SIXTEENTH ANNUAL

Texas Environmental Superconference

August 5 - 6, 2004

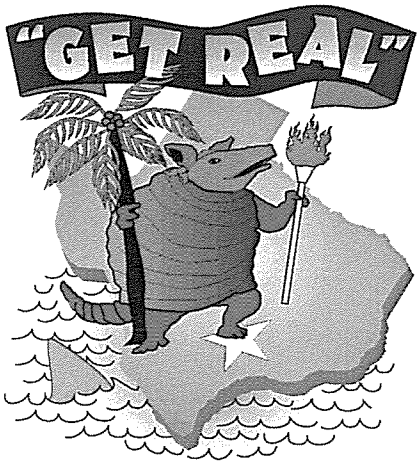
Four Seasons • Austin, Texas

"GET REAL"

The Sixteenth Annual Texas Environmental Superconference

August 5 - 6, 2004

Four Seasons • Austin, Texas



The Sixteenth Annual Texas Environmental Superconference

WELCOME

TO: Attendees

FROM: Planning Committee

DATE: August 5, 2004

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, the Auditing Roundtable, and the American Bar Association Section of Environment, Energy & Resources, welcome to the Sixteenth Annual Texas Environmental Superconference, "Get Real." 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, as well as gifts and quizzes and prizes.

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 scheduled for August 4 - 5, 2005. Please mark your calendars. If you would like to receive next year's program electronically, please provide us your e-mail address if you did not include it in your registration.

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 Jeff.Civins@haynesboone.com.

AGENDA

THE SIXTEENTH ANNUAL
Texas Environmental Superconference

THURSDAY AUGUST 5, 2004

TAB 1 9:00 – 10:20 Land Revitalization/Brownfields/Superfund-panel – ***Extreme Makeover***
Moderator: John Dugdale, Andrews Kurth, LLP
Sam Coleman, EPA Region 6
Jonathan Weisberg, EPA Region 6
The Honorable Dennis Bonnen, Texas State House of Representatives
Byron Ellington, Railroad Commission of Texas
Caroline Sweeney, TCEQ

10:20 – 10:40 Break

Moderator: Jim Morriss, Thompson & Knight

TAB 2 10:40 – 11:15* Environmental Management Systems – ***Playing It Straight***
Israel Anderson, TCEQ
William Bozzo, DynMcDermott

TAB 3 11:15 – 12:00 RCRA Update – ***Junkyard Wars***
Scott Sherman, EPA D.C.

12:00 – 1:15 Lunch – ***Iron Chef***

Moderator: David Cabe, Zephyr Environmental Corporation

TAB 4 1:15 – 1:35* Professional Licensing – ***The Apprentice***
Ed Miller, Texas Board of Professional Geoscientists

TAB 5 1:35 – 2:50 Air Quality - Panel – ***Under One Roof***
Rod Johnson, Brown McCarroll, Moderator
Joe Fulton, City Public Service, San Antonio
Carl Edlund, EPA Region 6
David Schanbacher, Commissioner, TCEQ
Gregg Cooke, Guida, Slavich & Flores
Jim Blackburn, Blackburn & Carter, P.C.

TAB 6 2:50 – 3:15 Water Quality – ***Love Cruise***
Lauren Kalisek, Lloyd, Gosselink, Blevins, Rochelle, Baldwin & Townsend, P.C.
David Gillespie, EPA Region 6

3:15 – 3:30 Cookie Break – ***Are You Hot?***

Moderator: Mary Sahs, Sahs & Associates, P.C.

TAB 7 3:30 –3:50 Water Resources – ***Croc Hunter Challenge***
Carolyn Ahrens Wieland, Booth, Ahrens & Werkenthin, P.C.

TAB 8 3:50 – 4:35 Alternative Energy – ***The Simple Life***
Chairman Victor Carrillo, Railroad Commission of Texas
Tracy Hester, Bracewell & Patterson, LLP

TAB 9 4:35 – 5:15* Enforcement – ***Fear Factor***
Jennifer Sidnell, TCEQ
Chuck Sheehan, EPA Region 6
Pam Giblin, Baker Botts L.L.P.
Rick Lowerre, Lowerre & Kelly

TAB 10 5:15 – 6:00 Reception – ***American Idol***
Honoring Ann Klee, EPA General Counsel

FRIDAY AUGUST 6, 2004

TAB 11 8:45 – 9:10 Natural Resource Damages Litigation – ***Eco Challenge***
Andrew Strong, Campbell, George & Strong LLP

TAB 12 9:10 – 9:40* Agency Data – ***Big Brother***
Jeff Saitas, Saitas and Arenson
Brenda Clayton, Kelly, Hart & Hallman, P.C.

TAB 13 9:40 – 10:20 Region 6/TCEQ – Point/Counterpoint – ***Married by America***
Larry Starfield, Deputy Regional Administrator, EPA Region 6
Larry Soward, Commissioner, TCEQ

10:20 – 10:40 Break

Moderator: Cindy Smiley, Kelly, Hart & Hallman, P.C.

TAB 14 10:40 – 11:45* Case Study – Part I – Contract Dispute/Negotiation Regarding Discovery of Contamination – ***Trading Spaces***
Seller's Counsel – Janet McQuaid, Fulbright & Jaworski
Buyer's Counsel – Pat Larkin, Strasburger & Price
Forensic Chemist – Ileana Rhodes, Shell Global Solutions (US) Inc.

11:45 – 1:00 Lunch – ***The Restaurant***

Moderator: Peter Gregg, El Paso Corporation

TAB 15 1:00 – 1:30 HB4 – Effect of Tort Reform on Toxic Tort and Environmental Litigation – ***House Rules***
Stan Perry, Haynes and Boone, LLP

TAB 16 1:30 – 2:35* Case Study – Part II – Toxic Tort Suit – ***Scare Tactics***
Plaintiffs' Counsel – Jay Beverly, Dow, Golub, Berg & Beverly
Defendants' Counsel – Bill Jackson, Connelly, Baker, Wotring & Jackson, LLP
Toxicologist – Dr. Phil Goad, Center for Toxicology and Environmental Health, LLC

TAB 17 2:35 – 3:00 Pipeline Regulation – ***Weakest Link***
John Jacobi, U.S. Department of Transportation, Office of Pipeline Safety

TAB 18 3:00 – 3:45 Open Mike – ***Star Search***
Moderator: Chuck Sheehan, Deputy Regional Administrator, EPA Region 6
Lydia González Gromatzky, TCEQ
Jennifer Sidnell, TCEQ
Mark Vickery, TCEQ

Closing Remarks – ***Survivor***
Jeff Civins

3:45 Sundaes – ***Temptation Island***

* Sessions with ethics credits

EPA United States Environmental Protection Agency

SUPERFUND: Building on the Past, Looking to the Future

April 22, 2004

Executive Summary

In November 2003, Acting Deputy Administrator Stephen L. Johnson requested that a small work group be established to conduct a relatively quick internal review (approximately 120 days) of the Superfund program. The main objective of this review was to identify opportunities for program efficiencies that would enable the Agency to begin and ultimately complete more long term cleanups, also known as remedial actions, with current resources. This internal study is intended to complement the work being done by the Superfund subcommittee of the Agency's National Advisory Council for Environmental Policy and Technology (NACEPT).

The Agency currently has a backlog of sites that are ready for long term cleanup, but lacks adequate funding to begin the remedial action. To a large extent the shortfall is the direct result of the evolution and maturation of the program, with the universe of Superfund sites expanding in both number and type. Sits now entering the long term cleanup phase tend to be larger, require multiple remedies and are more complex than those originally placed on the National Priorities List (NPL).

This new and expanded universe has put increased demands on the program overall. Funding needs have increased further as a greater proportion of the sites have progressed through the study phase and into the typically more costly cleanup phase. A significant challenge before the Agency and Congress, therefore, is how best to navigate this period when there are high funding needs for long term cleanup. The extraordinary demands of the especially large sites make this challenge all the more difficult.

Congressional Action in FY 2004

Over the last several years, EPA's senior managers have expressed concern about the Agency's inability to fund all of the Superfund long term cleanups that otherwise are ready to proceed. While EPA continues to address immediate public health threats through its short-term, emergency cleanup program, the Agency lacks adequate funds to address the growing number of sites that are ready for long term cleanups each year.

The House and Senate Appropriations Committees, and stakeholders outside of EPA, have also been concerned about this problem. Congress most recently expressed its concern during the Agency's FY 2004 appropriation in the following ways:

- The House Appropriations Committee in its FY 2004 report directed the EPA Inspector General to evaluate Superfund expenditures in EPA headquarters and

the Regions and to recommend options for increasing resources directed to cleanup while minimizing administrative costs.

- In its FY 2004 report, the Senate Appropriations Committee noted that the Agency was spending only 16 percent of the annual appropriation on site construction and long-term response actions, and directed the Agency to direct no less than 22 percent of the annual appropriation to site construction.

When the Conference Committee completed work on the Agency's FY 2004 budget, it did not direct the Agency to increase its percentage of funding for site construction. Rather, the Conference Committee made clear its expectation that the Agency direct the maximum amount possible to long term cleanup activities. The percentages in question represent how the Agency chose to distribute a portion of the Regions' funding. Those decisions on funding allocation were not intended to represent all funding dedicated to long term cleanup, though it is clear the Agency did not adequately communicate that fact.

This percentage understates the true amount the Agency spends on cleanups, reflecting only the extramural portion (what the Agency spends on cleanup contractors and other federal agencies), and does not include the cost of EPA staff necessary to manage the projects. The percentage also does not include short term, emergency cleanup actions taken at sites which contribute to the ultimate long term construction or the technical assistance required during the long term construction; and the EPA staff that support all of these activities.

In addition, at this point in the program, over 70 percent of Superfund cleanups are performed by potentially responsible parties (PRPs) as a result of EPA's enforcement program. The value of this work over the life of the program is more than $18 billion as of September 30, 2003. Also not included is the cost of enforcement and oversight of potentially responsible parties (PRP) who are conducting cleanup

The use of a simple percentage measure like this also fails to consider the costs of all of the necessary steps that must occur before a site reaches the cleanup phase, both for sites funded by EPA and by PRPs. Those steps include investigation of the site, identification and testing to determine the extent of the problem, development of an acceptable cleanup plan, and coordination with the local community.

Study Findings and Recommendations

The Superfund 120-Day Study is a short term, overall program review conducted by a team of EPA headquarters and regional staff who have knowledge and experience in the program, but are not all currently working in the program. Analyses of information from Agency data systems helped to frame areas for analysis. This was followed by additional data requests and an extensive number of interviews with Superfund program managers in headquarters and the Regions, as well as with selected outside experts. To supplement

the information gathered in the interviews, the study team prepared and sent out tailored questionnaires to gather program-specific information.

What became apparent to the study team as it spoke to a wide spectrum of Superfund practitioners across the country is that this is a complex, viable cleanup program with an effective enforcement component. Over time, the program has improved how it measures its progress, how it describes its work and achieves environmental results; however, there is still room for further improvement.

The Superfund program has two primary foci: the long term cleanup of contaminated sites, and the emergency response program. The emergency response program was originally designed to provide for rapid cleanup of sites to eliminate immediate threats to human health and the environment. Over the years, that response capability has evolved and expanded so that today, Superfund's emergency response mission involves not only waste sites, but train derailments, biological contamination of Senate office buildings, debris cleanup from the Colombia Shuttle disaster, and hazard assessment and cleanup at the World Trade Center after 9/11. EPA has to prepare for its ever expanding role in preparedness for counter terrorism response and Homeland Security such as continuity for operations plans and continuity of Government functions. Like a fire department, Superfund has to expend significant resources in staff, training and infrastructure simply to be prepared to respond when needed. The program has evolved as well as it addresses an ever changing list of Superfund sites which require long term cleanups, ranging from drum disposal sites and landfills, to abandoned smelters, sediments in rivers and harbors, and hard rock mining sites.

In addition, the program is complex administratively. Due to the need to track all of the Agency's costs at a site in order to recover those costs from potentially responsible parties, the Superfund program has a level of administrative complexity that does not exist anywhere else within EPA. This investment in the development of cost recovery cases has resulted in settlements with potentially responsible parties of $3.9 billion as of September 30, 2003. The Agency has also worked closely with PRPs over the years to ensure that funds they submit pursuant to cash-out agreements are only used at specific sites or even specific portions of those sites. While these administrative requirements are burdensome, they give the Agency and PRPs confidence that the Agency is using the funds appropriately.

The recommendations on improving resource utilization can make the Superfund program even stronger and, if implemented aggressively, will measurably increase the resources available for remedial action construction, perhaps by tens of millions of dollars annually. Program policy recommendations also hold the potential to reduce future out-year funding needs by a similar order of magnitude.
However, it is unrealistic to conclude that the recommendations of this report, however aggressively they are implemented, will fully address the projected funding shortfall of this changing program.

The most important recommendations on Superfund policies, with regard to the program's resource needs, are those that work to minimize the Agency's response funding needs. Key among these is:

- collaborating effectively with other federal and state cleanup programs under an integrated cleanup approach,
- using the NPL and Fund-financed actions as effective tools to leverage cleanups by others,
- maintaining a consistently strong enforcement program, and
- applying cost-conscious decision making in all facets of the program.

The study's findings fall into six key areas. They include:

- **Provide Leadership and Vision**

  To address cross-office issues more effectively, the study team recommends the creation of an overarching internal Superfund Board of Directors to provide enhanced program leadership, program coordination and accountability. In addition, with the growing complexity of the program coupled with tightening of resources, the Office of Solid Waste and Emergency Response (OSWER) needs to more clearly articulate the hierarchy of cleanup goals. Headquarters offices and the Regions also need to reinforce these clear goals with several new or more focused performance measures.

- **Build on Past Successes**

  After more than 20 years of operational experience and numerous program evaluations that have resulted in many improvements along the way, the Agency has many successes and lessons learned upon which it can build. The program is strongest when it integrates a variety of cleanup approaches and authorities into the overall response program. Much of the cleanup progress across the nation results from PRPs conducting over 70 percent of site work. To continue or enhance those results requires that the program continues to list sites on the NPL where appropriate, provide adequate funding for EPA to do the work where responsible parties are recalcitrant, and continue aggressive enforcement and cost recovery programs.

- **Continue to Develop a Better, More Effective Cleanup Program**

  There are opportunities for further cost and time savings through such programmatic changes as reviewing and updating specific records of decision and broadening the scope of the National Remedy Review Board to drive down remedy costs. Other recommendations include improving the cost-effectiveness of the analytical support program, improving cost analysis capabilities, and possibly developing national standards for a limited number of high-priority

contaminants. OSWER has already been working with the Regions on a series of cost management initiatives.

- **Improve the Use and Management of Agency Resources**

  The measures the study team identified to reduce demands on appropriated funds include improving the use of special accounts; speeding up the closeout of interagency agreements, grants, and contracts; and improving the timeliness of Superfund State Contract billing, obligations, reimbursements, and deobligations. Other suggestions include reviewing interagency agreements for possible cost efficiencies, such as negotiating consistent nationwide overhead rates with other federal agencies.

- **Improve Communications and Program Accountability**

  The study team recommends that the Agency review how it is tracking Superfund's milestones and program accomplishments to ensure it is providing a comprehensive picture of today's Superfund program, especially to Congress. There is also value in conducting focused benchmarking studies to improve performance in individual Regions; this will foster innovation, competition, and use of agency-wide baseline standards.

- **Make Purposeful Resource Shifts to Better Link Organizational Structure with Program Needs**

  Over the last 24 years, the Superfund program has grown both in scope and complexity. In the early years of the program, the focus of cleanup operations was on "traditional" uncontrolled hazardous waste sites; i.e., Love Canal or Valley of the Drums. Now the program is responsible not only for cleaning up these types of sites, but also for addressing more complex sites as well as responding effectively to complex 9/11 type of emergencies.

  At issue is whether the program has maintained pace with changing program needs. With the evolution and maturation of the program, opportunities exist to use resources more effectively and efficiently, if not innovatively. Examples include but are not limited to, sharing work across Regions, relying upon focused areas of expertise (e.g. Centers for Applied Science among the Regional labs), and consolidating some support functions.

Together, the recommendations of this report can build on past successes and create a better, more efficient way to implement the changing Superfund program. They are intended to improve upon a program that is working well, not one that is broken and requires fixing. These recommendations represent the best current thinking on what EPA can do with existing authorities and resources to efficiently implement the Superfund program, toward the goal of increasing the pace of site cleanup.

Moving Forward

Consistent with the numerous previous studies and analyses of the Superfund program, information collected during the study affirmed that Superfund is an inherently complicated and complex program, dealing with cleanup requirements that have been changing almost since it began 24 years ago. At the same time, Superfund has achieved a high level of success as it has carried out its mission.

Despite the Superfund program's complexity, and its unique administrative structure, it has made and continues to make significant strides in addressing abandoned and uncontrolled releases of hazardous substances across the country. With long term cleanups complete at nearly 900 NPL sites and more than 7,000 emergency cleanups conducted since its inception, the program is providing widespread benefits in terms of both human health and environmental risk reduction and providing opportunities for future beneficial land use.

Part of the program's success is due to its willingness to assess its strengths and weaknesses on an ongoing basis and to make modifications to improve cleanup approaches and administrative processes. Even now, as stated earlier, OSWER and the Regions are beginning to implement a series of cost- and time-saving recommendations, a number of which were affirmed through the study team's independent analysis. Likewise, the Office of Administration and Resources Management has been working with Agency senior managers to improve the management of grants and interagency agreements.

Nonetheless, the study team found opportunities for greater efficiency in the use of Superfund's current resources. There are several tangible, near-term opportunities for stretching existing resources further, and there are other promising means to move toward more efficiently using the existing level of resources in the longer term. If the recommendations of this study are aggressively implemented, this already strong and effective program will be even better.

While many of the implementation details will take time to work out, the Acting Deputy Administrator has confirmed his expectation that the Agency will move forward with two key aspects of implementation of the report's recommendations. First, the Acting Deputy Administrator will set up an internal Superfund Board of Directors. OSWER and the Office of Enforcement and Compliance Assurance Assistant Administrators will co-chair the board, whose members will include representatives from headquarters offices that have Superfund responsibilities and from the Regions.

The role of the Board of Directors will be to enhance overall leadership and coordination of all elements of the Agency involved with the Superfund program. Second, the new Board will be responsible for preparing, coordinating and executing an action plan(s) that addresses the recommendations contained in the following report. There are numerous recommendations in the report; however, the Study Team identified the top recommendations that would strengthen the leadership of the program and be most likely

to result in additional funding for long term cleanups. These recommendations also provide a blueprint for action for the new internal Board of Directors, and are identified in the last chapter of the study – Agenda for Moving Ahead.

Samuel Coleman, P.E.

Director
Superfund Division

Sam was born in Shreveport, Louisiana, to the proud parents Sam and Mildred Coleman, both long time residents of Shreveport. He attended 81St and Eden Garden Jr High before graduating with honors from Captain Shreve High School in 1974. He went on to attend Prairie View A & M University, where he received his Bachelor of Science degree in Civil Engineering in 1977.

Sam began his career with the U. S. Army Corps of Engineers in Fort Worth, TX as an engineering intern. He worked his way through the ranks with the Corps managing complex multi million dollar construction projects ranging from dams and spillways to Army Reserve Centers. In 1984 he accepted a position in Seoul, Korea. While in Korea, Sam worked as the Resident Engineer for the Demilitarized Zone and the Panmunjon Peace Village. Upon returning to the U. S. in 1987, Sam was named the Resident Engineer for Ray Roberts Resident Office in Sangar, TX. He continued his career with the Corps, ultimately being named Assistant Area Engineer for North Texas.

Sam sought new challenges in 1989 when he accepted a position with the Environmental Protection Agency (EPA) in Dallas, TX. He began his EPA career in the Hazardous Waste Enforcement Branch. In 1993, Sam accepted a position in Washington, D. C. which led to his appointment to the Federal Senior Executive Service in 1995 as Deputy Director of the Office of Site Remediation Enforcement. He returned to Dallas in 1995, as the Director of the Compliance Assurance and Enforcement Division. Sam is currently the Director of the Superfund Division in Dallas.

He is married to the lovely Esther M. Foster and currently lives in Arlington, TX. They have two wonderful children, Meredith and Zachary.

SUPERFUND PROGRAM

Implementation of the Superfund Program for EPA's South Central Region which includes Arkansas, Louisiana, New Mexico, Oklahoma, and Texas

- Federal Comprehensive Environmental Response, Compensation, and Liability Act (**CERCLA**),
- Superfund Amendments and Reauthorization Act (**SARA**),
- Oil Pollution Act (**OPA**),
- Emergency Planning and Community Right-to-Know Act (**EPCRA**) and
- Risk Management [**112(r)**] aspects of the Clean Air Act (**CAA**)
- Small Business Liability and Relief and Brownfields Revitalization Act of 2002

Specific areas of activities:

- Hazardous waste site assessments, investigations, and scoring for National priorities List (NPL) ranking activities;
- Appropriate response actions, including the remediation at abandoned hazardous waste sites to protect health of people and promote the reuse of the property;
- Emergency response activities, such as, on-scene monitoring, oversight of clean ups, and removal of accidental spills and releases of oil and hazardous materials;
- Regional Emergency readiness/preparedness and counter-terrorism programs;
- Oil Pollution Act (OPA) site cleanup program;
- Public participation in activities relating to abandoned site clean-up, including, comprehensive community involvement plans and communication strategies to educate and involve the public and elected officials;
- Support and assistance to States, local entities, and other stakeholders for the development and implementation of the Brownfields Program;
- Oversight of remediation activities at Federal Superfund sites;
- Assigns liability for remediation costs to Responsible Parties at Superfund sites;
- Oversight of Responsible Party funded clean-ups;
- Fund and assist states and Tribes in managing abandoned site clean-up programs;

Brownfields Legal Issues

Jonathan Weisberg
Acting Brownfields Coordinator
EPA Region 6

Texas Environmental Superconference
August 5, 2004

CERCLA Liability

- Section 107(a) of CERCLA
  - Current owner potentially responsible
  - Even if did not cause or contribute to contamination

What is a Brownfield?

"...real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant."

Program Overview

- Grants, *"Show me the Money"*
  - To Local Communities
    - Environmental Assessments
    - Cleanup
    - Revolving Loan Fund for Cleanup
    - Job Training for Assessment and Cleanup
  - To States
    - Voluntary Cleanup Programs
    - Environmental Assessments
- Liability Exemptions and Assurances
- Partnerships

The Small Business Liability Relief and Brownfields Revitalization Act

- Significant amendments to CERCLA – Signed by President Bush January 11, 2002
- Targeted some of the most inequitable consequences of Superfund's broad liability scheme
- In several cases, Act largely codified existing EPA policy

Two Titles

- Title I
  - De Micromis Exemption
  - MSW Exemption
  - Ability to Pay Settlements
- Title II
  - Brownfields Funding
  - Contiguous Property Owners, Prospective Purchasers, Innocent Landowners
  - State Funding, Enforcement Limits, NPL Deferral

Contiguous Property Owners

- Protects property owners from neighbors' actions
- Exempts owners of property contaminated solely by a release from a contiguous or similarly situated property owned by someone else
- CPO did not know or have reason to know of contamination at time of purchase
- Analogous State Programs – Texas ILP

Innocent Land Owners

- Must purchase without knowing, or having reason to know, of contamination
- Release or threatened release by someone not in employment, agency or contractual relationship w/ILO

Bona Fide Prospective Purchasers

- Must purchase after 1/11/02 to qualify
- BFPP not potentially liable or affiliated (corporate, contractual, familial) w/PRP
- Disposal occurred before acquisition of property
- Exempts BFPPs and tenants so long as the person did not or does not impede a response action
- BFPP can purchase with knowledge
- Windfall Lien may apply

J. Weisberg, EPA Region 6

Distinction between BFPPs and ILOs or CPOs

- Key: BFPPs can purchase with knowledge of contamination; ILOs and CPOs cannot
- Therefore, only BFPPs can purchase contaminated property that is on NPL, is undergoing active State or EPA cleanup, and retain liability protection

J. Weisberg, EPA Region 6

BFPP – Windfall Lien

- Lien on property if US has un-recovered response costs and the response action increased the FMV of the property
- Lien cannot exceed increase in FMV
- 7/16/03 guidance interpreting § 107(r)

J. Weisberg, EPA Region 6

"Common Elements" Guidance

- **Q:** What are the threshold criteria to qualify for a landowner liability protection?
- Threshold criteria: (1) perform "all appropriate inquiry" **on or before** acquiring the property; (2) must demonstrate they are not potentially liable or affiliated with anyone that is.

J. Weisberg, EPA Region 6

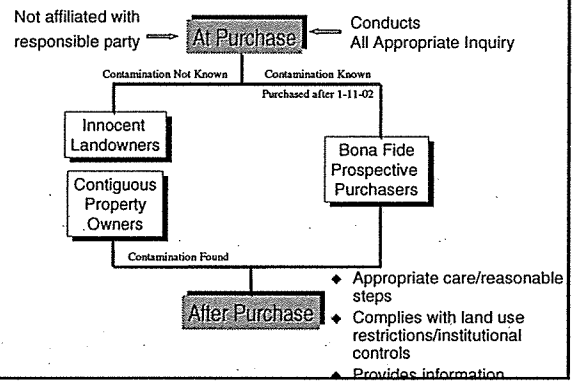
All Appropriate Inquiry

- EPA to issue regulations within 2 years
- Pending regulations, two standards based on date of purchase – After 5/31/97, ASTM Phase I, Standard E1527-97.
- Negotiated Rulemaking Committee Consensus Document in December 2003
- Proposed Rule in Federal Register summer 2004.

