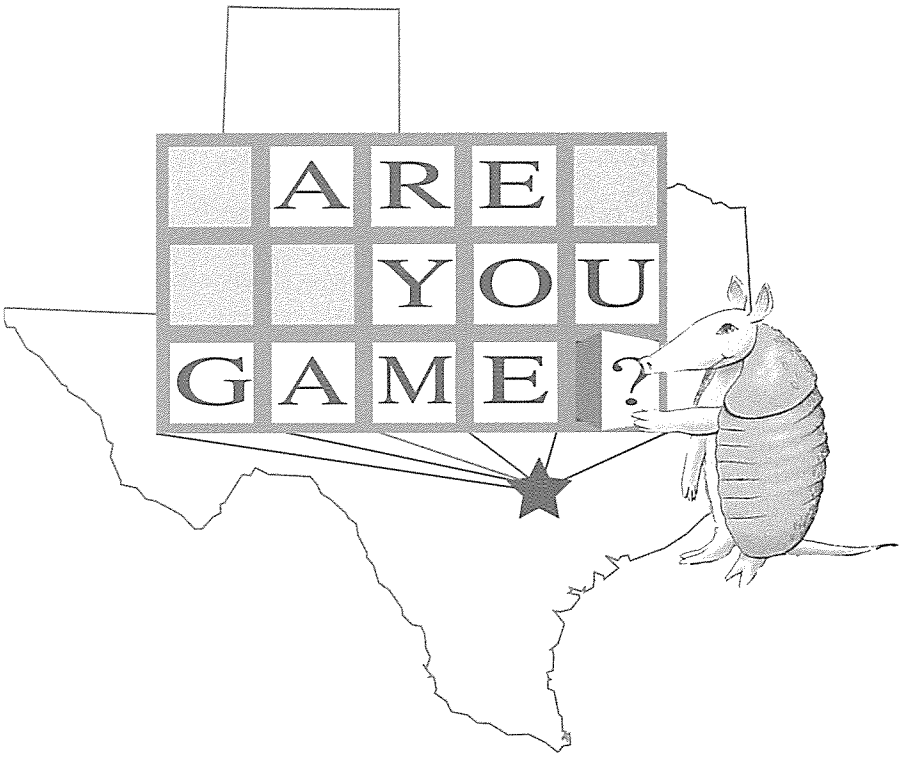
When touring the facility, the team typically reviews the process of receiving, storing and disposing of wastes. From a physical design of the facility, one can determine if the waste is stored and handled in protected areas where any potential releases can be contained and remediated. Some sites will have staging areas on gravel while others are on contained concrete. Obviously, if a release occurred on gravel, prompt removal would be more difficult than if it occurred in a contained area. Some sites have extensive containment areas while others contain high risk operations only. Secondly, the procedures in place for handling the wastes and responding to incidents is reviewed. Even well designed facilities can be risky if adequate procedures are not in place or if responsible personnel are not identified and well trained. Simply following the path of waste from receipt to disposal, both procedurally and physically, will identify any serious problems with the facility. Information concerning past releases or reputation in the community is also pertinent to the determination on the use of the facility. Searches of environmental databases and newspaper articles can frequently provide vital information concerning the facility.

Many companies participate in organizations that perform third party reviews for the members. This is often a very cost-effective method of obtaining the necessary information and making informed decisions. Other companies use in-house personnel to

perform the necessary reviews. Properly conducted third-party contractor audits can significantly limit potential future liability for the disposal of wastes.

Conclusions

As noted in each of the types of audits reviewed, the critical issue is to determine the purpose of the audit. Once the purpose is clearly identified, the type of audit to be performed and the information developed will become apparent. In short, it is necessary to determine the goal before knowing the proper questions to ask to determine "What's My Line."


ARE
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Biography

Education

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Work Experience

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The Secrets to a Successful ISO 14001 Certification Audit

Introduction

The ISO 14001 Environmental Management System (EMS) standard was finalized in September 1996, and is fast becoming a requirement for American companies operating globally. Many American companies are aligning their current EMS to the ISO 14001 standard in order to create a level playing field with less regulated international governments and companies. Having an EMS that conforms to the standard assures that these companies will be a step ahead of their competition and the regulators.

Now that companies have taken their existing management systems and modified them to follow the ISO 14001 standard, they need to check internally and externally that these systems are effective. This is done by conducting internal EMS audits and third-party EMS certification assessments to ensure that the ISO 14001 criterion are being met.

Internal Audits

A cross-functional EMS audit team within a company should be trained to complete internal conformance audits of the EMS. The EMS audit team should be lead by a "lead auditor" who is properly qualified to manage and execute an environmental audit. The rest of the EMS audit team should include the Quality Management System (QMS) audit team, and other qualified individuals trained to audit management systems. The internal auditors primary goal is to check conformance of the EMS to the ISO 14001 standard. It is important for the internal auditors to verify conformance not performance. Hence, if the company is in conformance with the ISO 14001 standard, then it is likely that they are in compliance with applicable environmental laws and regulations. A company's internal audit system is of key importance. A third-party assessor should be able to look at the internal audit findings and their respective corrective actions and feel confident that the EMS is effective.

External Audits

A certifying body will provide an external review of your organization's EMS in order to award ISO 14001 certification. There are usually two parts to this external review, which include a pre-assessment audit/document review and a certification assessment.

Pre-Assessment Audit/Document Review

The pre-assessment audit and document review is conducted on-site at the subject facility by the certifying body. This part of the certification process is used to evaluate if the company is ready to have their certification audit. It also enables the certifying body to tour the facility and plan for the actual certification audit. The following documents are typically reviewed during the pre-assessment audit:

- The EMS Manual or roadmap to the EMS system;
- Analysis of environmental aspects;
- Internal audit reports;
- Legal and other requirements applicable to the facility;
- Organization charts and job descriptions;
- Training programs; and
- Management review evidence.

The certification body provides feedback on the status of your EMS. They issue a list of major and minor non-conformances and observations on areas that need to be improved in order to achieve ISO 14001 certification. Proceeding with the formal certification audit without a pre-assessment audit could be costly and a waste of time for the certifying body and your organization.

The certifying body should not provide substantive guidance to your organization on how to achieve conformity with the ISO 14001 standard. Due to a conflict of interest, the certifying body cannot act both as a consultant and certifying body to your organization.

Certification Assessment

This is the real thing. The certification assessment usually follows a successful Pre-Assessment Audit and Document Review. The certifying body is now familiar with your site and your EMS. During the certification assessment, the certifying body will go back to the findings from the pre-assessment audit and make sure that corrective actions have been put in place. They will also focus on the particular elements of the ISO 14001 standard and the departments in the organization that appeared to be weak during the pre-assessment audit. This enables the organization to prepare for the certification assessment based on the non-conformances and observations given during the pre-assessment audit.

The certification assessment usually begins with an opening meeting for management and interested employees. During the opening meeting, the certifying body will discuss the scope of the audit, the audit schedule, interviews with employees, and the confidentiality agreement. The organization should be prepared to escort the auditors throughout the site and provide any assistance the auditors might need. It is important to remember that the certifying body should not leave your site with any of your procedures, documents, or

audit evidence. This is proprietary information and should only be reviewed on-site by the certifying body. All levels of employees from management to contractors have the potential to be interviewed to assess whether the EMS is in conformity with the ISO 14001 standard. The certifying body will start with the organization's EMS Manual and will track it to supporting procedures and records required by the ISO 14001 standard. The certifying body will talk to key employees and management who could have an impact on the environment by deviating from the program or operating procedures. The certifying body will interview 20 – 30 people regarding the organization's EMS. The following is a list of typical questions that the certifying body will ask the organization:

1) How does your job impact the environment?
2) What are the key points of your organization's environmental policy?
3) What are your organization's significant aspects?
4) What are your organization's objectives and targets?
5) What is your role in reducing the impact of the significant aspects identified for your site?
6) How does your organization ensure that they are meeting their local and federal environmental requirements?

The certifying body uses these interviews as evidence that the organization's EMS is effective and communicated through all relevant functions and levels. Your organization must demonstrate that the EMS is fully functional and satisfies your policy commitments and the criteria outlined in the ISO 14001 standard. The certifying body will usually hold a daily debriefing meeting with your organization to keep management informed on the progress of the audit and any non-conformances identified that day.

At the end of the certification assessment, the certifying body will conduct a closing meeting that will outline how many major/minor non-conformances and observations were documented during the assessment. A draft audit report is usually left with the organization detailing the non-conformances and observations noted during the assessment. They will also give the assessment team's recommendation regarding certification status. If several non-conformances are identified, the certifying body might require your organization to put a corrective action plan in place to address the non-conformances before you can receive your certification. Regardless, any non-conformances and observations must be addressed before certification is awarded. The majority of the time they can be cleared up by correspondence without the certifying body coming back to the site.

Your organization's third-party certification body should focus on "system-level" requirements such as management support, internal system audits, and corrective action requirements. If your organization has a strong internal audit system, then the certification body should rely on this system to test the overall effectiveness of your organization's EMS. With the proper verification and sampling of audit evidence, third-party assessments can focus on the ISO 14001 "system-level" requirements and place more reliance on the company's internal assessment of the other ISO 14001 requirements, thereby reducing duplication and cost.

Selecting a Third-Party Certifying Body (Registrar)

Because the ISO 14001 standard has become a market requirement for many organizations, top-level managers have made it their business to scrutinize the costs and benefits associated with third-party certification of their EMSs. The credibility of your organization's certificate rests in the hands of the certifying body (registrar) that your organization chooses; therefore registrar credibility is continuously being tested. It is very important to interview 2-3 different registrars before making a final selection. Try to look for a third-party certifying body that is familiar with your organization's operations. This will enable the certifying body to spend less time getting to know your organization's operations and will allow the certifying body to jump in and start immediately assessing your company's EMS. This will save time and money for both the certifying body and your organization. It is also important to select a certifying body that focuses on the "system-level" requirements of the ISO 14001 standard. By focusing on your organization's internal audit findings and their respective corrective actions, the registrar can get a good idea of how the EMS is functioning and can target the areas that appear to be weak. Additionally, the Environmental Auditors Registration Association (EARA) from the U.K. identified the following areas of expertise that are essential when verifying your audit teams qualifications:

- Education and training;
- Professional certifications (e.g., registration through RAB);
- General experience, including environmental and quality management, technical experience, and knowledge of environmental laws and regulations; and
- Environmental auditing experience.

As organizations are being required to achieve ISO 14001 certification they are becoming more knowledgeable and beginning to realize that they have the prerogative to demand a certain level of service from the registrar that they select.

Hints for Passing a Third-Party Certification Assessment

There are several things you can do that will prepare your organization for your third-party certification assessment. The following is a list of ideas to help your organization prepare for your ISO 14001 certification assessment:

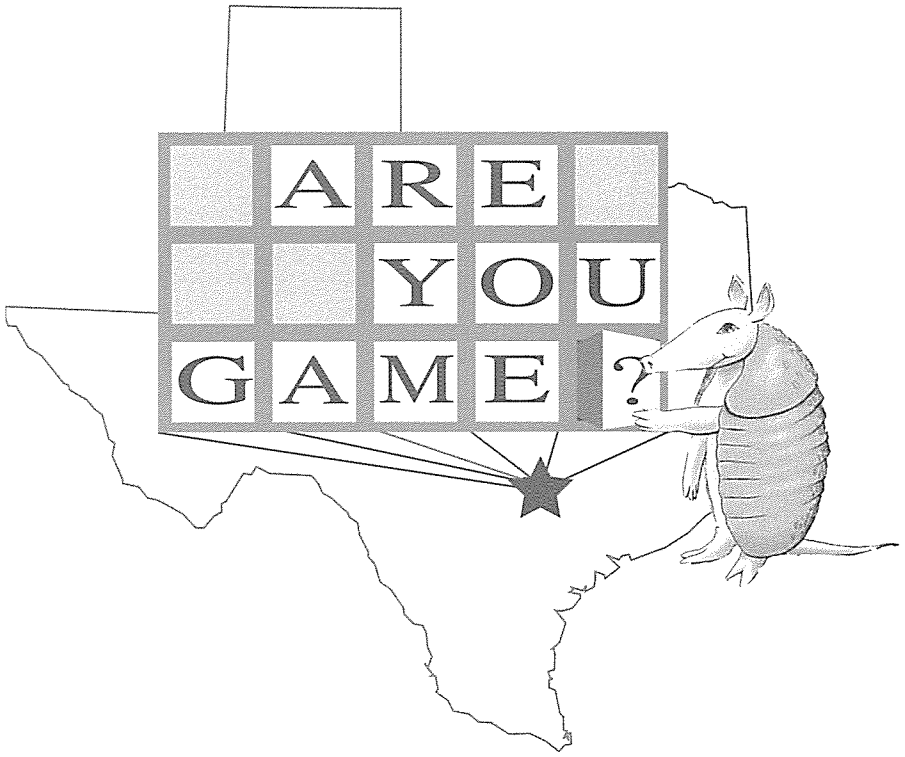
- Complete General Awareness Training for all management, employees, and contractors;
- Develop a fun acronym or saying to help employees remember the key points of your organization's environmental policy;
- Create badge cards with the organization's environmental policy acronym or saying;
- Create an ISO 14001 management fact sheet detailing the objectives they need to know if quizzed by the certifying body;
- Create an ISO 14001 employee fact sheet to be discussed in department or shift meetings;

- Build a company ISO 14001 Intranet Web Page that describes the environmental policy, objectives, targets and other pertinent information for the organization; and
- Utilize existing management meetings to update the organization on the ISO 14001 progress.

By utilizing some or all of these ideas your organization will be ready for the third party certification assessment.

Conclusion

The trickle-down effect is in full swing as we see Ford and General Motors require their suppliers to be ISO 14001 certified. As more and more companies are striving to achieve ISO 14001 Certification, it is likely that third-party certifying bodies will struggle to get everyone certified. This is why it is important to be selective when choosing your organization's registrar as they are responsible for the credibility of your organization's EMS and ISO 14001 certification. Finally, it is imperative that your company fully prepare its EMS and conduct adequate training prior to enlisting a certifying body so that the certification is successful.


ARE
YOU
GAME ?

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Environmental Audits

YOU THINK YOU HAVE A SECRET, BUT....

By

Richard Lowerre
Henry, Lowerre, & Frederick

and

Mary E. Kelly
Of Counsel
Henry, Lowerre, & Frederick

July 2000

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I. SUMMARY:

A. ISSUES:

This paper focuses on the privilege portion of environmental audit laws, using the Texas law as the example. It attempts to answer the following questions:

1. What does the Texas type of privilege cover (in theory and in reality)?

2. Do the benefits to society of the Texas type privilege outweigh the costs?

B. BASIC FINDINGS:

1. There is little disagreement that regulated entities should be encouraged, if not required, to perform regulatory compliance audits.

2. There is serious disagreement among the regulated entities, state governments, EPA, public interest organizations, labor unions and authors of legal critiques over what incentives to use to encourage audits. Texas law, for example, provides:

   a. Immunity from monetary penalties for most disclosed violations;
   b. Privilege for certain audit information; and
   c. Criminal penalties for whistle blowers.

3. There is no doubt that the privilege is beneficial for the regulated industries, and there is no doubt that the privilege restricts access to information.

4. Until state and federal courts have ruled on some basic issues, the extent of privilege provided in a Texas type audit privilege is not clear.

5. While proponents and opponents of the privilege continue to make their arguments based on their positions and theories, there are few efforts to examine objectively the benefits and costs of the privilege.

C. CONCLUSIONS:

1. Until TNRCC, EPA or others establish objective criteria and perform objective studies of the use and impact of the audit privilege, the debate over the value and harm caused by the privilege will continue to be waged on ideological grounds.

2. The Texas audit privilege law is substantially more expansive than alternative privileges. The result is a privilege that is counter to the normal common law protections.

3. Because TNRCC has not provided guidance on what is privileged, and because federal courts are not likely to accept the audit privilege in all cases, some users of the privilege will likely be surprised that the privilege they think they had may not protect some information in personal injury cases.

II. PRIVILEGES IN AUDIT LAWS

A. GOALS & IMPACTS:

1. GOALS IDENTIFIED BY SPONSORS OF THE TEXAS ENVIRONMENTAL HEALTH & SAFETY AUDIT PRIVILEGE ACT:

a. Encourage regulated entities not currently conducting EHS audits to do so;

b. Protect such audits so that they may include candid and frank discussions;

c. Alloy protection without reliance on attorney-client privileges;

d. Assure immunity from penalties for entities that disclose violations. (See, *Brown, J.E. Buster, Warren Chisum & Lisa Anderson, "Encouraging Compliance: the Texas Environmental , Health & Safety Act," 26 St. B. Tex. Envtl.L. J. 76, at 77, 1995.*)

2. OTHER POTENTIAL IMPACTS OR GOALS:

a. Attract industry to Texas by giving industries competitive advantages over those in states without such a broad audit privilege;

b. Reverse the historic judicial approach of disfavoring privileges that restrict state and federal courts in ascertaining truth.

c. Use the adoption of such a privilege in a number of states to form the basis for a new federal common law privilege of self critical evaluation for such audits.

d. Provide a blanket privilege for audits regardless of the benefits to the public. (Texas law does not require notice to the government as a prerequisite to taking advantage of the privilege provisions.)

B. EXTENT OF CREATION OF AUDIT PRIVILEGES:

1. FEDERAL LEVEL: EPA: The privilege is not included in EPA's audit policy. Incentives for Self-policing: *Discovery, Disclosure Correction and Prevention of Violations-Final Audit Policy, 60 Fed. Reg. 66706, December 22, 1995, revised 65 Fed. Reg. 19617, April 11, 2000.* That policy, however, does state that EPA will not request audits documents in most situations.

2. STATE LEVEL:

a. It appears that Texas is one of the few states, if not the only state, to extend the privilege beyond environmental law and to health and safety laws.

b. Twenty of the twenty five states with audit laws, as of 1998, provided a privilege in their laws. *State Environmental Audit Laws and Policies: An Evaluation, Larry Morandi, National Conference of State Legislators, October 1998, pages 4&5.* See Attachment 1 for a summary of state laws.

III. EXISTING "ANALYSES" OF THE IMPACTS OF PRIVILEGE

Summary: Given the wide disagreement on the need for and extent of the use of an audit privilege, one would expect significant efforts to evaluate and understand the actual impacts of the laws. There is no doubt that the privileges in state laws could create incentives to perform audits, thereby 1) benefitting society with better management of risks by regulated entities and 2) benefitting the regulated entities with protection against disclosures. There is also no doubt that such privileges allow concealment of information that could assist finders of fact in agencies and courts in discovering the truth. As far as the authors can determine, with the exception of the efforts of Council of State Governments and Price Waterhouse that are discussed below, there have been no objective efforts (by supporters, opponents or independent entities) to evaluate the extent of benefits and risks to society or to weigh those benefits and costs. Instead most analyses simply repeat the policy arguments for and against the privilege. See for example, *Testimony of John Riley, TNRCC, before the U.S. Committee of the Judiciary, Subcommittee on Administrative Oversight and the Courts, on S. 582, May 21, 1996* (in favor of the law) and *Letter from Atlantic States Legal Foundation, Inc re: Comments on EPA Environmental Audit Policy, (Docket No C-94-01). From Robert Shavelson (ASLF) to Carol Browner (EPA), February 6, 1995* (opposed to privileges).

A. FEDERAL GOVERNMENT:

1. CONGRESSIONAL ACTION: Has not adopted the audit privilege;

2. CLINTON ADMINISTRATION: Disfavors audit privilege and has opposed bills in Congress to create the audit privilege.

3. FEDERAL COURTS: Disfavor creation of new privileges such as those contained in the state audit laws: (See the discussion in Section V below.)

4. FEDERAL RULES OF EVIDENCE: The privilege is not included in Rule 501.

5. U.S. DEPARTMENT of JUSTICE: Disfavors such privileges. Has advised federal agencies that, because of the Clinton administration's position opposing audit privileges, "federal facilities, including facilities operated by contractors, should not rely on state environmental audit laws to conceal information obtained through an

environmental audit ...." *Memorandum from Lois Schiffer (DOJ) and Steven Herman (EPA) dated February 12, 1997.*

6. EPA: Disfavors such privileges.

a. *Discovery, Disclosure Correction and Prevention of Violations-Final Audit Policy" 60 Fed. Reg. 66706, December 22, 1995, revised 65 Fed. Reg. 19617 April 11, 2000.*

b. *Statement of Principles: Effect of State Audit Immunity/Privilege Laws on Enforcement Authority for Federal Programs," Steven Herman, EPA memorandum, Feb 12, 1997.* See, Attachment 2. See Attachment 5 for an example of the use of the Principles..

c. EPA has analyzed cases which have been used as justifications for the audit/privilege cases. For example, the case most often cited in law review articles and other documents involves Coors Brewing company. *For example, $1.05 Million Fine Against Coors May Deter Corporate Environmental Audits, 24 Env. Rep, (BNA) 570 July 30, 1993.* EPA's evaluation found that the audit was not voluntary, but the result of a state requirement applicable to a number of entities. See Attachment 2.

B. STATES:

1. NATIONAL CONFERENCE OF STATE LEGISLATORS: "found that the existence of the environmental audit privilege and immunity laws or audit policies does not appear to influence the level of audit activity. Eighty percent of the facilities reported that they were conducting audits. There was no difference in the responses based on whether the state in which the facility operates has an audit law, an audit policy, or no law or policy."

found "that the existence of environmental audit privilege and immunity laws or audit policies does not appear to influence the disclosure of violations."