Continuing Obligations

- Compliance with land use restrictions and institutional controls (2/19/03)
- Taking "reasonable steps" re: hazardous substances
- Cooperation, assistance and access
- Compliance with information requests
- Providing legally required notices

Superfund Landowner Exemptions



Enforcement Limitations

- Limits EPA's 106(a) and 107(a) authority
  - -- Against a person
  - -- Conducting a response action
  - -- At an eligible response site
  - -- Regarding release addressed
  - -- In compliance with a state program
  - -- Exception for ISE or State request

Eligible Response Sites

- "Eligible Response Site" and CERCLA enforcement bar does not include:
- Proposed or listed on NPL;
- Subject to CERCLA order or CD; or
- Federal property (except Tribal trust land).
- Others excluded unless EPA (consulting State) makes property-specific determination will protect HH&E and promote economic development, greenspace or non-profit purpose

J. Weisberg, EPA Region 6

State Voluntary Cleanup Programs

- Texas – 1582 sites entered in VCP; 870 Certificates issued; RR Commission 29 entered VCP, 1 Certificate issued
- New Mexico – 40 sites entered VRP; 18 VRP Certificates issued
- Oklahoma – 60 sites entered, 10 certificates issued
- Arkansas – 26 sites entered Brownfields program; 5 Certificates issued
- Louisiana – 36 sites entered in VRP; 5 Certificates issued

J. Weisberg, EPA Region 6

State Contacts

- TCEQ: Mike Frew (512) 239-5872
- Texas RR Commission: Aimee Beveridge (512) 463-7975
- ADEQ: Chris Hemann (501) 682-0854
- LDEQ: Roger Gingles (225) 219-3188
- ODEQ: Rita Kotke (405) 702-5127
- NMED: Ms. Chris Bynum (505) 827-2754

J. Weisberg, EPA Region 6

Law

- Brownfields Law (1/02)
  - (1) CPO, BFPP, ILO
  - (2) Enforcement limits
  - (3) USTfields
  - (4) All Appropriate Inquiry
- State Laws

Guidance

- Common elements (3/6/03)
- Windfall lien (7/16/03)
- Corrective Action Completion (68 FR 8757)
- IC Guidance (2/03)

Business

- State VCPs
- Insurance Available
- Tax Incentives

Tools

- Prospective Purchaser Agreements (5/95, 4/03)
- Comfort Letters (11/96, 2/01)
- Ready for Reuse

J. Weisberg, EPA Region 6

Information

All liability guidance can be found at /www.epa.gov/compliance/resources/policies/cleanup/index.html

- Brownfields 2004 National Conference September 20-22, St. Louis, MO
- Jonathan Weisberg (214) 665-2180
- Weisberg.Jonathan@EPA.Gov

Jonathan Weisberg is a senior attorney in Region 6 of the U.S. Environmental Protection Agency, and is currently serving as Brownfields Coordinator for the Region. He served Region 6 as Assistant Regional Counsel from 1993 until 2004, working on a wide range of programs and issues, including those pertaining to Enforcement of the Resource Conservation and Recovery Act (RCRA) and Clean Water Act (CWA), New Source Review (NSR) and Title V permitting under the Clean Air Act (CAA), Department of Defense base closure and realignment activities, and a wide range of Superfund legal issues. He served as the legal advisor to the Region 6 Brownfields Program from 1995 until 2000, and is a current member of the Region 6 Land Reuse Team. Prior to joining the EPA in 1993, he served as in-house counsel for Centex Real Estate Corporation, a national homebuilder based in Dallas, Texas, as an associate with the Dallas law firm of Stutzman & Bromberg, and as an attorney-advisor for the U.S. Department of Housing and Urban Development in Washington, D.C. He is a member of the State Bars of Texas and Pennsylvania. He received a J.D. from Washington University School of Law in St. Louis, Missouri in 1987, an M.A. from the University of Texas at Dallas in 1984, and a B.A. from the University of Texas at Austin in 1982.

PAPER NOT SUBMITTED

Representative Dennis Bonnen represents the 25th Legislative District in the Texas House of Representatives. Elected to the Legislature in 1996, he is now in his fourth term of office.

He was appointed Chairman of the Environmental Regulation Committee for the 78th Legislative Session, where he had the tremendous responsibility of seeing that the state and county were treated fairly on environmental issues. During the session, he authored the bill that restored full funding of the federally-mandated Texas Emissions Reduction Plan.

House Speaker Tom Craddick appointed him to represent the Texas House of Representatives as a member of the Environmental Task Force of The Council of State Governments for 2003-2004, a group which encourages multi-state problem solving.

Bonnen presently serves on the executive committee of The Energy Council, a nonprofit corporation whose main objective is to facilitate cooperation in national energy policy matters among energy producing states and international affiliates.

Last August Governor Rick Perry appointed him to the Advisory Committee on Rock Crushers and Quarries, which will advise the Texas Commission on Environmental Quality (TCEQ) on issues related to the regulation and permitting of rock crushers and quarries.

He currently serves on the Select Committee on Public School Finance.

In addition to his Legislative duties, Bonnen is a senior vice president for business development for First Community Bank. He and his wife Kim make their home in Angleton with their son Jackson.

RAILROAD COMMISSION OF TEXAS

Victor G. Carrillo, Chairman
Charles R. Matthews, Commissioner
Michael L. Williams, Commissioner

Railroad Commission of Texas Cleanup Programs

August 5, 2004

Byron Ellington, PG, CPG
Technical Manager
Site Remediation Section
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RRC Cleanup Programs

- Background
- Activities Regulated by the RRC
- RRC Authority and Jurisdiction
- Liability for Contamination
- RRC Cleanup Programs:
  - State Managed Cleanup Program
  - Operator Cleanup Program
  - Voluntary Cleanup Program
  - Brownfields Response Program
    - » Brownfields Subtitle C Grant
    - » Brownfields PAH Research Grant
    - » Grant Administration

RRC Cleanup Programs
Background

- 1891- RRC Established. Jurisdiction over railroads, terminals, wharves, and express companies
- 1917 – Jurisdiction over pipelines, responsibility to administer conservation laws relating to oil and gas added.
- 1935 – Legislature enacts comprehensive statutes prohibiting oil and gas waste and gives RRC authority to adopt necessary orders.

RRC Cleanup Programs

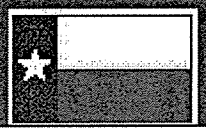
Background (cont.)

- 1983 – Establishment of Well Plugging Fund
- 1991 – Well Plugging Fund converted to Oil Field Cleanup Fund
- 2002 – Establishment of the Voluntary Cleanup Program
- 2003 – RRC Awarded first EPA Brownfields Grant(s)

RRC Cleanup Programs

Background (cont.)

- **Texas- An international leader in oil and gas production.**
- **There are more than 356,000 known oil, gas, and injection wells in Texas.**

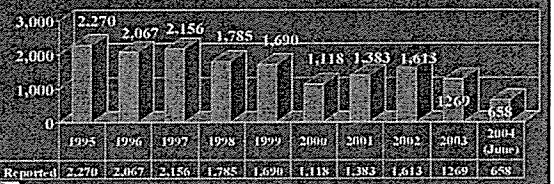


RRC Cleanup Programs

Background (cont.)

Reported Spills to the RRC

(Source: Field Operations Division)



Spills Reported	2,270	2,067	2,156	1,785	1,690	1,118	1,383	1,613	1269	688

RRC Cleanup Programs

Activities Regulated by the RRC

- **Oil and Gas Exploration and Production.**
- **Transportation of Oil, Gas, LNG by pipeline.**
- **Natural Gas Processing including recycling, separation, compression.**
- **Salt dome cavern storage, brine mining of Oil, Gas, LNG.**
- **Bulk Storage of Crude Oil.**
- **Commercial Disposal facilities for saltwater, RRC wastes.**

RRC Cleanup Programs

RRC Authority and Jurisdiction (cont.)

- **Statutory Authority:**
  - Texas Natural Resource Code, Title 3 (Oil and Gas), Subtitle A
  - Texas Water Code Section 26.131
- The Railroad Commission is solely responsible for the control and disposition of waste and the abatement and prevention of pollution of surface and subsurface water in the state from activities associated with the exploration, development, and production of oil and gas

RRC Cleanup Programs

RRC Authority and Jurisdiction (cont.)

Responsible Person:

Any operator or other person required by law, rules adopted by the commission, or a valid order of the commission to control or clean up the oil and gas wastes or other substances or materials **(Natural Resource Code, Section 91.113(b))**

RRC Cleanup Programs

RRC Authority and Jurisdiction (cont.)

- The RRC holds the oil and gas operator(s) who caused or contributed to the contamination responsible for cleanup at RRC regulated sites.
- RRC does not hold innocent landowners responsible for cleanup of RRC jurisdiction sites.

RRC Cleanup Programs

RRC Authority and Jurisdiction (cont.)

- Boundaries:
  - Memorandum of Understanding between RRC and TNRCC (16TAC3.30) – Statewide Rule 30
  - RRC/TCEQ working cooperatively on cleanups that involve waste from both industrial and O&G sources.

RRC Cleanup Programs

Cleanup Programs (cont.)

- District Offices

Related to the cleanup of contamination the district offices oversee:

- Emergency response
- Rule 91 cleanups
- Minor permits for waste disposal or land farming
- Closures of permitted facilities and pits
- Less complex or shorter duration

RRC Cleanup Programs

Cleanup Programs (cont.)

Site Remediation Section

- State Managed Cleanup Program
  - Uses Oil Field Cleanup fund where RP is unknown or fails or refuses to respond
  - Over 1,700 candidate sites
  - FY04 contract budget $3.6 million
  - Over 300 cleanups/year
  - Cost recovery actions through Texas AG

RRC Cleanup Programs

Cleanup Programs (cont.)

Site Remediation Section

- Operator Cleanup Program (OCP)
  - Oversees more complex, long-term, operator or 3rd party initiated cleanups.
  - Most cleanups involve a risk assessment and groundwater contamination
  - Approximately 500 sites managed by 2 full time and 3 part time technical staff w/ help from district office staff
  - FY04 will close issue over 170 no further action (NFA) closures
  - OCP staff also act as technical resource to district office personnel outside RRC customers

RRC Cleanup Programs

Cleanup Programs (cont.)

Site Remediation Section

- Voluntary Cleanup Program (RRC-VCP)
  - Established June 2002
  - Self Funded
    - » $1000 application fee
    - » $80/hour charged against application fee
  - Release of liability to state in return for cleanup
  - FY04 will have over 30 active sites

RRC Cleanup Programs

Cleanup Programs (cont.)

Site Remediation Section

- Voluntary Cleanup Program (RRC-VCP) (cont.)
  - Applicant make-up:
    - Operators who are not RPs
    - Developers
    - Landowners
  - VCPs are major tool on state level to counter Brownfields phenomenon
  - Contact: Aimee Beveridge, 512.463-7995
  - http://www.rrc.state.tx.us/divisions/og/site_rem/VolunCleanupProgram.html

RRC Cleanup Programs

Cleanup Programs (cont.)

Site Remediation Section

- Brownfields Subtiile C grant or RRC Brownfield Response Program (BRP)
  - $687,000 (current value FY04-05)
  - Grow the VCP, conduct outreach, create site inventory
  - Conduct free Phase 1/2 ESAs for non-RPs
  - Conduct free cleanups for non-RPs
  - Technical assistance on Brownfields
  - Utilizes framework of RRC-VCP
  - Contact: Aimee Beveridge, 512.463.7995
  - http://www.rrc.state.tx.us/divisions/og/brownfield/index.html

RRC Cleanup Programs

Cleanup Programs (cont.)

Site Remediation Section

- Brownfields Research and Training Grant
  - $148,933
  - Collect data to clarify risk of polycyclic aromatic hydrocarbons (PAHs) from weathered E&P waste at sensitive state-managed sites
  - Establish Brownfields assessment and cleanup tools (probably correlative, indicator parameter approach)
  - Contact: Heidi Bojes, Toxicologist, 512.475.3089

Railroad Commission of Texas

Victor G. Carrillo, Chairman
Charles R. Matthews, Commissioner
Michael L. Williams, Commissioner

Byron J. Ellington, PG, CPG
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Byron Ellington has served as the Technical Manager of the Site Remediation Section of the Railroad Commission of Texas (RRC) since February 2001. Mr. Ellington's primary duties involve the daily management of the Operator Cleanup Program, the Voluntary Cleanup Program, and Site Remediation's Grant Program as well coordination of environmental assessment, risk assessment, and cleanup technical issues being addressed by the section. Prior to the RRC Mr. Ellington worked in several cleanup programs with the Texas Commission on Environmental Quality (TCEQ) and its predecessor agencies dating back to 1989. From 1996 to 2000 Mr. Ellington served as TCEQ's Brownfields Coordinator, developing a structure by which local governments, non-profit organizations, and other stakeholder could address cleanup and redevelopment of their environmentally impacted properties. Between 1985 and 1989 Mr. Ellington worked in the oil and gas industry and then for the Texas Water Commission making surface casing determinations and salt-water injection zone authorizations (protection of useable quality groundwater).

Mr. Ellington received a Bachelor of Science in Geology from the University of Texas at Austin (1984), is a Certified Professional Geologist through the American Association of Professional Geologist (since 1990), and is a licensed Professional Geologist through the State of Texas (since 2003).

Brownfields Initiatives at the TCEQ

- Brownfield Site Assessments
- Voluntary Cleanup Program
- Innocent Program
- Tax Incentives

Brownfield Site Assessments

- Funding provided by EPA
  - Small Business Liability Relief and Brownfields Revitalization Act
- TCEQ provides:
  - Phase I & II Environmental Site Assessments
  - Guidance & Technical Assistance

Limitations on Brownfield Site Assessments

- Only government and non-profit organizations may apply
- Not a commitment to fully delineate
  - Average of $35,000 spent on each site assessment
- Does not include remediation activities

To Apply for a Brownfield Site Assessment

- Go to: http://www.tnrcc.state.tx.us/permitting/remed/vcp/brownfields.html
- No application fee
- Need signed access agreement

Voluntary Cleanup Program

- Created in 1995
- Statute – Subchapter S of the Texas Health & Safety Code (361.601 et seq.)
- Rule – Chapter 333 of 30 Texas Administrative Code

Voluntary Cleanup Program

Provides incentives to assess and remediateproperty:

- Liability Relief for Future Landowners
- Protection from Enforcement

Eligibility for VCP

- Under Section 361.603, property may not be subject to a TCEQ permit or order
- Under Section 333.6, no response actions may have been initiated on the property

The VCP Process

- Application with fee ($1000)
- VCP Agreement with schedule of future assessment & cleanup submittals
- Assessment & cleanup activities conducted & approved by TCEQ
- Certificate of Completion issued

For More Info on VCP

http://www.tnrcc.state.tx.us/permitting/remed/vcp/index.html

- VCP Application Form
- VCP Agreement Form
- Example Certificates of Completion
- MOA between TCEQ & EPA
- Texas VCP News

Innocent Owner/Operator Program

- Created in 1997
- Statute – Subchapter V of the Texas Health & Safety Code (361.751 et seq.)
- Rule – Chapter 333 of 30 Texas Administrative Code

Innocent Owner/Operator Program

Immunity from liability under the Health and Safety Code and the Water Code if:

- Contamination from an off-site source
- Owner/Operator did not cause or contribute to contamination
- Owner/Operator grants reasonable access

The IOP Process

- Application with fee ($1000)
- Site Investigation Report
- Notification to Adjacent Property Owners
- Innocent Owner/Operator Certificate issued

For More Info on IOP

http://www.tnrcc.state.tx.us/permitting/remed/vcp/iop.html

- Application
- Site Investigation Report Checklist
- Example Adjacent Landowner Notification
- Example

Tax Incentive

Section 312.211 of the Texas Tax Code:
Allows municipalities to provide property tax relief for certain brownfield properties that are located within a reinvestment zone and have been cleaned up through the VCP.

For More Info on Tax Incentives

http://www.tnrcc.state.tx.us/permitting/remed/vcp/brownfields.html

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Caroline Sweeney is the Senior Attorney for the Remediation Section within the TCEQ's Litigation Division. She has been with the agency since 1996 and provides legal support to the Superfund, Natural Resource Damages, Petroleum Storage Tank, Voluntary Cleanup, Innocent Owner/Operator, and Dry Cleaner programs.

Ms. Sweeney received a B.A. and a B.S. from the University of Texas and a J.D. from South Texas College of Law.

Environmental Management Systems: Playing it Straight
Texas Commission on Environmental Quality (TCEQ) Perspective

Presented at the Texas Environmental Superconference
August 5, 2004
Austin, Texas

Israel P. Anderson, Division Director, Small Business and Environmental Assistance (SBEA)
Susan Roothaan, Senior Technical Specialist, SBEA
Larissa Peter, CLEAN TEXAS - CLEANER WORLD Program Manager, SBEA

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Environmental Management Systems: Playing it Straight
Texas Commission on Environmental Quality (TCEQ) Perspective

Overview

This paper provides an overview of the Texas Commission on Environmental Quality (TCEQ) Environmental Management System (EMS) program, which has been in place since December of 2001. An overview of the statutory direction and program rules are provided, along with how the program is designed and a detailed update of the program incentives. A program update and results are also provided. Finally, ways to continue to assure success with these types of performance-based programs are provided.

Statutory Direction

The TCEQ EMS program was developed to implement HB 2997, Section 5.127, and HB 2912, Section 5.131, both from the 77th Legislature, 2001. This legislation directed the agency to develop a comprehensive program to provide regulatory incentives to encourage the use of EMSs and to integrate EMSs into the agency's regulatory programs including permitting, compliance assistance, and enforcement.

Program Rules

The Texas EMS program is codified under 30 TAC Chapter 9, Subchapter C (Regulatory Incentives for using Environmental Management Systems). The rules set forth the minimum requirements for an EMS, as well as broad categories of incentives including technical assistance, modification of state or federal requirements that do not change emission or discharge limits, flexibility in scheduling and conducting inspections, and credit under compliance history. The rules provide the Executive Director with broad authority on what to consider in providing incentives, and specifically list compliance history, stakeholder involvement, and participation in voluntary programs as elements to consider. Granting of federal incentives is tied to a site meeting EPA's National Environmental Performance Track (NEPT) criteria. Also, granting of incentives that modify state or federal requirements are tied to a site going beyond the minimum requirements.

Program Design

The Texas EMS program has been incorporated into TCEQ's long standing CLEAN TEXAS-CLEANER WORLD Program. The two top tiers of CLEAN TEXAS-CLEANER WORLD encompass the TCEQ EMS program: The LONE STAR LEADER level provides state recognition and incentives and the NATIONAL LEADER level provides federal recognition and incentives through NEPT. Availability of federal incentives through the NATIONAL LEADER level has been accomplished through a Memorandum of Agreement and a detailed work plan with EPA. Sites can gain membership in NEPT and gain associated federal incentives through the Texas process.

The LONE STAR LEADER level requires a performance-based EMS that is focused on the site

operations, while the NATIONAL LEADER level requires all the elements of a LONE STAR EMS plus additional requirements for environmental performance, stakeholder involvement, and community environmental service projects. Performance is expected in three areas: maintaining or enhancing compliance, controlling and/or reducing environmental liability, and reducing pollution beyond that required by rule. Performance is evaluated through the TCEQ EMS Audit Protocols that can be found at www.abouttexasems.org.

Sites are eligible for incentives once the site is approved through a TCEQ evaluation that includes an on-site audit. Audits can be conducted by TCEQ or by third-party auditors that can demonstrate equivalence to TCEQ EMS Audit Protocols (guidance for third party auditors is available at the Texas EMS web site). Texas has one of the most robust standards for participation, while offering the broadest set of incentives.

Incentives are designed for sites that have historically demonstrated results in continuous improvement in environmental and compliance performance and implemented an EMS that is capable of producing ongoing results. An EMS approved by the TCEQ must result in continuous improvement in both environmental performance and compliance. Additionally, some component of environmental performance must be in areas that go beyond legal requirements - either by going beyond requirements in areas that are regulated (e.g., hazardous waste reduction) or by addressing areas that are not regulated (e.g., energy conservation). It is understood that sites will place varying levels of emphasis on compliance versus environmental performance based on their current performance in each area. That sites are not going to have perfect compliance or achieve zero environmental impact. The focus is on improving the current operations, with the understanding that some base level of compliance and environmental performance has already been achieved. These base levels of compliance are defined in the TCEQ EMS Audit Protocols.

Incentives Package

The TCEQ program has a robust incentive package with many additional incentives under development. Incentive development goes through various steps. The first step is the initial conceptualization of the incentive. Incentives can be suggested by non-governmental organizations, state agencies, or regulated entities. The second step is review of the incentive by an inter-agency team. The team reviews the incentives based on the following criteria:

1. The incentive must not be less protective of the environment or result in increased emissions or pollution to the environment.
2. The incentive must not reduce public involvement.
3. The incentive cannot conflict with the statute.
4. Additional criteria are also considered such as: the logistical or cost impact to the agency; the extent to which the TCEQ has authority and can influence the offering of the incentive; whether the incentive conflicts with a major agency initiative.

Incentives that meet the agency criteria are then recommended to agency management. The third step is consideration of the incentive by the Executive Director and Commission. Approval of incentives is accomplished through Commission Work Session.

For those incentives approved in concept by the Commission, implementation of the incentives may then be undertaken by staff. Implementation may involve simply putting a new practice in place (such as discounts on training), or implementing a new agency policy (such as reduced penalties), or proposal and adoption of a new rule (such as exemption from the Waste Reduction Policy Act or credit under the Compliance History rules).

A summary of the incentives that have been approved by the Commission is provided in Tables 1, 2, and 3.

Table 1: Incentives Approved by Agency Management and Implemented

Incentive	Advocate*	Partner*	Lone Star Leader*	National Leader*	National Leader w/ High CH**
Reduced fees for TCEQ training	x	x	x	x	x
Technical and Program Assistance	x	x	x	x	x
Networking and Partnerships	x	x	x	x	x
Use of Logo and Annual Recognition	x	x	x	x	x
Custom Market Materials: Custom marketing including on-site recognition.			x	x	x
Credit under Compliance History: 10% credit under Chapter 60 TAC			x	x	x
Exemption from Source Reduction and Waste Minimization Planning: Exemption **from 30 TAC Chapter 335 Subchapter Q planning requirements.**			x	x	x
Single point of contact for innovative activities: Assistance with multi-media innovations and related issues			x	x	x
Stringency Evaluation: Stringency evaluations under air programs so that sites held to two similar standards (federal and state) only be held to one.				x	x
Low Inspection Priority for EPA Inspections: Does not include complaints or sector initiatives				x	x
Reduced State Inspection Frequency: Case-by-case reduction in inspection frequency					x

***Advocate membership is for non-regulated entities; Partner membership requires beyond compliance performance and community outreach, and Lone Star Leader and National Leader are the CERTIFIED EMS Levels. The National Leader Level is aligned with EPA's National Environmental Performance Track.**
****Compliance History**

Table 2: Incentives Approved by Agency Management, Implementation in Progress

Incentive	Partner*	Lone Star Leader*	National Leader*	National Leader w/ High CH**
Extended Hazardous Waste Storage Time: This was adopted by EPA in April 2004 and will need adoption at the state level.			x	x
Reduce MACT reporting: This was adopted by EPA in April 2004 and will need adoption at the state level.			x	x
Additional notice for inspections: In development.				x

Table 3: Incentives Approved by Agency Management, Implementation Planned

Incentive	Partner	Lone Star Leader	National Leader	National Leader w/ High CH
Reduced DMR Reporting: Reduced reporting and monitoring under the discharge monitoring report provisions of the Clean Water Act. This incentive will need federal approval to implement.			x	x
Alternative compliance options under Title V: Allow for alternative compliance options under Title V (if allowed by rule) without requiring the option to be identified up front. The equipment and/or operation would need to be authorized under the New Source Review (NSR) permit. This incentive will need federal approval to implement.			x	x

Stakeholder Group

The CLEAN TEXAS - CLEANER WORLD program has an open stakeholder group for interested parties to participate in program development. To join, an organization can sign up through the Texas EMS web site and receive email program updates and invitations to stakeholder meetings.

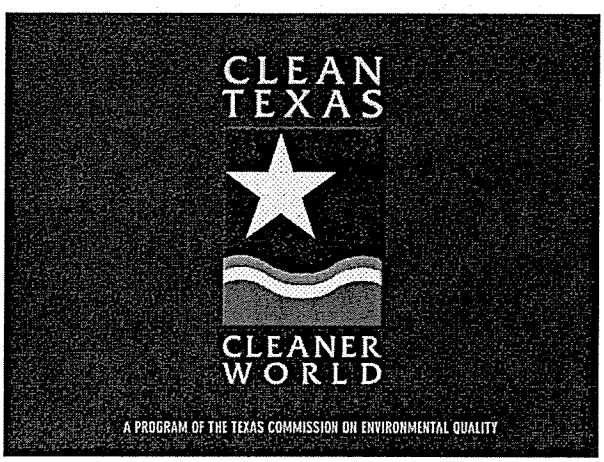
Program Activity and Results

Over 70 organizations in Texas have formally committed to join at the LONE STAR LEADER or NATIONAL LEADER level. Some are in the process of developing their EMS and others have already developed an EMS that is ready to be audited. Texas has conducted five formal audits and many training/mock audits to help facilities improve operations. TCEQ has also provided training and assistance to thousands of organizations.

Organizations that have attended TCEQ training have reported reductions of 5,385 tons of pollution and saved $3.9 million. In addition, participants in mock audits have reported extensive results. One local government showed cost savings and environmental results as a direct result of TCEQ assistance. Results include switching to latex paints (versus solvent-based), increasing efficiency of lubricant use, and increasing recycling efforts. Another site, a utility, is expecting to reduce oil spills by 200 per year and save nearly $700,000 based on an audit observation and root-cause analysis.