"found that, among the facilities that do not conduct audits, it is not clear whether enactment of an audit law or adoption of an audit policy would encourage them to begin an audit program. Roughly the same percentage of facilities indicated that a law or policy would be very likely as indicated that it would be not likely at all to convince the facility's company to begin an audit program." and

found that "state agencies revealed that they generally are not aware of the level of audit activity because the agencies do not routinely request audit reports from regulated entities." *State Environmental Audit Laws and Policies: An Evaluation, Larry Morandi, National Conference of State Legislators, October 1998, Executive Summary.*

2. STATES WITH AUDIT PRIVILEGE LAWS: Half the states have adopted audit laws. Twenty of those states provide for a privilege in their laws. *State Environmental Audit Laws and Policies: An Evaluation, Larry Morandi, National Conference of State Legislators, October 1998, pages 4&5.* (See Attachment 1)

C. STATE OF TEXAS:

1. IMPACTS OF THE AUDIT PRIVILEGE:

a. TNRCC Analysis: While the Texas audit privilege law has been touted as a model for other states, TNRCC has not attempted to collect data needed to evaluate:

i. The impact of the privilege on the environment or public health;

ii. The impact of the privilege on the number of audits performed;

iii. The impact of the privilege on any one facility's compliance or that of the industry as a whole; or

iv. The impact of the privilege on the ability of the agency or court decision makers to find the truth (or the existence or extent of abuse of the audit privilege.)

TNRCC does collect figures on the number of audits performed under the law and the number of violations disclosed under the law. **Neither TNRCC nor it's documents even acknowledge that there could be any adverse impacts of the audit privilege, except for a reduction in penalties collected.**

b. Texas Legislature: In 1996, the Senate Natural Resources Committee issued it analysis of the 1995 law. In its 3 page discussion of the results, it cites TNRCC's responses to the committees inquiries. TNRCC reported 256 notices of audit and 42 disclosures of violations. The report then cites TNRCC's responses in support of the positions that TNRCC took when the bill was before the Legislature, such as 1) the law has not hampered is enforcement and 2) violations disclosed included ones that TNRCC would not have discovered through inspections. *Effectiveness of the Environmental Audit Legislation: Interim Report to the 75th Legislature, Senate Natural Resource Committee, Sept. 1996, pages 6-8.*

(Attachment 3 purports to be a summary of major violations disclosed as a result of audits. It indicates, however, that many of the disclosed violations during the first two years of the use of the law were violations that TNRCC could have and should have discovered through inspection. A number of

violations involve failure to obtain authorizations (air permits or exceptions for existing units), violations inspectors routinely find.

Again, it must be noted that there is no acknowledgment of the broader social issue or any attempt to evaluate the potential negative aspects of the law.

c. Texas Attorney General: In order for Texas to obtain authorization for the federal NPDES program and to retain authorization of the federal UIC program, the Texas Attorney General was required to provide to EPA an analysis of the Texas law. The AG had to certify that the law would not unduly impact the state's enforcement authority for the program.

Texas Attorney General Morales has signed such a certification for Texas for the two programs. He argued that the audit privilege law would not preclude TNRCC from enforcing the environmental laws in the manner that is required by federal law for states seeking authority to run the federal programs. *State of Texas, Office of the Attorney General, Statement for Class I, III, IV, and V Underground Injection Wells, Dan Morales January 23, 1997.* (See Attachment 4)

It should be noted that the Oklahoma Attorney General may not have been willing to sign such a certification when a law similar to the Texas law was considered by the Oklahoma Legislature. (See Attachment 5)

2. GUIDANCE ON THE PRIVILEGE: TNRCC has not developed guidance for the regulated entities or its own staff on the privilege that would assist with the evaluation of the overall impacts of the audit privilege. The guidance that has been developed, in fact, makes such evaluations even more difficult.

a. Existing Guidance: *The Texas Environmental, Health and Safety Act Audit Privilege Act (as Amended by HB 3459, 75th Legislature), Report RG-173 (Revised), Litigation Support Division, TNRCC, September 1997:*

"Guidance- TNRCC staff shall not receive any information offered under a claim of confidentiality. If such a document or documents are submitted to the TNRCC, the employee who receives the documents should return then immediately, without review. Also no employee should request, review, accept, or use an audit report during an inspection without first consulting with the Litigation Support Division." and

"The agency will *not* routinely receive or review *privileged* audit reports."

b. Needed Guidance: TNRCC has neither developed guidance nor made efforts to resolve issues such as:

i. What facts are required to be collected, maintained, recorded or reported under the law, TNRCC rules, permits or enforcement orders to assist in determining what information collected in an audit is not privileged. Some guidance for the UIC program is found in the Attorney General Statement cited above. See Attachment 4. The AG did not include such a discussion in his statements on the NPDES program.

ii. If an audit for a facility was aimed simply at getting immunity and privilege for a violation already identified.

iii. If the audit at a facility resulted in better operations, fewer upsets, fewer violations, etc than prior to the audit.

iv. The use of the privilege to deny state or local governments or anyone else information that they would have had access to before the passage of the audit law.

(See also Section IV C below)

c. Existing TNRCC Efforts to Use the Guidance: TNRCC has developed a document entitled, *Standard Operating Procedure* and a checklist for notices of audits (NOA) and disclosure of violations (DOV). TNRCC also has forms for correspondence, confidentiality and compliance agreements. The TNRCC audit team meets periodically to review NOAs and DOVs.

D. INTERNATIONAL BODIES: The International Organization for Standards has developed an international "standard" for an environmental management system (EMS). *(ISO/DIS 14001 et seq.* The "ISO 14001" includes a provision for auditing compliance with environmental standards of practice as well as with the facilities' own internal standards. *ISO/DIS 14010 -12.* The requirements that must be followed to comply with ISO 14001 include of development of an EMS with management, operation and training procedures; monitoring; and auditing. *ISO/DIS 14004* **This international "standard of practice" also requires public involvement and external communications of the results of the EMS, including the audits.** *ISO 14001 Sections 4.1 and 4.4.* Thus, the international approach to encouraging audits takes a position directly opposed to privileges for audits.

E. PRIVATE ENTITIES:

1. PRICE WATERHOUSE: A 1995 survey indicated that about 20% of the companies surveyed were reluctant to audit without immunity or privilege type protections. Reported in *Effectiveness of the Environmental Audit Legislation: Interim Report to the 75th Legislature, Senate Natural Resource Committee, Sept. 1996, page 14.* The report also stated that more than 90% of corporate respondents

who conduct audits identified one of the reasons for doing so as the desire to find and correct violations before government inspectors discover them. It also found that concern about confidentiality ranked as one of the least important factors in decisions to conduct audits. EPA often cites the Price Waterhouse report for its position on privileges. See, for example, *Discovery, Disclosure Correction and Prevention of Violations-Final Audit Policy" 65 Fed. Reg. 19617 April 11, 2000, at 19619.*

2. BROWN MCCARROLL & OAKS HARTLINE, LLP: For the last several years, this law firm has distributed a "newsletter" on the development of the audit laws. It provides information on EPA's position, actions on legislation in other states and court decisions.

F. LAW REVIEW ARTICLES AND OTHER COMMENTARIES: A list of articles, comments, notes, and other commentaries on audit laws is provided in the attached list of references. Generally, except as discussed above, those authors favoring and opposing state audit laws provide the general policy arguments for or against the privileges, without any significant effort to support their argument with analyses of existing practices.

IV. FACTUAL ANALYSES OF AUDIT PRIVILEGE LAW (Using Texas law and TNRCC figures as the Case Study)

A. WHAT IS KNOWN: (The following data is taken from reports or correspondence from TNRCC.) The data reporting by TNRCC may not be completely up-to-date or accurate. Nothing in the experience of the authors, however, suggests that the TNRCC data is not sufficient to give a general picture of the number of audits and TNRCC's activities associated with them.

1. NUMBER OF AUDITS: As of June, 2000, TNRCC had received about 1,200 notices of audit (NOAs) under the Texas audit privilege law.

2. NUMBER OF AUDITS REJECTED: TNRCC apparently has rejected about 20 NOAs (or 1.6% of the 1200 audits), which reported violations, as not qualifying for immunity under the law. For a subset of these 20, TNRCC has initiated enforcement actions for the disclosed violations. (Note: the immunity in the Texas law is for penalties, not other enforcement actions. Thus, TNRCC could initiate enforcement actions for any disclosed violations.)

3. NUMBER OF VIOLATIONS DISCLOSED: Of the 1200 audits, there were about 325 audit for which there were one or more violations disclosed. TNRCC apparently can not use its data system to report easily on the actual number of violations disclosed. A case-by case review of the audit information in the data base or in the TNRCC records may be required to get the accurate number of violations disclosed.

4. PROBLEMS: A quick review of TNRCC files on individual audits and the

TNRCC data base by the authors indicates a number of problems with the use of the audit law, if not outright violations that were not reported or acted upon by TNRCC, including:

a. Improper Claims of Confidentiality: A number of documents serving as NOAs and DOVs have been filed with claims of confidentiality, a violation of the law. TNRCC apparently has obtained corrected documents in these cases.

b. Inadequate Description of the Violations Disclosed: TNRCC has had to seek additional information on DOVs to determine what was violated and how.

c. Failure to Timely Resolve Violations: While TNRCC has not often, if ever, taken enforcement action for failure of a party to resolve the violation in a timely fashion, the records suggest that such failures have occurred. Part of the problem is the lack of TNRCC guidance on what constitutes timely action.

B. WHAT IS NOT KNOWN:

1. NUMBER OF AUDITS PERFORMED FOR WHICH PRIVILEGE HAS BEEN CLAIMED BUT NO IMMUNITY WAS SOUGHT: Notice of an audit is not required to take advantage of the privilege. Thus, no one knows how many audits are being done and where the privilege in the law may be claimed. Apparently TNRCC is not making and does not intend to determine the extent of the use of the privilege.

2. NUMBER OR EXAMPLES OF PRIVILEGE CLAIMS THAT ARE NOT VALID: There is no apparent effort by TNRCC to determine if claims of privilege, other than claims of privilege on NOAs and DOVs , are valid.

3. NUMBER OF AUDITS PERFORMED WHEN THE VIOLATION WAS KNOWN BEFORE THE AUDIT BEGAN: There is no apparent effort by TNRCC to determine if audits are being used legitimately to discover past violations or if they are being used to gain protection for known violations.

4. NUMBER OF AUDITS THAT WOULD HAVE BEEN DONE WITHOUT THE PRIVILEGE: TNRCC apparently has no baseline for audits, i.e. no information on the number of audits that were done before the audit law was enacted. There is no apparent effort by TNRCC to perform an objective survey of regulated entities to determine if, or the extent to which, the privilege is serving as an incentive to do audits.

5. NUMBER OF VIOLATIONS IDENTIFIED IN AUDITS BUT NOT DISCLOSED: There is no apparent effort by TNRCC to determine if regulated

entities are deciding not to disclose violations or are disclosing some, but not all, of their violations.

6. INSPECTORS' ABILITY TO IDENTIFY THE VIOLATIONS: There is no apparent effort by TNRCC to determine if (or how many of) the type of violations disclosed have been or should be identified by TNRCC inspectors in routine or surprise inspections.

7. IMPROVEMENTS IN COMPLIANCE BASED ON AUDITS: There is no apparent effort to evaluate whether those entities that do audits perform better after the audit or continue to perform with similar compliance histories.

8. IMPACT ON THE ENVIRONMENT OR PUBLIC HEALTH AND SAFETY: There is no apparent effort by TNRCC to determine if the environment or public health is better protected in general or at any facility where an audit was performed.

C. WHAT IS NEEDED: (Assuming the current law is maintained in its current state.)

1. DATA COLLECTION: Information should be collected by TNRCC and other affected state agencies to help with evaluation of issues such as those identified in Section B above.

2. ADDITIONAL GUIDANCE: TNRCC needs easily accessible guidance on a number of issues, including, for example, what is required to be collected, recorded or reported under the laws (and, thus, not privileged) and what criteria to consider when determining what is a timely response to a violation discovered in an audit.

3. ADDITIONAL REGULATORY REPORTING REQUIREMENTS: TNRCC should revise its rules to require those seeking protection under the audit law to provide a

a. Full description of the violations with citations to the law, rule, permit or order violated;

b. Full explanation why the violation was not discovered in the normal course of events, including why the violation was not identified by any inspection or compliance management systems used by the entity to identify violations. (Future permit conditions requiring better inspection and management systems would be likely results.)

c. Certification, as is usually required for application materials, such as a statement that the regulated entity has complied with the audit law, that all violations discovered are being disclosed, that all responses to violations were initiated and completed in a timely fashion and that all information claimed

as privileged qualifies for the privilege under the law.

4. RANDOM SPOT CHECKS: The agencies should use their authority to review audit documents under confidentiality agreements to investigate the use of audits, claims of privilege, and disclosures.

V. SCOPE, APPLICATION AND FALSE CLAIMS OF PRIVILEGE UNDER THE TEXAS ENVIRONMENTAL AUDIT PRIVILEGE LAW

The Texas environmental audit privilege is very expansive (See, generally, Art. 4447cc, Section 5). As the Texas privilege is being interpreted (and used), it is broader than traditional privileges, such as those for attorney/client communications or attorney work product, or even the "self-critical" analysis privilege emerging in some jurisdictions. (Section V(A), below). This is one of the reasons why the scope of the privilege has been of concern to environmental organizations and EPA.(*See Section III, infra).*

There may, however, be some important limitations on when the Texas audit privilege can be invoked to protect information gathered through an environmental audit. (Section V(B), below). The most important of these limitations relates to whether the privilege is applicable in federal court litigation—either EPA enforcement actions or federal citizen suits. If the information is not subject to privilege in these types of cases—and is disclosed in a court action—there may be a question about whether it could then be used in subsequent personal injury or property damage litigation. Moreover, the Texas law itself has certain limitations on the privilege, at least one of which was incorporated in 1997 in an attempt to resolve potential problems with EPA delegation of federal programs to Texas. (*HB 3459, 75th Legislature, amending Art. 4447cc, Sec. 5 to delete the applicability of privilege in criminal proceedings*).

Given the general expansiveness of the Texas audit privilege, however, it is important that there be effective measures to recognize and prevent fraudulent claims of privilege. (Section V©), below). The Texas law provides for *in camera* review of privilege claims and disclosure in certain instances. *Art. 4447cc, Sec. 7.* It is not, however, clear if that process can work effectively in practice since a judge or administrative law examiner has little guidance as to what, for example, constitutes "appropriate efforts to achieve compliance with the law...promptly initiated and pursued with reasonable diligence after discovery of non-compliance". *Art. 4447cc, Sec. 7(a)(3).*

The Texas law also provides for sanctions for false claims of privilege. (*Art. 4447cc, Sec. 7(d)*). Finally, the regulatory oversight agencies could conduct more "spot reviews" of audit privilege claims to ensure the privilege is being properly invoked, though it does not appear that TNRCC has, to date, undertaken such spot checks.

A. SCOPE OF THE TEXAS AUDIT PRIVILEGE COMPARED WITH OTHER APPROACHES TO PROTECTING PRIVILEGED INFORMATION:[1]

1. ATTORNEY CLIENT PRIVILEGE:

(a) Four basic elements of attorney client privilege *United States v. United Shoe Machine Corp., 89 F. Supp. 357, 358-359 (D. Mass. 1950):* communication from client/prospective client to counsel; communication to attorney acting in counsel role; for the purpose of securing a legal opinion or legal services; client must claim and not have waived the privilege. *See also Tex. R. Evid. Rule 503(b).*

(b) In a corporate context, counsel must be corporate counsel, acting in that role; information must concern employee's duties; employee must be aware that communication is for purposes of obtaining legal advice; and information must be treated as confidential. (*Upjohn Co. v. United States, 449 U.S. 383 (1981); see also Nat'l Tank Co. V. Brotherton, 851 S.W.2d 193, 197-98 (Tex. 1993).*

(c) Attorney client privilege limited to "only those disclosures—necessary to obtain informed legal advice—which might not have been made absent the privilege." *Fisher v. United States, 425 U.S. 391, 403 (1976).*

(d) Attorney client privilege does not protect facts underlying the confidential communications. *Upjohn at 395.* These facts can be obtained through, for example, deposing employees or auditors involved in the audit to obtain the facts contained in the report. Attorney client privilege does not protect reports prepared as normal part of business practice. *Id. at 394.*

(e) One case has held an environmental audit to be covered by attorney client privilege because it "appeared to have been prepared for the purpose of securing an opinion of law." (*Olen Properties Corp. v. Sheldahl, Inc., 1994 WL 212135 (C.D. Cal, 1993).*

2. ATTORNEY WORK PRODUCT PRIVILEGE:

(a) Work product privilege applies to documents prepared "in anticipation of litigation or for trial" by a party, its attorneys or various consultants. *Fed.R.Civ.P. 26(b)(3).* The opposing party can overcome the privilege upon a showing of need, except with respect to mental impressions, conclusions, opinions or legal theories of an attorney.

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[1] See Hawks, Ronnie P., *Environmental Self-Audit Privilege and Immunity: Aid to Enforcement or Polluter Protection*, 30 Ariz. St. L.J. 235, 235-47 (1998), discussing applicability of attorney client, work product and self-critical analysis privileges to environmental audits.

(b) Work product privilege does not apply to facts, nor does it extend to documents "prepared in the ordinary course of business", even if those documents might be useful in litigation. *Martin v. Valley National Bank, 140 F.R.D. 291, 304 (S.D.N.Y. 1991); 1 Kenneth S. Brown, et al, McCormick on Evidence, Sec. 96, at 360 (John W. Strong, ed. 1992).*

3. SELF-CRITICAL ANALYSIS PRIVILEGE:[2]

(a) Despite federal court's general reluctance to create new privileges *University of Pennsylvania v. EEOC, 493 U.S. 182 (1990))*, some jurisdictions have recognized a new federal common law privilege for "self-critical" analyses. Bredice v. Doctor's Hospital, Inc., 50 F.R.D. 249 (D.D.C. 1970), aff'd 479 F.2d 920 (D.C. Cir. 1973); Reichold Chemicals, Inc. v. Textron, 157 F.R.D. 522 (N.D. Fla. 1994); Dowling v. American Hawaii Cruises, Inc., 971 F.2d. 423, 424 (9th Cir. 1992)(only for post-accident reviews, not for "routine" safety reviews)

(b) Basic elements of this privilege: information must result from a critical self-analysis; public interest in free flow of information uncovered in analysis must be strong and not outweighed by public interest in disclosure; document prepared with expectation that it would be confidential; not a routine review; can be overcome by a substantial showing of need; and does not protect underlying facts. *Ruskin, William A., et al, "Protecting the Confidentiality of Environmental Audits", in Toxics Law Reporter (BNA), January 22, 1997, 911, 911-13.* This privilege is much less likely to be recognized in litigation between government and private party. *See, e.g., Federal Trade Commission v. TRW, Inc., 628 F.2d. 207, 210-11 (Ct. App. D.C. Cir. 1980).*

(c) Application of the self-critical analysis privilege has so far been rejected in 5th Circuit: *Louisiana Environmental Action Network (LEAN), Inc. v. Evans Industries, Inc., 1996 U.S. Dist. LEXIS 8117, 43 ERC 1190 (E.D. La. 1996); Carr v. El Dorado Chemical Co., 1997 U.S. Dist. LEXIS 5752.* In LEAN, the court stated that even if the self-critical analysis did exist in the 5th Circuit, the "justifications for it do not support its application to voluntary environmental self-analyses. As correctly noted by the plaintiff: The consequences of failure to comply with state and federal environmental laws and regulations--including the possibility of criminal sentences, substantial civil penalties, debarment from entering into government contracts and public disapproval--make it essential that corporations constantly evaluate their compliance with those laws and regulations." (Cited with approval in *Carr*).

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[2] See Kiehnhoff, Tom N., *Handling Voluntary Disclosure: Environmental Audits and the Federal Prosecutor,* 29 St.B.Tex.Envtl.L.J. 40, 49-51 (1998) (discussing self-critical analysis cases).

4. TEXAS ENVIRONMENTAL AUDIT PRIVILEGE:

(a) The Texas environmental audit privilege law provides an expansive privilege for "audits" (environmental or "health and safety"). "Audit" is defined broadly in Section 4 of the Act. *Art. 4447cc, Section 4.* Such audits are "privileged and ...not admissible as evidence or subject to discovery" in either civil actions or administrative proceedings. *Id., Section 5(a), (b).* Unlike the attorney client, work product, and self-critical analysis privileges, the Texas law appears to bring within the scope of the privilege factual evidence "related to" the preparation of the audit. A person who conducted the audit and who "has actually observed the physical events of violation" can be compelled to testify about "events" related to a violation (*Id., Section 5(d)*), but this does not clearly apply to violations that occur before the audit is conducted.

(b) Section 8 of the Texas audit privilege law provides that information required to be "collected, developed, maintained or reported" under federal or state EHS laws, information obtained by a regulatory agency through observation, sampling or monitoring, and information obtained from a source not involved in the preparation of the audit is not privileged.