Summary and Future Success

The Texas EMS program is still in its infancy. Future success will depend on continued participation from the regulatory community and environmental stakeholders. Success of this program can yield environmental results far beyond that achieved through traditional mechanisms and can also increase efficiency and reduce costs. The quality and value of the incentives developed will correlate with the quality and the performance that members can demonstrate. Maintaining high standards will assure credibility for those that attain membership and will pave the way for future incentives. Both rigor and innovation will be required to achieve the promise of performance-based regulations.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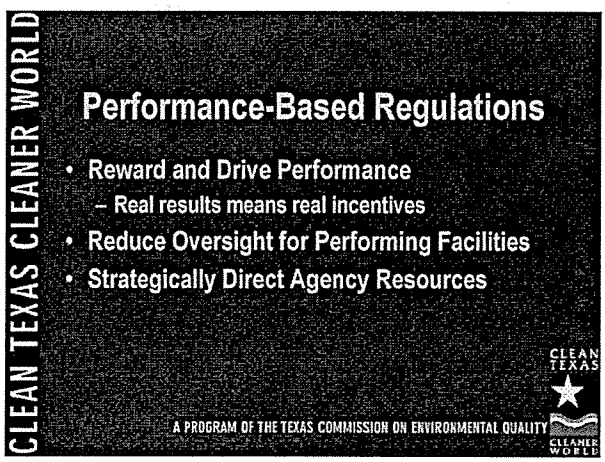
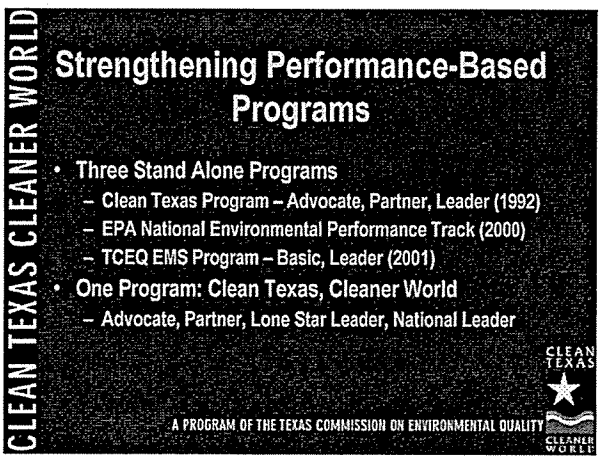

CLEAN TEXAS CLEANER WORLD
Performance-Based Regulations
• Reward and Drive Performance
– Real results means real incentives
• Reduce Oversight for Performing Facilities
• Strategically Direct Agency Resources
A PROGRAM OF THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY


CLEAN TEXAS CLEANER WORLD
Strengthening Performance-Based Programs
• Three Stand Alone Programs
– Clean Texas Program – Advocate, Partner, Leader (1992)
– EPA National Environmental Performance Track (2000)
– TCEQ EMS Program – Basic, Leader (2001)
• One Program: Clean Texas, Cleaner World
– Advocate, Partner, Lone Star Leader, National Leader
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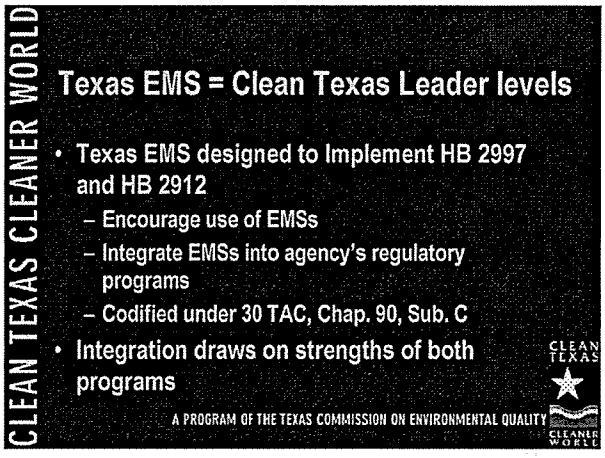
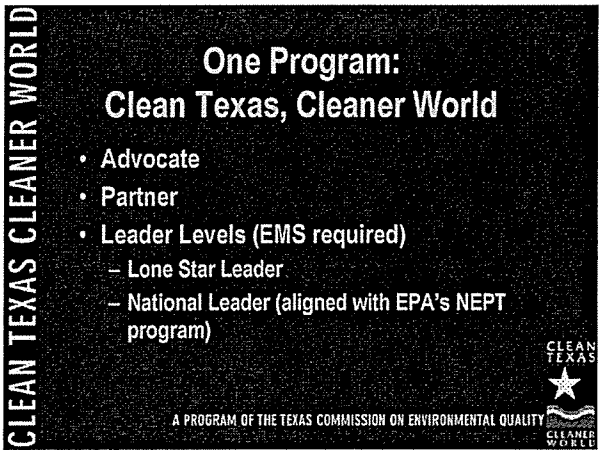
CLEAN TEXAS CLEANER WORLD
Integration with EPA
• Formal integration plan approved by EPA October 2003 lays out a "delegated" partnership approach
– Acceptance into TCEQ National Leader ⇒ Acceptance into NEPT (State and Federal Incentives)
– Acceptance into NEPT ≠ Acceptance into TCEQ National Leader Level
CLEAN TEXAS
A PROGRAM OF THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
CLEANER WORLD


CLEAN TEXAS CLEANER WORLD
Texas EMS = Clean Texas Leader levels
• Texas EMS designed to Implement HB 2997 and HB 2912
– Encourage use of EMSs
– Integrate EMSs into agency's regulatory programs
– Codified under 30 TAC, Chap. 90, Sub. C
• Integration draws on strengths of both programs
CLEAN TEXAS
A PROGRAM OF THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
CLEANER WORLD


CLEAN TEXAS CLEANER WORLD
One Program:
Clean Texas, Cleaner World
• Advocate
• Partner
• Leader Levels (EMS required)
– Lone Star Leader
– National Leader (aligned with EPA's NEPT program)
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CLEANER WORLD


CLEAN TEXAS CLEANER WORLD
Advocates and Partners
• Advocate
– Promote Clean Texas, Cleaner World
– Support Community Environmental Outreach Projects
• Partners
– Set Environmental Improvement Goals
– Implement Internal Environmental Training and Awareness Programs
– Participate in Community Environmental Outreach Projects
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CLEANER WORLD

CLEAN TEXAS CLEANER WORLD

EMS Leader Levels: Lone Star and National

- Top Performers
- Beyond compliance
- Beyond ISO 14001
- Require Results

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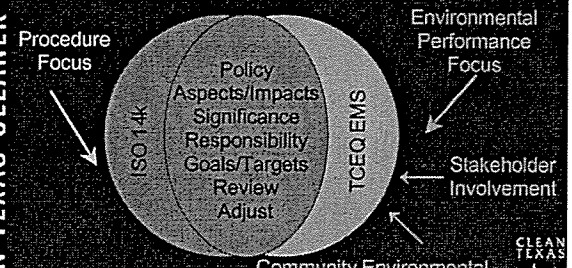
CLEAN TEXAS CLEANER WORLD

ISO/TCEQ EMS Overlap



A PROGRAM OF THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

CLEAN TEXAS CLEANER WORLD

Require Results

- Results show progress towards goals and targets as identified by the EMS plan
- Demonstrated enhanced or maintained compliance. Sites with very high compliance may be committed to only maintaining their current level of compliance
- Demonstrated mitigation/control of liability associated with any routine, non-routine, and emergency situations
- Demonstrated reductions in impact to the environment, such as reduced emissions, waste, etc
- Demonstrated reductions in pollution beyond that required by rule

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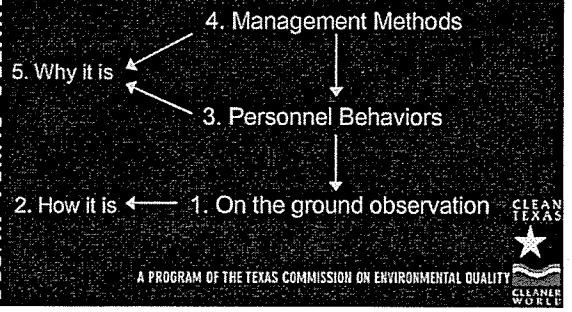
CLEAN TEXAS CLEANER WORLD

Audit Approach



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CLEAN TEXAS CLEANER WORLD

Incentives

A PROGRAM OF THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

CLEAN TEXAS CLEANER WORLD

Benefits for all Levels

- Reduced fees for Training
- Technical, Program, and Outreach Assistance
- Networking and Partnerships
- Recognition
  - During the Clean Texas Partnership Conference
  - Use of logo
  - Higher Level of Recognition for Leader Level plus Certification to TCEQ EMS standard

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Additional Benefits for All Members

- Compliance History
  - Mitigating factor for participation in Clean Texas, Cleaner World
  - May be used by ED to reclassify poor performers
- Penalty Policy
  - Reduction in penalty for participation in Clean Texas, Cleaner World

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Lone Star and National Regulatory Incentives

- 10% credit under compliance history
- Exemption from Waste Reduction Policy Act
- Single point of contact for innovations

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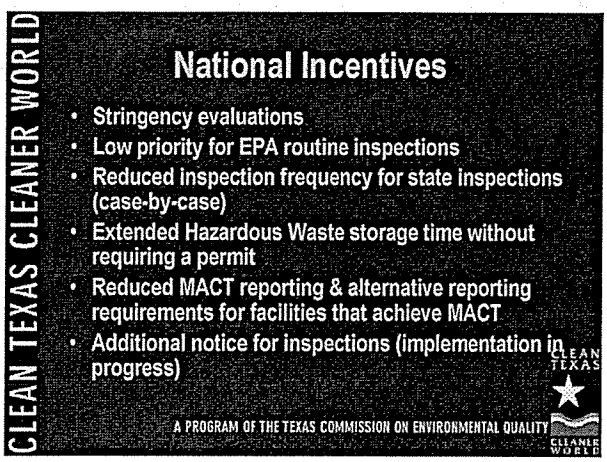
CLEAN TEXAS CLEANER WORLD
National Incentives
• Stringency evaluations
• Low priority for EPA routine inspections
• Reduced inspection frequency for state inspections (case-by-case)
• Extended Hazardous Waste storage time without requiring a permit
• Reduced MACT reporting & alternative reporting requirements for facilities that achieve MACT
• Additional notice for inspections (implementation in progress)
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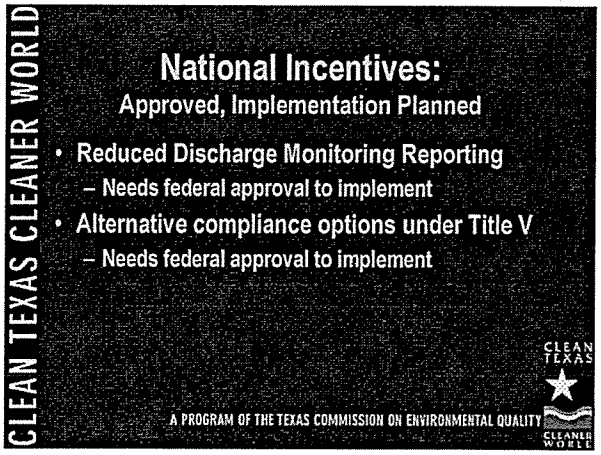
CLEAN TEXAS CLEANER WORLD
National Incentives:
Approved, Implementation Planned
• Reduced Discharge Monitoring Reporting
– Needs federal approval to implement
• Alternative compliance options under Title V
– Needs federal approval to implement
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Incentive Development
• Suggested incentives must:
– Not be less protective of the environment
– Not reduce public involvement
– Cannot conflict with statute
• Approved by TCEQ and EPA (if federal incentive)
• Incentives may take six months to over a year to be approved
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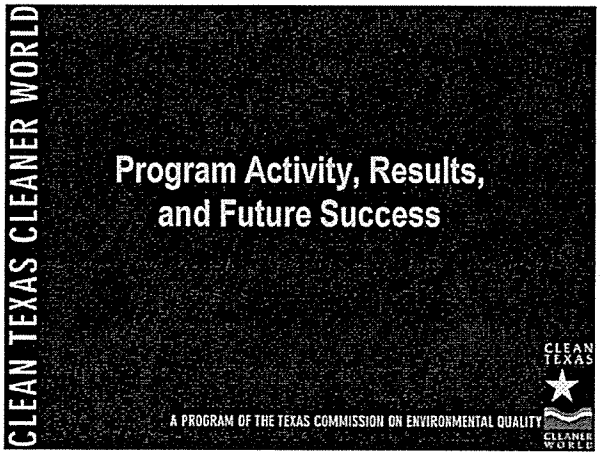
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Program Activity, Results, and Future Success
A PROGRAM OF THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

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Participation

- Over 250 total members at all levels
- Over 70 organizations formally submitted *Declaration of Commitment* at Leader levels
- TCEQ has conducted:
  - Five formal audits and numerous training audits
  - Variety EMS training opportunities

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EMS Results

- EMS Training participants
  - Reduced: 5,385 tons of pollution
  - Saved $3.9 million
- Mock Audit participants
  - Cost savings and environmental improvements achieved as a direct result of audit

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Future Success

- Continued participation by regulated and environmental community
- High standards, rigor, and innovation
- Quality and performance of members ⇒ Valuable incentives

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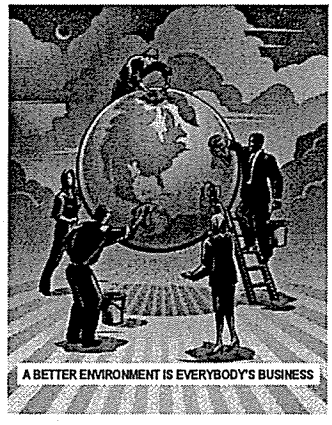

Israel P. Anderson

Small Business and Environmental Assistance Division
Texas Natural Resource Conservation Commission

Israel P. Anderson is director of the Small Business and Environmental Assistance Division at the Texas Commission on Environmental Quality (TCEQ). He also serves as the TCEQ's Small Business Advocate. The division provides confidential environmental technical assistance without the threat of enforcement action. Staff members help customers comply with regulations, prevent pollution, and minimize waste. It is a division priority to educate customers through seminars, trade fairs, workshops, hotline assistance, and on-site technical assistance and to recognize environmental achievements and inspire successes through voluntary programs, awards, and special events. Division customers include small businesses, industrial facilities, local governments, federal and state facilities, institutions, agricultural producers, schools, and individuals.

Mr. Anderson received his Bachelor of Arts in Political Science from Trinity University in San Antonio in January 1968, and his Master of Arts in Human Resource Management from Central Michigan University in June 1982. He served in the United States Army for 25 years, retiring in June 1993.

He began his employment with the TCEQ that same month serving as the seminar coordinator for the Water and Wastewater program in the Government and Business Assistance section. He helped create the Local Government Assistance Program whose mission is to provide a point of contact within the TCEQ for local governments to get advice, technical assistance, and help with environmental problem solving. In October 1997, the mission of the section was expanded to include educational outreach activities such as seminars, workshops, and trade fairs. Mr. Anderson became director of Small Business and Environmental Assistance in January 1999.

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ENVIRONMENTAL MANAGEMENT SYSTEMS: ROUTE TO A PERFORMANCE PLUS PHILOSOPHY

William Bozzo
DynMcDermott Petroleum Operations Company

Introduction

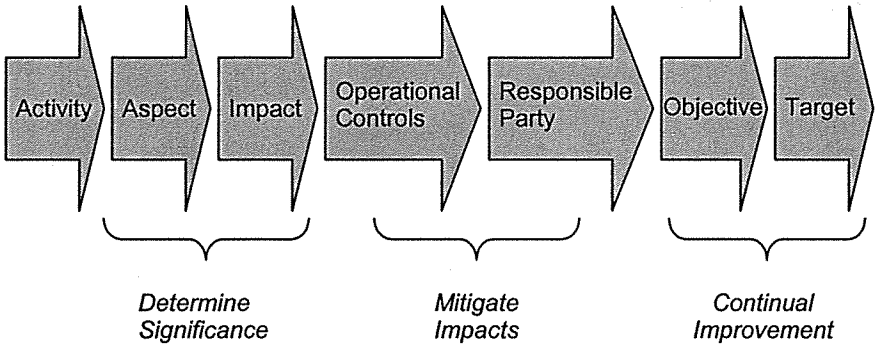
With publication of the American National Standard, "Environmental Management Systems – Specification with guidance for use" (ANSI/ISO 14001 – 1996) in 1996, U.S. facilities were provided an internationally recognized template that could be used to manage the environmental aspects of their business. This standard provides a mechanism for identifying the aspects and the associated significant impacts (risks), and prioritizing those aspects so that a facility or company can apply resources in an effective and efficient manner. When a company chooses to utilize such a tool to aggressively address its environmental risk it can transition from the traditional philosophy of managing to compliance requirements, to a more far reaching performance based approach where improving environmental performance becomes the goal. In essence, compliance with the laws and regulations employed by environmental regulators as a safety net against environmental degradation becomes the baseline or minimum, with performance significantly beyond that minimum becoming the norm. In some cases, only a marginal incremental increase in resources is required for this performance based approach, and once implemented an effective Environmental Management System (EMS) may even provide a positive return on investment. This paper examines that experience.

Implementing ISO 14001:

The ISO 14001 standard consists of 17 elements which must be addressed within the scope of the management system. Those elements are for the most part relatively non-prescriptive and adaptable to the almost infinite variety of businesses and facilities with environmental concerns. (For the details of these management system elements, the reader is referred to the ISO 14001 standard: ANSI/ISO 14001-1996.) However, certain of those elements can be arranged to nicely describe in a very simplified manner how an environmental management system works.

Affected facilities are engaged in one or more *activities* which describe the business purpose. For example, a facility may produce, store, or transport a chemical. Each activity has *aspects* associated with it that describe how it can interact with the environment. For example, a chemical storage tank may experience a certain loss rate due to evaporation. This loss many be economic in that it represents lost product, or environmental in that it may degrade air

quality. The change that this interaction can produce in the environment is the *impact*. (Note that an impact need not always be negative.) Negative impacts, dependent on their significance, might be mitigated through application of some sort of *operational control*, which could be physical or administrative in nature. In our example, tank seals along with seal inspection and maintenance procedures provide physical and administrative controls which reduce the risk that the public will be affected by pollutants. It is generally appropriate to preferentially direct resources to controlling those operations that produce the most significant impacts (providing the most marginal utility). But to assure the operational control is carried out, it is imperative that there be a *responsible party* associated with it. It does no good to require an action without someone being responsible for its accomplishment. So how do we then determine if the operational controls are effective? We develop an *objective* describing what we intend to achieve, and a quantitative *target* describing how much we intend to achieve over a certain period of time. For example, reduce emissions of "chemical A" from "tank B" by "X lbs per year." This process can be illustrated as follows.



Keep in mind that the process can be applied to ongoing activities, as well as to new activities as they enter the design or planning stage. In a nutshell you determine significance, mitigate impacts, and continue improvement so that over time through a continuous improvement process, the significance of aspects and impacts (risk) diminish relative to other aspects. Thus the impact or potential impact of the highest risk aspects is reduced, reducing their significance relative to other aspects. In this way resources can be re-directed other aspects which have now become relatively more significant.

Dealing with Environmental Risk:

What are the drivers to such an approach? From a business perspective, reducing risk and increasing competitive advantage have value. Risk has a cost, so any tool that can reduce risk, other things being equal, adds value, creating an opportunity for a competitive advantage.

In the larger picture, risk management goes to protection of the public (the driver for most environmental regulations), resource stewardship (the traditional

role of environmental requirements), and corporate exposure (which can affect insurance and stock valuation). Risk can be described simply as a function of severity times frequency. Reducing the probability that an adverse event will occur reduces the number of such events over the long term, and the associated costs or impacts. By the same token, reducing the magnitude of an event typically reduces the costs or impacts. So in summary, risk can be addressed in terms of severity and/or frequency, with reductions along either or both axis potentially protecting the public, providing resource stewardship, and/or enhancing corporate valuation.

When focusing on a traditional compliance based approach the scope is typically directed to the facility, as permits and regulatory obligations are so orientated. The risk management approach accommodates a broader perspective that considers the impact that a facility's actions may have on customers and suppliers alike, in addition to the facility itself. This risk management focus on outcome can provide a broader performance based approach and result. Lowering the risk upstream and downstream, as well as on the facility itself, takes a global, sustainable approach that can provide enhanced protection to a broader public: certainly a better way.

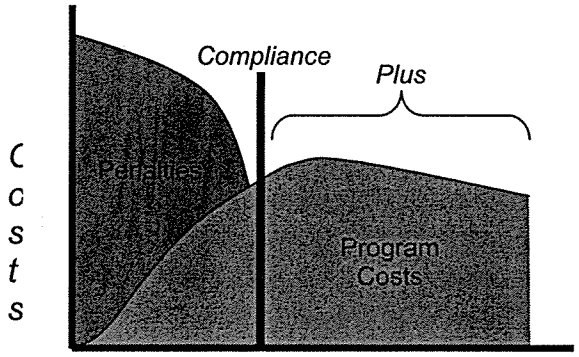
Competitive Advantage:

But how can a competitive advantage of a facility or company enhance the environment? There are many reasons why a particular business entity might gain competitive advantage. Quite simply, when that advantage stems from a beneficial environmental practice, the collateral effect is to perpetuate that practice among competitors. In a capitalistic system, competitive advantages are replicated or improved upon. Certain auto manufacturers flow their EMS requirements down to their suppliers establishing ISO 14001 certification as a business condition. Suppliers must hold certified ISO 14001 EMSs, and the presence of an effective EMS should enhance the environment. If a supplier does not meet this specification, it does not compete, and once the specification is in place, proper implementation will drive environmental improvement.

Environmental Management Systems are a condition of participation in broader performance plus programs, such as EPA's National Environmental Performance Track program, as well as variations on that program implemented by various states. In addition to their purpose of benefiting the environment, these performance plus programs can also offer business benefits. We are beginning to see such benefits reflected in the corporate valuation process as surrogate indicators of effective management of environmental risk. We are also seeing that some major insurance companies are starting to recognize that implementation and maintenance of effective EMSs with participation in

performance plus programs reduce environmental risk, reflecting this in the policies they issue.

Other things being equal, a facility with a performance plus program carries less risk, is more insurable, and has greater value to its stockholders. Why is this so? It is expensive to operate as a non-compliant entity, and is becoming more so. Fines and penalties, as well as possible civil and criminal actions continue to escalate. These sorts of impacts affect insurance premiums and potentially insurability. On the other hand the major costs in establishing a robust environmental program are in getting to compliance. One must obtain the expertise, do the analyses to understand facility activities and operations, and adjust those activities in accordance with existing and developing requirements. But once a company becomes effectively compliant, the marginal costs for moving beyond compliance diminish and may even become negligible. This is because instead of having to adjust activities and operations to a prescriptive solution, as may be the case with attaining simple compliance, environmental improvements beyond compliance can be tailored to the facility operational philosophy. In fact, in some cases there may be a return on moving beyond compliance, especially when the reductions in the cost of managing wastes and pollutants are considered, actually offsetting the program costs. So transitioning from simple compliance to a performance based philosophy may in fact provide a greater and more positive return on investment in resources than simple compliance.



Compliance Status

A Mini Case Study on Performance Improvement:

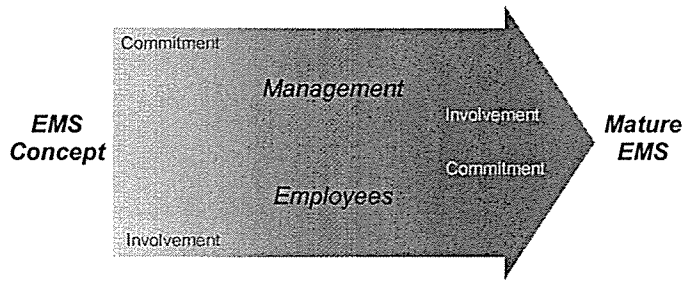
There are many ways to approach performance improvement. What follows is a mini-case study of a multi-state petroleum distribution and operation concern, and its experience with improving environmental performance. In the 1980's the combined facilities of the concern were experiencing an annual average of 86 reportable events (releases and permit noncompliances) per year. This was recognized as unacceptable environmental performance and at about mid-1980 the concern began tracking metrics of these reportable events by facility and by cause. This simple act of emphasizing metrics sharply reduced reportable events (by 52%) to a fairly stable average of 41 events per year over the next 8 years. Interestingly though, while the metrics were being tracked responsibility for preventing recurrence was not clear due to a matrix management approach involving facility and corporate personnel. In retrospect the metrics were not

being used to formally leverage improvement. Then in the early 1990's a new operational philosophy was implemented which clearly placed responsibility and accountability for reportable events on the shoulders of facility managers, and provided them the authority to reduce or prevent their continuing occurrence. This philosophy was referred to as RAA (Responsibility, Accountability, and Authority) and produced a dramatic improvement by an additional 68% to only 13 reportable events per year over the next seven years. While the improvement was dramatic, there was no trend of continuing improvement. So in the late 1990's a way to further improve environmental performance was sought.

After investigating a variety of options, a management system approach that would instill the elements of environmental management into the overall fabric of business systems was deemed an appropriate strategic solution. The ISO 14001 standard was selected as the template for implementing this system because it was deemed as having broad recognition and adaptability. In addition it provided the opportunity for rigor through a third party certification process. And as an added advantage, it would eventually provide the foundation for moving beyond the compliance orientation of avoiding reportable events to a philosophy of minimizing environmental risk. And this orientation to minimizing environmental risk goes directly to reducing reportable events, but not just to a compliance threshold.

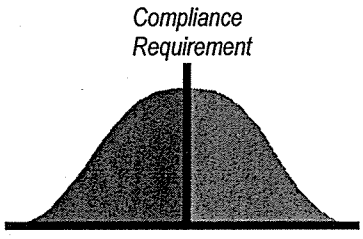
A desirable characteristic of the ISO 14001 standard is that it describes the EMS as a process that spirals up through continuous improvement as it matures. It starts with an *Environmental Policy*, that provides the foundation for *planning*, and which is necessary to effective *implementation and operation*. At that point *checking and corrective action* can be readily implemented to check the effectiveness of the process, and is fed back to management through the *Management Review* process. This provides a *continuous improvement* process that addresses implementation through outcome, and provides for ongoing correction of shortcomings with resources as appropriate through a continuing cycle of improvement. Thus this system provides a mechanism for continuing the reduction of environmental risk over time, beyond the compliance threshold.