(c) The Texas law also appears to seek protection of underlying facts. The law allows the audit privilege for "information gained in the audit and findings, conclusions and recommendations", "field notes", "records of observations", "laboratory analyses and other analytical data", "photographs", "maps", "charts", "graphs", and "surveys". *Art. 4447cc, Section 4.* The law does not allow the privilege for: (1) a "document, communication, datum, or other report or other information required by a regulatory agency to be collected, developed, maintained, or reported under a federal or state environmental or health and safety law." *Id. Sec. 8(a)(1).* TNRCC guidance provides that "Stack tests, data reviews, and so forth may be privileged only if they are included in the scope of the audit and are not required to be collected, maintained or reported under laws, regulations, permit conditions or enforcement orders." *TNRCC, The Texas Environmental, Health and Safety Audit Privilege Act (as amended by HB 3459, 75th Legislature), Report No. RG-173 (revised), Sept. 1997, p.12.*

B. APPLICABILITY OF THE TEXAS ENVIRONMENTAL AUDIT PRIVILEGE:

1. APPLICABILITY TO FEDERAL FACILITIES: Under the current federal administration state privileges cannot be used by federal facilities, including facilities operated by contractors. See *Memo from Lois Schiffer (DOJ) and Steve Herman (EPA), February 12, 1997, discussed above..*

2. APPLICABILITY TO ACTIONS BY EPA: This question is unsettled. In diversity cases, state law of privilege will apply. Generally, however, in "federal question" cases, Rule 501 of the federal rules of evidence requires the application of the federal common law of privilege. *Rule 501, Fed. R. Evid.:*

> *Except as otherwise required by the Constitution of the United States or provided by Act of Congress or in rules prescribed by the Supreme Court pursuant to statutory authority, the privilege of a witness, person, government, State or political subdivision thereof shall be governed by the principles of common law as they may be interpreted by the courts of the United States in light of reason and experience. However, in civil actions and proceedings, with respect to an element of a claim or defense as to which State law supplies the rule of decision, the privilege of a witness, person, government, State, or political subdivision thereof shall be determined in accordance with State law.*

There are two aspects to this question: (a) does a federal court enforcement action by EPA against a regulated entity in a state with a delegated program (including, but not limited to, "over-filing" cases) constitute application of federal law or state law and (b) even if such a case involves application of federal law, will federal courts recognize a privilege for EHS audits under the "self-critical analysis" privilege or in an exercise of "comity" toward state law?

(a) **Enforcement of federal or state law for delegated programs**: The case law is not clear as to whether EPA is enforcing federal law or state law when it brings an enforcement action pursuant to federal environmental law in a state with a delegated program. The overfiling cases do not provide much guidance on this question. For example, in *Harmon Indus. V. Browner, 191 F.3d 894 (8th Cir. 1999),* an EPA overfiling action was barred, in part, on the grounds of res judicata. In analyzing whether res judicata precluded the EPA action, the court (looking to Missouri law on res judicata) concluded that both EPA and the prior state action sought to "enforce a hazardous waste program pursuant to RCRA", thus providing an "identity" in the cause of action. *Id. at 902.* In another case, a district court essentially focused on the facts from which claims of violation arose to determine whether certain citizen suit claims under the federal Clean Water Act (in a state authorized to run the NPDES program) were barred by res judicata. *Citizens Legal Environmental Action Network v. Premium Standard Farms, Inc., 2000 U.S. Dist. LEXIS 1990 (W.D. Mo. 2000).*

In the portion of *Harmon* analyzing whether EPA's overfiling action was barred by RCRA itself, the court noted that Congress, in allowing for delegation of this particular federal law environmental program to the states, intended that it "supplant the federal hazardous waste program in all respects including enforcement." *Harmon at 899.*

However, it is far from clear that federal courts, in the context of a federal enforcement action brought by EPA, would apply the state law on audit privilege, even in states with fully delegated programs. Among other reasons, this is because federal courts generally strongly disfavor privileges because they hinder ascertainment of the truth. *University of Pennsylvania, supra; Federal Trade Commission, supra (privilege disfavored especially where it would interfere with government enforcement).*

(b) **If the federal court concludes it is enforcing federal law in such a case, then it will normally apply the federal common law of privilege:** Federal common law has not yet developed an explicit privilege for environmental audits and decisions on the "self-critical analysis" privilege are sparse. Federal courts are generally reluctant to recognize new privileges (*University of Pennsylvania, supra; Jaffe v. Redmond, 116 S. Ct.1923, 1928 (1996)(but creating new social worker/psychotherapist privilege in private tort action); A.C.L.U. v. Finch, 638 F.2d 1336, 1344 (5th Cir. 1981).* Factors mitigating against federal court recognition of a common law privilege for environmental audits, especially in federal government enforcement actions, include public policy favoring disclosure and ascertaining truth; interference with a federal statutory scheme that does not include the privilege, imposing an undue burden on enforcement and disputable public benefits of the audit privilege. *See, e.g., University of Pennsylvania, supra and Matter of International Horizons, Inc., 689 F.2d 996, 1004 (11th Cir. 1982) (rejecting adoption of state privilege where it would substantially thwart an important federal interest).*

3. APPLICABILITY TO COURT CITIZEN SUITS: The same considerations set out above with respect to the application of the state privilege in federal court enforcement actions of federal environmental laws would apply to the application of the privilege in citizen suits to enforce federal environmental laws.

4. APPLICABILITY TO PERSONAL INJURY AND PROPERTY DAMAGE SUITS, PENDANT TO FEDERAL LAW CLAIMS: In a personal injury or property damage suit brought under diversity jurisdiction in federal court, the federal court, pursuant to Fed. R. Evid. 501 would likely recognize the state environmental audit privilege. However, if the personal injury or property damage claims are heard by the federal court under pendent jurisdiction, the court may apply the federal common law of privilege. *See, e.g., Reichhold, supra; Hancock v. Hobbs, 967 F.2d 462, 466 (11th Cir.1992); Hancock v. Dodson, 958 F.2d 1367 (6th Cir. 1992); Wright, Charles A. & Kenneth A. Graham, Federal Practice & Procedure, Sec. 5434 (West 1980).*

5. APPLICABILITY TO STATE AGENCIES AND POLITICAL SUBDIVISIONS: The Texas audit privilege law applies by its terms to governmental units as well as private companies. Federal courts, however, may not recognize the privilege if a governmental unit was the subject of a federal enforcement action or a citizen suit in

federal court. In fact, the 5th Circuit has perceived a "special danger in permitting state governments to define the scope of their own privilege when the misconduct of their agents is alleged." *A.C.L.U. v. Finch, supra at 1344, quoting from Carr v. Monroe Mfrg.Co 431 F.2d 384, 389 (5thCir.1970) cert.denied, 400 U.S. 1000 (1971).*

6. APPLICABILITY TO CRIMINAL ACTIONS: After the 1997 amendments, the Texas audit privilege law no longer allows the privilege claim for criminal actions. *HB 3459, 75th Legislature.*

C. CHECKS AND BALANCES TO PREVENT FALSE PRIVILEGE CLAIMS:

The Texas law contains three possible opportunities for checks and balances to prevent false claims of privilege:

(1) *IN CAMERA* REVIEW: Review of audits by a court or Administrative Law Judges to determine if portions are not privileged for reasons set out in the act (*Art. 4447cc, Sec. 7(a));*

(2) SANCTIONS OR MONETARY PENALTIES: The law provides for penalties for "intentional or knowing" false claims of privilege (*Id., Sec. 7(d));* and

(3) SPOT CHECKS: The law provides the opportunity for TNRCC (or other agencies) to engage in spot checks of audits pursuant to confidentiality agreements.

As noted above, the *in camera* review provisions are likely to be difficult for a court or an ALJ to apply because the party advocating that the privilege does not apply cannot generally see the audit and is, therefore, hamstrung from providing the information the court or ALJ might need to determine if the privilege applies (e.g. if "appropriate efforts to achieve compliance with the law" were "promptly initiated and pursued with reasonable diligence after discovery of noncompliance" *Id. Sec. 7(a)(3).* False claims of privilege are unlikely to be discovered unless TNRCC undertakes a program to "spot check" audits, pursuant to confidentiality agreements.

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ATTACHMENTS

ATTACHMENT 1

State Environmental Audit Laws and Policies: An Evaluation

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Executive Summary

Environmental audits can help regulated industries comply with environmental laws and shift a state's limited enforcement resources into areas of greater concern. An environmental audit is a voluntary internal evaluation of a facility's operations or of a specific activity at the facility. Companies use them to measure compliance with environmental regulations, identify problems early and correct them quickly, ensure that pollution control systems are functioning properly, and improve the company's overall environmental program by making it more proactive.

Twenty-five states have enacted environmental audit privilege or immunity legislation—and 11 states have adopted environmental audit policies—to encourage greater use of environmental audits. The legislation typically grants information generated through an audit a privilege against disclosure in an administrative or judicial proceeding, and limited immunity from fines and penalties if a company voluntarily discloses the audit results and corrects the violation in a timely manner. Policies encourage the use of audits and disclosure of violations by treating them as mitigating factors in enforcement actions and either not assessing a fine or penalty, or reducing the amount.

The National Conference of State Legislatures (NCSL), with assistance from Abt Associates Inc. of Cambridge, Mass., conducted telephone interviews with 988 manufacturing facilities—and with environmental regulatory agencies and offices of attorneys general in 28 states—during 1998 to try to determine the effects of environmental audit laws and policies on the level of audit activity. Specifically, NCSL sought to determine whether the existence of an environmental audit privilege and immunity law—or of an environmental audit policy—encourages facilities to conduct more audits, and to disclose more compliance violations discovered during an audit, than facilities in states that have no law or policy. NCSL also sought to determine the level of awareness among state agencies of environmental audit activity by regulated entities.

NCSL found that the existence of environmental audit privilege and immunity laws or audit policies does not appear to influence the level of audit activity. Eighty percent of facilities reported that they were conducting audits. There was no difference in the responses based on whether the state in which the facility operates has an audit law, an audit policy, or no law or policy. NCSL also determined that the existence of environmental audit privilege and immunity laws or audit policies does not appear to influence the disclosure of violations. Between one-fourth and one-third of facilities had disclosed a violation. Again, there was no difference among facilities operating in states that have an audit law, an audit policy, or no law or policy.

Facilities reported that the two most important reasons for conducting audits are 1) to measure compliance with environmental requirements and 2) to identify problems internally and correct them before they are discovered by a regulatory agency. For those facilities that do not conduct audits, the two most important reasons are 1) that they have few problems complying with environmental requirements and 2) a concern that a regulatory agency might attempt to obtain an audit report and use the information in an enforcement action. NCSL found that, among facilities that do not conduct audits, it is not clear whether enactment of an audit law or adoption of an audit policy would encourage them to begin an audit program. Roughly the same percentage of facilities indicated that a law or policy would be *very likely* as indicated that it would be *not likely at all* to convince the facility's company to begin an audit program.

The interviews with state agencies revealed that they generally are not aware of the level of audit activity because the agencies do not routinely request audit reports from regulated entities. The only way most state agencies know whether an audit is being conducted is for a regulated entity to disclose a violation, or—in some cases—to provide advance notification that an audit is being performed as a condition to receive privilege or immunity. Three-fourths of the states that have environmental audit immunity provisions in their laws have received voluntary disclosures of violations pursuant to the law, although the number of disclosures varies significantly by state. The violations disclosed typically are minor violations that are quickly corrected and are granted immunity from fines or penalties. Regulatory agencies routinely work with facilities to help them comply with environmental regulations, whether or not the state has an audit law or policy.

Table 1. Voluntary State Environmental Audit Privilege and Immunity Legislation

State	Statutory Citation	Eff. Date*	Privilege: Civil/Adm. Proceedings	Privilege: Criminal Proceedings	Pre-Notification for Protection	Immunity: Civil/Adm. Penalties	Immunity: Criminal Penalties	Sunset Date
Alaska	*Alaska Stat., 9.25.450 et seq.*	1997	Yes	No	Yes	Yes	No	No
Arkansas	*Ark. Stat. Ann., 8-1-301 et seq.*	1995	Yes	Yes	No	No	No	No
Colorado	*Colo. Rev. Stat., 13-25-126.5, 25-1-114.5*	1994	Yes	Yes	No	Yes	Yes	Yes (1999)
Idaho	*Idaho Code, 9-801 et seq.*	1995	Yes	Yes	No	Yes	Yes	Yes (1997)
Illinois	*Ill. Comp. Stat. Ann., 415-5/52.2*	1995	Yes	Yes	No	No	No	No
Indiana	*Ind. Code, 13-28-4-1 et seq.*	1994	Yes	Yes	No	No	No	No
Iowa	*1998 Chapter 1109*	1998	Yes	No	No	Yes	No	No
Kansas	*Kan. Stat. Ann., 60-3332 et seq.*	1995	Yes	Yes	No	Yes	Yes	No
Kentucky	*Ky. Rev. Stat. Ann., 224.01-040*	1994, *1996*	Yes	Yes	No	Yes	No	No
Michigan	*Mich. Comp. Laws Ann., 324.14801 et seq.*	1996, *1997*	Yes	No	Yes	Yes	No	No
Minnesota	*Minn. Stat. Ann., 114C.20 et seq.*	1995	No	No	N/A	Yes	Yes	Yes (1999)
Mississippi	*Miss. Code Ann., 49-2-71*	1995	Yes	Yes	No	No	No	No
Montana	*Mont. Code Ann., 75-1-1201 et seq., 80-1-301 et seq.*	1997	No	No	N/A	Yes	No	Yes (2001)
Nebraska	*Neb. Rev. Stat., 25-21,254 et seq.*	1998	No	No	N/A	Yes	No	No
Nevada	*Nev. Rev. Stat., 445C.010 et seq.*	1997	Yes	No	No	Yes	No	No

Table 1. Voluntary State Environmental Audit Privilege and Immunity Legislation (continued)

State	Statutory Citation	Eff. Date*	Privilege: Civil/Adm. Proceedings	Privilege: Criminal Proceedings	Pre-Notification for Protection	Immunity: Civil/Adm. Penalties	Immunity: Criminal Penalties	Sunset Date
New Hampshire	*N.H. Rev. Stat. Ann., 147-E:1 et seq.*	1996	Yes	Yes	No	Yes	No	Yes (2002)
Ohio	*Ohio Rev. Code Ann., 3745.70 et seq.*	1997, *1998*	Yes	No	No	Yes	No	Yes (2004)
Oregon	*Ore. Rev. Stat., 468.963*	1993	Yes	Yes	No	No	No	No
Rhode Island	*R.I. Gen. Laws, 42-17.8-1 et seq.*	1997	No	No	N/A	Yes	Yes	No
South Carolina	*S.C. Code Ann., 48-57-10 et seq.*	1996	Yes	Yes	Yes	Yes	No	No
South Dakota	*S.D. Codified Laws Ann., 1-40-33 et seq.*	1996	No	No	N/A	Yes	Yes	No
Texas	*Texas Civ. Stat., 4447cc*	1995, *1997*	Yes	No	Yes	Yes	No	No
Utah	*Utah Code Ann., 19-7-101 et seq.*	1995, *1996, 1997*	Yes	No	No	Yes	No	No
Virginia	*Va. Code, 10.1-1198 et seq.*	1995	Yes	No	No	Yes	No	No
Wyoming	*Wyo. Stat., 35-11-1105 et seq.*	1995, *1998*	Yes	No	No	Yes	No	No

* Amendments in italics.
Source: National Conference of State Legislatures, 1998.

(which are representative of the policies in the 11 states that have policies). As with the legislation, these policies were adopted no later than 1996.

Summaries of State Environmental Audit Privilege and Immunity Legislation

Arkansas

Act No. 350 of 1995 *(Ark. Stat. Ann., 8-1-301 et seq.)* provides privileged status to a voluntary environmental audit report against disclosure as evidence in civil, criminal and administrative proceedings. The privilege does not apply to information required to be collected, developed, maintained or reported under state or federal law, or to information obtained through other means by a regulatory agency. The information to which privilege is asserted

ATTACHMENT 2

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

FEB 14 1997

MEMORANDUM

SUBJECT: Statement of Principles
Effect of State Audit Immunity/Privilege Laws
On Enforcement Authority for Federal Programs

TO: Regional Administrators

FROM: Steven A. Herman
Assistant Administrator, OECA

Robert Perciasepe
Assistant Administrator, OW

Mary Nichols
Assistant Administrator, OAR

Timothy Fields
Acting Assistant Administrator, OSWER

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Under federal law, states must have adequate authority to enforce the requirements of any federal programs they are authorized to administer. Some state audit immunity/privilege laws place restrictions on the ability of states to obtain penalties and injunctive relief for violations of federal program requirements, or to obtain information that may be needed to determine compliance status. This statement of principles reflects EPA's orientation to approving new state programs or program modifications in the face of state audit laws that restrict state enforcement and information gathering authority. While such state laws may raise questions about other federal program requirements, this statement is limited to the question of when enforcement and information gathering authority may be considered adequate for the purpose of approving or delegating programs in states with audit privilege or immunity laws.

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I. Audit Immunity Laws

Federal law and regulation requires states to have authority to obtain injunctive relief, and civil and criminal penalties for any violation of program requirements. In determining whether to authorize or approve a program or program modification in a state with an audit immunity law, EPA must consider whether the state's enforcement authority meets federal program requirements. To maintain such authority while at the same time providing incentives for self-policing in appropriate circumstances, states should rely on policies rather than enact statutory immunities for any violations. However, in determining whether these requirements are met in states with laws pertaining to voluntary auditing, EPA will be particularly concerned, among other factors, with whether the state has the ability to:

1) Obtain immediate and complete injunctive relief;

2) Recover civil penalties for:

i) significant economic benefit;

ii) repeat violations and violations of judicial or administrative orders;

iii) serious harm;

iv) activities that may present imminent & substantial endangerment.

3) Obtain criminal fines/sanctions for wilful and knowing violations of federal law, and in addition for violations that result from gross negligence under the Clean Water Act.

The presumption is that each of these authorities must be present at a minimum before the state's enforcement authority may be considered adequate. However, other factors in the statute may eliminate or so narrow the scope of penalty immunity to the point where EPA's concerns are met. For example:

1) The immunity provided by the statute may be limited to minor violations and contain other restrictions that sharply limit its applicability to federal programs.

2) The statute may include explicit provisions that make it inapplicable to federal programs.

II. Audit Privilege Laws

Adequate civil and criminal enforcement authority means that the state must have the ability to obtain information needed to identify noncompliance and criminal conduct. In

determining whether to authorize or approve a program or program modification in a state with an audit privilege law, EPA expects the state to:

1) retain information gathering authority it is required to have under the specific requirements of regulations governing authorized or delegated programs;

2) avoid making the privilege applicable to criminal investigations, grand jury proceedings, and prosecutions, or exempted evidence of criminal conduct from the scope of privilege;

3) preserve the right of the public to obtain information about noncompliance, report violations and bring enforcement actions for violations of federal environmental law. For example, sanctions for whistleblowers or state laws that prevent citizens from obtaining information about noncompliance to which they are entitled under federal law appear to be inconsistent with this requirement.

III. Applicability of Principles

It is important for EPA to clearly communicate its position to states and to interpret the requirements for enforcement authority consistently. Accordingly, these principles will be applied in reviewing whether enforcement authority is adequate under the following programs:

1) National Pollutant Discharge Elimination System (NPDES), Pretreatment and Wetlands programs under the Clean Water Act;

2) Public Water Supply Systems and Underground Injection Control programs under the Safe Drinking Water Act;

3) Hazardous Waste (Subtitle C) and Underground Storage Tank (Subtitle I) programs under the Resource Conservation Recovery Act;

4) Title V, New Source Performance Standards, National Emission Standards for Hazardous Air Pollutants, and New Source Review Programs under the Clean Air Act.

These principles are subject to three important qualifications:

1) While these principles will be consistently applied in reviewing state enforcement authority under federal programs, state laws vary in their detail. It will be important to scrutinize the provisions of such statutes closely in determining whether enforcement authority is provided.

2) Many provisions of state law may be ambiguous, and it will generally be important to obtain an opinion from the state Attorney General regarding the meaning of the state law

and the effect of the state's law on its enforcement authority as it is outlined in these principles. Depending on its conclusions, EPA may determine that the Attorney General's opinion is sufficient to establish that the state has the required enforcement authority.

3) These principles are broadly applicable to the requirements for penalty and information gathering authority for each of the programs cited above. To the extent that different or more specific requirements for enforcement authority may be found in federal law or regulations, EPA will take these into account in conducting its review of state programs. In addition, this memorandum does not address other issues that could be raised by state audit laws, such as the scope of public participation or the availability to the public of information within the state's possession.

IV. Next Steps

Regional offices should, in consultation with OECA and national program offices, develop a state-by-state plan to work with states to remedy any problems identified pursuant to application of these principles. As a first step, regions should contact state attorneys general for an opinion regarding the effect of any audit privilege or immunity law on enforcement authority as discussed in these principles.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION VIII
999 18th STREET - SUITE 500
DENVER, COLORADO 80202-2466

APR 26 1995

Ref: 8A

MEMORANDUM

SUBJECT: Infamous Coors Case

FROM: Jack W. McGraw
Acting Regional Administrator

TO: Regional Administrators
Deputy Regional Administrators

Many of you have heard of "abuse" cast upon Coors as a result of their self audit. This horror story is being used around the country to support the need for state self-audit environmental laws.

Attached is a summary of that case. Note that the action taken was not a self audit on the part of Coors. They were ordered to review.

Secondly, they actually were fined $237,000 not the millions you hear in the horror stories. Thirdly, it was a state action not a federal action.

Our most knowledgeable person on this case is Ron Rutherford at (303) 312-6180.

Attachment

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COORS BREWING COMPANY
AIR ENFORCEMENT
AND
THE COLORADO SELF-AUDIT AMNESTY LAW

BACKGROUND

As required by Colorado Regulation No. 7, which regulates sources of volatile organic compounds (VOC), beginning in 1990 Coors Brewing Company (Coors) initiated a comprehensive emissions testing program throughout its Golden brewery to determine sources and levels of VOC emissions from its brewing operations. Regulation No. 7 required that sources identify and report all sources and emissions of VOCs and to make a Reasonably Available Control Technology (RACT) determination for each source. This was to be completed and reported the the State by the end of October 1990 and RACT was to be installed no later than the end of October 1991. Coors submitted its report in late 1992, almost one year late. Based on information it received from Coors from the required audit of VOC emissions and sources in December 1992, the State determined that Coors was in violation of Regulation No. 7 and of Regulation No. 3, which concerns the permitting of sources of air pollution.