A strength of the ISO 14001 EMS standard is that it demands the involvement of management and affected employees alike. Management provides leadership. It must be committed to initially implementing the EMS, in that successful implementation of a rigorous management system requires the commitment of a variety of

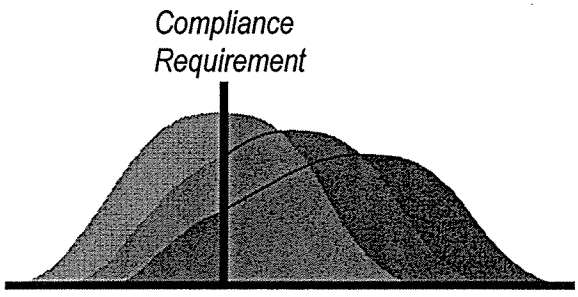


resources that are typically controlled by management. The operational concern in this study chose to internalize implementation of the process to minimize implementation costs and maximize employee understanding and "buy-in." Management recognized the need and made the investment of internal manpower resources. As the process matured, management became actively involved in effectively addressing opportunities for improvement that might require realignment of resources or changes in policy. Management's involvement was critical to efficient continuous improvement initiatives. Implementation of the EMS involved employees in diverse areas ranging from identification of aspects to upgrade of procedures, to process improvement ideas. Once implemented, however, the employees' commitment to the process provided a key element to perpetuating continuous improvement. The combination of management and employees provided the leadership and innovation that lead from implementation to a performance plus approach.

In 2000, the U.S. Environmental Protection Agency implemented its Performance Track program designed to recognize and encourage facility performance over and above the compliance threshold. Key elements to participation in this program are a functional EMS, specific commitments to continuous improvement, community outreach, and management commitment. In return for such commitments several incentives were offered, including recognition, technical assistance, and for certain requirements as appropriate, flexibility that does not diminish protection of the environment. These benefits can translate into cost savings. Through interface and Memorandums of Agreement, EPA has and continues to integrate this federal program with state programs, greatly increasing the potential benefit.



So how does this improve environmental performance? A traditional compliance approach produces a clustering of performance about the compliance threshold, with risk takers potentially shading to the "red" noncompliant side and risk avoiders shading to the "green" compliant side producing a normal distribution, commonly referred to as a bell curve. With a performance based program there is a tendency towards compliance plus. This means that the center of the normal or bell distribution moves to the right side of the compliance threshold; with the majority of facilities now incentivized to perform beyond mere compliance, providing a better track.

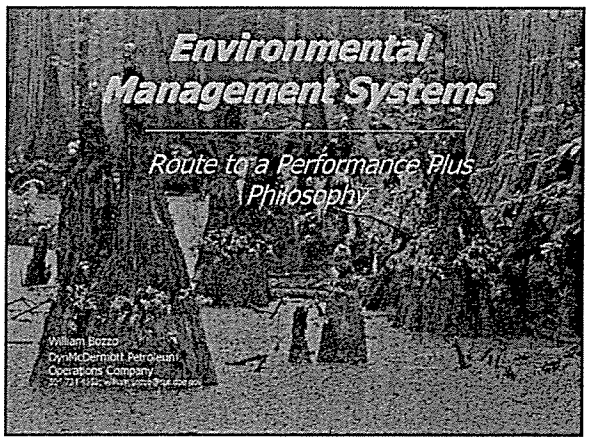


So what did the petroleum storage and distribution concern in our mini case-study do? They implemented an EMS and utilized a third party registrar to certify it against the ISO 14001 standard. The average of 13 reportable events experienced during the 1990's was further reduced to an average of 6 reportable events over the past 4 years, or a further improvement of 54%. Over the long term the various improvements implemented by this facility produced improvements from an average of 86 events per year in the early 1980's to only 6 reportable events per year since 2000, or a 93% improvement.

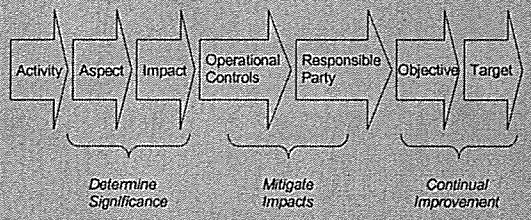
This facility became a charter member of the EPA Performance Track program in late 2000, committing to continuing improvement over and above compliance. The ISO 14001 EMS, in conjunction with the commitment to improvement under the Performance Track, has combined to produce meaningful reductions in risk over the past four years. Specifically, waste disposal has been sharply reduced, diminishing associated costs. An affirmative procurement process has been implemented to purchase 100% environmentally preferred products that encourage reuse markets, as well reduce the contribution of these products to future waste streams. Spills of hazardous materials were also sharply reduced eliminating corresponding cleanup costs. Using 1999 as a baseline, relative to ISO 14001 implementation and Performance Track membership, this operational concern realized cost savings and avoidances of $2.4 million through 2003 (four years), against program costs of just under $200,000, or a 4-year return on investment of about 1,200 percent. In this case the performance plus philosophy paid for itself many times over.

Conclusion:

A fully and effectively implemented EMS can produce real and continuous improvement in an environmental program. These improvements include improved stewardship of resources and reduction of environmental risk. In addition, the EMS can provide economic benefits to the operation, enhancing valuation, affecting insurance costs and providing a positive return on investment. And finally, an effectively implemented EMS is a gateway to performance based regulatory programs that recognize those facilities willing to commit to moving beyond the traditional compliance standard to providing additional reductions in environmental risk and commitments to environmental stewardship.



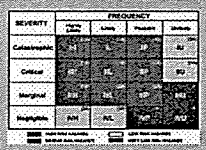
The EMS Process

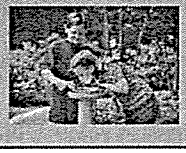


- May produce:
  - A reduction in environmental risk
  - An enhanced competitive position

Reducing Risk

- Environmental: public safety & stewardship
  - Risk: function of potential impacts
    - Various media/ targets
    - Suppliers & customers (up/down stream)

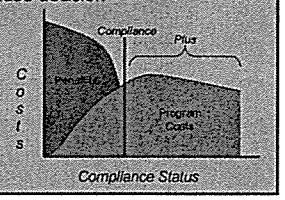




  - Compliance is a minimum standard!
    - The public expects more
      - *compliance+*
    - Corporate exposure demands it

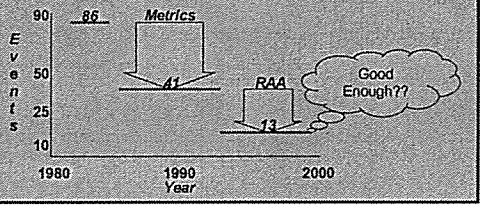
Seeking Competitive Advantage

- Customer expectations
  - A $570,000,000 discriminator
- Image & Goodwill: *They have value!*
  - An intangible in the purchase decision
  - Positive image = well managed company
- Corporate Valuation
  - Affect operating costs



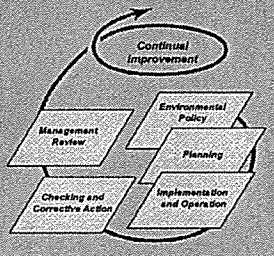
Strategic Decision

- Outstanding record of Environmental Performance
  - Was there value in further improvement?
  - Our customer said yes!



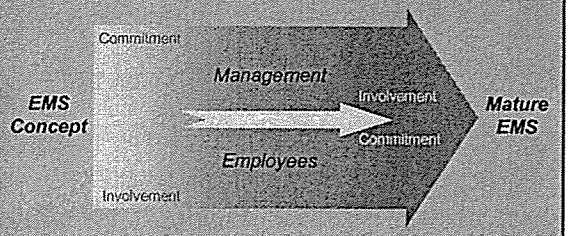
Strategic Solution

- Implement structured Environmental Management System
  - Use ISO 14001 model
    - Build rigor into system
    - A broadly recognized international standard



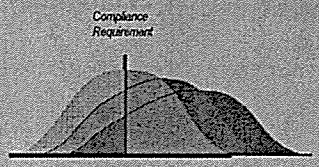
EMS Implementation

- It's a partnership
  - Commitment ⟺ Involvement

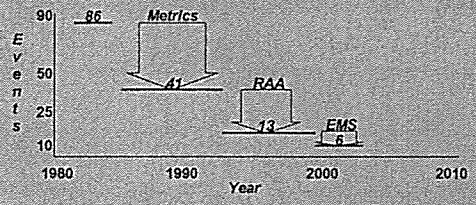


Collateral Opportunity

- Join performance based programs (EMS+)
  - EPA's Performance Track
  - TCEQ's Clean Texas Cleaner World
- What's it do?
  - Low cost step to shift the paradigm

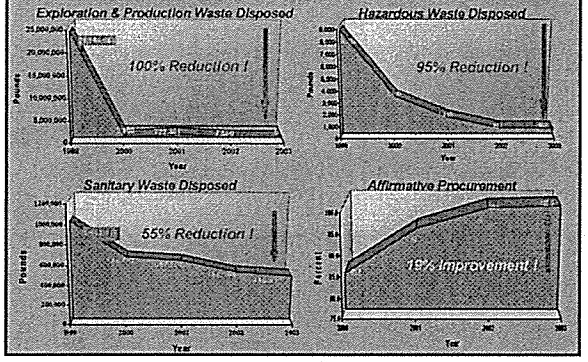


Strategic Outcome

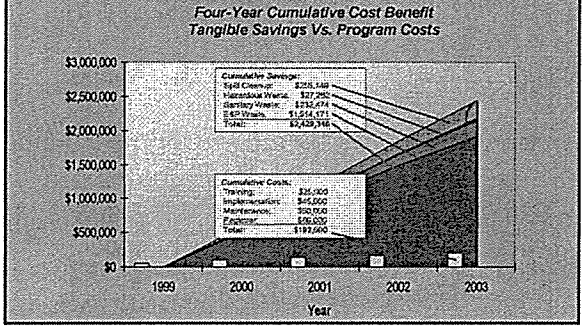


- Cut reportable events by another 54%!

Risk Reduction



Return on Investment



Conclusion

- An EMS can benefit the public
  - A means of reducing risk

- An EMS provides stewardship

  - Evolve from compliance to performance+ management
- An EMS can benefit the company
  - Positive Return on Investment
  - Enhance corporate valuation

Summary Information for William E. Bozzo

BIOGRAPHY:

Mr. Bozzo has been the corporate Environmental Manager for DynMcDermott Petroleum Operations Company since 1993 with overall Environmental Program responsibility for all facilities. DynMcDermott manages and operates five petroleum storage and pipeline distribution facilities with a combined storage capacity of 700 million barrels. These facilities are located in some of the nation's most productive wetlands along the Louisiana and Texas Gulf Coast.

Under his leadership all five of DynMcDermott's facilities have received and maintained 3rd Party certification of their Environmental Management System against the ISO 14001 standard, and Charter Membership in the U.S. Environmental Protection Agency Performance Track program. In addition DynMcDermott participates actively in state environmental leadership programs in both Louisiana and Texas, and has received recognition for environmental excellence at both the state and national level on numerous occasions.

Mr. Bozzo has worked in the Environmental field for about 25 years gaining a variety of field and corporate industrial experience with a number of companies including Computer Science Corporation, McDermott, Lockheed-Martin, Boeing, Kansas Nebraska Pipeline, and Dravo Utility Constructors, as well as field environmental research experience with the U.S. Environmental Protection Agency and the Naval Research Laboratory. He is currently a member of the Environmental Management System Accreditation Council for the ISO 14001 National Accreditation Program. He also sits on the Board of Directors for the Performance Track Participants Association (PTPA), chairing the 2004 national conference. Mr. Bozzo recently earned a Six Sigma Black Belt from Loyola University of New Orleans. Mr. Bozzo holds a Bachelors degree in biology from Washington and Jefferson College, a Masters of Science degree in environmental science from The American University, and a Masters of Business Administration from Tulane University.

United States Environmental Protection Agency
Office of Public Affairs Washington, D.C. 20460 (1703A)
www.epa.gov/newsroom

Note to Correspondents

FOR RELEASE: MONDAY, SEPTEMBER 9, 2002

EPA ANNOUNCES CREATIVE APPROACHES FOR HELPING AMERICANS RECYCLE, RECOVER ENERGY, MINIMIZE WASTE AND REVITALIZE THE LANDSCAPE

Dave Ryan, 202-564-7827 / ryan.dave@epa.gov

Urging Americans to take renewed responsibility for their individual impact on the environment, EPA today announced the kickoff of a campaign challenging Americans to meet or beat two goals by 2005: Boosting the national recycling rate from 30 percent to at least 35 percent, and curbing by 50 percent the generation of 30 harmful chemicals normally found in hazardous waste. To help meet the goals of the Challenge, EPA also announced 12 new innovative projects that will test creative approaches to waste minimization, energy recovery, recycling and land revitalization.

The program, called the "Resource Conservation Challenge," was announced by EPA at the National Recycling Coalition's 21st Annual Congress and Exposition in Austin, Texas.

"We are challenging all Americans to take a 'hands-on' approach to helping conserve our precious natural resources," said Marianne Lamont Horinko, EPA Assistant Administrator for Solid Waste and Emergency Response. "EPA is asking Americans to adopt smart environmental practices, make smart environmental purchases, reuse more products, and recycle at least one pound of their household waste a day. The results of the Resource Conservation Challenge and the innovative projects will be less waste, more economic growth and greater energy savings and recovery."

The Resource Conservation Challenge comprises 68 projects whose hallmarks are flexibility, partnership and innovation.

For example, in one of the projects, EPA is asking businesses and industry to join a "Waste Minimization Partnership Program" to help achieve the national goal of a 50 percent reduction of 30 harmful chemicals by 2005. These chemicals, such as lead, are among the most harmful to public health and the environment. The five founding members of the partnership are American Video Glass, Corning Asahi, Dow Chemical Corp., International Truck and Engine, and Toyota Motor Manufacturing.

EPA will do its part to support those actions that will contribute to meeting the Challenge goals. These efforts include:

- Establishing partnerships and alliances with industry, states and environmental groups.
- Providing training, tools, and technology assistance for businesses, governments and citizen groups.

– Getting the word out through outreach and assistance to the general population, especially to youth and minority groups.

In addition to the Resource Conservation Challenge, EPA is also partnering with states, academia, non-profits, tribes and local government and industry to test innovative ideas to make EPA's waste programs more efficient and effective. Twelve innovative projects from around the country were announced by EPA today. These creative projects demonstrate approaches to waste minimization, energy recovery, recycling and land revitalization that may be replicated across various industries, communities and regions. The projects range from making plastics from plant materials, to demonstrating the reuse potential of recycling residential building materials. For example, one project will develop and solicit designs for readily reusable packaging for products purchased electronically through the internet.

Founded in 1978, the National Recycling Coalition, Inc. is a nonprofit organization representing all the diverse interests committed to the common goal of maximizing recycling to achieve the benefits of resource conservation, solid waste reduction, environmental protection, energy conservation and social and economic development.

Learn more about the Challenge at: http://www.epa.gov/epaoswer/osw/conserve/index.htm
Learn more about the Innovations *Projects* at: http://www.epa.gov/oswer/IWG.htm.

EPA
United States
Environmental Protection
Agency

April 2002
EPA530-F-02-018
www.epa.gov/osw

More Recycling and Reuse Proposed For Electronic Wastes and Mercury-Containing Equipment

The Environmental Protection Agency (EPA) is promoting the safe reuse and recycling of cathode ray tubes and mercury-containing equipment. The Agency believes that revising existing regulations for these growing waste streams will facilitate better collection; lead to more recycling and less disposal; and will better protect the environment. It will also help keep mercury and lead out of municipal landfills and incinerators.

Background

Cathode Ray Tubes (CRTs). CRTs are the video display components of televisions and computer monitors. CRT glass typically contains enough lead to be classified as hazardous waste when it's being recycled or disposed of. Currently, businesses and other organizations that recycle or dispose of their CRTs are confused about the applicability of hazardous waste management requirements to their computer or television monitors. The Agency is proposing to revise regulations to encourage opportunities to safely collect, reuse, and recycle CRTs.

Mercury-containing Equipment. Mercury is contained in several types of instruments that are commonly used by electric utilities, municipalities, and households. Among others, these devices include barometers, meters, temperature gauges, pressure gauges, sprinkler system contacts, and parts of coal conveyor systems. EPA has received data on mercury-containing equipment since 1995, when it issued the first federal universal waste rule. The Agency believes that adding mercury-containing devices to the universal waste stream will facilitate better management of this waste.

Universal wastes are items such as batteries, thermostats, pesticides, and lamps that are commonly thrown into the trash by households and small businesses. Handlers of universal wastes follow tailored standards for storing, transporting, and collecting wastes. These standards are designed to encourage collection and keep these wastes out of municipal landfills and incinerators.

Action

Cathode Ray Tubes. To encourage more reuse and recycling, intact CRTs being sent for possible reuse are considered to be products rather than waste, and therefore not regulated unless they are being disposed of. If CRT handlers disassemble the CRTs and send the glass for recycling, EPA is also proposing to exclude them from being a waste, provided they comply with simplified storage, labeling, and transportation requirements. Furthermore, the Agency believes that if broken CRTs are properly containerized and labeled when stored or shipped before recycling, they resemble commodities more than waste.

Finally, processed glass being sent to a CRT glass manufacturer or a lead smelter is excluded from hazardous waste management under most conditions. If the glass is being sent to any other kind of recycler, it must be packaged and labeled the same as broken CRTs. The Agency believes that these proposed changes will encourage the recycling of these materials, while minimizing the possibility of releasing lead into the environment.

Mercury-containing Equipment. The universal waste rule tailors management requirements to the nature of the waste in order to encourage collection (including household collections) and proper management. Universal waste generators, collectors, and transporters must follow specific recordkeeping, storage and transportation requirements. The Agency is proposing the same tailored requirements for mercury-containing equipment. Final disposal and recycling requirements remain unchanged.

For More Information

This fact sheet and other documents related to this rule are available on the Internet at <http://www.epa.gov/epaoswer/hazwaste/recycle/electron/crt.htm>. For additional information, or to order paper copies of any documents, contact the RCRA Call Center. The Call Center operates weekdays, 9:00 a.m. to 5:00 p.m., and may be reached by dialing: 703-412-9810, TDD 703-412-3323, 1-800-424-9346, or TDD 1-800-553-7672.

United States Environmental Protection Agency | Solid Waste and Emergency Response (5305W) | EPA530-F-01-003 January 2001 www.epa.gov/osw

Office of Solid Waste

EPA Environmental Fact Sheet

HAZARDOUS WASTE MANIFEST SYSTEM TO BE STREAMLINED

The Environmental Protection Agency (EPA) proposes to improve the Uniform Hazardous Waste Manifest system by automating procedures and standardizing the manifest form. Waste handlers could realize savings between $24-$37 million a year, and states could save up to 25 percent in manifest-related costs while ensuring the continuous, safe management of hazardous waste.

Background

For more than 15 years, hazardous waste handlers have been required to ship their hazardous wastes according to the Uniform Hazardous Waste Manifest system. The manifest form provides a complete paper trail of a waste's progress from a generator through its treatment, storage, and disposal. The form identifies the type and quantity of the hazardous waste being shipped, the transportation companies that will transport the waste, and the permitted facility that will treat, store, or dispose of the waste. In addition, the manifest form also contains a generator's certification of waste minimization practices.

Whenever a waste handler takes custody of a waste shipment, it must sign the accompanying manifest to acknowledge its receipt and thus create a record of the shipment's chain of custody. When the waste shipment is finally delivered to the permitted facility selected to manage the waste, the receiving facility must sign the manifest, retain a copy as a record, and return a signed copy to the generator who originated the shipment. This closes the accountability circle and enables the generator to verify that the shipment reached its final destination. Either EPA or a state agency must be notified for appropriate action when a generator does not receive a final manifest verification, or when a handler discovers that the shipment actually received does not match the description of the waste on the manifest.

The regulations for generators and transporters in 40 CFR Parts 262-263 are affected by this proposal. Related requirements for owners and operators of treatment, storage, and disposal facilities in Parts 264-265 are also affected, along with state requirements in Part 271.

Action

EPA proposes options to change the Uniform Hazardous Waste Manifest system. Mainly, these changes would allow waste handlers the option of using an electronic

manifest to track their waste shipments, and would standardize further the manifest form and procedures.

Automation

The proposed rule would enable waste handlers to conduct nearly all the waste tracking and recordkeeping functions of the manifest electronically. The proposal announces standard electronic data interchange and Internet formats that could be used for originating and transmitting the manifest. Under the proposal, the electronic manifest would be signed electronically either with a public key/private key encryption method known as a "digital signature," or with a "secure digitized signature" that uses a digitizer pad and stylus to create a graphic image of a handwritten signature. The proposal also includes computer security controls to protect the integrity of data and to ensure that electronic manifests are processed and stored securely and accurately.

The automation options should significantly reduce the manifest paperwork burden, and should also improve the tracking of hazardous waste shipments. Although waste handlers still may opt to use a paper manifest, the Agency expects that automation will provide better and more timely data on waste shipments for both waste handlers and regulators.

Standardization

The Agency intends to eliminate manifest variability by further standardizing the content and appearance of the manifest form. The new standard format announced in the proposal could be used in all states. These proposed changes would eliminate the different manifest forms that are currently required by many authorized states, and also make it possible to obtain forms from a greater number of sources. All manifest forms would be printed according to a precise specification to assure uniformity. Each form would have a unique, preprinted manifest tracking number. Under this option, for example, a waste handler with multistate operations could register and use its own manifest forms everywhere they do business. EPA would oversee the process by which states, waste handlers, or other printers would be registered to print the standard form according to EPA's specifications.

Impact

This proposal affects 92,000 businesses in 45 economic sectors that conduct hazardous waste manifest-related activities. These include about 90,000 small and large quantity waste generators, 500 waste transporters, and 2,000 treatment, storage, and disposal facilities in 24 states. Simply automating the manifest form could save up to $27million a year.

For More Information

The Federal Register notice, this fact sheet, and related documents are available on the Internet at http://www.epa.gov/epaoswer/hazwaste/gener/manifest/index.htm. For additional information, or to order paper copies of any documents, call the RCRA Call Center. Callers within the Washington Metropolitan Area please dial 703-412-9810 or TDD 703-412-3323 (hearing impaired). Long-distance callers please call 1-800-424-9346 or TDD 1-800-553-7672. The RCRA Call Center operates weekdays, 9:00 a.m. to 6:00 p.m. Address written requests to: RCRA-Docket@epa.gov or RCRA Information Center (5305W), 1200 Pennsylvania Avenue, NW, Washington, DC 20460.

eManifest Stakeholder Meeting

May 19-20, 2004
EPA East Building, Public Hearing Room 1153
1201 Constitution Ave. NW, Washington, D.C.

Meeting Objectives

- Present and receive stakeholder input on the *working-draft* eManifest road map.
- Understand the lessons learned from other electronic manifesting projects.
- In small groups, identify and work through issues associated with creating a successful eManifest approach, including balancing consistency with flexibility, ensuring system security and usability, and addressing cost and funding.
- Describe streamlining and other opportunities that might be created by an eManifest system.

Day One: May 19, 2004

8:30 Registration

9:00 Opening plenary – welcome and orientation (30 minutes)
- Matt Hale, Deputy Director, Office of Solid Waste, OSWER
- Renee Wynn, Deputy Director, Office of Information Collection, OEI

9:30 The draft eManifest roadmap (1 hour)
- Rich LaShier, Office of Solid Waste

10:30 Morning break (15 minutes)

10:45 Group discussion of the draft eManifest roadmap (1½ hours)
- Develop group understanding about the road map
- Identification and discussion of alternatives
- Briefly describe the breakout group process:
  - Business process, opportunities and governance
  - Technology architecture
  - Funding
- Identify key questions and issues for three breakout groups:
  - Reaction to the overall eManifest approach
  - Pros and cons of alternatives
  - Challenges to eManifest
  - Strategies and partners to overcome these challenges
  - Other options to consider or opportunities that might be realized

12:15 Lunch (on your own) (1¼ hours)

1:30 Lessons learned from other electronic manifesting systems (1 hour)
- George Rocoski, Ontario Ministry of the Environment
- Randy Smith, DOD Defense Logistics Agency

2:30 Afternoon break (15 minutes)

2:45 Breakout groups – understand issues and questions (1½ hours)
- Business process, opportunities and governance
- Technology architecture
- Funding

4:15 Wrap up day 1 and plan for day 2 (45 minutes)

5:00 Adjourn

Day Two: May 20, 2004

8:30 Panel: current needs and future visions for electronic manifesting (1¾ hours)
- Mike Fusco, Safety-Kleen
- David Case, Environmental Technology Council
- Liz Bols, Michigan Department of Environmental Quality
- Glenn Miller, Northey-Smith
- Dan Munyan, CSC

10:15 Morning break (15 minutes)

10:30 Breakout sessions – discuss solutions and path forward (1½ hours)
- Business process, opportunities, and governance
- Technology architecture
- Funding

12:00 Lunch (on your own) (1¼ hours)

1:15 Report on business process, opportunities and governance group discussion (45 minutes)
- Reaction to the overall eManifest approach and alternatives
- Pros and cons of alternatives
- Challenges to eManifest
- Strategies and partners to overcome these challenges
- Other options to consider or opportunities that might be realized

2:00 Report on technology architecture group discussion (1 hour)
- See topics above

3:00 Afternoon break (15 minutes)

3:15 Report on funding group discussion (1 hour)
- See topics above

4:15 Wrap up and next steps (45 minutes)

5:00 Adjourn

Background Information and Breakout Sessions

Breakout (or small group) sessions will be used so that meeting participations can "drill down" into some of the key issues, questions, and major issues associated with who will design, implement, manage, maintain, modify, certify, and approve eManifest system IT software, hardware, guidance, administrative processes, modifications, upgrades, interfaces, and technical formats.

For purposes of this meeting, EPA has identified a number of potential approaches to developing and implementing an eManifest system, including centralized, distributed, and shared services models.

Under a *"Centralized Services"* approach, all services are hosted on a primary network location. Mission-critical data is located at the primary location.

Under a *"Distributed Services"* approach, private firms would develop eManifest systems that adhere to a set of promulgated standards. Services and data, regardless of type, may be hosted by any network partner.

Under a *"Shared Services"* system, manifest handling services and manifest 'documents' would be hosted on a primary network location. All other services and data may be hosted by any network partner wishing to participate.

Of the three, it seems that the *Shared Services* approach best addresses the stakeholder comments received thus far, offers robust security for non-repudiation, and provides an opportunity for value-added development of additional services by network partners.

EPA wishes to thoroughly vet this proposal with stakeholders, both as a group and in focused small group breakouts, as described below:

Business Process, Opportunities, and Governance

EPA anticipates that the business process, opportunities, and governance breakout group will focus on how to use the eManifest to address current information and process requirements, as well as new opportunities (potential roles and functions) that may be created by an eManifest and should, therefore, be factored into thinking about the system design, operation, and funding. For example, an eManifest might be able to:

- Serve as a mechanism for consolidating a number of functions currently performed by hazardous waste generators, transporters, TSDFs, state regulators, enforcement personnel, and federal regulators.
- Consolidate reporting requirements for the RCRA Biennial Report and other data collection programs.
- Allow for integrated reporting and faster data collection and analysis.

This group will also discuss how an eManifest system might be administered and the role of EPA in administering such a system.

Information Technology Architecture

The information technology architecture breakout group will focus on technical aspects of different eManifest system approaches (i.e., software and hardware architectures) and explore the four main IT systems:

- *Data subsystem:* key assumptions, questions, and issues to be resolved related to manifest data (e.g., input, transfer, output, storage, and archive).
- *Services subsystem:* key components of the IT application architecture and how they interrelate (i.e., interoperability), as well as defining potential discrete transactions that comprise the entire process.
- *Data security subsystem:* how manifest data and IT applications will be kept secure.
- *Infrastructure subsystem:* how data and IT applications will be managed (maintained, updated).

Funding

EPA will not be able to move forward with a "shared services" or other approach that involves the Agency developing and hosting new applications or systems unless a stable source of funding is identified for the entire life cycle of such a system. The funding breakout group will focus on evaluating a number of possible funding mechanisms, such as:

- User fees
- Share-in-savings and other cost-recovery contracts
- New federal appropriations earmarked for system development
- Reallocation/earmarking of EPA state grants

Texas Environmental Superconference
RCRA Update

Scott A. Sherman
Associate General Counsel
U.S. Environmental Protection Agency

RCRA Update

- Definition of Solid Waste
- Financial Assurance
- Resource Conservation Challenge
- E-Waste
- E-Manifest

RCRA Update
Definition of Solid Waste

- RCRA: EPA jurisdiction to regulate management of "solid waste"
- RCRA § 1004(27)

  . . . any garbage, refuse, sludge . . . and **other discarded material** . . .

RCRA Update
Definition of Solid Waste

- AMC I
  - American Mining Congress v. EPA, 824 F.2d 1177 (D.C. Cir. 1987)
  - Trade associations for mineral processing and petroleum refining challenged EPA's 1985 recycling rules, claiming they exceeded EPA's RCRA jurisdiction.
- D.C. Circuit
  - Congress intended "discarded" to have normal, dictionary meaning of "abandoned, thrown away".
  - ". . . EPA need not regulate spent materials that are recycled and reused in an ongoing manufacturing or industrial process. These materials . . . are destined for beneficial reuse in a continuous process by the generating industry itself".

RCRA Update
Definition of Solid Waste

- ABR
  - Association of Battery Recyclers v. EPA, 208 F. 3d 1047 (D.C. Cir. 2000)
  - Challenge to EPA's 1998 rule relating to mineral processing materials
- D.C. Circuit
  - Plain meaning of "discarded": "abandoned, thrown away".
  - Materials cannot be considered discarded if they are reused in a continuous process within the generating industry.

RCRA Update
Definition of Solid Waste

Current Rulemaking

- "Revisions to the Definition of Solid Waste"
- Proposed: October 28, 2003
  - 68 Fed. Reg. 61558-61599
- Comment period closed: February 25, 2004

RCRA Update
Definition of Solid Waste

Revisions to the Definition of Solid Waste

- Materials generated and reclaimed in a continuous process within the same industry
  - Example: Spent solved generated at a paint manufacturing plant and then shipped to another paint manufacturing plant for reclamation.
- Criteria to determine whether the recycling process is legitimate
  - To distinguish "sham recycling" (treatment/disposal disguised as recycling)

RCRA Update
Definition of Solid Waste

Revisions to the Definition of Solid Waste

- Definition of "Industry"
- NAICS codes at 4-digit level
- Examples:
  - basic chemical manufacturing (3251)
  - pharmaceutical and medicine manufacturing (3254)

RCRA Update
Definition of Solid Waste

Revisions to the Definition of Solid Waste

- Definition of "Continuous Process"
- Materials must be transferred directly from generator to recycler.
- Must be recycled within existing time limits for "speculative accumulation". 75% of materials must be recycled within a calendar year.

RCRA Update
Definition of Solid Waste

Revisions to the Definition of Solid Waste

- Requested comment on a broader regulatory exclusion
- Would apply to inter-industry recycling

RCRA Update
Definition of Solid Waste

Revisions to the Definition of Solid Waste

"Legitimacy Criteria"

- Materials must be managed as valuable commodities
- Materials must provide useful contribution to product or recycling process
- Recycling must produce valuable product
- Products of recycling process must not contain significant amounts of hazardous constituents that are not found in analogous products

RCRA Update
Definition of Solid Waste

- Over 200 comments from states, generators, waste management industry, and environmental groups.
- Broader exclusion
  - reuse of materials across industries; by-product synergy
  - intra-industry at 3-digit NAICS level
- Concerns
  - defensibility in the absence of additional analysis
  - potential impact on Superfund cost recovery
- Safe Food and Fertilizer (D.C. Cir. 2003)
  - "... [W]e have never said that RCRA compels the conclusion that material destined for recycling in another industry is necessarily 'discarded'"
  - Impact?

RCRA Update

Definition of Solid Waste

Revisions to the Definition of Solid Waste

- Final Rule: Early 2006 (estimated)

RCRA Update

Financial Assurance

- Zurich American Insurance Co. v. Whittier Properties, Inc. (9th Cir.)
- Commerce and Industry Insurance Co. (4th Cir.)

RCRA Update

Resource Conservation Challenge

- RCC Goals
  - Prevent pollution and promote recycling and reuse
  - Reduce the use of toxic chemicals
  - Conserve energy and materials
- Efficiency, conservation and pollution prevention in 1 place
- From a "cradle to grave" approach to a "cradle to cradle" approach

RCRA Update

Resource Conservation Challenge

Six Program Elements

- product stewardship
- reducing priority chemicals
- "greening" the government
- beneficial reuse
- energy conservation
- environmentally friendly design

RCRA Update

Resource Conservation Challenge

Coal Combustion Products Partnership

- "Beneficial reuse" of waste
- Increased use of coal ash in highway and building construction products (concrete)
- 43% increase by 2010 (14 M metric tons to 20M metric tons)
- Dual benefits: reduce landfill disposal and reduce carbon emissions in mfg process (coal ash in lieu of Portland cement)

RCRA Update

Resource Conservation Challenge

Tire Partnership

- > 300 million scrap tires today
- Markets exist for about 78% of scrap tires
- EPA, stakeholders working together
  - divert 85% of newly generated scrap tire to reuse, recycling and energy recovery
  - reduce existing tire stockpiles by 55%
- Philadelphia Tire Round Up
  - Dual benefits: energy conservation and reducing urban blight

RCRA Update

E-Waste

E-Waste/E-Cycling

- 250 million computers to be retired by 2005
- Contain valuable materials: > 112 million pounds recovered from electronics, including steel, glass, plastic and metals (1998)
- CRTs: found in video display component of computer and TV monitors; protection from x-rays
- CRTs: composed of specialized glasses, up to 4 lbs of lead; TC for lead

RCRA Update

E-Waste

"Cathode Ray Tube" Rulemaking

- Proposed: June 2002 (67 Fed. Reg. 40507); Final: Early 2005 (est)
- Streamlined regulations to promote recycling and reuse of CRTs
- Intact CRTs: if may be reused, they are products, not wastes; not regulated unless they are being disposed of
- Used CRTs sent for recycling: conditionally excluded from DSW if they comply with universal waste-type packaging and labeling requirements for storage and shipment
- Processed glass sent to glass-to-glass manufacturer or lead smelter: treated as a product

RCRA Update
E-Waste

"Cathode Ray Tube" Rulemaking

- No speculative accumulation
- If disposed of in landfill or incinerator: regulated under Subtitle C
- Outside of regulation
  - Households: may send for recycling or disposal
  - CESQGs: less than 100 kg/month
- Beyond this rulemaking
  - Cell phones, printers, keyboards (July 2004 U. Fla study)
- Comments
  - Processed glass sent to recyclers other than glass-to glass manufacturers
  - Export of CRTs

RCRA Update
E-Waste

EPA E-Waste Initiatives

- "Plug-in to eCycling" – RCC "product stewardship" effort
- Increase national recycling rate to 35% (26.4 M lbs in 2003)
- Partners: Apple, AT&T, Dell, JVC, Sony, Panasonic, Best Buy
  - Promoting recycling of used electronic equipment
  - Pilot projects: collecting, transporting, and recycling electronics

RCRA Update
E-Manifest

E-Manifest Rulemaking

- Proposed: May 22, 2001 (66 Fed. Reg. 28239-28318)
- Final: 2005 (est.)
- Utilize technology to:
  - Reduce paper burden of 2.5M – 5.0M manifests circulated each year
  - Reduce annual costs of $193M - $404M

RCRA Update
E-Manifest

Benefits

- accountability and accuracy of data
- quick and easy access to information improves ability to manage risk
- electronic audit trail
- intra-agency sharing of information

RCRA Update
E-Manifest
Challenges

- Costs
  - Who pays?
  - How funded?
- Reliability and Security
  - 24/7 system operation
  - Backup capability and customer support
  - Confidentiality of business information
- Standardization
  - Variation among states vs. national standard

RCRA Update
Nanotechnology

- What is it?
  - Ability to work at the molecular level (atom-by-atom) to create structures with fundamentally new organizations and characteristics
  - nanometer = one-billionth of a meter
- Potential applications?
  - Chemical sensors, pollution prevention, and waste treatment and remediation

RCRA Update
Nanotechnology

Nanotechnology ≈ Nanowaste?

RCRA Update

The New "Reality"

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Scott A. Sherman
Associate General Counsel
U.S. Environmental Protection Agency

Scott Sherman is the EPA Associate General Counsel for Solid Waste and Emergency Response. In this capacity, he serves as the senior EPA counselor for the nation's hazardous and solid waste management programs and cleanup initiatives, including Superfund, RCRA, brownfields, federal facilities, oil spills, USTs, and the emergency response program. As Associate General Counsel, Scott also manages the Solid Waste and Emergency Response division of the EPA Office of General Counsel.

Scott previously served as a Special Assistant Attorney General for the State of Texas and as a senior legal and policy advisor to Texas state energy and environmental commissioners. He is a member of the adjunct faculty of Johns Hopkins University, where he teaches environmental law.

Scott received his B.A. with Highest Honors from the University of Texas and his J.D. *cum laude* from Harvard Law School. He also holds an M.S. in Real Estate from the Berman Real Estate Institute at Johns Hopkins University, where his research focused on the cleanup and redevelopment of brownfield properties.

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PROFESSIONAL LICENSING

Frequently Asked Questions about the Texas Geoscience Practice Act

"Geoscientist Licensure"

Presented By

Edward G. Miller, P.G.

Vice Chairman

Texas Board of Professional Geoscientists

Frequently Asked Questions about the Texas Geoscience Practice Act - "Geoscientist Licensure"

• What is and why geoscientist licensure?

Licensure is a means to protect the public, and the licensed profession, from unqualified and unethical practitioners of the profession. Licensing establishes a degree of legal accountability for the work product of the regulated practitioners. The State legislation establishing a licensure program defines basic experience and educational requirements that all licensees must meet. The legislation also sets civil penalties that can be enforced on licensees determined to have violated the practice and ethical standards required by the legislation.

• How was Geoscientist Licensure established in Texas?

The Texas Geoscience Practice Act (the Act) was enacted by the 77th Texas Legislature upon passage of SB-405 in May of 2001. SB-405 was developed by a coalition of Texas geoscientists working in the petroleum, environmental, groundwater resources, engineering, and mining practice areas. Representatives of State Agencies also participated.

• How will the Act be administered and enforced?

The Act established the Texas Board of Professional Geoscientists (TBPG; the Board), which is empowered to administer and enforce the Act. The Board consists of six geoscientists and three members of the public, all appointed by the Governor. The Board has developed administrative and licensing rules (22TAC§§850 and 22TAC§§851) to implement the Act.

• Where can the Act, the Rules, and other information on this licensure program be found?

The Board's website is www.tbpg.state.tx.us. Its mailing address and phone numbers are:

TBPG
P.O. Box 13225
Austin, TX 78711

(512) 936-4408
(512) 936-4405 (fax)

• Who must be licensed and who is exempt from licensure?

Any individual practicing geoscience or holding themselves out to be a geoscientist before the public, including governmental entities, must be licensed. Practicing means taking responsible charge of a geoscientific work product. In addition, firms or corporations who engage in the public practice of geoscience, must have their geoscientific work performed by or under the supervision of a licensed geoscientist who is responsible for and signs/seals such work.

Geoscientific work exempt from licensure includes: work by a subordinate to a licensee if the subordinate does not bear final responsibility for the work; work by an employee or agent of the Federal government acting in their capacity as such employee or agent; work performed to explore for and develop energy and mineral resources, IF the work is done in and for the benefit of private industry; most academic, governmental, and institutional research; teaching of

geoscience; and, geoscientific work customarily performed incidental to the work of other professions, such as archaeology, geography, oceanography, cartography, etc.

• If I work exclusively in exploring for and developing oil, gas, or other energy resources, do I need to obtain a license to continue to practice?

No, provided the work is only done in and for the benefit of private industry. However, if the work involves the State of Texas or any subdivision of the State, you may be required to obtain a license to continue to practice.

• What areas of geoscience practice are subject to licensure?

By rule, the Board has recognized three broad geoscience disciplines subject to licensure. These disciplines are: geology, geophysics, and soil science. Applicants must select one discipline in which to be licensed; however, licensees can practice any of the disciplines, provided they are qualified.

• What are the key dates in the implementation of the licensure program?

- September 1, 2001: The Act was in effect.

- August 31, 2003: Last day for receipt, by the Board, of license applications under the "grandfathering" provision. For applications submitted after this date, applicants must take a Board-approved examination. This will be the National Association of State Boards of Geology (ASBOG) exam for the discipline of geology and the Council of Soil Science Examiners (CSSE) exam for the discipline of soil science. An examination prepared by the Board for the discipline of Geophysics is available and administered by the Board.

- September 1, 2003: A license is required to practice geoscience on and after this date.

• What are the requirements and eligibility criteria for licensure?

- Application form with personal information and a summary of the applicant's education and relevant work experience.
- Five or more reference letters, with at least three from licensed geoscientists or other board-acceptable professionals personally familiar with the applicant's relevant work experience.
- The application fee, currently set by the Board at $200.
- Graduation from a course of study in one of the Board-recognized geoscience disciplines, with at least 30 semester or 45 quarter credit hours in geoscience. At least 2/3 of these credit hours must be in upper division courses. The Board may accept additional (more than the basic requirement) qualifying work experience in lieu of the formal education requirements.
- Have a minimum of five, documentable years of qualifying work experience, acquired after award of an undergraduate geoscience degree and under the supervision of a licensed geoscientist(s) or other professionals acceptable to the Board. Full-time graduate study in a geoscience discipline may qualify for up to two years of work experience credit.
- University-level research in and/or teaching of a geoscience discipline may, at the Board's discretion, qualify as work experience.
- Pass an exam administered by the Board on the fundamentals and practice of the applicable geoscience discipline.
- Other requirements that the Board may adopt by Rule.

• How do I get forms and information about licensure?

License information and application forms are available on and downloadable from the Board's website or can be ordered from the Board.

• Can the Board waive any or all of the license eligibility requirements?

The Board is authorized by the Act to waive any of the eligibility requirements, except the payment of fees. It is the responsibility of an applicant seeking eligibility requirement waivers to demonstrate, to the Board's satisfaction, justification for such waivers.

• Does the Board have reciprocal license arrangements with other states?

The Act authorizes the Board to enter into reciprocity or comity agreements (mutual recognition of licenses or state-sanctioned professional registrations between states) with other states that regulate the practice of geoscience. The Board has not negotiated any such agreements at this time.

• Do geoscience licenses/registrations from other states, professional society certifications, or state agency-granted certifications (e.g. TCEQ's CAPM Certification) count towards license eligibility?

Not directly. However, applicants are requested to cite such licenses, registrations, and certifications in their application as further evidence of their overall qualifications. A license/registration granted by another state MIGHT be formally credited at such time as the Board has a reciprocity agreement with that state.

• Will continuing education be a requirement for license renewal?

The Act allows the Board to adopt a requirement of continuing education. The Board will at some point adopt a continuing education requirement, established the number, or scope of continuing education (CE) credits.

• What is the term of a license and what are the license renewal requirements?

A license is valid for a period of one year. Renewal requirements are the payment of the renewal fee (currently set at $150), and meeting other renewal requirements that the Board may establish (such as continuing education).

FAQ's About Use of Geoscientist Seal

- **What reports must be sealed?**

All geoscientific reports required by municipal or county ordinance, state or federal law, state agency rule, or federal regulation must be sealed, , and all other reports unless otherwise exempted under section 6.02 of the Act.

- **What documents, drawings, etc. within a report must be sealed?**

The original title sheet of bound reports, specifications, details, calculations or estimates, and each original sheet of plans or drawings contained within the report regardless of size or binding. The TBPG considers this to include cross-sections, maps, and other graphic data such as limits of contaminant plumes, contaminant concentration, or other original geoscientific work in graphic form.

- **What does "all other geoscience work " mean?**

It includes but is not limited to research reports, opinions, recommendations, evaluations, addenda, documents produced for litigation, and geoscience software.

- **Must reports prepared exclusively for private industry be sealed?**

Yes, unless otherwise exempt under Sec. 6.02 of the Act.

- **If geology is added to a base map prepared by others must the map be sealed?**

Yes. However, it is recommended that the source of the base map be made clear and the additions made clear in a note added to the map in the vicinity of the placement of the seal.

- **Must boring logs contain a seal and a signature?**

Only if submitted outside of a report. Therefore, it is recommended that a note be placed on all boring logs stating something to the effect "These logs should not be used separately from the original report." A cover letter transmitting the logs can serve as the report.

- **Must all pages of forms used for reporting information to state agencies be sealed and signed?**

No. Only the pages containing a place for a signature should be sealed and signed or as otherwise directed by the agency.

- **Can a certification page be used that lists each of the people that were significantly involved in a project along with their areas of responsibility to identify the persons sealing a document?**

Yes.

- **Do Phase I, II, or III ESA's require a seal?**

All geoscience reports or any other reports containing new or original geoscience must be sealed unless otherwise exempt under 6.02 of the Act. Anyone that reports geoscience information taken from the literature should reference the source for any geoscience reported.

Note: For additional information and details refer to the Geoscience Practice Act Section 1.02 Definitions, Section 6.01 License Required, Section 6.02 Exemptions, and Section 6.13 Seal and the TBPG Rules, Section 851.156 Geoscientist's Seal.

Geoscience Practice Act Sections

Sec. 1.02. DEFINITIONS . In this Act:

(1) "Board" means the Texas Board of Professional Geoscientists.

(2) "Certified geoscientist" means a geoscientist who has been certified in a discipline of geoscience by a professional organization, society, or association that maintains a certification program.

(3) "Geoscience" means the science of the earth and its origin and history, the investigation of the earth's environment and its constituent soils, rocks, minerals, fossil fuels, solids, and fluids, and the study of the natural and introduced agents, forces, and processes that cause changes in and on the earth.

(4) "Geoscientist" means a person qualified to engage in the public practice of geoscience because of the person's knowledge, acquired through education and practical experience, of geoscience, mathematics, and the supporting physical, chemical, mineralogical, morphological, and life sciences.

(5) "Licensed geoscientist" means a person who holds a license issued by the board under this Act.

(6) "Practice for the public":

(A) means providing professional geoscientific services:

(i) for a governmental entity in this state;

(ii) to comply with a rule established by this state or a political subdivision of this state; or

(iii) for the public or a firm or corporation in this state if the practitioner assumes the ultimate liability for the work product; and

(B) does not include services provided for the express use of a firm or corporation by an employee or consultant if the firm or corporation assumes the ultimate liability for the work product.

(7) "Public practice of geoscience" means the practice for the public of geoscientific services or work, including consulting, investigating, evaluating, analyzing, planning, mapping, and inspecting geoscientific work and the responsible supervision of those tasks.

(8) "Responsible charge" means the independent control and direction of geoscientific work or the supervision of geoscientific work by the use of initiative, skill, and independent judgment.

Sec. 6.01. LICENSE REQUIRED .

(a) Unless exempted by this Act, a person may not engage in the public practice of geoscience unless the person holds a license issued under this Act.

(b) Unless the person is licensed under this Act, a person may not:

(1) use the term "Licensed Professional Geoscientist" or the initials "P.G." as part of a professional, business, or commercial identification or title; or

(2) otherwise represent to the public that the person is qualified to:

(A) practice as a geoscientist; or

(B) engage in the public practice of geoscience.

(c) A person may not take responsible charge of a geoscientific report or a geoscientific portion of a report required by municipal or county ordinance, state or federal law, state agency rule, or federal regulation that incorporates or is based on a geoscientific study or geoscientific data unless the person is licensed under this Act.

Sec. 6.02. EXEMPTIONS . The following activities do not require a license under this Act:

(1) geoscientific work performed by an employee or a subordinate of a license holder under this Act if the work does not include the responsible charge of geoscientific work and is performed under the direct supervision of a licensed geoscientist who is responsible for the work;

(2) geoscientific work performed by an officer or employee of the United States practicing solely as such an officer or employee;

(3) geoscientific work performed exclusively in exploring for and developing oil, gas, or other energy resources, base metals, or precious or nonprecious minerals, including sand, gravel, or aggregate, if the work is done in and for the benefit of private industry;

(4) geoscientific research conducted through an academic institution, local, state, or federal governmental agency, nonprofit research institution, or for-profit organization, including submission of a report on the research to a public agency, unless the work is covered by Section 6.01(c) of this Act;

(5) teaching geoscience or a related physical or natural science;

(6) work customarily performed by a cartographer, technician, or physical or natural scientist, including a geologist, geophysicist, soil scientist, chemist, archaeologist, geographer, or oceanographer, if the work does not include the public practice of geoscience;

(7) work performed by an archaeologist, geoscientist, or other person conducting a stratigraphic or historical geological investigation for archaeological purposes;

(8) testifying or preparing and presenting an exhibit or document for the sole purpose of being placed in evidence before an administrative or judicial tribunal or hearing if the testimony, exhibit, or document does not imply that the person is licensed under this Act;

(9) the evaluation by a state agency, as defined by Section 2001.003, Government Code, or by a hearing examiner of an exhibit or document offered or placed in evidence before an administrative tribunal; or

(10) the determination of the suitability of a site for a specific on-site sewage disposal system by a person who has successfully completed site evaluation training approved by the Texas Natural Resource Conservation Commission and is:

(A) registered by the commission as:

(i) an installer, if the commission recognizes only one level of installer; or

(ii) the highest level of installer recognized by the commission, if the commission recognizes more than one level of installer;

(B) a designated representative; or

(C) a registered professional sanitarian.

Sec. 6.13. SEAL .

(a) On issuance of a license, the license holder must obtain a seal of a design established by the board bearing:

(1) the license holder's name;

(2) the license number;

(3) the words "Licensed Professional Geoscientist"; and

(4) the license holder's discipline of geoscience.

(b) A geoscientific report, document, or other record, as defined by the board, that is offered to the public and prepared or issued by or under the supervision of a licensed geoscientist must, in accordance with rules adopted by the board, include the full name, signature, and license number of the license holder who prepared the report, document, or other record or under whose supervision it was prepared and bear an impression of the license holder's seal.

Texas Board of Professional Geoscientists Rules

§851.156. Geoscientist's Seals.

(a) The purpose of the geoscientist's seal is to assure the user of the geoscience product that the work has been performed by the professional geoscientist named and to delineate the scope of the geoscientist's work.

(b) The geoscientist shall utilize the designation "P.G." or the titles set forth in the Texas Geoscience Practice Act (Act), §4.05. Physical seals of two different sizes will be acceptable: a pocket seal (the size commercially designated as 1-5/8-inch seal) or desk seal (commercially designated as a two-inch seal) to be of the design shown in this subsection. Computer-applied seals may be of a reduced size provided that the geoscientist's name and number are clearly legible. All seals obtained and used by license holders must contain any given name or initial combination except for nicknames, provided the surname currently listed with the board appears on the seal and in the usual written signature.

(c) Geoscientists shall only seal work done by them or performed under their direct supervision. Upon sealing, geoscientists take full professional responsibility for that work.

(d) It shall be misconduct to knowingly sign or seal any geoscience document or product if its use or implementation may endanger the health, safety, property or welfare of the public.

(e) It shall be misconduct or an unlawful act for a license holder whose license has been revoked, suspended, or has expired, to sign or affix a seal on any document or product.

(f) All seals obtained and used by license holders shall be capable of leaving a permanent ink or impression representation on the geoscience work, or shall be capable of placing a computer-generated representation in a computer file containing the geoscience work. If not accompanied by an original signature and date, computer-generated seals shall be accompanied by the following text or similar wording: "The seal appearing on this document was authorized by (Example: Leslie H. Doe, P.G. 0112) on (date)."

(g) Preprinting of blank forms with a geoscientist's seal, or the use of decal or other seal replicas is prohibited. Signature reproductions, including but not limited to rubber stamps or computer-generated signatures, shall not be used in lieu of the geoscientist's actual signature.

(h) Geoscientists shall take reasonable steps to insure the security of their physical or computer-generated seals at all times. In the event of loss of a seal, the geoscientist will immediately give written notification of the facts concerning the loss to the executive director.