ENFORCEMENT

STATE ACTIONS:

1. February 18, 1993, the Colorado Department of Health, Air Pollution Control Division (APCD) issued a "Notice of Violation" (NOV) for the following violations:

    a. construction, modification, and operating sources of air pollution without filing Air Pollution Emissions Notices (APENs) for 61 emission sources;
    b. failure to obtain State air emissions permits for 25 sources, as required by the State permitting regulations, Regulation No. 3;
    c. failure to submit the VOC inventory and RACT report by October 30, 1990, as required by Regulation No.7;
    d. failure to apply bottom or submerge-fill technology on 26 transfer tanks;

2. In a letter dated April 16, 1993, EPA Region VIII notified the Director of the APCD that EPA was adding the Coors to the national Significant Violators list for the second quarter fiscal 1993.

3. June 11, 1993, the APCD issued a second NOV for making a major modification to a major source located in a ozone non-attainment area resulting in significant net VOC emissions increases.

4. July 11, 1993, the APCD issued a Compliance Order for the above violations and assessing a civil penalty of $1,050,300.

EPA ACTIONS:

EPA took no formal enforcement action against Coors for these violations. EPA did inform both the State and Coors that to avoid a federal action, a settlement must be reached that met the requirements of the State/EPA Enforcement Agreement. This Agreement requires any injunctive relief necessary to correct the violations and the assessment penalties to recover the economic benefit of noncompliance and impose a gravity component reflecting the seriousness of the violations.

SETTLEMENT

On February 17, 1994, the State and Coors Brewing Company entered into a Settlement Agreement settling all violations cited in the two NOVs and the Compliance Order. The Agreement which required Coors to:

1. Pay a penalty of $237,000, of which $137,000 was to recoup the calculated economic benefit of noncompliance;
2. Relinquish 70 tons per year of banked VOC emissions, valued at $70,000;
3. Forfeiture of 285 tons per year of NOx allowable emissions, valued at $71,250;
4. Forfeiture of 285 tons per year of SOX allowable emissions, valued at $71,250;
5. Reduction of VOC emissions by 69.5 tons per year;
6. Installation of RACT on Cellar 9 and the Process Wastewater Treatment Plant.

The State recognized a $175,000 expenditure by Coors in developing new VOC emissions factors for breweries, which significant improved the understanding of the State and the public concerning such emissions which had been previously significantly underestimated.

LEGACY OF THIS CASE

As a result of this action, Coors was instrumental in having introduced to the Colorado Legislature Senate Bill 94-139:" A Bill for an Act Concerning Environmental Self-Evaluation, and, In Connection Therewith, Creating an Environmental Self-Evaluation Privilege and Creating a Presumption Against the Imposition of any Administrative, Civil, or Criminal Penalties for Voluntary Disclosures Arising Out of any Environmental Self-Evaluation". This Bill was signed into law by the Governor on June 1, 1994.

APCD was severely criticized by editorials in Denver's two leading newspaper, the Rocky Mountain News and the Denver Post, for assessing a $1 million fine against Coors after its "exemplary" behavior and cooperation and for doing a "favor for air pollution regulators around the country".

ATTACHMENT 3

DRAFT

NOT FOR ATTRIBUTION

6/12/97

ENTITY NAME	TYPE OF BUSINESS	MAJOR VIOLATIONS
ALCOA - ALUMINUM CORPORATION OF AMERICA	ALUMINUM MANUFACTURING	5/20/96 DOV, and 5/17/96 & 6/26/96 correspondence provide additional monitoring data from internal waste water treatment outfalls. The company did not fail to conduct the analyses, they failed to submit the results of these additional analyses with their monthly reports. The permit conditions (#4 under Monitoring & Reporting) , are for additional monitoring which the company conducts for their own purposes, the analysis is not required by the permit, but, if the company conducts it they are required to report the results. In addition, #1 under Other Requirements has provisions for maintaining BOD & chlorine residual for domestic sewage prior to discharge into the treatment facility, but, does not require submittal of data. Timeframe includes January 1993 through April 1996.
ALLIED-APICAL COMPANY		4/16/96 DOV discloses that they may not have satisfied minor record keeping and minor reporting requirements in the past. Neither DOV or NOA is specific enough to determine which rule was violated or which program media. 11/10/95 DOV discloses they may not be operating as represented in the PI-7 registration form submitted for its vent gas incinerator under certain operating conditions.
AMERICAN AIRLINES, INC	COMMERCIAL AIRLINE	DOV dated 11/21/96 was marked as confidential - not accepted to date due to confidentiality claim.
ARCO CHEMICAL COMPANY - BAYPORT	CHEMICAL MANUFACTURING	8/4/95 DOV was not preceded by a NOA but discloses a violation of NSPS Subpart Kb regulations - failure to notify prior to refilling tank systems which vent to the atmosphere. TNRCC sent a letter on 6/12/96 which indicated that ARCO's NOA did not comply with the provisions of the Texas Environmental, Health, and Safety Audit Privilege Act and denied immunity.
ARCO CHEMICAL COMPANY - CHANNELVIEW	CHEMICAL MANUFACTURING	11/4/96 DOV discloses a potential violation of burning hazardous wastes exibiting the characteristic of ignitability & possibly toxicity for cresols in a non-hazardous waste incinerator (BDO Incinerator F-57675). The incinerator was shutdown in May of 1996 - the duration of the violation was not stated in the DOV.
ARCO PERMIAN BLOCK 31 GAS.&PRES. MAIN.	PRESSURE MAIN. & GASOLINE PLT.	9/18/96 DOV discloses possible violations of 30 TAC 116 & 40 CFR 52.21. There were no specifics regarding the violations or the duration of the violation provided.
ARCO PERMIAN CRANE GAS PLANT	GAS PLANT	9/18/96 DOV discloses possible violations of 30 TAC 116 & 40 CFR 52.21. There were no specifics regarding the violations or the duration of the violation provided.
ASARCO, INC - AMARILLO	COPPER REFINERY	1/19/96 DOV discloses violations discovered during two separate audits. One in May of 1995 and one in November of 1995. We currently track each audit separately, therefore this counts as two disclosures. The DOV discloses air permit exceedances, but provides no specificity on parameters exceeded - only permit nos. 593 & 594. The DOV also provides dates for submittals of permit amendments for the 2 permits. Since the disclosure, the permit amendments have been filed and new permits issued. The violations appeared to involve NOX & SO2 exceedances for annual emissions from one emission point for Permit #593 and NOX exceedances for hourly emissions for one emission point & PM & PM10 hourly emission exceedances for another emission point.
ASARCO, INC - AMARILLO	COPPER REFINERY	1/19/96 DOV discloses violations discovered during two separate audits. One in May of 1995 and one in November of 1995. We currently track each audit separately. Therefore this counts as two disclosures. The DOV discloses air permit exceedances, but provides no specificity on parameters exceeded - only permit nos. 593 & 594. The DOV also provides dates for submittals of permit amendments for the 2 permits. Since the disclosure, the permit amendments have been filed and new permits issued.
ATCHISON, TOPEKA & SANTE FE RAILWAY CO.	CLEBURNE RAIL YARD	11/22/96 DOV was marked confidential - not accepted to date due to confidentiality claim.
ATCHISON, TOPEKA & SANTE FE RAILWAY CO.	TEMPLE RAIL YARD	11/15/96 DOV was marked confidential - not accepted to date due to confidentiality claim.
BELL HELICOPTER TEXTRON		1/23/97 DOV discloses violations related to air permits. Compliance issues were documented as follows: Documentation for standard exemption, special exemption or grandfathered facilities was not maintained for 8 open topped vapor degreasers. Records of construction authorization for 1 open topped vapor degreaser could not be located. Failure to obtain a permit for solvent wipe down operations. Relocation and replacement of paint booths was not authorized by permit.
CAPITOL CEMENT	CEMENT PLANT	3/11/96 DOV discloses potential violations of public drinking water requirements involving cross connections between PWS & industrial process water for hand washing and showering; failure to have a certified Grade D operator for the public water system, inadequate operations and maintenance manual, no standby disinfection unit; and no pressure tank for storage to maintain pressure in the system. Other recordkeeping & inspection violations were also disclosed. Violations occurred following promulgation of new regulations effective January 1, 1996.
CENTRAL AND SOUTH WEST SERVICES, INC.	ELECTRIC UTILITY COMPANY	3/8/96 DOVs to both TNRCC & EPA disclosed violations of wastewater effluent temperature limits - reported an exceedance of the 110 degree F limit by 5 degrees and also reported that they incorrectly self-reported for the month the violation occurred in. 5/3/96 letter with attachments elaborated on how the violation was resolved and will not reoccur. A June 6, 1996 letter further defined the violation as a one time occurrence of elevated temperature and a one time occurrence of failure to report - the date of

ENTITY NAME	TYPE OF BUSINESS	MAJOR VIOLATIONS
		noncompliance was identified as July 26, 1994.
CHAMPION INTERNATIONAL CORP.-CAMDEN	WOOD PRODUCTS MANUFACTURING	6/18/96 DOV disclosed possible permit modification required at the Corrigan and Camden facilities - requested TNRCC concurrence with the company's decisions that all modifications met standard exemptions or have been otherwise permitted. Also indicated that the Camden audit resulted in submittal of a permit renewal application.
CHAMPION INTERNATIONAL CORP.-CORRIGAN	WOOD PRODUCTS MANUFACTURING	6/18/96 DOV disclosed possible permit modification required at the Corrigan and Camden facilities - requested TNRCC concurrence with the company's decisions that all modifications met standard exemptions or have been otherwise permitted.
CHEMICAL LIME COMPANY	CEMENT KILNS	12/30/96 DOV disclosed violations of permitted air emission rates. The DOV addresses two different audits - one in May of 1996 and the other from October 15 - December 3, 1996. Specifically, emissions of nitrous oxides from Kiln No. 1 and of nitrous oxides, volatile organic compounds, PM10, and carbon monoxide from Kiln No. 2 exceeded the allowable emissions limits contained in Permit No. 23214 and 4335A, respectively. Also, the company added a heat exchanger to Kiln No. 2 which resulted in an increase in emissions and constituted a modification of the kiln - authorization for the modification was not requested/approved prior to construction.
CHEMICAL LIME COMPANY	CEMENT KILNS	12/30/96 DOV disclosed violations of permitted air emission rates. The DOV addresses two different audits - one in May of 1996 and the other from October 15 - December 3, 1996. Specifically, emissions of nitrous oxides from Kiln No. 1 and of nitrous oxides, volatile organic compounds, PM10, and carbon monoxide from Kiln No. 2 exceeded the allowable emissions limits contained in Permit No. 23214 and 4335A, respectively. Also, the company added a heat exchanger to Kiln No. 2 which resulted in an increase in emissions and constituted a modification of the kiln - authorization for the modification was not requested/approved prior to construction.
CHEMICAL WASTE MANAGEMENT, INC.	WASTE DISPOSAL COMPANY	3/22/96 DOV disclosed violations involving disposal of TSCA regulated wastes (PCB wastes) in a hazardous waste injection well in violation of their permit and TSCA regs. 4/24/96 follow-up DOV elaborates on the violation causes and their corrective measures. The wastes were laboratory washwater wastes and the company documented that the tanks receiving the wastes prior to injection did not contain amounts of PCBs in excess of 50 ppm. Sludge samples in the tanks were documented at 12.3 ppm and the tanks were cleaned and procedures for incineration of wastes suspected to contain PCBs were instituted. Duration of violation appears to be from June of 1992 to the date of the audit - March 15, 1996. Disposal of wastes from tanks into the deepwells apparently occurred approximately every two weeks during that time period.
CHEVRON CHEMICAL COMPANY - CEDAR BAYOU	CHEMICAL PLANT	6/13/96 DOV disclosed a violation of special provision 15 & NSPS but determined in the same correspondence that they were compliant. Apparently the permit states that they need to install a continuous oxygen analyzer; however, it also states that if they can prove a 98% or greater destruction removal efficiency then they can do this in place of continuous monitoring. Chevron indicates that they have maintained compliance with the 98% destruction efficiency and therefore an oxygen analyzer is not required.
CHEVRON U.S.A. PRODUCTS COMPANY	GALENA PARK TERMINAL	4/19/96 DOV discloses possible non-compliances with state air regulations involving a modification in December, 1995, of an existing facility (tank 108) w/o filing a standard exemption and adding a fifth loading lane in a loading rack in 1980 w/o a permit to construct. A permit application was submitted on July 15, 1996 to correct the noncompliances.
CUPLEX, INCORPORATED		11/15/96 DOV disclosed potential violations for failure to maintain and submit standard exemption documentation for 2 pieces of equipment (Curtain Coater No. 1 & No. 2); failure to meet standard exemption requirements or to register as a standard exemption for stacks utilized with a screen printer in the Photo-Imageable Solder Mask area; failure to meet standard exemption requirements for location standards in relation to off-site structures for an anhydrous ammonia tank; and failure to perform and submit a baseline emission inventory report and pay applicable fees.
DIAMOND SHAMROCK REFINING & MARK.	SOUTHLAKE PRODUCTS TERMINAL	12/30/96 DOV disclosed potential violations of RCRA, wastewater discharge, and underground storage tank requirements. Specifically, container management requirements including discovery of unidentified drums of waste (no classification, hw identification, or labeling); lids on some drums not securely closed; storage of waste & product drums together (does not state they were incompatible); could not determine if any of the drums were hazardous & whether or not they complied with 90 day accumulation requirements (does not state how many drums were located). The RCRA contingency plan needed to be updated to specifically address hazardous waste management areas. There was not a formal inspection schedule for all waste container storage areas or for all safety and emergency equipment. RCRA training records did not include written job title and job descriptions for each employee involved in hazardous waste management. It was discovered that the company was discharging effluent through a flexible hose to an earthen diked containment area for several hydrocarbon storage tanks rather than to a permitted outfall. The audit found that liquids had not been routinely removed within 48 hours of the release from the knockout drum for the flare nor had the drum been inspected at least once per month in order to be exempted from technical standards applicable to UST.

ENTITY NAME	TYPE OF BUSINESS	MAJOR VIOLATIONS
DIAMOND SHAMROCK REFINING COMPANY	OIL REFINERY - MCKEE PLANT	3/14/96 DOV disclosed 20 potential violations of hazardous waste, water quality, and air regulations. Major violations involved discovering that several stormwater ponds & sumps had received process wastewater with listed hazardous wastes; underground piping between storage tanks and injection wells may not be in compliance; NSPS notification violations; missing pilot flame monitors for flares; inadequate fugitive monitoring requirements; the refinery wastewater system may not be in compliance with VOC emission requirements for petroleum refineries; and inadequate sulfur dioxide sampling and monitoring requirements & failed opacity readings for a boiler. Inadequate inspection, training, and TRI reporting requirements were also addressed.
DIAMOND SHAMROCK REFINING & MARKETING	MONT BELVIEU FACILITIES	10/2/96 DOV discloses potential violations of container management, waste classification, contingency plan, inspection, training, and storm water pollution prevention plan requirements. Specifically, paints, empty paint cans, thinners, unmarked drums, and other related buckets and cans were discovered lying on unprotected ground; were not properly characterized or labeled; the storage area was not clearly marked as a hazardous waste storage area; soil contamination was identified; and records on the characterization and final disposition of these materials were not maintained. Sand blasting residue was not properly classified. The contingency plan did not specifically identify and address hazardous waste management areas. An inspection schedule and plan was not maintained for all waste container storage areas. The job title and written job description for each employee involved in hazardous waste management was not included in the training records and inadequate content of training procedures was identified. The Storm Water Pollution Prevention Plan required amendment in regard to including both maintenance and other materials handling and all sections under the plan in reference to the facility's propane/propylene splitter needed to be updated.
DIAMOND SHAMROCK REFINING COMPANY	OIL REFINERY - THREE RIVERS	2/13/96 DOV disclosed 12 potential violations of hazardous waste and air regulations. Major violations involved storage tanks for ground-water recovered did not meet haz. waste standards; hydrogen sulfide continuous monitoring systems needed to be calibrated more frequently; fugitive monitoring requirements needed to be improved; the refinery wastewater system my not comply with VOC emission requirements, sumps were not vapor tight; storage tanks had not been tested for vapor pressure; and other inspection, personnel training, contingency planning, waste classification, record keeping & pollution prevention planning.
ENRON CORPORATION	METHANOL PLANT/PIPELINE	3/8/96 DOV disclosed potential violations involving inadequate VOC emission controls for a waste oil tank and re-evaluation of whether or not a loading dock is grandfathered.
GENERAL MOTORS - ARLINGTON	TRUCK GROUP	5/31/96 DOV disclosed possible waste classification violations, failure to manifest out of state shipment of class I waste, failure to store solvent contaminated absorbents in sealed containers as required by their air quality permit, and failure to maintain the booth incinerator at the specified temperature during cleaning operation.
HARRISBURG/WOOLLEY - HOUSTON		2/6/96 DOV disclosed potential violations involving lack of a Storm Water Pollution Prevention Plan, 11 drums of hazardous waste being stored for > 90 days, and failure to notify (by a previous owner) of underground storage tank removal.
HARRISBURG/WOOLLEY - ODESSA		12/20/95 DOV disclosed 7 potential violations including failure to submit biennial reports, open containers in satellite accumulation areas, storing haz. waste w/in 50 feet of property line, failure to submit an air emissions inventory, a need to update the Storm Water Pollution Prevention Plan, failure to sign and certify the Spill Prevention Counter-Measures and Containment Plan, and mischaracterization of cutoff sawdust and paint booth filter wastes as non-hazardous. A follow-up DOV on 1/22/96 elaborated on the status and actions taken to correct the violations.
HOECHST CELANESE - BAY CITY PLANT	CHEMICAL MANUFACTURING	7/26/96 DOV discloses violations of 335.2 & 335.43 and recordkeeping and reporting requirements. The company requested a meeting in the letter.
HOECHST CELANESE - BAYPORT WORKS	CHEMICAL MANUFACTURING	4/26/96 DOV disclosed that not all technical and record keeping requirements <90 day storage requirements for hazardous waste were fully followed.
HOECHST CELANESE - CORPUS CHRISTI	CHEMICAL MANUFACTURING	10/31/95 DOV disclosed that RCRA required inspections and observations of the flare during each shift were not documented in all cases.
HOECHST CELANESE - PAMPA PLANT	CHEMICAL MANUFACTURING	10/23/95 DOV disclosed that erroneous log entries were included for a 3 day period in the daily operating record for the Ground-Water Corrective Action Systems. A letter dated 10/2/95 was also submitted listing vessels for notifications for NSPS applicability - it is not possible to tell from the face of the letter whether they are trying to disclose violations or just make sure our records match their records. 5/6/96 DOVs (2) disclosed additional violations - one letter was a follow-up to the 10/23/95 DOV which described violations regarding operating log errors; a second DOV disclosed violations of NSPS requirements regarding operating plans for control devices using boilers or product recovery from storage vessels. The operating plans have been submitted. All violations in the DOVs have been corrected..

ENTITY NAME	TYPE OF BUSINESS	MAJOR VIOLATIONS
HUNTSMAN CHEMICAL CORPORATION - BAYPORT	CHEMICAL MANUFACTURER	12/12/96 DOV disclosed violations of 40 CFR 60.18(c)(3) related to minimum net heating value of flared gases; 40 CFR 60.49b(h) related to quarterly reporting; 40 CFR 60.665(l) related to semi-annual reporting; 40 CFR 61.349(a)(1) related to installation of flow indicator and car seal on closed vent system; and 40 CFR 61.354(f)(1) related to monthly visual monitoring. A 12/17/96 DOV disclosed additional violations of 40 CFR 60.7(c) related to semi-annual CEMS reporting.
HUNTSMAN CORPORATION - JEFFERSON CO.	C4 PLANT - CHEMICAL MANUF.	11/11/96 DOV disclosed violations of 40 CFR 60.663, 60.664, 60.665, 60.703, 60.704, & 60.705 and 30 TAC 115.131(a), 115.132(a), 115.135(a), & 115.136(a).
HUNTSMAN CORPORATION - JEFFERSON CO.	OXIDES AND OLEFINS PLANT	11/11/96 DOV disclosed violations of 30 TAC 116.110 and 40 CFR 660.663 & 60.665.
HURLEY HOLDINGS, INC.		3/4/96 DOV disclosed certain environmental problems associated with activities conducted at the site, which was recently acquired by Hurley Holdings. Primarily the problems involve surface and subsurface soil contamination involving certain solvent constituents and improper disposal practices allegedly by Mullins Manufacturing.
LOUISIANA-PACIFIC CORPORATION-CLEVELAND	PLYWOOD MILL	10/26/95 DOV disclosed air violations including producing more plywood than authorized by its air permit from 1985 though 1990 & 1993-1994 and that VOC, carbon monoxide, and particulate matter emissions are greater than represented in permit application materials.
LYONDELL PETROCHEMICAL CO.-CHANNELVIEW	PETROCHEMICAL PLANT	3/4/96 DOV disclosed that <0.1% of the wastes burned in the East Plant boilers may be considered listed hazardous waste.
LYONDELL-CITGO REFINING COMPANY	PETROLEUM REFINERY	A 5/30/96 letter from the company dislcosed violations, but, was marked confidential. The letter was returned to the company and it was explained that disclosures cannot be confidential. They were asked to resubmit a letter without the confidentiality claim if they intended to claim immunity. To date, they have not submitted a new letter.
MISSOURI PACIFIC LEASE PROP.-MCALLEN	RAILROAD COMPANY	12/15/95 letter does not state that violations were discovered during the audit, but, instead asks the TNRCC to sign a confidentiality agreement and they would submit their investigation report. Cannot find this record in the database anymore - apparently the company did not provide notice of the audit prior to discovering violations and they may have withdrawn their correspondence.
MODERN WELDING COMPANY OF TEXAS, INC.	METAL PRODUCT FABRICATOR	4/12/96 DOV discloses possible violations of air rules including failure to submit an Emissions Inventory and inspection and/or emission fees. 12/9/96 DOV elaborated on the violations by disclosing that they operate a surface coating operations for which neither a permit or a Standard exemption have been obtained or documented in accordance with Regulation VI. They also disclosed that they conduct abrasive cleaning operations and operate associated equipment for which they have not obtained a permit and cannot qualify for a standard exemption. They also dislcosed that they use surface coatings that may not meet the volatile organic compound emissions limitations contained in Reg. V and they have not maintained required records on the surface coatings.
MONTANA POWER COMPANY	ELECTRIC UTILITY COMPANY	5/29/96 DOV discloses violations of air permit no. 9407, 30 TAC 116.115 - involving possible violations of air emissions by exceeding the total throughput rate per hour for their lignite crushers, but indicates that they have never exceeded the annual throughput rate. Additionally the DOV discloses operating the crushers without the water spray system when ambient temperatures were at or below freezing. 8/30/96 DOV discloses additional violations, specifically, the emissions from the lignite crushers and the truck dumping emission sources (emission points 2 & 3) have exceeded the allowable emissions specified in Permit. No. 9407. Additionally, due to calculation errors, they disclosed that they may have underpaid the emission fees for the facility.
MONTELL POLYOLEFINS - BAYPORT	CHEMICAL MANUFACTURING	9/20/95 DOV disclosed 22 violations of air, water, and waste requirements. Violations include: Actual operating conditions, emission rates, and description of the Catalloy unit do not comport with the air permit; failure to obtain a construction permit prior to installation of polyethylene purification equipment; air permits must be updated to eliminate discrepancies for flare efficiency; the emission inventory underestimated total emissions; inadequate Emission Reduction Plan; failure to implement the Employee Trip Reduction Plan; failure to obtain a permit for potentially contaminated stormwater; inadequate SPCC plan; failure to maintain certified water treatment operators; waste container tracking inventory, inspection, labeling, and storage are inadequate; some types of drummed wastes did not comply with US DOT regulations; failure to have a waste analysis plan; inadequate RCRA training and documentation; improper drum storage in leaking containers or storing incompatible wastes together; inadequate waste profiles; incomplete notice for haz. wastes; and failure to maintain closure plans for haz. waste units. 10/20/95 follow-up DOV elaborated on remediation of the identified possible violations.
NET GULF COAST INC.		7/11/96 DOV discloses violations of "Environmental and Occupational Health and Safety Laws, but, the letter and attachment were marked confidential. TRNCC sent correspondence on August 19, 1996 accepting their claim of confidentiality for their audit report, but, disallowing any immunity because they did not notify of the audit in advance. TNRCC correspondence of 9/25/96 notifies the company that a criminal investigation may be undertaken.

ENTITY NAME	TYPE OF BUSINESS	MAJOR VIOLATIONS
OWENS-CORNING AMARILLO PLANT		2/15/96 DOV disclosed 2 potential air violations applicable to a furnace. Fluoride emission rates at the furnace stack may exceed the provisions of their permit and TSP exceedances were documented on 2 occasions. On August 2, 1996, a permit amendment was granted which corrected the violation.
OXYCHEM - CORPUS CHRISTI	CHEMICAL MANUFACTURING	12/12/95 DOV disclosed 27 violations apparently related to OSHA requirements, not environmental laws. TNRCC correspondence of 9/3/96 returned the confidential marked letter and acknowledges that the violations are for health and safety regulations, not environmental regulations. They are asked to resubmit the correspondence without the confidentiality claim if they intend to disclose environmental violations. To date, the company has not resubmitted the letter.
OXYCHEM - HOUSTON CHEMICAL COMPLEX	CHEMICAL MANUFACTURING	5/24/96 DOV disclosed violations DOV LETTER ARGUES THAT ALL INFORMATION IN THIS DISCLOSURE IS CONFIDENTIAL 7/31/96 DOV disclosed violations regarding the RCRA Biennial Report - 1995 report submitted late, waste classification documentation - initial generation dates of some waste streams was missing, notification of solid waste generated - failure to notify of a sandblasting area and a wastewater stream, potential deficiency regarding continuous NOx monitoring requirements at the cogeneration facility, Storm water monitoring deficiency, deficiency in sampling and analysis schedule for monitoring for the SDWA, EPA storm water permit requirements deficiency regarding closed onsite land disposal units.
OXYCHEM - PASADENA	CHEMICAL MANUFACTURING	3/28/96 DOV disclosed that the facility has not been monitoring its stormwater discharges in accordance with Part VI.B.2 of its Federal General Stormwater Permit. Specifics about which parameters were not monitored were not given and the letter states that it is provided for informational purposes only. TNRCC letter of 8/29/96 states that violations relate to federal storm water discharge permit requirements - not State requirements.
SEMATECH	COMPUTER TECHNOLOGY	10/28/96 DOV disclosed potential violations regarding air permit representations. Specifically, emission rates of some air contaminants may be greater than the representations made in the original application for the preconstruction permit. The DOV also stated that they had hired a contractor to prepare and submit a permit amendment to correct the violation.
SGS-THOMSON MICROELECTRONICS	SEMICONDUCTOR MANUFACTURING	7/2/96 DOV disclosed potential violations of 30 TAC sections 111.111(a)(7)(A), 112.41(a)(1), 113. 3(a)(2)(A)(ii) and 116. The letter also indicated the company was planning to submit a permit amendment and would resolve some of the violations through completion of construction of a thermal oxidizer in October which has already been permitted by the TNRCC.
SGS-THOMSON MICROELECTRONICS	SEMICONDUCTOR MANUFACTURING	1/30/97 DOV discloses ground-water contamination in one well located on the north side of the facility but determines that the contamination is caused by off-site sources.
SOUTHDOWN, INC. - ODESSA		12/16/96 DOV disclosed a violation of deed recordation requirements for a non-hazardous waste landfill (30 TAC 335.5). The letter indicated that a surveyor had been hired and the noncompliance would be corrected by the end of January 1997.
SOUTHERN CLAY PRODUCTS, INC.	ORGANOCLAY PLANT	7/31/96 DOV disclosed violations of air regulations, in particular regarding grandfathered facilities and not recognizing the need for an air permit for VOC emissions, specifically isopropyl alcohol. Specific violations include: the number 1 filter press and quat storage tanks, which were originally grandfathered, were subsequently replaced without obtaining an air permit; float cells were installed at the organoclay plant without obtaining a permit for the resulting IPA emissions (the IPA comes in with a raw material to keep the raw material fluid) although currently the float cells appear to fit within standard exemption 106, however, they did not appear to fit a standard exemption when they were installed in 1982; a dryer/filter was constructed in 1986 and authorized by Sepcial Permit No. 16759, but the permit did not cover the IPA emissions from the unit; some equipment (a mill and bag packer vented to a common baghouse and a predryer) was installed at a time when it appears to be subject to NSPS requirements (Subpart OOO and Subpart UUU respectively), but not all the NSPS requirements have been met (i.e., appears not to have complied with all the testing, reporting, and record keeping requirements nor installed a continuous opacity monitoring system); special provisions 1-3 of Permit No. 16759 may have been violated; Permit No 16759 was amended in 1988 to authorize the simultaneous use of two dryers, but the amendment did not address the installation of a second wet processing line (including quat weigh tank and reaction tank) and a second filter press unit; wastewater containing IPA was directed to the wastewater pond without first obtaining an air permit for the IPA emissions; Special Permit No. 16759 was amended to allow addition of a fluid bed dryer, but the amendment application did not identify the addition of filter press number 3 nor did the amendment account for the IPA emissions from the press and dryer; an initial emissions inventory has not been filed nor have any emissions inventory updates been submitted; the emission fees may have been underpaid; a new settling/irrigation facility and a dry process steam dryer were constructed in 1994 without obtaining a preconstruction permit or PSD permit for either emission source. The letter stated that the company would make process changes to reduce the number of emission sources, remove IPA from the raw material before it is used in the process, and by installing additional controls.
SOUTHWEST SHIPYARD INC.	BARGE & SHIP CLEANING/REPAIR	4/10/96 DOV disclosed 33 violations of air, waste, and water quality rules or permits. The main violations include: Unauthorized gas-freeing of empty benzene barges; unauthorized cleaning of an MTBE containing barge; exceeded the permitted number of barges

ENTITY NAME	TYPE OF BUSINESS	MAJOR VIOLATIONS
		degreased in 1995; flare inoperative during several barge cleaning operations; exceeded air permit limits for several emission points; failure to have an Emissions Reduction Plan; failure to maintain a flare log to monitor visible emissions; failure to submit monthly out-of-state waste shipment summaries; failure to submit the annual report associated with the Source Reduction and Waste Minimization Plan; inadequate plan and implementation of the hazardous waste contingency plan; inadequate biennial report; haz. waste accumulation area deficiencies; inadequate plan and implementation of the SPCC; inadequate Storm Water Pollution Prevention Plan; failure to conduct an annual evaluation of the facility's storm water pollution prevention program; failure to submit NPDES annual summary of barge data regarding the WWTP; failure to maintain records for specified periods of time.
STERLING CHEMICALS	CHEMICAL MANUFACTURING	1/26/96 DOV disclosed a possible violation relating to a water scrubber in one of the production units - no specificity of what the violation was. 2/12/96 DOV disclosed potential non-compliance issues primarily related to record keeping and inspection requirements. There was not enough specificity in the DOV to determine which program media the violations occurred in.
UNION CARBIDE CORPORATION - SEADRIFT	CHEMICAL MANUFACTURING	2/20/96 DOV discloses violations discovered during two separate audits. One in September of 1995 and one in October of 1995. We currently track each audit separately. Therefore this counts as two disclosures. 2/20/96 DOV disclosed 27 deficiencies regarding air permits/rules involving NSPS requirements for open-ended lines; unsafe to monitor and difficult to monitor plan deficiencies, deficiencies in calibration techniques/standards for monitoring equipment; records regarding assurance that permit limits were met for 2 permits.
UNION CARBIDE CORPORATION - SEADRIFT	CHEMICAL MANUFACTURING	2/20/96 DOV discloses violations discovered during two separate audits. One in September of 1995 and one in October of 1995. We currently track each audit separately. Therefore this counts as two disclosures. 2/20/96 DOV disclosed 27 deficiencies regarding air permits/rules involving NSPS requirements for open-ended lines; unsafe to monitor and difficult to monitor plan deficiencies, deficiencies in calibration techniques/standards for monitoring equipment; records regarding assurance that permit limits were met for 2 permits.
UNION PACIFIC RESOURCES - A & M PLANT	GAS PLANT	6/20/96 DOV discloses two semi-annual reports for VOC equipment leaks were not on file at the A&M Gas Plant, the signature of operator was missing from the list of equipment with no detectable emissions, the SPCC plan has not been recertified by a registered P.E. every 3 years, Certification form certifying that the facility does not pose substantial harm was not maintained, failure to conduct a hazardous waste determination for used oil filters and absorbent pads.
UNION PACIFIC RESOURCES - BRYAN PLANT	GAS PLANT	6/20/96 DOV discloses delayed repair of valves identified as leaking VOC emissions, semi-annual report for VOC equipment leaks was not on file at the Bryan Gas Plant, the signature of operator was missing from the list of equipment designated for repair, the signature of operator was missing from the list of equipment with no detectable emissions, records documenting performance of daily fuel gas monitoring were missing, notice was not provided to the TNRCC prior to outdoor burning in fire-training events, pressure relief devices were not monitored within 30 days of a release, the SPCC plan has not been recertified by a registered P.E., Certification form certifying that the facility does not pose substantial harm was not maintained, failure to conduct a hazardous waste determination for used oil filters and absorbent pads, the waste oil storage tank was not labeled with the words "used oil".
UNION PACIFIC RESOURCES - AUSTIN CHALK	BRAZOS VALLEY PRODUCTION OFF.	8/1/96 DOV disclosed violations of documentation to verify that breathing/working losses from production tank battery facilities and dehydration units on the Dunlap No. 1 and Cannon Unit No. 1 do not exceed 25 tons per year of VOC emissions to verify compliance with Standard Exemption 66 of Reg. VI.
UNION PACIFIC RESOURCES - AUSTIN CHALK	LA GRANGE PRODUCTION OFFICE	8/1/96 DOV disclosed violations of documentation to verify that breathing/working losses from production tank battery facilities do not exceed 25 tons per year of VOC emissions to verify compliance with Standard Exemption 66 of Reg. VI.
VESUVIUS, USA, CORP.		8/8/96 DOV disclosed violations of 30 TAC 116 regarding the permitting of new or existing air emission sources. The facilities were thought to be exempt from air permitting requirements in accordance with 116.211 but were discovered to be possibly subject to the permitting requirements of 116.110.

ATTACHMENT 4

Barry R. McBee, *Chairman*
R. B. "Ralph" Marquez, *Commissioner*
John M. Baker, *Commissioner*
Dan Pearson, *Executive Director*

1/23 cy: 6EN
6WQ
6RC
6RA
6RD

TEXAS NATURAL RESOURCE CONSERVATION COMMISSION

Protecting Texas by Reducing and Preventing Pollution

January 23, 1997

Ms. Jane Saginaw
Regional Administrator
EPA, Region 6
1445 Ross Avenue
Dallas, Texas 75202-2733

Re: Review of Texas' Underground Injection Control Program

Dear Ms. Saginaw:

Enclosed please find the Attorney General Statement which concludes that we are in substantial compliance with all Federal UIC program requirements. This Statement supports the position stated in my December 4 letter to you that the EDF petition is without merit. [illegible]gize that we were not able to forward this to you by December 13. Both we and the Attorney General understand fully the importance of this Statement and we needed additional time to thoroughly review the issues that have been raised in this and our other delegated programs.

This completes our UIC program revision submission. I am confident that you and your staff will now be able to review the submission and will agree with us that substantial compliance is shown and that no reason exists to begin formal withdrawal proceedings. Of course, should you discover the need for additional information or explanation during the review process, we will be more than happy to respond. This has been a very useful exercise for us and has contributed, in part, to enhanced procedures and updated processes, especially in the public participation area. We will certainly do a better job in the future of keeping the EPA informed of changes to laws and regulations and I look forward to a very open dialogue on State implementation of our delegated programs.

Thank you for your patience, and I again apologize for any delay.

Sincerely,

Dan Pearson
Executive Director

Enclosure

DP/JP

cc: Barry R. McBee, Chairman, TNRCC
John Baker, Commissioner, TNRCC
Ralph Marquez, Commissioner, TNRCC
Geoffrey S. Connor, General Counsel, TNRCC
Hal Ray, Office of Attorney General
John Howard, Director, Policy, Office of the Governor

STATE OF TEXAS
OFFICE OF THE ATTORNEY GENERAL
STATEMENT FOR CLASS I, III, IV AND V UNDERGROUND INJECTION WELLS

Pursuant to my authority as the Attorney General of the State of Texas, and in accordance with 42 U.S.C. § 300h-1(b)(1)(B)(2) and 40 C.F.R. § 145.24, it is my opinion that the laws of the State of Texas provide adequate authority to carry out all aspects of the Texas Underground Injection Control ("UIC") program submitted by the Texas Natural Resource Conservation Commission ("Commission" or "TNRCC") to the U.S. Environmental Protection Agency ("EPA"). The specific authorities cited in this Statement are lawfully enacted statutes and regulations in effect on the date this Statement is signed, except as noted otherwise below.

In 1993, the Texas Water Commission ("TWC") merged with the Texas Air Control Board ("TACB") to become the Commission. Senate Bill 2, 72nd Legislature (1991). The Commission assumed authority over all powers and duties of the former TWC and TACB.

The Commission is authorized by Texas Water Code §§ 5.013, 5.103, and 27.019 to adopt rules and procedures reasonably required to carry out its powers, duties, and functions under the Injection Well Act, Texas Water Code, chapter 27. Whenever this Attorney General's Statement refers to a Commission rule, the provisions of these statutes provide adequate authority to promulgate the rule.

The UIC program of the State of Texas is administered by the Commission for the categories of wells described in this Statement. The UIC program is authorized under chapter 27 of the Texas Water Code, chapter 361 of the Texas Health & Safety Code, and Title 30, chapters 305 and 331, of the Texas Administrative Code ("TAC"). Other applicable authority may include

state law." Permitting and enforcement of UIC wells under the Texas UIC program would qualify under this provision. Because the Texas UIC program is a federally authorized program, any action taken pursuant to that authority is "taken to fulfill an obligation mandated by federal law," and the provisions of S.B. 14 do not apply to actions taken under the provisions of that program.

Furthermore, even if the § 2007.003(b)(4) provision did not apply, any action taken under the UIC program could be covered by the exception contained in § 2007.003(b)(13). That section exempts governmental action that is "taken in response to a real and substantial threat to public health and safety, that is designed to significantly advance the health and safety purpose and does not impose a greater burden than is necessary to achieve the health and safety purpose." The protection of surface and groundwater quality from potential contamination resulting from UIC-authorized waste disposal would seem to qualify under this provision of S.B. 14 as well.

Since S.B. 14 became law, only two lawsuits have been filed under the act in which the State or a state agency is a party. Neither of these involved the UIC program, or suggest any effect of the act on the UIC program. Neither the Commission nor this office are aware of any chilling effect that the provisions of S.B. 14 have had on the Texas UIC program.

C. THE ENVIRONMENTAL, HEALTH AND SAFETY AUDIT PRIVILEGE ACT

1. Provisions of the Act

The Audit Act was passed by the 74th Legislature in 1995 as H.B. 2473. The act was created to encourage voluntary compliance with environmental and health and safety laws by granting incentives to entities that voluntarily seek to determine the environmental, health and

safety compliance status of their facility. *See* House Comm. on Nat. Res., Bill Analysis, Tex. H.B. 2473, 74th Leg., R.S. (1995). The law provides two types of incentives: a limited privilege for information compiled in a voluntary audit, and penalty immunity for certain violations that are self-disclosed to the regulatory agency with jurisdiction over the regulated entity. In both cases, the regulated entity must come into compliance in order to take advantage of the incentive.

The privilege created by the Audit Act generally provides that information created during a voluntary audit, including the actual audit report, any legal memoranda discussing the report, and any remedial implementation or tracking plans, are not admissible as evidence or subject to discovery in any civil, criminal or administrative proceeding. Audit Act § 5. However, the physical events of a violation are not privileged. A person who observes a violation may be compelled to testify about the event witnessed. *Id.* To take advantage of the privilege, appropriate efforts to achieve compliance must be promptly initiated and pursued with reasonable diligence after discovery of noncompliance. *Id.* § 7. The privilege does not apply if it is asserted for a fraudulent purpose. *Id.*

In addition, the privilege does not apply to the extent that it is expressly waived by the owner or operator who prepared the audit report or caused the report to be prepared. *Id.* § 6. However, disclosure by the owner or operator or the person for whom the audit report was prepared does not waive the privilege if it is made under the terms of a confidentiality agreement. *Id.* The only persons who may enter into voluntary confidentiality agreements are: 1) a partner or potential partner of the owner or operator of the facility or operation; 2) a transferee or potential transferee of the facility or operation; 3) a lender or potential lender for the facility or operation; 4) a governmental official or state or federal agency; or 5) a person or entity engaged

in the business of insuring, underwriting or indemnifying the facility or operation. *Id.* If one of those parties violates a confidentiality agreement, that person is liable for damage caused by the disclosure. *Id.* These remedies for breach of a confidentiality agreement are consistent with the law of contracts.

Further, disclosure by the person for whom the audit report was prepared or by the owner or operator to a governmental official or agency under a claim of confidentiality does not waive the privilege. *Id.* It is an offense punishable by a Class B misdemeanor for a public entity, public employee, or public official to wrongfully disclose such confidential information. *Id.* However, it is an affirmative defense to the clerical dissemination of a privileged audit report that the report was not clearly labeled "COMPLIANCE REPORT: PRIVILEGED DOCUMENT." Thus, the penalty provisions are solely aimed at persons who disseminate information they know is confidential or should know is confidential because it is clearly labeled as such. This remedy for wrongful disclosure of confidential information is equivalent to provisions in the Texas Public Information Act. Tex. Gov't Code Ann. § 552.352 (Vernon 1994)(providing criminal penalties for distribution of confidential information).

The following information is expressly defined as non-privileged: (1) any information required by a regulatory agency to be collected, developed, maintained, or reported under a state environmental or health and safety law; (2) information obtained by a regulatory agency through observation, sampling or monitoring; and (3) information obtained from a source not involved in the preparation of an audit report. Audit Act § 8. Information required as a result of a permit condition is incorporated in exclusion (1) above.

If there is reasonable cause to believe that a criminal offense has been committed, the

Audit Act provides that the State can obtain an audit report, place it under seal, and then wait for the person claiming the privilege to request an in camera hearing. *Id.* § 9. If a hearing is not requested the privilege is waived. *Id.* If a hearing is requested then the seal is removed to allow the State to review the audit to prepare for the hearing. *Id.* The attorney representing the state may consult with enforcement agencies in preparation for the in camera hearing. *Id.* If the court finds that information in the audit report is privileged as asserted, then such information used in preparation for the in camera review remains confidential and not subject to disclosure under the Texas Public Information Act. *Id.* The only persons who receive access to an audit report under this section are the attorneys representing the state and state enforcement agency employees. *Id.* If one of those persons wrongfully discloses confidential information, the court may find them in contempt of court and may order other appropriate relief. *Id.* Again, these remedies are equivalent to those contained in the Texas Public Information Act.