(i) Geoscientists shall affix an unobscured seal, original signature, and date of signature to the originals of all documents containing the final version of any geoscience work as outlined in subsection (j) of this section before such work is released from their control. Preliminary documents released from their control shall identify the purpose of the document, the geoscientist(s) of record and the geoscientist license number(s), and the release date by placing the following text or similar wording instead of a seal: "This document is released for the purpose of (Examples: interim review, mark-up, drafting) under the authority of (Example: Leslie H. Doe, P.G. 0112) on (date). It is not to be used for (Examples: construction, bidding, permit) purposes."

(j) The geoscientist shall sign, seal and date the original title sheet of bound geoscience reports, specifications, details, calculations or estimates, and each original sheet of plans or drawings regardless of size or binding. All other geoscience work, including but not limited to research reports, opinions, recommendations, evaluations, addenda, documents produced for litigation, and geoscience software shall bear the geoscientist's printed name, date, signature and the designation "P.G." or other terms allowed under the Act, <*>1.3. A seal may be added on such work if required or at the geoscientist's discretion. Electronic correspondence of this type shall be followed by a hard copy containing the geoscientist's printed name, date, signature and the designation "P.G." or other terms allowed under the Act, §4.05.

(k) Work performed by more than one geoscientist shall be sealed in a manner such that all geoscience can be clearly attributed to the responsible geoscientist or geoscientists. When sealing plans or documents on which two or more geoscientists have worked, the seal of each geoscientist shall be placed on the plan or document with a notation describing the work done under each geoscientist's responsible charge.

(l) Licensed employees of the state, its political subdivisions, or other public entities are responsible for sealing their original geoscience work; however, such licensed employees engaged in review and evaluation for compliance with applicable law or regulation of geoscience work submitted by others, or in the preparation of general planning documents, a proposal for decision in a contested case or any similar position statement resulting from a compliance review, need not seal the review reports, planning documents, proposals for decision, or position statements.

(m) When a geoscientist elects to use standards or general guideline specifications, those items shall be clearly labeled as such, shall bear the identity of the publishing entity, and shall be:

(1) individually sealed by the geoscientist; or

(2) specified on an integral design/title/contents sheet that bears the geoscientist's seal, signature, and date with a statement authorizing its use.

(n) Alteration of a sealed document without proper notification to the responsible geoscientist is misconduct or an offense under the Act.

FAQ's About Continuing Education

- **When will the TBPG Continuing Education (CE) program be established?**

The Board of Professional Geoscientists has begun the initial work on the continuing education (CE) program. The continuing education program is not anticipated to be in place before February 2005.

- **What will be accepted as continuing education?**

Specific requirements for continuing education have not yet been established.

- **Will 2004 classes in CE count for CE credits when the CE is required in later years?**

The TBPG is in the very beginning of planning the CE program. The Board may consider including CE courses taken previously for the first year. Once established, continuing education will be required each year for license renewal.

- **What is an acceptable continuing education class?**

The Board has not yet established the criteria for continuing education.

- **Who credentials the continuing education?**

The Board has not determined acceptable accreditation for continuing education classes.

- **Will the Texas Board of Professional Geoscientists post acceptable continuing education classes on the website?**

The Board may consider posting some guidelines for continuing education on the web site, where appropriate.

- **Do I need continuing education classes to renew my license in 2004?**

No.

A. DO I NEED A LICENSE?

B. WHAT MUST I SEAL?

C. WHAT HAPPENS TO ME IF I DON'T?

A. Do I need a license?

- **Sec. 6.01. LICENSE REQUIRED**
- (a) Unless exempted by this Act, a person may not engage in the public practice of geoscience unless the person holds a license issued under this Act.

- (b) Unless the person is licensed under this Act, a person may not:
- (1) use the term "Licensed Professional Geoscientist" or the initials "P.G." as part of a professional, business, or commercial identification or title; or
- (2) otherwise represent to the public that the person is qualified to:
- (A) practice as a geoscientist; or
- (B) engage in the public practice of geoscience.

- (c) A person may not take responsible charge of a geoscientific report or a geoscientific portion of a report required by municipal or county ordinance, state or federal law, state agency rule, or federal regulation that incorporates or is based on a geoscientific study or geoscientific data unless the person is licensed under this Act.

B. What must I seal?

- FAQs About use of Geoscientist Seal
- Nine FAQs

1. What reports must be sealed?

- All geoscientific reports required by municipal or county ordinance, state or federal law, state agency rule, or federal regulation must be sealed, and all other reports unless otherwise exempted under §6.02 of the Act.

2. What documents, drawings, etc. within a report must be sealed?

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2. What documents, drawings, etc. within a report must be sealed? cont.

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3. What does "all other geoscience work" mean?

- It includes but is not limited to research reports, opinions, recommendations, evaluations, addenda, documents produced for litigation, and geoscience software.

4. Must reports prepared exclusively for private industry be sealed?

- Yes, unless otherwise exempt under §6.02 of the Act.

5. If geology is added to a base map prepared by others must the map be sealed?

- Yes. However, it is recommended that the source of the base map be made clear and the additions made clear in a note added to the map in the vicinity of the placement of the seal.

6. Must boring logs contain a seal and a signature?

- Only if submitted outside of a report. Therefore, it is recommended that a note be placed on all boring logs stating something to the effect "These logs should not be used separately from the original report." A cover letter transmitting the logs can serve as the report.

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8. Can a certificatton page be used that lists each of the people that were significantly involved in a project along with their areas of responsibility to identify the persons sealing a document?

- Yes.

9. Do Phase I, II, or III ESAs require a seal?

- "All geoscience reports or any other reports containing new or original geoscience must be sealed unless otherwise exempt under 6.02 of the Act.
- Anyone that reports geoscience information taken from the literature should reference the source for any geoscience reported."

- Note: For additional information and details refer to the Geoscience Practice Act §1.02 Definitions, §6.01 License Required, §6.02 Exemptions, §6.13 Seal, and the TBPG Rules, §851.156 Geoscientist's Seal.

C. What happens to me if I don't?

- **Sec. 9.03. DISCIPLINARY ACTIONS**
- (a) The board may take the following disciplinary actions:
- (1) refuse to issue or renew a license;
- (2) permanently revoke a license;

- (3) suspend a license for a specified time, not to exceed three years, to take effect immediately notwithstanding an appeal if the board determines that the license holder's continued practice constitutes an imminent danger to the public health, safety, or welfare;
- (4) issue a public or private reprimand to an applicant, a license holder, or an individual, firm, or corporation practicing geoscience under this Act;

- (5) impose limitations, conditions, or restrictions on the practice of an applicant, a license holder, or an individual, firm, or corporation practicing geoscience under this Act;
- (6) require that a license holder participate in a peer review program under rules adopted by the board;
- (7) require that a license holder obtain remedial education and training prescribed by the board;

- (8) impose probation on a license holder requiring regular reporting to the board;
- (9) require restitution, in whole or in part, of compensation or fees earned by a license holder, individual, firm, or corporation practicing geoscience under this Act;
- (10) impose an appropriate administrative penalty as provided by Subchapter J of this Act for a violation of this Act or a rule adopted under this Act on a license holder or a person who is not licensed and is not exempt from licensure under this Act; or
- (11) issue a cease and desist order.

EDWARD G. MILLER, P.G.

- Education: B.S. Geology, Texas A&M

- Employment: Current, President, Geo Cam, Inc., San Antonio
  - Providing geophysical logging and down-hole video services to the water well industry.

  Previous, Senior Geologist, Pape-Dawson Engineers, San Antonio
  - Working mostly in groundwater resources, environmental geology, and engineering geology.

  Previous, Senior Vice President, Raba-Kistner Consultants, San Antonio
  - Working mostly in engineering geology and environmental geology all over central and south Texas.

- Memberships: American Institute of Professional Geologists
  Association of Engineering Geologists
  National Groundwater Association
  South Texas Geological Society
  Texas Board of Professional Geoscientists, Vice Chairman
  - Leader, Rules and Compliance Work Group

PRESENTATION

PROFESSIONAL LICENSING

Frequently Asked Questions about the Texas Geoscience Practice Act

"Geoscientist Licensure"

This presentation will include a brief status report for The Texas Board of Professional Geoscientists including a timeline of applications received and application status. The presentation will also included a discussion of who needs a license, rules regarding the signing and sealing of reports and other geoscience products, when do you need to start signing and sealing geoscience products, and what happens if the licensed geoscientist does not sign and seal required documents.

PAPER NOT SUBMITTED

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Legal Experience

Mr. Johnson's practice involves environmental regulatory counseling on permitting, compliance/enforcement, and rulemaking with a particular emphasis on air quality issues before the TNRCC and the U.S. Environmental Protection Agency. Mr. Johnson was a staff attorney at the TNRCC and the former Texas Air Control Board, has handled air quality permitting, rulemaking, and administrative and civil-judicial enforcement matters. His experience includes serving as the former enforcement coordinator for all air quality enforcement matters in the Legal Services Division. Representative industries include: Cement and Lime Manufacturing, Ship Building and Repair, Synthetic Organic Chemicals, Iron Production, and Beef Processing.

Education

- Doctor of Jurisprudence, University of Houston, 1991
- Bachelor of Arts, Geology and Geophysics, Rice University, 1986

Professional Licenses

- Attorney at Law, Texas, 1992

Prior Professional Experience

- Bracewell & Patterson, L.L.P., Associate, 1995-1999
- Texas Natural Resource Conservation Commission, Staff Attorney, 1992-1995

Professional Memberships and Activities

- Volunteer Legal Services of Central Texas
- *Government Institutes - Clean Air Act Primer,* Presenter, July 1999
- State Bar of Texas
  - Administrative and Public Law Section
  - Environmental Natural Resources Section
- American Bar Association
  - Administrative Law and Regulatory Practice Section
  - Natural Resources, Energy and Environmental Section
  - ABA Air Quality Committee Newsletter, Regional Editor
  - ABA Environmental Year in Review, Reviewer, 1999 and 2000
  - Travis County Bar Association

Community Involvements

- Austin Arts Festival, Volunteer

Texas Environmental Superconference

Building New Electric Generation in Texas: Reconciling Energy and Environmental Needs
J.E Fulton - August 5 2004

Introduction: When Thomas Edison built his Pearl Street Generating Station in 1882 his purpose was to create the impetus for the development of an electric industry. Not even the great Edison could have imagined in 1882 just how far reality could have exceeded even his vivid imagination. Before Edison electricity was merely a scientific curiosity. After Edison electricity became, in turn, a luxury, a convenience, an important asset and, finally, an indispensable necessity. Few today could argue that Texas doesn't need a reliable and affordable supply of electric energy and yet virtually every proposed major addition to Texas' electric infrastructure - generators, transmission lines and distribution lines - is subject to intense opposition. Is it possible to reconcile the need for affordable and reliable electric energy with the demands for a sound environment? Clearly, the answer has to be affirmative or Texas will soon be in a serious world of hurt.

Growing Energy Needs: The demand for electric energy is growing at a substantial rate at virtually every level - national, state, regional and local. Figures 1-4 depict the growth of electric energy demand for the last 25 years at various jurisdictional levels. Some have argued that growth can be eliminated through conservation programs thus obviating the need for new power plants. Some cite the city of Austin as an example of having the types of conservation programs needed to avoid the construction of new power plants. However, Austin has built new power plants in recent years and necessarily so because, as the data shows, Austin has had the highest growth rate for electric energy consumption of the four examples given. The Austin conservation program began in earnest in 1982 and while undoubtedly successful it has not created a zero growth scenario. Electric energy consumption for San Antonio and Austin have been normalized to 1982 levels and presented in Figure 5. Clearly, even with its conservation program Austin's growth has significantly outpaced San Antonio's.

Growth is a reality that needs to be dealt with, but even in the event that growth rates could be reduced growth is not the only valid reason to build new generating units. Power plants do not last forever. There will always be a need to replace aging and obsolete plants. Furthermore, the energy crisis of the 1970's taught us that it is not advisable to become overly reliant upon a single source of energy so diversification of your energy portfolio is also a valid reason to build new

units. Finally, the evolving need to meet competitive pressures may also dictate the need for additional generating units.

Power Plant Additions in Texas: The addition of new generating units in Texas since 1960 is depicted in Figure 6. This 44-year history shows that power plant development in Texas exhibits three distinct epochs. Prior to the early 1970's, and extending backward in time to at least the 1920's, steam generating units in Texas were almost exclusively natural gas fired. Following the oil embargo of 1973 that precipitated the "energy crisis" years, Texas entered a period of 20 years where almost all new power plants were coal-fired or nuclear. Beginning in the early 1990's, and culminating with an explosive 5-year (1999-2003) power plant construction renaissance, natural gas once again became the dominant fuel choice. This massive addition of new gas-fired units, not only in Texas but also across the U.S., has precipitated an incredible run-up in the price of natural gas. The history of wellhead gas prices since 1976 is depicted in Figure 7. For comparison sake, the CPS price for coal and nuclear fuels over the last 5 years is also depicted on the chart. The current price differential between coal and natural gas is more than $4 per million BTU. Considering the quantity of coal used by CPS, each one-cent per million BTU price difference between coal and gas amounts to about $1 million per year in fuel cost savings for CPS' customers.

The run up in wellhead natural gas prices over the last year or so has been fueled largely by the tremendous increase in demand for natural gas to fuel these new gas-fired units. However, the underlying fundamentals in the supply differences between natural gas and coal dictate that, relative to coal, gas will always be a relatively expensive and volatile fuel choice going forward. Figure 8 depicts the present day estimate of U.S. energy reserves for coal, oil and natural gas. The vast difference in supply between coal and gas is readily apparent. For comparison purposes, the world's largest reserves of gas (Russian) and oil (Saudi) are also presented.

Today, there is little current activity in the construction of new power plants in Texas but there are two coal-fired units proposed for operation near the end of this decade that are working their way through licensing process at the TCEQ. City Public Service (CPS) of San Antonio is building one of those proposed coal-fired units.

The CPS Environmental Improvement Program: City Public Service is a municipally owned electric and gas utility - the second largest municipal utility in the nation (after Los Angeles). CPS has a diversified energy portfolio consisting of natural gas, nuclear, coal and renewables. CPS' existing coal units are among the best environmentally controlled coal units in the nation, as measured by their emission rates of the principle coal emissions of nitrogen oxides (NOx) and

sulfur dioxide (SO_2). Emission rate data for 1,072 operating coal units for the year 2002 is presented in Figures 9-11. Figure 9 depicts the emission rate for NOx. Figure 10 depicts the emission rate for SO_2. Figure 11 depicts the combined emission rate for NOx plus SO_2, which can be used as a surrogate for overall environmental performance. These charts are actually bar charts but compressing the information for 1,072 generating units on this scale makes the bars very thin and not particularly recognizable as bars. The location of CPS' coal units is marked on each chart. The data plainly shows that CPS' coal units are much better than average and rank among the best-controlled coal units in the U.S.

Figure 12 focuses on the 25 best coal units in the U.S. based upon combined emission rates for NOx plus SO_2. CPS' Spruce 1 unit is included in this category. CPS is currently licensing a new unit for its Spruce plant. The Spruce 2 unit is planned to be on line by the fall of 2009. The physical and environmental particulars for Spruce 2 are given in Figure 13. Perhaps the most interesting aspect of the Spruce 2 decision making process was the inclusion of a group of citizens in the decision making process. This citizen's advisory group, called the Southeast Quadrant Citizens Advisory Group or SEQCAG has been involved in this process for going on 2 years. These citizens have made it clear that while they demand reliable and affordable electricity supplies they also want superior environmental performance as well. The SEQCAG process resulted in CPS going forward with its plans for a new coal unit but with renewed emphasis on environmental performance. Four of the major environmental commitments made by CPS are: 1) that the new coal unit would use the best available environmental control technology, 2) that CPS would establish a renewable energy commitment equivalent to 10% of its expected peak demand by the year 2015, 3) that CPS would renew and reinvigorate its aggressive conservation program and, 4) that CPS would more than offset proposed emissions of the principle air emissions (SO2, NOx and Particulate Matter) from the new unit. This final commitment has resulted in the environmental improvements program sketched out in Figure 14. This environmental commitment of more than $300 million, combined with more than $200 million in expected environmental control costs for Spruce 2 means that CPS has committed more than one-half billion dollars solely for environmental controls at its power plants! Given that the CPS coal plants were already among the best controlled in the nation leads to the realization depicted in Figure 15 - that after completion of these programs CPS will have the 4 lowest emission rate coal units in the nation, when compared to 2002 data. The bottom line is depicted in Figure 16; CPS will increase its coal capacity by 52% but reduce its emissions by 69%! That is how CPS proposes to reconcile the demand for additional energy supplies with the need for environmental protection.

Figure 1

Sales of Electric Energy - U.S.

1978 - 2002

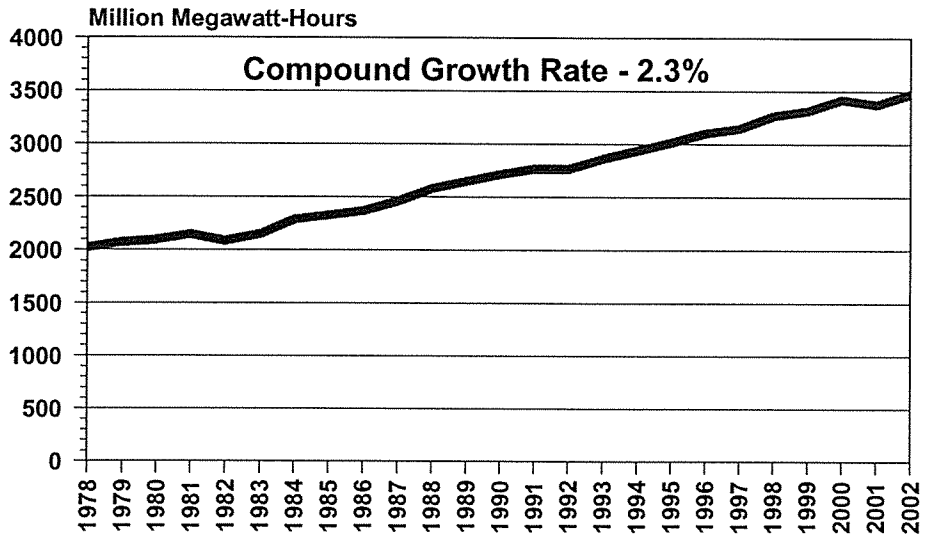


Figure 2

Sales of Electric Energy - Texas

1978 - 2002

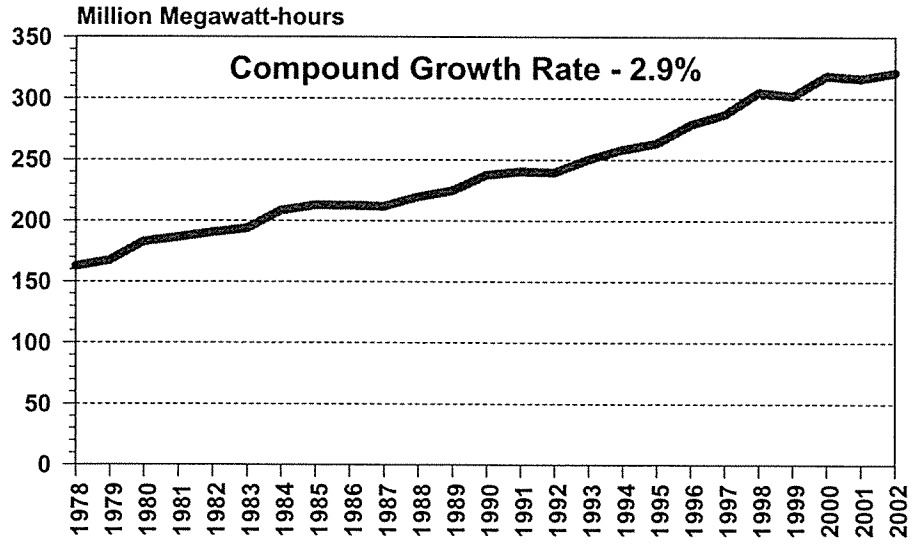


Figure 3

Sales of Electric Energy - San Antonio

1978 - 2002

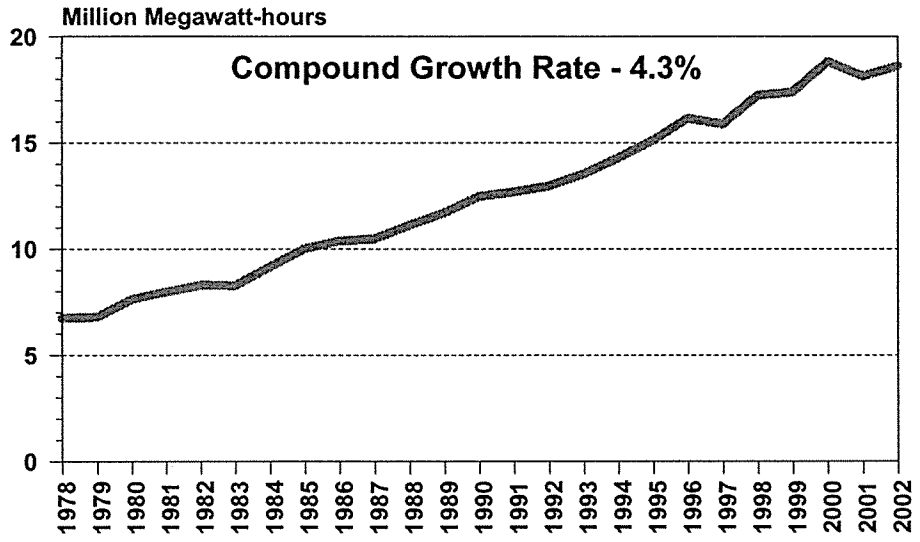


Figure 4

Sales of Electric Energy - Austin

1978 - 2002

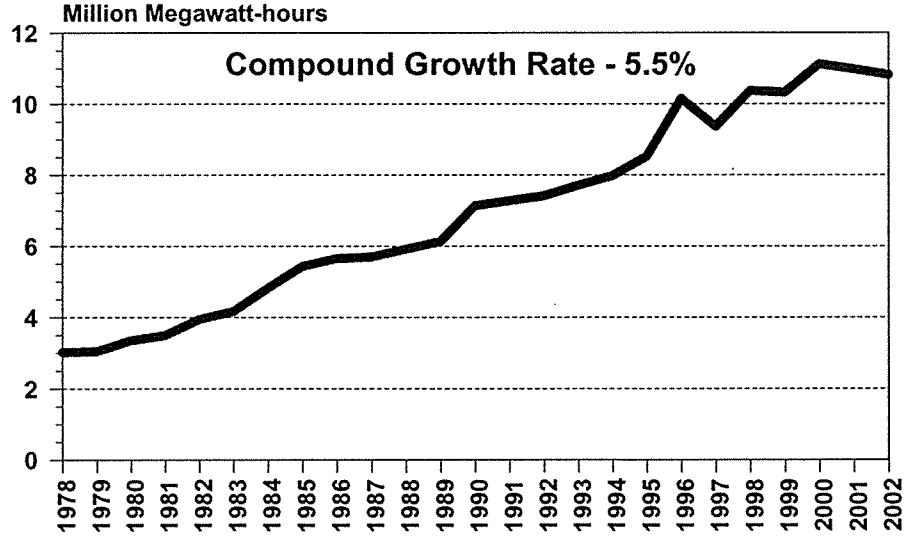


Figure 5

Growth Rate of Electrical Sales MWH

Austin Energy vs. CPS - 1982-2002

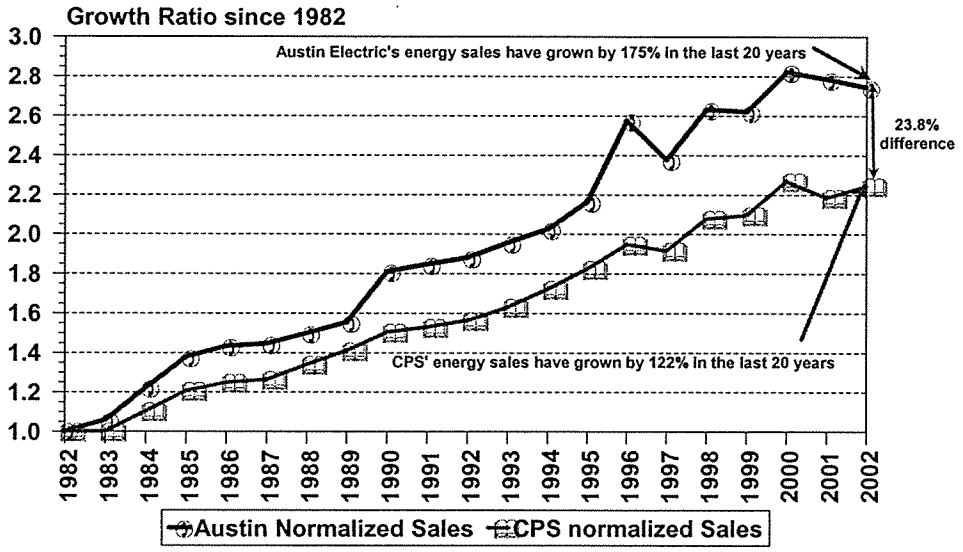


Figure 6

Capacity Additions in Texas by Year and Type

1960 - 2003

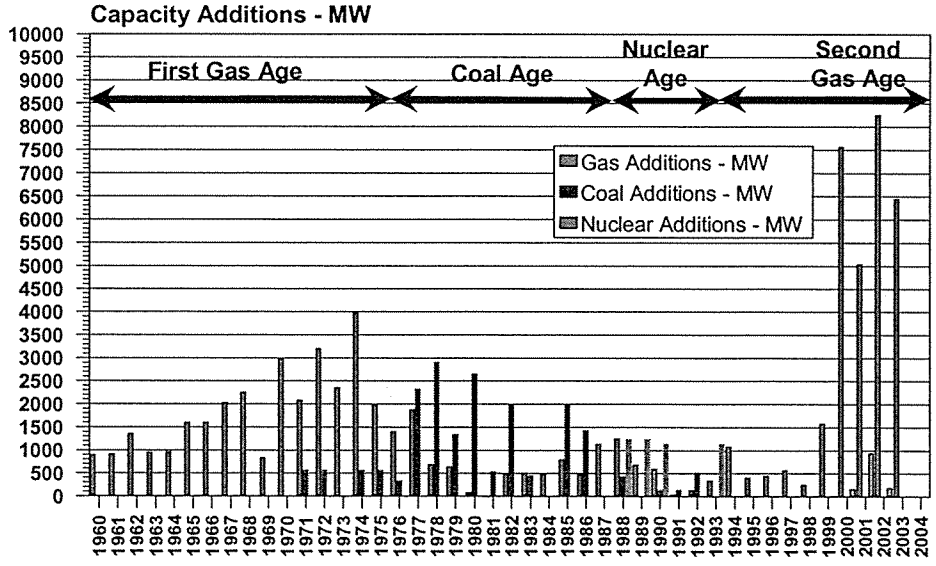


Figure 7
Fuel Cost Variability 1976-2004

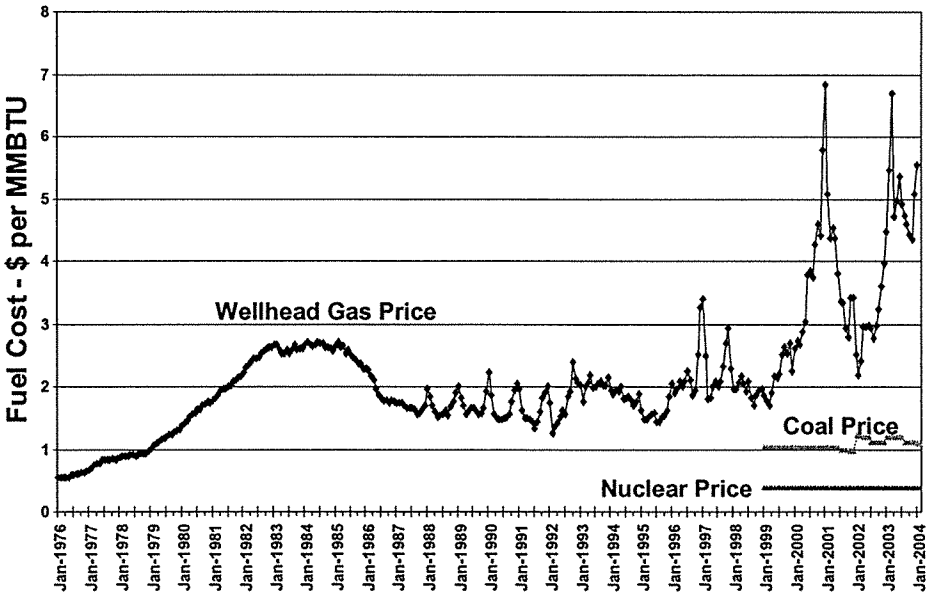
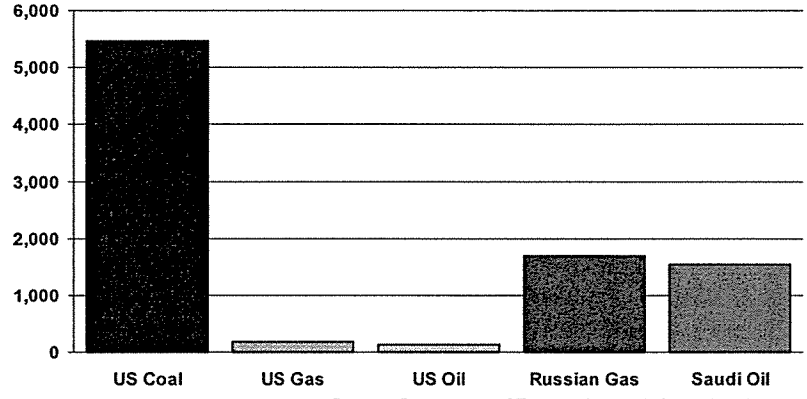