The Audit Act also provides that a person who promptly and voluntarily discloses, in writing, certain violations discovered in a voluntary audit is immune from administrative, civil and criminal penalties. *Id.* § 10. Penalties are defined as "sanctions," and do not include a technical or remedial provision ordered by a regulatory authority. *Id.* § 3. Thus, persons may not use the Audit Act to claim immunity from emergency orders and injunctive relief.

A person must give notice to the appropriate regulatory agency of the intent to perform an audit in order to later claim immunity under the Audit Act. *Id.* § 10(g). Notices of the intent to audit are public information, as are disclosures of violations. In order to claim immunity the person who makes the disclosure must also correct the noncompliance within a reasonable time and must cooperate with the appropriate agency in connection with an investigation of the issues

identified in the disclosure. *Id.* §§ 10(b)(5)-(6). The immunity does not apply to a violation that resulted in substantial harm to persons, property, or the environment. *Id.* § 10(b)(7). Nor does it apply to a repeat offender who has committed serious violations and has formed a "pattern of disregard" of environmental and health and safety laws by failing to attempt to correct non-compliance. *Id.* § 10(h).

2. Implication on Enforcement of UIC Program Requirements

The State of Texas possesses the authority required in 40 C.F.R. § 145.13 to enforce state UIC program requirements. The privilege and immunity incentives created by the Audit Act do not jeopardize that authority.

a. The audit privilege does not prevent the State from obtaining sufficient information about violations to issue emergency orders, obtain injunctive relief, or seek and obtain civil or criminal penalties.

The audit privilege applies only to documents and other information properly made part of an "audit report," as defined by § 4 of the act. The physical events of the violation are not privileged, and thus even a person who participated in the preparation of an audit and observed the violation can be compelled to testify about those events. *Id.* § 5(d). Disclosures of violations under the Audit Act are public information and include descriptions of violations and the remedial actions necessary to come into compliance. Furthermore, the audit privilege is limited by the following three exceptions which protect the means by which the State may gain the information necessary for adequate enforcement.

i. No privilege exists for documents, communication, datum, or information that the State requires an alleged violator to collect, develop, maintain or report under a federal or state environmental or health and safety law. *Id.* § 8(a)(1).

The UIC program requires facilities to develop and maintain extensive information

through monitoring, testing and reporting requirements, as well as through requirements for record retention. The following provisions are examples of TNRCC rules that yield non-privileged information which aids the State in enforcement of the UIC program:

Class I Wells:

- 30 TAC § 331.62. Construction Standards. (Mandates logging and testing, including integrity testing, pressure tests and core samples, during drilling and construction of all Class I wells).

- *Id.* § 331.63. Operating Requirements. (Provides for monitoring during operation, including testing and calibration of gauges, pressure sensing and recording devices; and mechanical integrity demonstrations following major operations which involve removal of the injection tubing, recompletions, or unseating of the packer).

- *Id.* § 331.64. Monitoring and Testing Requirements. (Requires monitoring and testing of wells and injected fluids, including: 1) that the owner or operator sample and analyze injection fluids with a frequency sufficient to yield representative data of their characteristics, including development of an approved written waste analysis plan; repeat analysis of injected wastes when changes occur that may significantly alter the characteristics of the waste stream; and continuous or periodic monitoring of parameters selected by the executive director of the Commission (executive director); 2) that pressure gauges be installed and maintained in proper working order at all times; 3) that recording devices and automatic alarms be installed and continuously used; 4) that the owner or operator notify the executive director within 24 hours of obtaining any evidence of a possible release of injected wastes into an unauthorized zone, and then identify and characterize the extent of any release; 5) water quality monitoring at a frequency sufficient to protect USDWs, and fresh or surface water; quarterly corrosion monitoring of well materials; ambient monitoring, including monitoring of the pressure buildup in the injection zone at least annually; and any other monitoring and testing requirements which the executive director determines to be necessary including but not limited to monitoring for seismic activity).

- *Id.* § 331.65. Reporting Requirements. (Requires reporting of monitoring and testing, including : 1) Pre-operation reports, including a completion report containing all logging and testing data on the well; a demonstration of mechanical integrity; and a Well Data Report on forms provided by the executive director; 2) Operating reports, including quarterly injection operation reports on forms provided by the executive director for non-commercial facilities; monthly injection operation reports for commercial facilities containing information on chemical characteristics of new waste streams received for injection, information on all of the waste received, and a log of injection operations for

each injection episode; an annual report on the injection zone including an updated graphic or other acceptable report of the pressure effects of the well upon its injection zone; and reports following all periodic tests of mechanical integrity and any other test of the injection well or injection zone if required by the executive director; emergency reports, within 24 hours of any significant change in monitoring parameters or of any other observations which could reasonably be attributed to a leak or other failure of the well equipment or injection zone integrity; and 3) Work over reports, including the reason for well work over, the details of all work performed, and a bottom hole pressure report during major work overs).

- *Id.* § 331.67(c). Record-Keeping Requirements. (Requires the permittee to keep complete and accurate records of: 1) all monitoring and testing required by the permit; 2) all shut-in periods and times that emergency measures were used for handling injection fluid; and 3) any additional information on conditions that might reasonably affect the operation of the injection well).

- *Id.* § 331.68. Post-Closure Care. (Requires submission of a post-closure care plan and continuation of all groundwater monitoring required under the permit until pressure in the injection zone decays to the point that the well's cone of influence no longer intersects the base of the lowermost USDW or freshwater aquifer).

Class III Wells:

- *Id.* § 331.82. Construction Requirements. (Mandates logging and testing during the drilling and construction of Class III wells, including but not limited to deviation checks on holes where pilot holes and reaming are used. Also requires calculation of injection zone characteristics, and placement of monitoring wells where injection wells penetrate an aquifer containing fresh water in an area subject to subsidence or catastrophic collapse).

- *Id.* § 331.83. Operating Requirements. (Requires calculation of pressure at the wellhead).

- *Id.* § 331.84. Monitoring Requirements. (Requires monitoring wells and injection fluid, including: 1) analyzation of injection fluid for physical and chemical characteristics with sufficient frequency to yield representative data on its characteristics; 2) recording of the injection pressure, the injection volume and the production volume; and 3) monitoring of water quality and fluid levels in monitor wells).

- *Id.* § 331.85. Reporting Requirements. (Provides procedures for reporting results of monitoring and testing. Also requires, in the event an excursion is verified in a designated monitor well, the submission of a written remedial action report at least every month, for each well affected. The report should include: an explanation of required and other actions taken since the verifying analysis was taken; a description of action to be taken during the following report period; sample analysis results for control parameters; and

permittee's efforts to define the extent and probable cause of the presence of mining solutions in a designated monitor well).

Injection Authorized by Rule:

- *Id.* § 331.9(a). Injection Authorized by Rule. (Provides that in order to receive authorization by rule, owners or operators must timely comply with certain regulations applicable to permitted wells. [Applicable to certain Class I, III, IV and V wells. *See* Section IV of this Attorney General's Statement]. These include: 1) operating, monitoring and reporting requirements; 2) rules concerning reporting of noncompliance or malfunction; and 3) provisions for the retention of records).

- *Id.* § 331.132. Construction Standards for Class V wells. (Requires that information regarding all new Class V injection wells be submitted to the TNRCC on a form provided by the Commission).

ii. Information that a permit condition requires a regulated entity to maintain or report is included in the § 8(a)(1) exclusion and thus is not eligible for the audit privilege.

The UIC program provides that the injection permits shall be conditioned on the following requirements:

- 30 TAC § 305.125. Standard Permit Conditions. (Includes monitoring, record retention, and compliance and non-compliance reporting requirements).

- *Id.* §§ 305.127(2), (3)(c). Individual Permit Conditions. (Include monitoring, recording, and reporting requirements).

- *Id.* § 305.157. Record Retention. (Requires retention of all records concerning the nature and composition of injected fluids until five years after completion of plugging and abandonment procedures for the well).

iii. Information obtained by observation, sampling or monitoring by a regulatory agency is not privileged. Audit Act § 8(a)(2).

The Audit Act does not inhibit the established powers of the State to investigate environmental concerns. The UIC program authorizes entry onto any public or private property to inspect and investigate conditions, monitor compliance, or examine and copy records related to

injection activities. Tex. Water Code §§ 27.071-.072; Tex. Health & Safety Code §§ 361.032-.033; 30 TAC § 305.125(10). Thus, an alleged violator who has prepared an audit report cannot effectively raise the audit privilege as a bar to the State's exercise of its power to enter a regulated facility to inspect and investigate conditions surrounding an alleged violation of the UIC program.

iv. Conclusion.

The Safe Drinking Water Act ("SDWA"), at 42 U.S.C. § 300h-1, requires states to meet the regulations promulgated by the EPA Administrator at 40 C.F.R. § 145. Title 40 C.F.R. § 145.13 requires states to maintain adequate enforcement authority. Specifically, it requires states to have available emergency orders, injunctive relief, and criminal and appropriate civil penalties for violations of State program requirements. The Texas Water Code authorizes such remedies.

The Audit Act does not prevent the State from obtaining sufficient information about violations to impose the remedies required by 40 C.F.R. § 145.13. The State UIC program is comprehensively regulated. The State requires, through regulations and permit conditions, monitoring, record-keeping and reporting continuously throughout every stage of underground injection--from construction to post-closure care. Importantly, these requirements include extensive recording and reporting of noncompliance, malfunction, and emergency situations. *See* 30 TAC §§ 305.125(9), 305.125(12), 331.64(c)(4), 331.65(b)(5), 331.85(f), and 331.125(12). Any and all information developed as required by the State, including information maintained as required by a permit condition, is not privileged. In addition, the State maintains the authority to independently inspect conditions, monitor compliance and investigate violations. Any information acquired by the State through observation, sampling or monitoring is not privileged. In light of the State's comprehensive monitoring, record-keeping, and reporting requirements, and the

State's authority to independently inspect conditions, monitor compliance, and investigate potential violations, the Audit Act does not inhibit the State from obtaining sufficient information about violations to impose the remedies required by 40 C.F.R. § 145.13.

b. The Audit Act provides for civil penalties appropriate to the violation.

Title 40 C.F.R. § 145.13 requires that civil penalties assessed, sought, or agreed upon by the State be appropriate to the violation. EPA has expressed concern to the Commission that the Audit Act "not provide immunity from civil penalties for any violations of the SDWA, and particularly not provide immunity from civil penalties for repeat violations, violations resulting in serious harm or risk of harm, and violations resulting in substantial economic benefit to the violator," adding that "[f]ederal statutes and policies clearly reflect these factors."

The Texas Legislature by its passage of the Audit Act and the Commission through its rules, regulations, and policies answer this concern. The Act expressly provides for the consideration of violations that are repeat in nature and that result in harm to the environment. Audit Act, §§ 10(b)(7) and (h). Furthermore, neither the SDWA nor 40 C.F.R. Part 145 require the State to consider the factors EPA claims the State must consider in determining appropriate penalties. EPA's position that the State must consider certain criteria before arriving at "appropriate" penalties represents a new interpretation of the 40 C.F.R. § 145.13(c) requirement and an interpretation that conflicts with EPA's expressed interpretation at the time that it promulgated 40 C.F.R. § 145.13(c) as reflected in the administrative history of that section of the C.F.R.

EPA apparently interprets the 40 C.F.R. § 145.13(c) requirement that penalties be "appropriate to the violation" as if this requirement mirrored federal requirements relating to EPA

penalty assessments, when Congress clearly intended otherwise. If Congress had intended to require the State to consider the same factors EPA is required to consider when assessing civil penalties, then Congress would have been expected to incorporate into 42 U.S.C. § 300h(b), the section containing state requirements, the factors expressly applicable to EPA itself under 42 U.S.C. § 300h-2(c)(4)(B).

Moreover, EPA's application of its own penalty policies to the question of whether the State's UIC program meets the legal requirements of 40 C.F.R. § 145.13(c) does not appear to be required by law. At its origin, EPA's basis for questioning the State's ability to satisfy the 40 C.F.R. § 145.13(c) requirement is traceable to differences EPA perceives between the immunity granted by the Audit Act and the immunity granted by EPA's Policy on Incentives for Self-Policing ("Self-Policing Policy") and differences in the consideration given to violations that are repeat in nature, violations resulting in harm to the environment, and violations resulting in substantial economic benefit. EPA is in essence applying its own recently developed Self-Policing Policy as a new minimum requirement for "appropriate" penalties under 40 C.F.R. § 145.13(c).

By interpreting "appropriate" to require the State to consider the same criteria EPA is required to consider, EPA is acting in a manner directly contrary to the administrative history of the Part 145 regulations. When EPA originally adopted regulations establishing the requirement that state programs assess civil penalties appropriate to the violation now found at 40 C.F.R. § 145.13(c), the regulations expressly required the states to consider specific criteria, but this requirement was dropped in revisions adopted on September 1, 1983. Current 40 C.F.R. § 145.13(c) was proposed as 40 C.F.R. § 123.10(c) on June 14, 1979, as part of the Consolidated Permit Program regulations under which EPA consolidated state program

requirements for the UIC, RCRA, NPDES, and Section 404 programs. Since amended on September 1, 1983, the 40 C.F.R. § 145.13(c) requirement no longer requires a state to consider specific criteria when assessing civil penalties.

Thus the concerns EPA raises with respect to the State's consideration of violations that are repeat in nature, violations resulting in harm to the environment, and violations resulting in substantial economic benefit represent an effort by EPA to interpret the 40 C.F.R. § 145.13(c) as if it still contained the language that was dropped in 1983. When properly interpreted, 40 C.F.R. § 145.13(c) does not require the State to consider any specific criteria when assessing civil penalties.

EPA further implies that the State cannot grant immunity for any violation of the SDWA. However, EPA's Self-Policing Policy provides complete immunity where all conditions of Section D of the policy are satisfied and no significant economic benefit has resulted from noncompliance. EPA's Interim Policy on Compliance Incentives for Small Businesses ("Small Business Policy") also provides complete immunity from penalties where a small business satisfies all of the criteria in Section E of the policy except in instances where a small business "has obtained a significant economic benefit from the violation(s) such that it may have obtained an economic advantage over its competitors."

In the absence of express statutory or regulatory requirements that the states must consider in assessing civil penalties, Texas law contains provisions to ensure that penalties are appropriate to the violation and does not appear to violate the provisions of 40 CFR § 145.13(c). The Audit Act expressly does not extend immunity to violations that are repeat in nature or that result in harm to human health or the environment. Audit Act §§ 10(b)(7) and (h). The Audit

Act as well as the other statutory authorities referred to in this statement reflect the will of the Texas Legislature. Texas law has been and remains sufficient to carry out the provisions of the Underground Injection Control program that EPA has authorized the State to carry out.

Dated January 23, 1997

Dan Morales

DAN MORALES
Attorney General of the State of Texas

ATTACHMENT 5

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS, TX 75202-2733

May 19, 1999

Richard Lowerre, Esq.
Henry, Lowerre, Johnson & Frederick
202 West 17th Street
Austin, Texas 78701

MAY 27 1999

Re: Audit and Immunity Laws

Dear Rick:

At a recent meeting, you expressed a concern that audit and immunity bills might proliferate, and other states might adopt Texas' version without the clarifications and interpretations that the Texas Attorney General recently gave to EPA in connection with Texas' audit bill. We have not found this to be a problem. Where a state's proposed audit and immunity bill has raised concerns, EPA has required those states to either amend the law to resolve the concern or to obtain an interpretation from the state's Attorney General resolving the concern. In most cases, an Attorney General's Opinion or Statement is needed anyway because the states often have unique, state-specific case law or legal interpretations/principles which may have an impact on the legislation that is passed regarding an authorized program. Further, EPA's authorization regulations contemplate the need for such an opinion or update of an opinion when the state passes a law or regulation affecting an authorized program.[1]

This is the very point the Region made to Oklahoma officials during their consideration of proposed audit privilege legislation that was similar in many respects to the Texas Audit Privilege and Immunity Act. I am enclosing, for your information, a copy of the letter that I recently sent to Mark Coleman, Executive Director of the Oklahoma Department of Environmental Quality, concerning the proposed audit bill in that State. We expressed several concerns with that particular bill, and went on to explain that we would need the Oklahoma Attorney General to provide a statement finding that the bill would not unduly impact the State's enforcement authorities under its authorized program. We understand that Attorney General Drew Edmondson did have some concerns regarding the legislation, and in the end, the proposed legislation did not move forward in the Oklahoma Legislature.

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[1]These provisions require an Attorney General's Opinion or Statement: RCRA-40 C.F.R. § 271.17, CAA-40 C.F.R.§ 70.4(b)(3), CWA-40 C.F.R. §123. These provisions require an updated or revised Attorney General's Opinion or Statement: RCRA-40 C.F.R. §271.21, CAA-40 C.F.R. §70.04(i), CWA-40 C.F.R. §123.62. Additionally, all other environmental programs have very similar, if not identical, language regarding the requirements for an Attorney General's Statement or Opinion or a revised Opinion or Statement.

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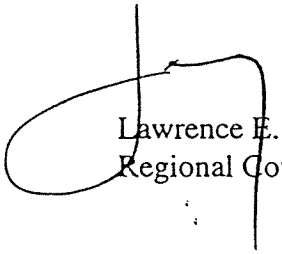
I hope this information is helpful. If you have any further questions please contact me or Bruce Jones on my staff at (214) 665-3184.

Sincerely,



Lawrence E. Starfield
Regional Counsel (6RC)

Enclosure

cc: Duncan Norton, General Counsel, TNRCC
Jim Phillips, Deputy Director, Legal Services, TNRCC
W. A. Drew Edmondson, Oklahoma Attorney General
C. Miles Tolbert, Office of the Oklahoma Attorney General
Jimmy Givens, General Counsel, ODEQ

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS, TX 75202-2733

MAR 01 1999

Mark S. Coleman
Executive Director
Oklahoma Department of Environmental Quality
1000 N.E. Tenth St.
Oklahoma City, Oklahoma 73117

Re: Proposed Oklahoma Environmental, Health and Safety Audit Privilege Act
Senate Bill 679

Dear Mr. Coleman:

I understand that an audit and immunity bill is now pending before the Oklahoma Senate and I want to express to you some of the concerns the Agency has regarding audit privilege and immunity legislation generally, and SB 679 in particular.

EPA supports environmental auditing and other forms of self-policing. EPA opposes legislation in this area and believes that it is better public policy for states to encourage environmental audits through policy approaches, such as the ones adopted by eleven states, that provide penalty mitigation for violations that are voluntarily discovered and promptly disclosed and corrected. These policy approaches encourage environmental auditing without concealing information about potential environmental hazards from law enforcers or the public and without immunizing serious violations. EPA issued its own audit policy in December of 1995, "Incentives for Self-Policing: Discovery, Disclosure, Correction and Prevention of Violations" (60 FR 66706, December 22, 1995), which offers a positive alternative to across-the-board privileges and immunities that may shield criminal misconduct and conceal important information regarding facility noncompliance. The policy offers up to 100% mitigation of the gravity-based penalty where all of the policy's conditions are met. To date, 410 entities have disclosed violations at 1788 facilities.

Privileges, such as the one proposed in Oklahoma, by definition invite secrecy, instead of the openness needed to build public trust in industry's ability to self-police. One of the arguments in favor of such privileges has been that they will encourage facilities to audit and through these audits achieve greater environmental compliance. However, this does not appear to happening. A recent study done by the National Conference of State Legislatures found that state audit privilege and immunity laws do not accomplish their stated purposes in that they do not encourage facilities to begin auditing, to increase the number of audits they perform, or to disclose more violations to regulators. The study also finds that inspector presence is a strong motivator for environmental auditing. I am enclosing a copy of this study for your reference.

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Beyond the policy realm, EPA also has concerns that SB 679 may adversely affect Oklahoma's ability to be authorized for additional federal environmental programs, as well as the state's ability to maintain currently authorized federal environmental programs. For example, the bill appears to interfere with the State's ability to obtain important environmental information, including data that may be necessary to address an imminent and substantial endangerment. Provisions of the Clean Water Act (CWA) and the Resource Conservation and Recovery Act (RCRA) and their implementing regulations require, as a condition of delegation or authorization, that a state demonstrate that it has the legal authority to obtain information necessary to determine compliance.

SB 679 also raises potential issues regarding the State's authority to obtain injunctive relief and to obtain civil penalties appropriate to the violation, including the authority to recoup economic benefit. Regulations promulgated under the CWA, RCRA and the Clean Air Act require that the State have authority to "immediately and effectively" restrain persons from engaging in any unauthorized activity which is endangering or causing damage to public health or the environment and to sue to enjoin any threatened or continuing violation or any program requirement.[1] Other regulations require that the State have available civil penalties appropriate to the violation for specified types of violations.[2] To the extent that the Oklahoma bill would weaken or eliminate the state's ability to obtain injunctive relief or to recoup significant economic benefit, it would raise questions regarding the State's ability to receive approval or authorization to implement and enforce environmental programs under the federal statutes.

Because of the concerns raised above, if this legislation passes, the Oklahoma Attorney General will have to issue an Attorney General's Statement or Opinion in which he discusses how the audit privilege and immunity law will impact the State's ability to administer its authorized programs. Even though the pending legislation may be similar to other states' audit privilege and immunity laws, there are a number of factors unique to the application of each State's laws, regulations, and case law that must be evaluated separately for each state. EPA has made similar requests to other states asking for an Attorney General opinion on a number of state law questions. Therefore EPA, will need a similar analysis and clarification from the Oklahoma Attorney General to ensure that the Oklahoma audit/privilege bill would not unduly impact the State's enforcement authorities under its authorized programs (see, e.g., the list of authorization requirements which must be covered in the Attorney General Statement, attached as Enclosure A).

EPA strongly supports state implementation of federal environmental programs and

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[1] See, for example, NPDES regulations at 40 C.F.R. § 123.27(a)(1), CAA regulations at 40 C.F.R. § 70.11(a)(1) and (2), and RCRA regulations at 40 C.F.R. § 271.16. (*See also* Safe Drinking Water Act (SDWA) regulations at 40 C.F.R. § 142.10(b)(6)(ii).)

[2] See the NPDES regulations at 40 C.F.R. § 123.27, Wetlands regulations at 40 C.F.R. § 233.41(a)(3), CAA Title V regulations at 40 C.F.R. § 70.11, RCRA regulations at 40 C.F.R. § 271.16(a)(3). See also SDWA regulations at 40 C.F.R. § 142.10(b)(6)(vi), and POTW regulations at 40 C.F.R. § 403.10(f)(1)(iv).

policies that encourage responsible auditing. However, EPA has a number of concerns about the pending Oklahoma audit privilege and immunity legislation. If you have any questions, above please call me or Bruce Jones on my staff at 214 665-3184.

Sincerely,

Lawrence E. Starfield
Regional Counsel

Enclosures

cc: W.A. Drew Edmondson, Attorney General of Oklahoma

ENCLOSURE A

The State is required to submit an Attorney General's Statement or Opinion for each program it seeks to administer[1] and for all revisions to state programs.[2] The Statement or Opinion must find that the laws of the state provide adequate authority to carry out the program as described in the program description and all other authorization requirements set forth in the regulations. Program revisions may be necessary when State statutory or regulatory authority is modified or supplemented. Since an audit privilege and immunity statute may impact many of the authorization requirements and, in particular, the enforcement authorities of a state agency, the Attorney General may need to provide a supplemental Statement for each of the state's authorized programs.

In this supplemental Statement, the Attorney General would have to find the enforcement requirements of the State's various authorized programs can still be met by the State agency. Federal regulations provide that states "shall be authorized to assess or sue to recover in court" civil penalties for "any" or "each instance" of program violations.[3] The regulations also require that penalties should be "appropriate to the violation."[4] EPA has identified in its "Statement of Principles" areas of particular concern pertaining to states' ability to recover civil penalties: significant economic benefit, repeat violations and violations of judicial or administrative orders, seriousness of the harm, and whether the violation may have resulted in an imminent and substantial endangerment to human health or the environment. All of these factors should be considered in whether the penalty issued by the state is appropriate to the violation. As stated above the Attorney General must make the finding that the Oklahoma audit and immunity law does not impair the State's ability to meet these requirements. Criminal fines and remedies for

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[1]See RCRA-40 C.F.R. § 271.17, CAA-40 C.F.R.§ 70.4(b)(3), and CWA-40 C.F.R. §123. Additionally, all other environmental programs have very similar, if not identical, language regarding the requirements for an Attorney General's Statement or Opinion .

[2]See RCRA-40 C.F.R. §271.21, CAA-40 C.F.R. §70.04(i), and CWA-40 C.F.R. §123.62. Additionally, all other environmental programs have very similar, if not identical, language regarding the requirements for an Attorney General's Statement or Opinion.

[3]See, e.g., RCRA -40 CFR §271.16(a)(3)(i), CAA - 40 CFR §70.11(a)(3)(1), CWA- 40 CFR §123.27(a)(3)(i), Safe Drinking Water Act/Public Water Supply (DW/PWS) 40 CFR §142.10 b)(6)(vi), and Safe Drinking kWater Act/Underground Injection Control (DW/UIC) 40 CFR §145.13(a)(3)(i).

[4]See, e.g., RCRA- 40 CFR §271.16(c), CAA-40 CFR§ 70.11(c), CWA-40 CFR §123.27(c), and UIC - 40 CFR §145.13(c)

"any" or "each instance" of violation knowingly or wilfully committed shall be assessable and, under Clean Water Act, criminal fines for criminal gross negligence must be recoverable.[5] The State must be able to restrain effectively and immediately any person, by order or suit, from engaging in unauthorized activity endangering or causing damage to public health or the environment. Injunctive suits should be available without prior permit revocation.[6] The State's ability to engage in compliance investigations, to have authority to enter any facility subject to regulation, and to copy any records, inspect, monitor, or otherwise investigate compliance must also not be impaired.[7] There are also information sharing requirements which provide that the state agency be able to share any information obtained or used in the administration of these programs with EPA and the public.[8] The above is a summary of the most common concerns raised regarding authorization when a state passes an audit privilege and immunity law; a state's Attorney General may review the state's audit law and the authorization requirements and find additional areas of concern.

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[5]See RCRA-40 C.F.R. §271.16(a)(3)(ii), CAA-40 C.F.R. § 70.11(a)(3)(ii) & (iii), CWA-40 C.F.R. §123.27(a)(3)(ii)(iii) & (b)(1), and PWS -40 C.F.R.§ 42.10(b)(6)(vi). (The CWA 404 Wetlands program requires penalties be assessable for simple negligence as opposed to gross negligence.)

[6]See, e.g., RCRA-40 C.F.R. 271.16(a)(1) & (2), CAA-40 C.F.R. 70.11(a)(1) & (2), CWA-40 C.F.R. 123.27 (a)(1) & (2), DW/PWS-40 C.F.R. 142.10 (b)(6)(ii), and DW/UIC-40 C.F.R. 145.13 (a)(1) & (2).

[7]See, e.g., RCRA-40 C.F.R. 271.15(c), CAA-40 C.F.R. 70.6(c)(2)(ii), CWA-40 C.F.R. 123.26(b-e), and DW/UIC-40 C.F.R. 145.12(c).

[8]See, e.g., RCRA-40 C.F.R. 271.17, and CAA-40 C.F.R. 70.4(j).

Catherine J. Webking

Attorney and Counselor at Law

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(512) 264-9121 office
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Catherine J. Webking's legal practice focuses on issues related to infrastructure development and services that have historically been subject to economic regulation. Ms. Webking's principle practice involves the representation of market participants in the electric, telecommunications and natural gas industries. She has extensive experience representing participants in these regulated industries before state and federal administrative agencies. Ms. Webking has been involved in preparing companies for the emerging competitive markets through participating in complex contested case proceedings, rulemaking proceedings, legislative initiatives as well as offering daily counseling on various regulatory issues. Ms. Webking also represents property owners affected by proposed electric transmission lines and pipelines.

Ms. Webking's prior experience as a process and production engineer for a major oil company enhances her understanding of the technical business issues that affect market participants in the infrastructure industries she represents.

Ms. Webking received a B.S. in chemical engineering from Texas A&M University in 1985. She received her J.D. with honors in 1991 from the University of Texas School of Law where she was a member of the Order of the Coif.

Ms. Webking is a member of the State Bar of Texas.

THE TWELFTH ANNUAL TEXAS ENVIRONMENTAL SUPPERCONFERENCE

Electric Utilities – Environmental Issues What's My Line?

ANSWER: ELECTRIC TRANSMISSION LINES!

Catherine J. Webking

Attorney and Counselor at Law

August 4, 2000
Austin, Texas

Electric Utilities – Environmental Issues
What's My Line?

ANSWER: ELECTRIC TRANSMISSION LINES!

I. Introduction

The recent changes in the legislation that governs the electric market in Texas, has spawned a number of new proposed electric transmission lines.[1] In 1998, the Public Utility Commission of Texas (PUC or Commission) reviewed 29 applications for transmission line Certificates of Convenience and Necessity (CCNs). The PUC expects that there will be 122 new transmission line projects in 2000.[2] The corresponding change in expenditures for new transmission line projects has increased from $57 million in 1998 to a projected $291 million in 2000.

Historically, transmission lines have been constructed by electric utilities to deliver power generated by the utility to retail customers in the utility's service area. Some utilities have also constructed transmission lines to deliver power to wholesale customers such as cooperatives and municipalities. In the future, these lines will be owned by transmission and distribution utilities, who by definition, will not generate power or make retail sales of electricity.[3] This market structure change also has policy implications because of the change in the nature of the relationship between the landowners whose property is traversed by the proposed line and the utility that builds the line.

Construction of electric transmission lines has environmental consequences of any structural construction. However, there are environmental issues unique to electric transmission lines because of the potential for EMF emissions from the lines after they are placed in operation. Further, construction of electric transmission lines can require study of very diverse types of terrain and environment because of the potentially long length of line that can be constructed in a single project.[4] The width of easement required for construction and operation varies according to the capacity of the line to be

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1 Public Utility Regulatory Act, TEX. UTIL. CODE ANN. § 11.001, *et seq.* (Vernon Supp. 2000) (PURA).

2 P.U.C. Project No. 21466 – *Report of Electric Reliability Council of Texas Independent System Operator (ERCOT ISO) to the commission on Existing and Potential Electric System Constraints and Need in ERCOT in Response the requirement of Senate Bill 7;* Memo of T. Brian Almon to Commissioners dated June 28, 2000.

3 PURA § 31.002.

4 Transmission lines can vary in length from a few feet up to over 100 miles.

constructed. For example, a 345 kV line typically requires an easement of 160 feet in width, and a potentially larger area for access during construction.

Electric transmission lines cannot be constructed without the approval of a number of regulatory agencies. This analysis provides an overview of the various regulatory agencies that may be involved in approving the construction of an electric transmission line. Also included is a more in depth analysis of the regulatory requirements of the Public Utility Commission of Texas, and the nature and scope of PUC review of a utility's proposal to build a transmission line.

II. Regulatory Authorities

An electric utility is required to obtain a certificate of convenience and necessity (CCN)) from the Public Utility Commission of Texas prior to providing service over an electric transmission line.[5] Many other regulatory authorities may also be involved in the approval of a proposed electric transmission lines. Which regulatory agencies and the scope of their authority will depend on the location and terrain of the property traversed by a particular proposed transmission line. For instance, some of the regulatory authorities that may be involved include:

- Army Corp of Engineers for crossing of wetlands;
- US Fish and Wildlife Service (USFWS) and Texas Parks and Wildlife (TPW) for habitat protection;
- Environmental Protection Agency (EPA) and Texas Natural Resource Conservation Commission (TNRCC);
- Texas Historical Commission (THC);
- Texas Department of Transportation (DOT);
- Federal Aviation Administration (FAA);
- Local governments; and
- The General Land Office (GLO) may be involved where easements on state-owned land are required.

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[5] PURA § 37.054.

The PUC's application form for a CCN requires the applicant to supply information on each of the governmental agency permits and approvals required for the specific project.

III. Public Utility Commission CCN Process

A. Statutory Criteria

The PUC has jurisdiction to approve, deny, or remand a utility's application for a CCN to construct a new electric transmission line pursuant to PURA § 37.056(a) and (b). Embracing the statutory standard, P.U.C. Subst. Rule § 25.101(c)(4) states that the Commission shall render a decision approving or denying an application for such a certificate within one year of the date of filing the complete application, unless good cause is shown for exceeding that period.

Several policy and jurisdictional questions are raised by the recent legislative changes that require structural unbundling and a separation of the transmission and distribution utility from the generation and sales functions of the incumbent utilities. First, the PUC is expected to rely more heavily on ERCOT and other independent organizations to review the necessity of the proposed transmission lines. Pursuant to PURA § 39.155(b), the ERCOT ISO is required to submit an annual report to the PUC identifying existing and potential transmission and distribution constraints and system needs within ERCOT, alternatives for meeting system needs, and recommendations for meeting system needs. The first of these reports by ERCOT was submitted on October 1, 1999, and subsequent reports will be submitted on an annual basis.

An applicant must satisfy several statutory requirements before the Commission may grant a CCN. First, PURA § 37.056(a) states that:

> The commission may approve an application and grant a certificate only if the commission finds that the certificate is necessary for the service, accommodation, convenience, or safety of the public.

Also, PURA § 37.056(c) requires that, prior to granting a CCN, the Commission must consider:

- the adequacy of existing service;
- the need for additional service;
- the effect of granting the certificate on the recipient of the certificate and any electric utility serving the proximate area; and

- other factors, such as:

    1. Community values; which includes consideration of

        - Habitable structures
        - Land use
        - Communications facilities
        - Airstrips

    2. Recreational and park areas;

    3. Historical and aesthetic values;

    4. Environmental integrity; which includes consideration of
        - EMF and other health effects
        - Flora and fauna
        - Wildlife
        - Water crossings
        - Other

    5. The probable improvement of service or lowering of cost to consumers in the area if the certificate is granted.

B. Prudent avoidance standard

In reviewing applications for transmission line CCNs, the PUC applies the standard of "prudent avoidance."[6] Under the prudent avoidance standard, the transmission line should be constructed in a manner that minimizes impacts on the environmental interests, including consideration of impacts on historical sites, archeological sites, parks and recreational areas, and habitable structures. As a part of this standard, the Commission favors use of existing rights-of-way (ROW) and following property lines, wherever possible.

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[6] See, *Application of Central Power and Light Co. for Certificate of Convenience and Necessity for Proposed Transmission Line in Nueces, San Patricio, Bee and Goliad Counties*, Docket No. 9305, 18 P.U.C. BULL. 1699, 1784-5 (Mar. 11, 1993).

Some mitigation factors that are available due to alternative technologies include:

- Use of Single Pole Construction;

  Traditionally the 345 kV structures have been on lattice design. However, single pole structures have been used more recently in some instances.

  Single pole structures have a smaller footprint and are considered more aesthetically pleasing that lattice structures.

  Maintenance on lattice can be argued to be higher due to need to check and tighten numerous bolts.

  Single poles can withstand high winds because of increased flexibility in the structure.

  Length of span for lattice has traditionally been perceived as longer, but some utilities are using single poles with longer spans.[7] According to some experts there is no real difference in the length of span for lattice and single poles.

- Double-circuits of smaller capacity and upgrades of existing single circuits;

- Distribution upgrades[8]; and

- Bundled feeder loops can be used when connecting substations in lieu of a transmission line.

The PUC has also adopted a number of requirements for transmission line construction to reduce the potential environmental impacts associated with the construction of an electric transmission line. When the Commission approves an application for a transmission line, the Commission regularly orders the utility to perform most, or all of the following archeologically, historically, and environmentally related actions (depending upon the Administrative Law Judge's (ALJ's) recommendations, and PUC Staff's and intervenors' positions):

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[7] Use of single pole construction for 345 kV lines is used by TXU through the Dallas-Fort Worth metroplex. STEC also proposes to use single pole construction for the 345 kV line proposed in P.U.C. Docket No. 21747.

[8] *See, Application Of Lower Colorado River Authority To Amend A Certificate Of Convenience And Necessity For A Proposed Transmission Line Within Kendall County,* P.U.C. Docket No. 20827 *(Final Order, May 22, 2000).*

1. If the utility has not already done so, the utility must have a professional archeologist conduct an archeological field survey of the utility's approved route, prior to construction, to determine whether any archeological sites may be encountered during construction of the project.

2. If the utility encounters any archeological sites during construction, the utility must cease construction pending direction from the Texas Historical Commission (THC) and a qualified archeologist. Any report the archeologist prepares must be filed with the THC.

3. If the project is near waterways or wetlands, the utility must continue consulting with the U.S. Fish and Wildlife Service (USFWS) and other agencies, such as the Texas Parks and Wildlife Department (TPWD), on the impacts of the project while the final project plans are developed.

4. The utility must follow the procedures outlined in the following materials for protecting raptors:
   (a) *Mitigating Bird Collision with Power Lines: The State of the Art in 1994*, Avian Power Line Interaction Committee for the Edison Electric Institute, 1994;
   (b) *Suggested Practices for Raptor Protection on Power Lines: The State of the Art in 1996*, Avian Power Line Interaction Committee, 1996;
   (c) REA Bulletin 61-10, *Protection of Bald and Golden Eagles from Power Lines*; and
   (d) USDI-EPA report entitled *Impacts of Transmission Lines on Birds in Flight* (FWS/OBS-78/48).

5. The utility must instruct employees and construction contractors to watch for identified endangered species on or near the ROW. The utility and/or the contractors must stop construction immediately at the location of any sighting of such species, and notify the USFWS and TPWD, and await instructions from the USFWS before proceeding with construction at the site.

6. To avoid potential avian wire strikes, the utility must use certain mitigating measures, such as marking the conductors with orange aviation balls or other types of markers, to make the lines more visible.

7. The utility must adhere to the following procedures in order to protect the environment and to avoid and/or minimize construction related impacts that may result from the project:
   (a) Minimize right-of-way clearing, including, but not limited to, the following mitigating measures:

- construction equipment must be limited to the minimum size necessary to complete the work;
- where possible, tracked vehicles must be used instead of wheeled vehicles;
- construction mats must be used for vehicular access in environmentally sensitive areas, where necessary;
- silt fences or other approved barriers must be used in the vicinity of any submerged aquatic vegetation in order to reduce turbidity and sedimentation;
- equipment access to construction sites in environmentally sensitive areas must be from existing road/highway ROW, and construction and access areas must be the minimum size necessary to conduct required work;
- all equipment and material staging sites must be the minimum size required and located in upland areas, and transmission poles must be delivered to the site as needed, rather than stockpiled; and
- environmentally sensitive areas within or adjacent to proposed construction areas must be clearly marked, and equipment operators must be informed of appropriate construction procedures in these areas.

(b) Clear the ROW using selective clearing techniques in order to minimize habitat fragmentation by preserving trees and shrubs that will not pose a hazard for future contact with the transmission line conductors.

(c) Minimize the amount of flora and fauna disturbed during construction by reclaiming construction sites with native species of grasses, forbs, and shrubs.

(d) Implement erosion control measures by, *inter alia*, returning the site to its original contours and grade, and using a mix of native plant species to re-vegetate the area.

(e) Engage in construction only during dry periods.

(f) Prohibit use of chemical herbicides for controlling vegetation within the ROW in environmentally sensitive areas, and near streams in all other areas. Additionally, the utility must minimize the use of herbicides within the ROW in all other areas. In all applications of herbicides, the utility must employ U.S. Environmental Protection Agency (EPA)- approved herbicides applied in complete accordance with label directions.

8. The utility must submit a preliminary construction report thirty (30) days prior to the commencement of construction. The construction report should affirm that the utility:

(a) has not traversed any portions of property which was excluded in the Final Order of approval;
(b) has avoided adverse impacts on specific designated properties to the extent possible and within reason to the satisfaction of a specific intervenor;
(c) has identified and avoided all habitable structures, to the extent possible, by 200 feet on the approved route; and
(d) has attempted to locate its transmission line to parallel existing fence lines, property boundaries, and/or ROWs by angling, and to avoid known archeological sites, and designated historical sites.

9. The Office of Regulatory Affairs at the PUC must submit a report to the Commission within fifteen (15) days of the utility's pre-construction report, advising the Commission whether the utility has satisfactorily complied with the above Ordering Paragraph.

10. The utility must submit a post-construction report to the Commission with thirty (30) days of completion of construction of the project affirming that:
(a) the utility has inspected the public and private property on which construction activities were conducted, and
(b) the utility has returned each property to its pre-construction state, or, in the alternative, has proposed a plan of corrective action and time frame for return of the property to its pre-construction state.

11. The utility must submit a final construction report within 180 days after completion of construction.

One of the greatest factors in determining the extent of mitigation measure that may be incorporated into a PUC Order on any particular CCN application is the extent of involvement of intervenors. Traditionally, the primary intervenors in a CCN case have been the landowners over whose property the proposed line would traverse. These intervenors can have a major influence on the extent of mitigation measures reviewed by the PUC.

INSTRUCTIONS

Application of Electric Utility for a Certificate of Convenience and Necessity (CCN) for Proposed Transmission Line

Submit four (4) copies of the application and all attachments to:

Public Utility Commission of Texas
Attn: Filing Clerk
1701 N. Congress Ave.
Austin, Texas 78711-3326

Question Number

1. Applicant, Certificate Number, Phone Number, Street Address, Mailing Address:

   Self explanatory.

2. Person to Contact, Title/Position, Phone Number, Mailing Address:

   Provide the name of a person in the applicant's organization who is knowledgeable about the proposed facilities and can answer questions about the project.

   Legal Counsel, Phone, Mailing Address:

   Self explanatory.

3. Name or Designation of Project, Voltage Rating (kV), Miles of Right-of-Way, Miles of Circuit, Type and Size of Conductor, Type of Structures, Width of Right-of-Way, and Percent of Right-of-Way Acquired:

   If the project is comprised of several segments, supply the information for each segment.

4. Substation:

   If the proposed substation will be located in an area that presently has no houses, but which is platted as a residential subdivision, then the distance to the nearest lots should be indicated. If the proposed substation is within 1000 feet of an existing subdivision, or within 500 feet of the nearest residence, residential area, school, church, or community, complete the SUBSTATION QUESTIONNAIRE .

5. Schedule:

   Provide a proposed schedule for the project. Include, as a minimum, the estimated date of: right-of-way acquisition, construction of transmission line and substation, and energizing the line.

6. Counties:

   Self Explanatory.

7. Municipalities:

Attach a copy of the franchise, permit or other evidence of the city's consent held by the utility. If franchise, permit or other evidence of the city's consent has been previously filed, provide only the docket number of the application in which the consent was filed.

8. Other Electric Utilities:

   Self explanatory.

9. Agreements:

   Provide written notice to utilities that are certificated to areas traversed by the proposed transmission line. A letter of consent from the certificated utility is not necessary if the area is dually certificated with the applicant.

10. Affected Utilities:

    Identify any other utility served by or connected to facilities proposed in this application. Include any utilities sharing proposed facilities (double circuit structures, substation equipment) or right-of-way. Describe how the other electric utility will be affected and the extent of the other utilities' involvement in the construction of this project. Locate any taps, ties, meter points, or other facilities involving other utilities on a routing map and the system schematic.