Figure 8

Factors Behind Coal Price Stability

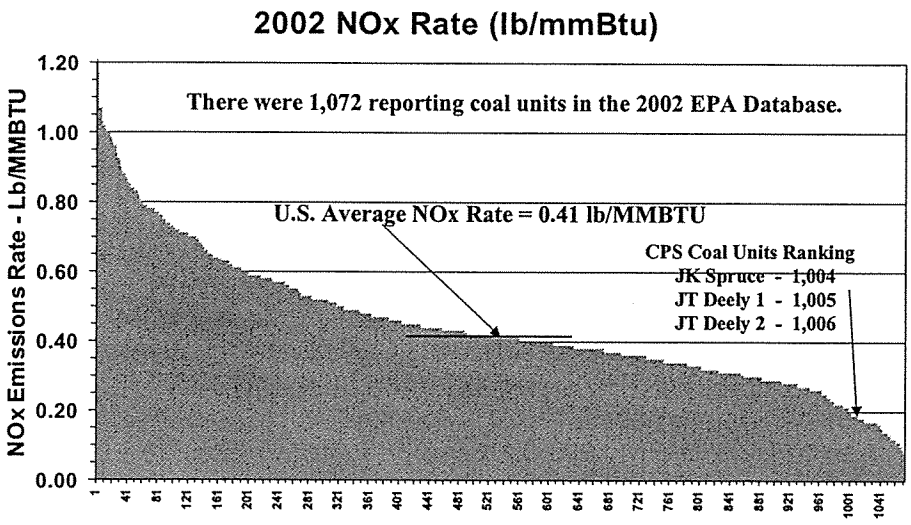
Comparison of Energy Reserves (Quadrillion BTUs)



Source: Department of Energy, Energy Information Agency

Figure 9

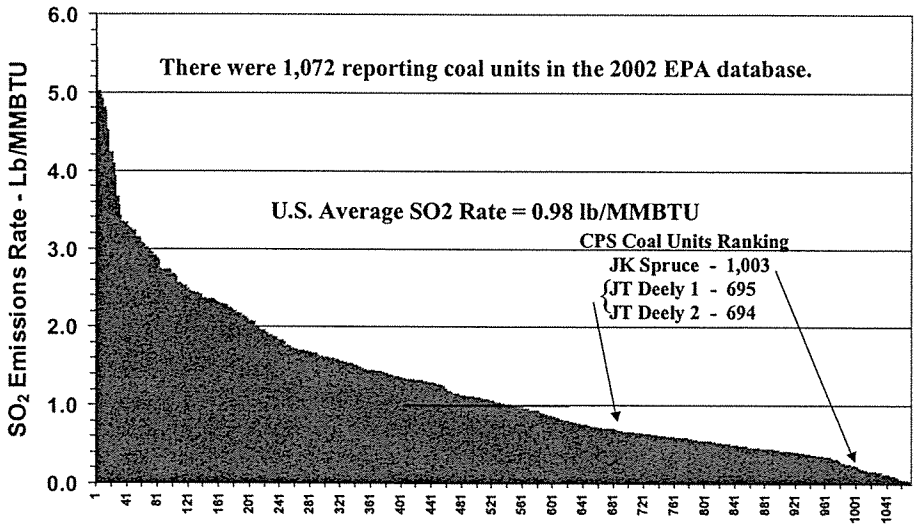
U.S. Coal Unit Performance Data



Source: EPA EDR data

Figure 10

U.S. Coal Unit Performance Data

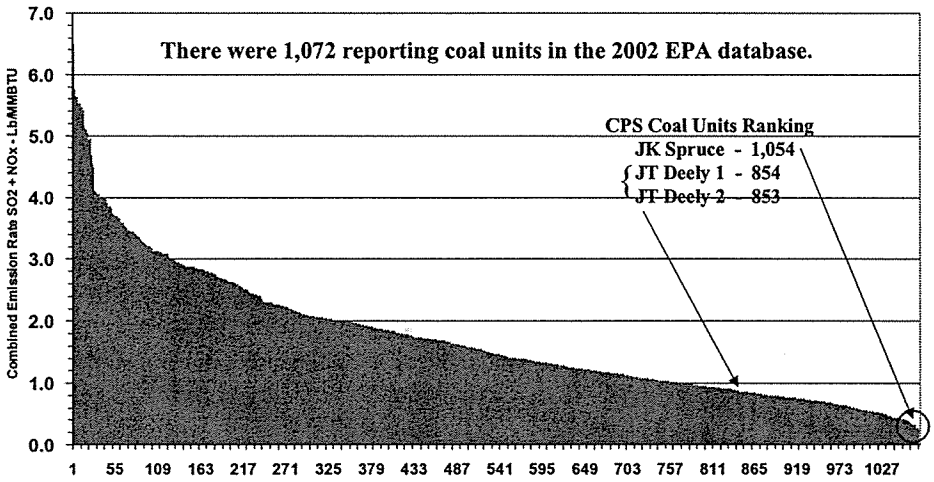


Source: EPA EDR data

Figure 11

U.S. Coal Unit Performance Data

Combined SO_2 & NOx Rate



Source: EPA EDR data

Figure 12

25 Best Coal Units in the US - 2002

Based upon Combined SO2 + NOx Emission Rates

Lowest Emitting 25 units out of 1,072 Nationwide in 2002

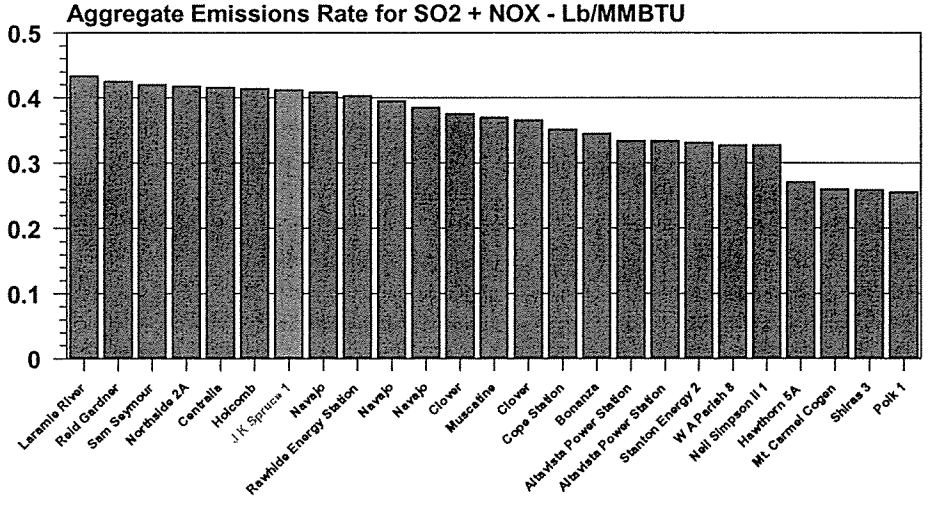


Figure 13

CPS Plans to Add a New Coal Unit

- Type : Pulverized Coal, Hybrid Pressure (2520 psi, 1050 °F, 1050 °F)
- Location: Calaveras Lake
- Fuel: Powder River Basin Coal
- Size: 750 MW
- Heat Rate: 9,800 BTU/KWH
- Proposed Permit Levels (annual averages)
  - SO_2 - 0.06 Lb/MMBTU (wet limestone scrubber)
  - NOx - 0.05 Lb/MMBTU (SCR)
  - PM - 0.022 Lb/MMBTU (fabric filter) (collectibles + condensables)
  - HG - 0.020 lb/GWH (Above plus oxidation process)

Figure 14

Environmental Enhancements at Existing CPS Coal Units

Total Cost - $316 million

Item	Date	Cost
System NOx Reductions	1999 - 2004	$55 million
Enhanced Monitoring Program	2003 - 2009	$3 million
Coal Yard Dust Controls	2003 - 2004	$4.0 million
Gas Startup at JTD	2006 - 2007	$5.5 million
Baghouse Retrofit at JTD	2006 - 2007	$74 million
Additional Coal NOx Controls	2005 - 2007	$15 million
Enhance Existing Scrubber	2008 - 2009	$10 million
Scrubber Retrofits at JTD	2012 - 2013	$150 million

Figure 15

25 Best Coal Units in the US - 2002

Based upon Combined SO2 + NOx Emission Rates

Lowest Emitting 25 units out of 1,072 Nationwide in 2002

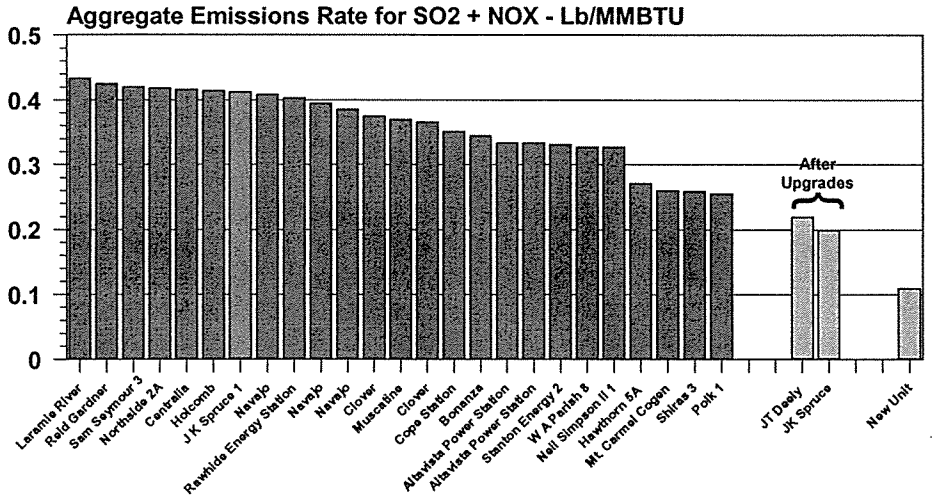
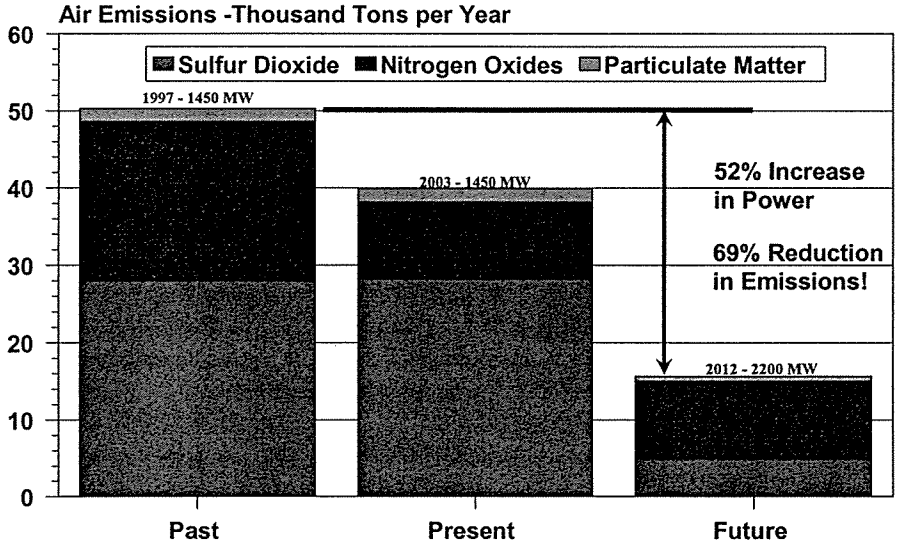


Figure 16

CPS Air Emissions from Coal

Past, Present and Future



Joseph (Joe) E. Fulton

Joe Fulton is currently Director of Research and Environmental Management. A 31-year employee at City Public Service Mr. Fulton has worked in a wide variety of jobs at CPS including nuclear projects, power plant engineering, fuels, long range planning, strategic planning and environmental planning. Mr. Fulton attained his current position in 1999.

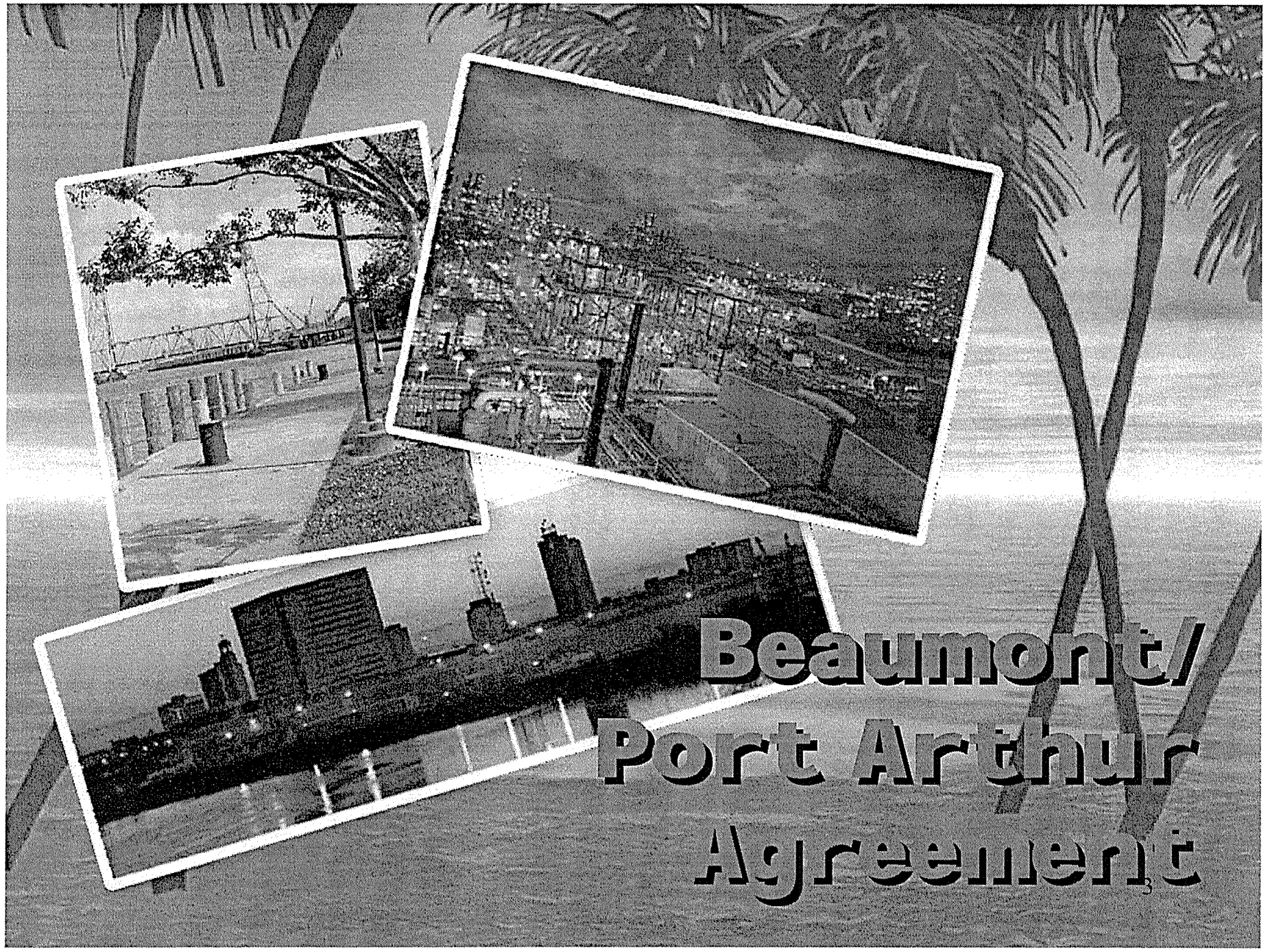
Mr. Fulton is active in numerous areas of environmental management and research including the American Public Power Association environmental committee, the Large Public Power Council environmental committee, the Electric Power Research Institute and the Air and Waste Management Association. Mr. Fulton is a professional engineer and is a member of the National Society of Professional Engineers and the Texas Society of Professional Engineers. Mr. Fulton has served on numerous committees investigating matters of water quality, water management and air quality in San Antonio throughout his career.

Mr. Fulton is a lifelong native of San Antonio. Mr. Fulton graduated from Texas A&M University in 1973 with a Bachelor of Science degree in Nuclear Engineering from and attained a Master of Science degree in Environmental Management from the University of Texas at San Antonio in 1979.


AIR QUALITY
SURVIVOR
STRATEGIES
Carl Edlund
EPA Region 6 Tribe

Successes of Collaboration

- Settling Beaumont
- Early action Compacts


Beaumont/
Port Arthur
Agreement

Early Action Compact Areas

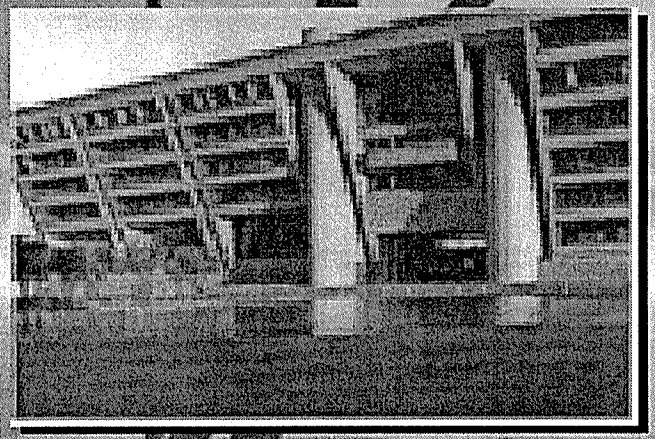
July 2003

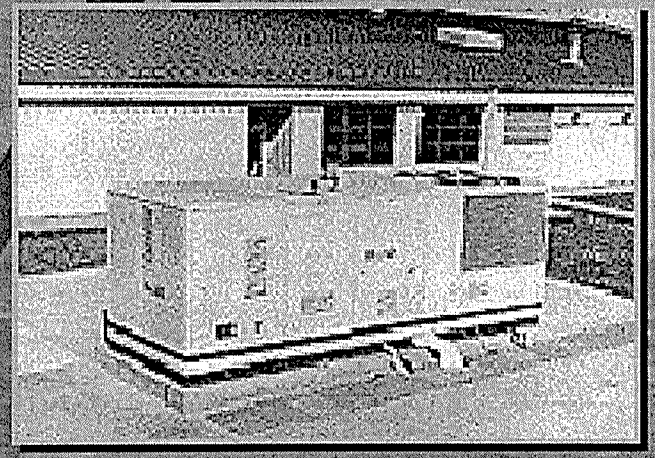
Denver, CO and Tulsa, OK - A portion of some of the counties are excluded from the EAC

Innovations

- Energy Efficiency & SIP credits
- Remote Sensing

Energy Efficiency = Reducing air emissions

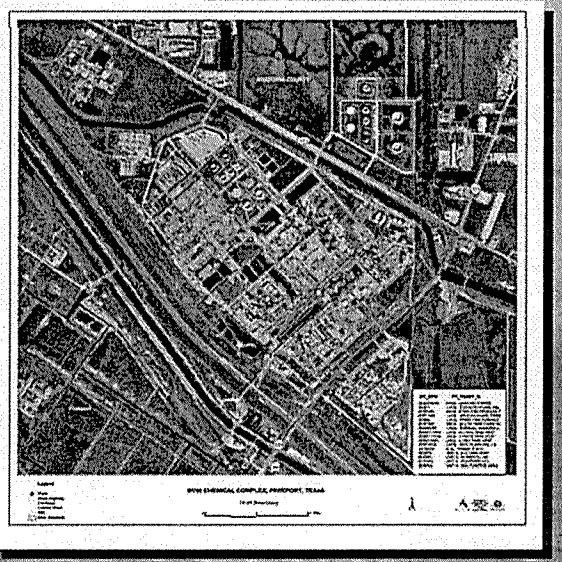


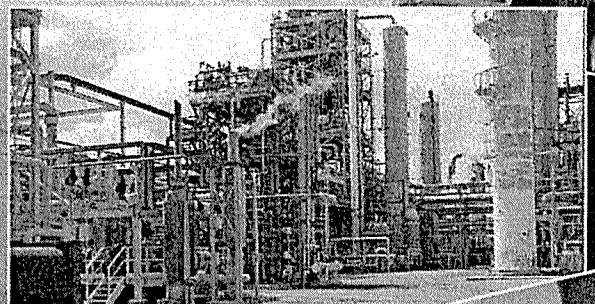


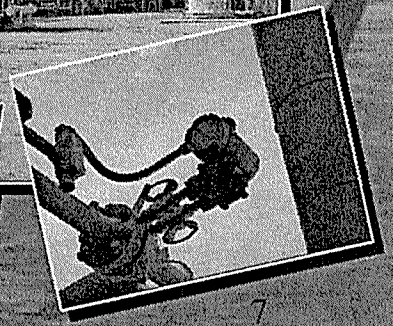
- Fuel cell SEPs
- Clean-vehicle loaner
- Dallas energy efficiency
- Energy Star benchmarking
- SB 5 workshops on air quality-energy efficiency
- Frisco Energy Star video
- Outreach to industry, governments, public
- MOU with DOE-NREL

Remote Imaging

"Distant Pollution Detection"







On the Horizon

- Permit Streamlining
- Blue Sky Highway Program


The Tribe
has
spoken...

Carl E. Edlund, P.E.

Director, Multi-media Planning and Permitting Division

Carl Edlund directs the EPA Region 6 programs for air pollution, hazardous waste, and toxic pollutants in Texas, Louisiana, Arkansas, Oklahoma, and New Mexico. These programs include: development of air quality improvement plans, issuance and oversight of air and waste permits, clean up of pollution from underground storage tanks, oversight of pesticide use, development of U.S.-Mexico border environmental initiatives, and a variety of toxic contaminant strategies targeted to help sensitive groups of people. Before this assignment, Mr. Edlund managed a variety of programs in the EPA Regional Office including the Superfund, Air Enforcement, and Resources Management Offices. Prior to joining the Dallas Regional Office in 1977, he worked in EPA's Washington D.C. offices where he chaired national task forces to abate air pollution at iron and steel mills and other problem industries. Mr. Edlund is a charter member of the EPA, and a member of the federal Senior Executive Service. He is an adjunct professor and a member of the Civil and Environmental Engineering Advisory Board at the Southern Methodist University. He received his BS in Mechanical Engineering from the University of Maryland, and is a registered Professional Engineer.

PAPER NOT SUBMITTED

David C. Schanbacher, P.E.