11. Financing:

    Describe the method of financing this project. If the applicant is to be reimbursed for this project, or a portion of this project, identify the source and the amount of the contribution in aid of construction.

12. Cost:

    Self explanatory.

13. Maps and Drawings:

A. Routing Map.
Show the proposed route or placement of the facilities and any existing facilities to be interconnected or coordinated with the proposed project. Base maps should be a full scale (one inch = one mile) highway map of the county or counties involved, or a U.S.G.S. 7-minute topographical map, or other map of comparable scale with sufficient cultural and natural features to permit location of the proposed route in the field. Include the location of the habitable structures, radio transmitters and other electronic installations, airstrips, irrigated pasture or cropland, parks and recreational areas, historical and archeological sites, and any environmentally sensitive areas as described in the following questions.

B. Routing Study:
Provide a copy of the routing study conducted by the utility or consultant. If no formal routing study was performed, identify (on a map) the alternate routes that were considered and state the reasons for rejecting each alternate.

C. Schematic or Diagram:
Provide a schematic or diagram of the applicant's transmission system in the proximate area of the proposed project. Show the location and voltage of existing transmission lines and substations, and the location of the proposed construction.

D. Dimensionalized Drawings:
Provide dimensional drawings of the typical structures to be used in the project.

14. Need:

Describe the need for the proposed construction (system upgrade, new customer, growth). Include the utility's objectives (increased reliability, extended service). Describe the existing transmission system and conditions addressed by this application. Provide load projections to justify projects planned to accommodate load growth. State how the proposed facilities will meet the projected demand.

15. Options:

Describe alternatives to the construction of this project (not routing options). Explain how the proposed project overcomes the insufficiencies of the other options that were considered. Explain the consequences of not constructing the project.

16. Permits:

Self explanatory.

17. Description of Area:

Provide a brief description of the area traversed by the proposed transmission line. Include a description of the general land uses in the area, and the type of terrain crossed by the proposed line.

18. Habitable Structures:

List all residences, businesses, schools, churches, cemeteries, hospitals, nursing homes or other habitable structures within 200 feet of the center line of the proposed transmission line. Provide a general description of each habitable structure and its distance from the center line. In cities, towns or rural subdivisions, houses can be identified in groups. Provide the number of houses in each group and list the distance from the center line of the transmission line to the closest houses. Locate all habitable structures or groups of structures on a routing map.

19. Electronic Installations:

List all commercial AM radio transmitters located within 10,000 feet of the center line of the proposed project; and all FM radio transmitters, microwave relay stations or other similar electronic installations located within 2,000 of the center line of the proposed project. Provide a general description of each installation and its distance from the center line of the project. Locate all installations on a routing map.

20. Airstrips:

List all airstrips registered with the Federal Aviation Administration located within 10,000 feet of the center line of the project. Provide a general description of each registered airstrip and its distance from the center line of the proposed transmission line. Locate all airstrips on a routing map.

21. Irrigation Systems:

Identify any pasture or cropland irrigated by traveling irrigation systems (rolling or pivot type) that will be traversed by the proposed project. Provide a description of the irrigated land and state how it will be affected by the proposed project (number and type of structures etc.). Locate any such irrigated pasture or cropland on a routing map.

22. Notice:

List the newspapers that will publish the notice for this application. Attach a copy of the notice that is to be published. After the notice is published in accordance with Procedural Rule 21.24 (C), provide the publisher's affidavits and tear sheets.

The Commission's Procedural Rule 21.24 requires an applicant for approval of a new transmission line to publish notice "once each week for two consecutive weeks" in a newspaper or newspapers generally circulated in each affected county. The rule discusses the text of the notice and requires the filing of publishers' affidavits.

The text of the notice should describe the line's proposed route in some detail. In most cases, unless the proposed line is very short, it is inadequate to say merely that the applicant proposed to build a line from Point A to Point B. On the other hand, the notice should not use legal descriptions of the route that an ordinary reader would not understand.

To avoid delays, the publisher's affidavit should list each of the affected counties in which the newspaper is published. If the notice is meant to reach several counties, an affidavit which mentions only the county in which the paper is published may not be sufficient. This problem most often arises when a metropolitan newspaper is being used to reach readers in suburban counties.

23. Parks and Recreation Areas:

List all parks and recreational areas owned by a governmental body or an organized group, club, or church located within 1,000 feet of the center line of the project. Provide a general description of each area and its distance from the center line. Identify the owner of the park or recreational area (public agency, church or club). List the sources used to identify the parks and recreational areas. Locate the listed sites on a routing map.

24. Historical and Archeological Sites:

List all historical and archeological sites known to be within 1,000 feet of the center line of the proposed project. Include a description of the site and its distance to the center line of the project. List the sources (national, state or local commission or societies) used to identify the sites. Locate all historical sites on a routing map. For the protection of the sites, archeological sites need not be shown on maps.

25. Environmental Impact:

Determine if the proposed project is located, either in whole or in part, within the coastal management program boundary as defined in 31 T.A.C. §503.1. If the project is, either in whole or in part, in the coastal management program, determine if any part of the proposed facilities are seaward of the Coastal Facilities Designation Line as defined in 31 T.A.C. §19.2(a)(21). Also, identify the type(s) of Coastal Natural Resource Area(s) using the designations in 31 T.A.C. §501.3(b) impacted by any part of the proposed facilities.

26. Environmental Impact:

Provide copies of any environmental impact studies or assessments of the project. If no formal study was conducted for this project explain how the routing and construction of this project will impact the environment. List the sources used to identify the existence or absence of sensitive environmental areas. Locate any environmentally sensitive areas on routing map. In some instances, the location of the environmentally sensitive areas or the location of protected or endangered species should not be included on maps to insure preservation of the areas or species.

BIOGRAPHICAL INFORMATION

JAMES E. SMITH

TWELFTH ANNUAL TEXAS ENVIRONMENTAL SUPER CONFERENCE

August 4, 2000

Jim Smith is a partner in the law firm of Beirne, Maynard & Parsons, L.L.P. His practice emphasizes environmental litigation. He has represented plaintiffs and defendants in subsurface contamination cases, and has represented defendants in a variety of airborne and other toxic tort cases. He also handles enforcement and other contested case matters before TNRCC and EPA. Mr. Smith has been a member of the State Bar of Texas since 1982, and has been especially active in Environmental and Natural Resources Law Section programs for law students. He received his BS in Chemical Engineering from the University of Kansas in 1978 and his JD, with honors, from the University of Texas in 1982. Prior to joining Beirne, Maynard & Parsons, L.L.P., he was a partner in the Houston office of Baker & Botts.

TOXIC TORT ISSUES
Joker's Wild

TWELFTH ANNUAL TEXAS ENVIRONMENTAL SUPERCONFERENCE

August 3-4, 2000

James E. Smith, Partner
BEIRNE, MAYNARD & PARSONS, L.L.P.

#243388

TOXIC TORT ISSUES
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Twelfth Annual Texas Environmental Super Conference
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James E. Smith, Partner
Beirne, Maynard & Parsons, L.L.P.

Virtually every lawyer involved in environmental matters, and probably most non-lawyer environmental practitioners, know that the jurisprudence in the State of Texas has produced several recent developments that clearly benefit defendants in the toxic tort cases. However, this recent case law, and even the "tort reform" generated changes to the procedural rules and substantive statutes, have not brought an end to toxic tort litigation. As this brief survey of recent Texas toxic tort developments will show, changes that probably hurt the very weak plaintiffs' cases may have helped the strong cases obtain higher verdicts. Indeed, several recent verdicts show what may be an upward trend in the value of good plaintiffs' toxic tort cases, even in the face of so many developments that favor toxic tort defendants.

Recent Changes That Have Benefitted Defendants

The trend that swept across the country as a result of the United States Supreme Court's decision regarding scientific evidence, *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993), is now firmly a part of Texas jurisprudence. *E.I. du Pont de Nemours & Co. v. Robinson*, 923 S.W.2d 549 (Tex. 1995). Adoption in Texas of the *Daubert* "gate keeping" role for judges regarding scientific evidence was in keeping with the stated goal of the current Texas Supreme Court

Chief Justice to bring the Texas jurisprudence in line with the federal courts and the majority of the states. As such, it is not surprising that subsequent developments on the federal side relating to expert testimony have had comparable results in the state courts. Compare *Gammill v. Jack Williams Chevrolet, Inc.*, 972 S.W.2d 713 (Tex. 1998) to *Kumho Tire Co. v. Carmichael*, 526 U.S. 137 (1999). In *Robinson* and in *Merrell Dow Pharmaceuticals, Inc. v. Havner*, 953 S.W.2d 706 (Tex. 1997), the Texas Supreme Court indicated that toxic tort cases were among the types of cases where the court's "gatekeeper" role was very important.

Lawyers who represent plaintiffs in toxic tort cases universally condemn the *Daubert* and *Robinson* decisions, complaining that these decisions take the causation determination in a toxic tort suit away from the jury and give it, in many cases, only to the judge. I suspect that these lawyers would condemn these rulings in any political context. Moreover, the dominance of Republican judges in the State Supreme Court, in many of the appellate courts, and in most of the large city district courts, many of whom proudly use the label "conservative" to describe their judicial philosophy, only makes this situation worse, from their perspective.

As if the *Daubert/Robinson* jurisprudence is not bad enough from a toxic tort plaintiffs' perspective, other changes in Texas jurisprudence also receive condemnation as benefitting defendants in toxic tort cases. Among these developments are:

- the "no evidence" summary judgment practice of Rule 166a(i) Tex. R. Civ. P.;

- *Abel Supply Co. v. Moye*, 898 S.W.2d 776 (Tex. 1995), holding that plaintiffs must specifically identify the allegedly causative agents, and the medical basis for the claim, within the discovery process; and
- the recent Texas Supreme Court decision clearly antagonistic to class certification in toxic tort cases, *Southwest Refining Co., Inc. v. Bernal*, No. 98-0154, decided May 11, 2000 (Tex. 2000 WL 566745).

In addition to these procedural developments in Texas law, certain substantive developments also would generally be characterized as favoring defendants. For example, a Texas Appellate Court has ruled that no common law property damage claim can proceed if TNRCC "action levels" were not exceeded. *Taco Cabana, Inc. v. Exxon Corp.*, 5 S.W.3d 773 (Tex. App.–San Antonio 1999, writ denied). The "action levels" in *Taco Cabana* were from TNRCC's Petroleum Storage Tank (PST) program, which generally has the highest action levels of any TNRCC program. Nonetheless, the Court made a bright line determination that contamination below these action levels could not be the basis for any common law claim.

An example of a "tort reform" generated change in the substantive law is the 1995 change to §33.013 Civ. Prac. & Rem. Code Ann. (Vernon 1997). This change makes a toxic tort defendant jointly and severally liable only if that defendant's percentage of responsibility is 15 percent or greater. Under the old statute, a toxic tort defendant was jointly and severally liable if found responsible for any percentage. Many practitioners feel that this change in the Civil Practices and Remedies Code gave the "marginal" defendants in multi- defendant toxic tort cases significantly

stronger bargaining position in settlement discussions. In the past, the last defendant left standing could be liable for all of the plaintiff's damages, less the settlement credits, even if found only 1% responsible. The new rule gives bargaining power to the marginal defendant in toxic tort case settlement discussions, because the marginal defendant can escape joint and several liability if the jury assesses its responsibility at under 15%.

The Rumored Demise of Toxic Tort Litigation in Texas is Greatly Exaggerated

After hearing of these procedural and substantive developments regarding toxic torts in Texas, an observer may conclude that toxic tort litigation is at or near death in Texas, and that Texas is no longer a good place to bring plaintiffs' toxic tort cases. Do not believe it. Recent toxic tort cases have achieved significant verdicts, either in dollars or in accepting arguably novel theories, some of which the appellate courts have already affirmed. In fact, it appears that strong plaintiffs' toxic tort cases may be generating even higher dollar verdicts, and some of this may be due to the very reforms thought to be so favorable to defendants.

For example, in *Pittsburgh Corning Corp. v. Walters*, 1 S.W.3d 759 (Tex. App.–Corpus Christ 1999, no writ), the Corpus Christi Court of Appeals upheld an $8.1 million single plaintiff wrongful death/survivor verdict in an asbestos case. Included in the verdict, all of which was upheld on appeal, was an award of $5.7 million to the estate of the decedent based on pain, mental anguish, and medical expenses, a separate award of $2.1 million to the widow for her past and future pain and mental anguish, and $300,000.00 to the decedent's parents.

In another recent case, Pittsburgh Corning Corporation and Pittsburgh Plate Glass Co. (PPG) were assessed a combined total of $13.25 million in actual damages, with Pittsburgh Corning assessed an additional million dollars in punitive damages, in a seven plaintiff case. *Sonnier v. Pittsburgh Corning Corporation*, No. A-140,807-S (58th Dist. Ct., Jefferson County, Texas). Of the plaintiffs, two had died of lung cancer and five were suffering from various degrees of asbestosis.[1]

In a case reported by the Toxic Law Reporter (Vol. XXX, No. 11, March 16, 2000), a Gregg County Jury awarded $4.3 million in actual damages and $15 million in punitive damages to the family of a single worker who died of lung cancer. *Durham v. Abel Supply Inc.*, No. 98-758-B, (Gregg County, Tex., Feb. 28, 2000). The jury assessed punitive damages against Pittsburgh Corning Corporation, and assessed liability for actual damages against Pittsburgh Corning, Armstrong World Industries, United States Gypsum, and National Gypsum. The jury also assessed five percent responsibility to the plaintiff because he smoked cigarettes.

In a recent property damage case, reported in the May 29, 2000 issue of the Texas Lawyer and also reported in the Blue Sheet, *Timely Adventures Inc. v. Coastal Mart Inc.*, (93rd Dist. Ct., Hidalgo, County, Texas , 2000), the jury awarded over $100 million after finding nuisance, trespass, and gross negligence. The case involved subsurface contamination of real property, diminution in value of the property, and related damages.

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[1] Amounts and case description provided by Blue Sheet of Texas, Inc., Vol. XXIV, Issue 11 (2000). The Blue sheet reported that the plaintiff's counsel stated that this was the first time in 30 years that PPG was held liable (10%) due to its association with Pittsburgh Corning.

Even in the context of *Daubert, Robinson* and *Havner*, plaintiffs still can establish personal injuries in toxic tort cases in Texas. In *Texas Workers' Compensation Insurance Fund v. Lopez*, No. 04-98-00338-CV, 2000 WL 31519 (Tex. App.–San Antonio, decided January 12, 2000, n.w.h.), the appellate court recognized causation in a case that some might say employed a novel theory. In this case, the San Antonio Court of Appeals affirmed a jury verdict finding that Mr. Lopez sustained chronic obstructive pulmonary disease (COPD) in the course and scope of his employment as a sandblaster. The appellate court did an analysis of the scientific evidence relating to the cause of the COPD. The appellate court noted that, at trial, the parties stipulated that Mr. Lopez suffered from COPD; however, at trial and on appeal, the defense denied that his work caused his COPD. The appellate court noted that Mr. Lopez had a Board Certified pulmonalogist testify on his behalf; that this pulmonalogist established general causation (the concept that exposure to the alleged agent could theoretically cause the alleged ailment); and that the exposure evidence, although qualitative, was adequate to establish specific causation. The qualitative evidence included statements to the effect that the dust was so thick that workers could not see in front of themselves; that similar working conditions have required significantly greater safety measures since 1990; and that Mr. Lopez worked for several years before then. In this context, the appellate court held that it was not an abuse of discretion to allow the plaintiff's expert to testify that he could reasonably rule out other causes and determine specific causation.

Even the Texas Supreme Court agreed with the plaintiff in one significant recent toxic tort case. *Childs v. Haussecker*, 974 S.W.2d 31 (Tex. 1998). While this case was actually a legal malpractice case, the underlying issue was the application of the discovery rule in latent occupational

disease cases. The court held that a plaintiff is not barred from bringing a toxic tort claim even though he had filed a workers' compensation claim, alleging the same injury caused by the same substances, more than two years (the limitations period) earlier. In *Childs*, the court determined that a fact issue existed regarding the state of medical science, and thus what the plaintiff could have known, when the plaintiff filed the workers' compensation claim. To the extent that medical science would not have recognized causation at the earlier time, then the plaintiff could not have reasonably known that the exposure caused the injury, until such time as medical science changes in its viewpoint. Thus, the plaintiff's own statement of belief as to causation, even when the plaintiff goes so far as filing a claim and testifying to it under oath, does not necessarily begin to toll limitations in a toxic tort suit. As the dissent noted, *Childs* holds "that a person can allege in a lawsuit and testify under oath that he has a latent occupational disease, and later contend that he did not really know whether he had the disease or not." 974 S.W.2d at 48. Therefore, if medical science does not recognize a causal link, then a plaintiff cannot "know or reasonably know" of the cause of the injury, no matter how firm that plaintiff's belief. The *Childs* decision should give some comfort to toxic tort plaintiffs that they can delay filing their claims until sufficient medical science supports causation.

Some Thoughts Regarding Recent Plaintiffs' Successes in Toxic Tort Cases

In the recent past, juries seemed to have had a great deal of scepticism regarding almost every plaintiffs' claim. Practitioners in counties generally thought to be good plaintiffs' venue, such as Harris (Houston) and Cameron (Brownsville) counties began saying that these counties are no longer particularly favorable for plaintiffs. Some attribute the shift in jury attitudes to reports of apparently

frivolous cases generating large jury verdicts, and the hype that pro tort reform interests generated with those reports.

It now appears that the tort reform advocates have succeeded in keeping very weak plaintiffs' cases away from juries. At the same time, this success has also appeared to have decreased juror scepticism regarding those claims that eventually reach jury trials. Moreover, many of the procedural steps, such as "*Robinson*" hearings and responding to "no evidence" summary judgment motions, also appear to have had the effect of strengthening those plaintiffs' cases that make it to trial.

For the near future, we will still see toxic tort cases in Texas. The cases that survive "*Robinson*" challenges and "no evidence" summary judgment motions will be those cases that have strong medical science support for general causation (such as asbestos and silicosis related claims), and that have good quantitative or very good qualitative evidence of actual exposure. Cases that make it through the process have a much better chance of making a big impact on juries, and generating significant recoveries.

The cases that will not get to juries will be those cases where the alleged chemical agents do not have strong scientific evidence to support general causation. Also, even where evidence of general causation exists, courts are insisting that toxic tort cases present strong evidence of exposure. In general, this will mean quantitative evidence, but will, at times, be satisfied with very good qualitative evidence of exposure, such as in *Lopez*. As the toxicologists are fond of saying, "the dose

makes the difference," and this concept is now firmly entrenched in the jurisprudence in Texas and around the country.

In toxic tort cases, especially where causation is the central issues, the trial judge will still play a very critical role in determining whether a jury will ever hear the case. An analysis of a recent Texas Court of Appeals decision is illustrative of this point. *Weiss v. Mechanical Associated Services, Inc.*, 989 SW2d 120 (Tex. App.–San Antonio, 1999, writ denied). In this case, the plaintiff alleged various diseases, including chronic fatigue, vasculitis, asthma, and other injuries. The plaintiff alleged that there was a poor ventilation system in her building, and that the specific chemicals causing her the injury came from a medical X-ray facility located in the same building. The plaintiff's experts identified glutaraldehyde from the X-ray machine. However, no tests found glutaraldehyde in the air in the building and the plaintiff's experts admitted that they could not rule out other possible causes of the plaintiff's illness.

In this context, the trial court ruled that the plaintiff's evidence on causation was not admissible under *Robinson*. Without competent evidence of causation, the trial court then granted a "no evidence" summary judgment, after the case had been pending for over two years.

In analyzing the trial court's actions, the appellate court acknowledged that the general standard was to review the evidence in a light most favorable to the non-movant. 989 S.W.2d at 124. However, even in a summary judgment proceeding, the appellate court also stated that its review of the decision to exclude the expert opinion testimony was "an abuse of discretion" standard. *Id.*

Indeed, the appellate court stated that even if it disagreed with the trial court's determination regarding admissibility of the expert testimony, even at the summary judgment stage, the appellate court would not overrule this determination absent an abuse of discretion. *Id.* Thus, in toxic tort cases where causation is the central issue and the parties dispute the adequacy of expert evidence to demonstrate causation under *Robinson*, the appellate review is, as a practical matter, based on an abuse of discretion standard, rather than the traditional *de novo* review of the granting of a summary judgment.

Given this practical situation, the philosophical leanings of the trial judge will be extremely important, especially in cases that allege causation due to chemicals that do not have a long history in the medical literature, or in situations where the exposure information is based on qualitative testimony and inference, rather than measured amounts.

For practitioners evaluating toxic tort cases in the current context, early analysis of general causation literature and the evidence of exposure is essential. Where the evidence of exposure is good, but the general causation medical literature is weak, plaintiffs' lawyers may consider preserving the testimony and other evidence regarding exposure while waiting for developments in medical science that may show general causation. In fact, some persons have suggested that a pretrial dismissal due to lack of general causation evidence should be, at least for the first filing, a dismissal without prejudice.

In property damage cases, it appears that defendants can minimize or remove liability when they are able to remediate and meet the TNRCC action levels. When defendants do not conduct remedial action, or do not remediate to TNRCC action levels (this would include a situation where the remediation is to risk-based levels rather than to action levels) defendants continue to face the possibility of significant damages.

In summary, while recent developments in Texas law have discouraged weak plaintiffs' toxic tort cases from reaching the jury and generating verdicts, it appears that these same developments have enhanced strong plaintiffs' cases. These developments have strengthened plaintiffs' cases in at least two ways: first, by decreasing the initial scepticism of the juries, and second, due to better pretrial preparation, by improving the quality of the presentation of the cases that get to a jury.