Texas Commission on Environmental Quality
Office of the Executive Director

David C. Schanbacher serves as the Chief Engineer for the Texas Commission on Environmental Quality, providing oversight and guidance on engineering standards of the agency and coordinating major engineering initiatives and studies. He has received certification as a registered professional engineer in the State of Texas. The Chief Engineer also serves as director of the Chief Engineer's Office, which consists of technical experts in engineering, biology, and toxicology.

Mr. Schanbacher has served as special assistant to the Office of Air Quality at the TCEQ and as a permit engineer in the New Source Review Program before joining the Office of the Executive Director. Mr. Schanbacher previously spent several years in various engineering positions in the chemical industry and the oil and gas industry before joining the Texas Air Control Board, a predecessor agency of the TCEQ, in 1992.

Mr. Schanbacher received a Bachelor of Science Degree in Chemical Engineering from the University of Missouri and a Master's Degree in Engineering from the University of Texas at Austin.

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16th Annual Texas Environmental Superconference

Implementation of 8-hour Standard

August 5-6, 2004

By Gregg Cooke
Guida, Slavich & Flores, P.C.

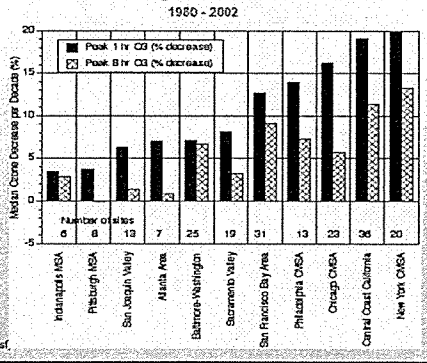
1-Hour vs. 8-Hour Attainment

- 1-hour ozone levels have declined greatly over past 20 years; 8-hour levels have not
- Strategies that worked for the 1-hour may not be as effective for the 8-hour
- 1-hour is a peak value over 3 years; 8-hour is an average value over 3 years
- 8-hour ozone is affected much more by regional transport

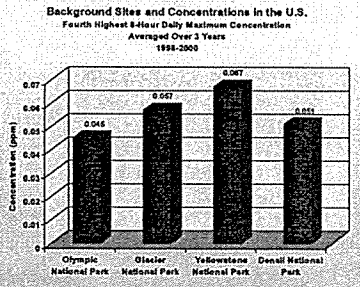
8-Hour Ozone NAAQS

Attaining the Standard

1980 - 2002



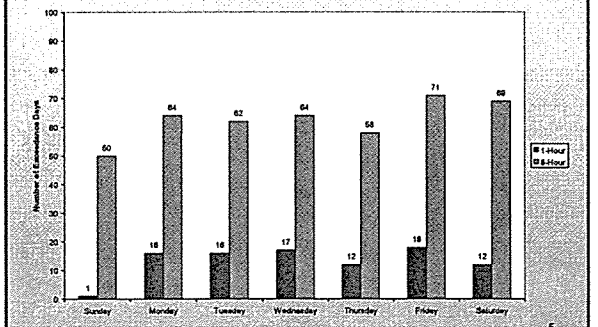
Background Ozone Concentrations at Some of the Cleanest Sites in the U.S.



(Based on 4th Highest 8-Hour Daily Maximum Concentration Data 1998-2000)

Weekend Effect

1-Hour and 8-Hour Ozone Exceedance Days in DFW by Day of Week
1990-2002



cooke@gsfpc.com

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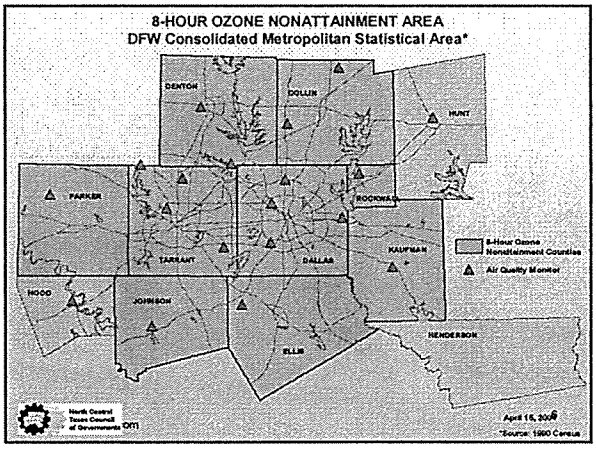
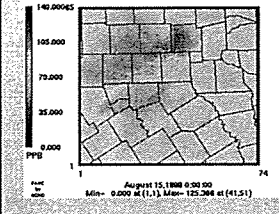


Episode Max 8-Hour O3

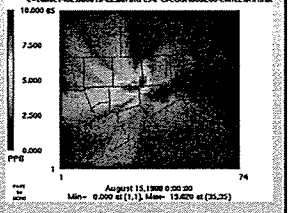
with Ellis Co. Source Contributions

13 – 22 August 1999

Episode Max 8hr O3



Ellis Co. O3 Contribution

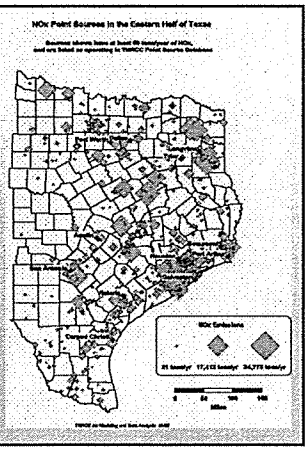


cooke@gsfpc.com

7

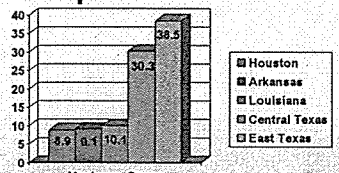
DFW NOx Background

Numerous Point Sources East - South of DFW contribute to background concentrations

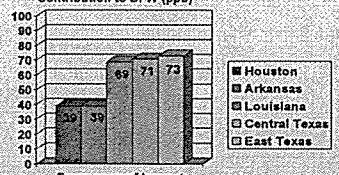


cooke@gsfpc.com

Ozone Transport into DFW Area



Maximum Ozone Contribution to DFW (ppb)

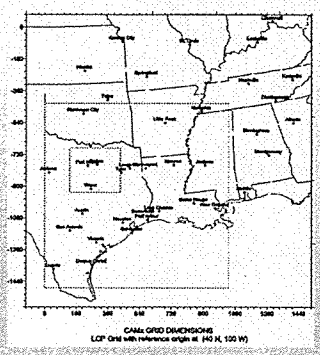


Frequency of Impact Upon DFW (%)

cooke@gsfpc.com

9

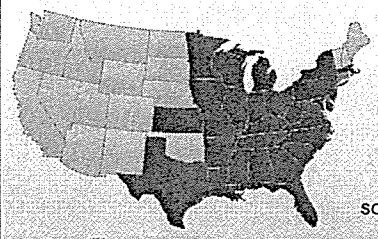
DFW Ozone Modeling Domain



cooke@gsfpc.com

10

IAQR: Affected Region and EGU Emission Caps



States controlled for both SO_2 and NOx
States controlled for ozone season NOx only (CT)
States not covered under the IAQR

EGU Emissions Caps*

(million tons)

	2010	2015
SO_2	3.9	2.7
NOx	1.6	1.3

*For the affected region.

cooke@gsfpc.com

11

Gregg A. Cooke

Gregg A. Cooke is "Of Counsel" with the Dallas law firm of Guida, Slavich & Flores, P.C. and is a Principal with the Washington, D.C.-based Global Environment and Technology Foundation. Formerly the Regional Administrator of Region VI of the U.S. Environmental Protection Agency (EPA), Mr. Cooke was the top ranking EPA official in the area that encompasses Texas, Louisiana, Arkansas, Oklahoma, and New Mexico.

Mr. Cooke's experience in establishing partnerships to create environmental progress in Texas and the Southwest has been demonstrated by his successful career at the EPA.

Mr. Cooke served as Regional Administrator of EPA Region VI for the past four and one-half years. He was appointed to the post by President Clinton and was the only political appointee in the EPA retained by current President George W. Bush.

During his tenure, Mr. Cooke was instrumental in developing clean air plans for both Dallas-Fort Worth and Houston-Galveston in partnership with the State of Texas. These plans contain innovative provisions that incorporate economic incentives as well as traditional mandatory measures. His clean air plans also included development of an innovative "compact" to facilitate early compliance with EPA's upcoming eight-hour standard for such cities as Austin and San Antonio, Texas. Mr. Cooke also served on the Board of Directors of the Border Environmental Cooperation Commission ("BECC") which provides funding for environmental infrastructure projects on both sides of the US-Mexico Border.

Prior to serving as Regional Administrator, Mr. Cooke practiced environmental law as a partner with Haynes and Boone in Austin. His previous professional positions include service as Chief of the Natural Resource Protection and Energy Division of the Office of the Texas Attorney General. While at the Office of the Texas Attorney General, he also served as the state's North America Free Trade Agreement Environmental Liaison and served as the interim General Counsel for the Border Environmental Corporation Commission in Juarez, Mexico.

Since leaving the EPA in January, 2003, Mr. Cooke was worked with Urban Chambers of Commerce on clean air funding from the Texas Legislature as well as funding for advanced environmental technology projects for both air and water quality.

Mr. Cooke earned a B.A. in history, cum laude, from Baylor in 1977. He earned a master of foreign affairs degree from the University of Virginia in 1979, and received a law degree from Baylor in 1982.

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THE FAILURE OF TEXAS AIR POLLUTION CONTROL: A CITIZEN'S PERSPECTIVE

BY JIM BLACKBURN

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THE FAILURE OF TEXAS AIR POLLUTION CONTROL: A CITIZEN'S PERSPECTIVE

BY JIM BLACKBURN

The Texas Air Control Board (TACB) was the first Texas agency to have control over all sources of air pollution in Texas. The TACB was created in 1965 due to the spectre of control by the federal government, as evidenced by the passage of the Clean Air Act of 1963. Although the proposal to create the TACB faced substantial industry opposition, industry eventually agreed. As stated in a comment in the Texas Law Review:

> "Most of these [industry] interests realized that since pollution control was inevitable and that they would have more power over pollution regulations at the state level than at the federal level, it would be more advantageous to write their own bill than to defeat the [bill creating the TACB]." (G. Todd Norvell and Alexander W. Bell, Comment, Air Pollution Control in Texas, 47 Texas Law Review 1086, 1092 (1969)

That was a monumental decision. Since that time, industrial interests have been dominant in air pollution control matters in Texas.

In 2004, while certain aspects of air pollution in Texas have improved, the overall situation is still very bleak for those living near industrial sources of air pollution. Children and adults suffering from asthma must endure episodes of ozone air pollution. They are exposed daily to releases of hydrogen sulfide and sulfur dioxide from refineries and a wide variety of toxics from chemical plants, refineries and storage and shipment facilities. Ports, a major source of fine particle air pollution, are not regulated by the State. Welcome to Texas.

I. THE U.S. EPA AS THE ENEMY OF THE STATE OF TEXAS

The 1970s saw the emergence of a new federal agency – the U.S. Environmental Protection Agency. Formed by President Nixon's reorganization, the EPA became the point agency for federal pollution control. The first fight between the EPA and the State of Texas came when EPA sought to clean up the extensive pollution in Galveston Bay under the Federal Water Pollution Control Act. In that fight, the Texas Water Quality Board – the state agency with power over water pollution - led the fight against the federal mandate side-by-side with

industry. The EPA won that battle because of the structure of the federal legislation and the clarity of the problem.

On the other hand, the federal Clean Air Act Amendment of 1970 (CAAA) had a much looser structure. Rather than a federal permitting process for existing and new facilities such as found in the Clean Water Act, the Clean Air Act's structure was focused around ambient air standards set under Section 109 of the Act and a State Plan to implement this ambient standard called a SIP (state implementation plan) under Section 110. The CAAA basically required that if an area was in violation of the national standard, then the state had to study the problem, identify sources and amounts of pollutants from those sources and develop a plan to reduce pollution and attain the standard. Areas violating the standard were called non-attainment areas and certain sanctions were required if the standard was not met by 1975, a deadline initially extended to 1977.

From the outset, the pollutant of concern in most of Texas was ozone. Unlike other pollutants, ozone is not emitted directly. Ozone is formed by the reaction of volatile organic compounds (VOCs) and nitrogen oxides (NOx) in the presence of sunlight. To reduce ozone, either VOCs or NOx or both must be regulated. In order to develop strategies to control ozone, both conceptual and mathematical models were developed by the agencies to guide the regulatory process. Ultimately, EPA and Texas, Texas industry and certain Texas institutions disagreed as to the models for certain areas and the impact of certain control strategies on ozone levels.

Texas submitted its initial clean-up plan to EPA, and EPA disapproved that plan and implemented its own plan for Texas through regulation. In turn, the TACB, Texas industry, several counties and even Rice University sued the EPA in the 5th Circuit Court of Appeals. Both agreed that a 75% reduction in VOCs was necessary, but they disagreed on details. Ultimately, the 5th Circuit, in the case of *Texas v. EPA*, 499 F. 2d 1897 (5th Cir. 1974), ruled that the U.S. EPA was arbitrary and capricious and violated federal law in rejecting certain elements of the state plan and in requiring certain controls.

By stepping up against the federal government, the TACB was certainly proving itself to be a worthwhile ally of Texas industry. EPA never recovered the initiative on air pollution control in Texas over the next year or two and in 1977, the Clean Air Act was amended, extending the time for attainment of the national standard to 1987. With a three-year extension, that attainment date became 1990. And in 1990, the federal Congress again amended the Clean Air Act to extend the

deadline for compliance with the national standards. Today, we are operating under the Clean Air Act Amendments of 1990.

After the Clean Air Act Amendment of 1977, the Houston Chamber of Commerce, with primary funding from industry and support from the TACB, undertook a study called the Houston Area Oxidant Study or HAOS to show that ozone did not pose a health threat to humans. HAOS sought to remove ozone as a national ambient air quality standard. Ultimately, this effort was abandoned, but its impact is still felt in Texas air pollution circles where many believe that ozone does not represent a health hazard despite substantial sound science to the contrary. In fact, my co-presenter on this panel, Commissioner Marquez, generated quite a bit of publicity as a result of his testimony before Congress when he referred to the relatively benign nature of ozone. (1995, Nor. 9, Serial No. 104-55, 104th Congress, Testimony to Subcommittee on Oversight and Investigations and the Subcommittee on Health and Environment of the Committee on Commerce, H.S. House of Representatives). Today, we can still hear claims that ozone is not a health hazard in boardrooms across Houston despite significant evidence to the contrary.

II. IMPLEMENTING THE CLEAN AIR ACT OF 1990

The Clean Air Act of 1990 was an updated version of the Clean Air Act of 1977 that portended to be much more serious about meeting air quality goals. A comprehensive permitting program was created under Title V and an extensive air toxics program was added under Title III. From an ozone perspective, Title I strengthened and altered the thrust of ozone regulation. The EPA was coming once again to regulate Texas industry. It was clearly time for the TACB to again rush forward to help Texas industry avoid extensive new pollution controls. And of course, they did.

A. NOx CONTROL

The initial difference between the Clean Air Act of 1990 and its predecessors was the emphasis on the role of NOx control regarding ozone. Past efforts in Texas had concentrated on VOCs rather than NOx, so this focus represented a unique, new problem. The first step for the TACB (which soon merged into the Texas Natural Resources Conservation Commission or TNRCC) was to question whether in fact NOx was implicated in Houston and Dallas ozone formation. Texas requested in 1994 that EPA defer NOx controls for the Houston and Dallas non-attainment areas, and amazingly enough, EPA issued a waiver on

NOx control in Texas ozone non-attainment areas in 1995. Later, in 1998, Texas filed a modeling analysis with EPA that indicated that significant NOx reductions would be required if Houston and Dallas were to meet the ozone standard by the 2007 deadline set by the 1990 Clean Air Act Amendments. Clearly, the NOx waiver was ill-advised. In this circuitous manner Texas lost four years of NOx regulation, a benefit to industry but not to the citizens of Texas breathing ozone.

In November 1999, the State of Texas submitted documentation that it labeled a SIP revision to the EPA. Under the CAAA of 1990, a SIP revision documenting compliance with the ozone standard was due in 1994, yet this was the first submission made by the Texas agency. In December, 1999, EPA disapproved this November 1999 SIP submission and set December, 2000, as the date by which rules must be adopted that show attainment of the standard. If those rules were not forthcoming, then serious sanctions under the CAAA would occur in the Houston region, including a cut-off of transportation (e.g. road-building) funds in Houston. Nothing catches the attention of Texas politicians more than the threat of loosing road money, so the State moved forward to address the deficiency in a "kinda sorta" manner.

In December, 2000, the TNRCC filed the SIP that arguably was required to have been filed in 1994. In addition to continued VOC controls this 2000 plan identified that industry would have to reduce NOx emissions by 90%. At least in part, this 90% NOx reduction was adopted because the EPA had conditionally disapproved the November 1999 submission and had taken a strong position that the 90% reduction was required.

In turn, Texas industry, through a group called the BCCA Appeals Group formed by the executive committee of the Houston Partnership (e.g., Chamber of Commerce), sued the TNRCC in 2001 for being arbitrary and capricious in adopting the rule requiring a 90% reduction in NOx from industry. Among other things, the TNRCC staff stated that the EPA requirement for 90% reduction lacked technical justification and was not sound science. A staffer stated in an e-mail that "it is not good public policy to move forward with stringent, untried controls if there is substantial uncertainty with the model results". (Plaintiffs exhibit 8, *BCCA Appeal Group v. TNRCC*, Cause No. GN100210, Travis County District Court, 2001). This suit was settled by the TNRCC after several days of testimony before Judge Margaret Cooper.

Essentially, the TNRCC agreed with industry that the 90% control of NOx was arbitrary and capricious, a particularly interesting admission given that EPA

required the TNRCC to adopt such controls. In three decades of litigation over environmental matters, I have never encountered a state agency admitting that it was arbitrary and capricious and settling a suit leading to a rule being set aside, yet that is exactly what happened in the BCCA Appeals Group litigation. Subsequently, the TNRCC changed names, becoming the Texas Commission on Environmental Quality (TCEQ); in 2001, the TCEQ adopted the 80% control of NOx that industry supported.

B. REACTIVE VOCs AND THE HOUSTON SHIP CHANNEL

In the midst of the fight over NOx control and the adequacy of the computer modeling for predicting and controlling ozone a startling find was made by a reconnaissance airplane that was monitoring pollutants over the Houston Ship Channel. In 2000, the TXAQS study determined that significantly more reactive hydrocarbons were in the atmosphere over the Houston Ship Channel than had been included in the emissions estimates used for computer modeling used to develop regulatory strategies. At the time of writing this paper, it appears that four of these VOCs – termed the HR VOCs (ethylene, propylene, butadiene and butanes) - have been underestimated and/or underreported by a factor of 5.6 times and the other, less highly reactive hydrocarbons have been underestimated by as much a 4.8 times.

Of course, this finding set off a new round of concern about the adequacy of the computer modeling for determining the best course of action for ozone attainment in Houston. However, to me, the most important issue is – how could the emissions of these key hydrocarbons be under-reported so dramatically? How could we be off by a factor of four or six? It is not as if the production of ethylene, propylene and butadiene were unknown to the Houston area. The Houston-Galveston non-attainment area produces 11% of the world's ethylene, 17% of the world's propylene and 11% of the world's supply of butadiene. It should not come as a surprise that substantial emissions of these chemicals was occurring yet it seemed to be a surprise.

Back in the early 1970s, the focus on the Houston Ship Channel was reactive hydrocarbons, which are VOCs. For almost forty years, control of these VOCs has been the centerpiece of the TACB, the TNRCC and the TCEQ. How is it that the full extent of the emissions of these pollutants had escaped the attention of the Texas air pollution control agency?

It is clear that, the emissions from industry in the Houston-Galveston non-attainment area have been under-reported, not only in emissions estimates under Title I of the Clean Air Act, but also potentially under the release reporting requirements of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), the Toxic Release Inventory (TRI) requirements of the Superfund Amendment and Reauthorization Act (SARA) as well as the Title V emission inventory and submission under the Clean Air Act of 1990. These are serious legal requirements that carry civil and criminal penalties, yet no serious inquiry into this under-reporting has occurred to my knowledge.

Did industry not know what they were releasing? Did the TCEQ not care? And where is EPA in this matter? Tune in for the next installment of the continuing soap opera of ozone control in Texas.

C. CURRENT STATUS OF OZONE CONTROL IN HOUSTON

Ozone control is dependant upon accurate computer modeling. After the discovery of the VOC under-reporting, more accurate emissions inventories needed to be compiled and new modeling undertaken. Under the SIP that was submitted in December, 2000, certain controls were to be implemented immediately and additional controls would be specified in a mid-course correction that was to occur in 2004. In fact, according to the approved SIP, TCEQ was to adopt final rules associated with the mid-course correction, as well as to make further NOx reductions by May, 2004.

To date, TCEQ has not adopted these rules. Rules were proposed by the TCEQ on June 23, 2004, but they have not been passed. The deadline set under the Clean Air Act and the SIP has – once again – come and gone without the agency implementing meaningful regulations. At this time, no final rules have been passed. In fact, the computer modeling that has been done to date does not include the less reactive VOCs that we know to exist on the Ship Channel. Instead, the modeling only includes the highly reactive VOCs. Undoubtedly, if asked to testify in court, a computer modeler could clearly state that the modeling lacked a sound science basis because known contributors to ozone formation were omitted from the modeling.

I believe that unless citizens force the TCEQ to comply, they will not. And I do not believe EPA will be willing to stand up for us. Enough is enough. Attachment A to this paper is a Notice of Intent to Sue that has been filed alleging

that the TCEQ has violated the ozone attainment requirements of the Clean Air Act by failing to implement the requirements of an approved SIP by failing to adopt final mid-course correction rules in May 2004 that assures attainment of the ozone standard.

III. NEW PERMITS AND NON-ATTAINMENT

One of the key aspects of a non-attainment area is the requirement that new sources of air pollution not add to existing problem. This is generally addressed by the new source permitting rules for non-attainment areas, generally by requiring adoption of the lowest achievable emission rate (LAER) and a required offset of the new emissions according to ratios set in Title I of the 1990 Clean Air Act.

However, what about the situation where the new source is located outside of a non-attainment area but will affect ozone formation within the non-attainment area? Such a situation arose in a recent case involving a power plant in Ellis County south of Dallas called Tractebel II. In this situation, testimony in a contested case hearing indicated that over 400 tons per year of NOx would be emitted south of the DFW non-attainment area and that this NOx would cause the formation of approximately 1 ppb of ozone in the Dallas-Fort Worth (DFW) non-attainment area. Additional testimony indicated that this source was not included in the compliance modeling for the DFW area that was submitted to the EPA as part of the DFW SIP. Finally, the TCEQ staff testified that the DFW area would barely, if at all, come into compliance with the ozone standard taking into account the sources that were identified and modeled.

From the testimony, it was clear that this major source of NOx pollution would increase ozone concentrations in the DFW area and that this source could cause the DFW area to continue to violate the standard. In order to get a permit, the applicant must demonstrate compliance with all rules 30 TAC § 116.111(a)(2)(i). 30 TAC §116.161 states that the Commission ". . .may not issue a permit . . . if ambient air impacts from the proposed source would cause or contribute to a violation of any NAAQS (national standard)). 30 TAC §101.21 states "that national primary and secondary air quality standards . . . will be enforced throughout all parts of Texas." Arguably, this was a clear case where a permit should be denied because it caused or contributed to the violation of a national ambient air quality standard. However, the TCEQ did not see it that way.

In the Matter of the Application of Ennis Tractebel II for Air Quality Permit Nos 46665 and PSD-TX-1003, the TCEQ granted permission for the construction

of the Tractebel II power plant notwithstanding the fact that this new source would add 1 ppb to the DFW ozone level that may not be attained. The basis for this ruling appears grounded in equity, namely, it would not be fair to make the applicant conduct an ozone impact analysis of the NOx emissions because the guidance documents from the TCEQ focus only on VOCs and not on NOx. In this case, the VOC emissions were less than 100 tons per year and considered to be de minimus relative to the formation of ozone. The guidance does not mention NOx.

In fact, the guidance document was written before NOx control became a factor in ozone control and did not incorporate the change in attainment policy associated with NOx control. In essence, because the TCEQ had not updated its guidance as to how to seek and obtain a permit, an equitable argument was made and accepted that it would be unfair to the applicant for NOx to be considered in determining whether or not to issue a permit. There is no discussion of the impact on people regarding violation of the ozone standard. In fact, there is no concern at all over the violation of the ozone standard. Equity in Texas seems to exist on behalf of the industry seeking a permit and no one else.

Gentry and Genevieve Holmes v. TCEQ has been filed in Travis County District Court, Cause No. GN301206. This court will determine whether or not the equitable consideration under Texas permitting procedure goes to the applicant rather than the public that continues to be exposed to air that violates the national ambient standard for ozone. On the other hand, only in Texas would such a case have to go to court.

IV. FINE PARTICLE MATTER AND BAYPORT

Ozone is not the only pollutant that is causing problems for residents in the Houston region. There is a relatively new concern about a pollutant called fine particle matter or $PM_{2.5}$. This type of pollutant is very small particulate matter than can be inhaled deep into the lungs. The U.S. EPA set a national standard for $PM_{2.5}$ that was recently upheld by the U.S. Supreme Court in the case of *Whitman v. American Trucking Ass'n*, 531 U.S. 457 (2001).

Recently, the Port of Houston Authority proposed to construct a new container port facility on Galveston Bay at Bayport. 5000 people live within one mile of Bayport and were concerned about the fine particle air pollution that will be produced by the diesel sources at this facility. Among the diesel sources at this port will be the container ships themselves, over 5,000 eighteen-wheel trucks in

and out each day, four trains per day and innumerable container-moving cranes and stackers.

Although this facility will produce significant amounts of air pollution, no air pollution permit is required from the State of Texas for a port facility. This is because the sources of diesel pollution are considered to be mobile sources rather than stationary sources and are therefore not subject to Texas clean air permitting. Similarly, no air pollution permit is required under federal law, again distinguishing between stationery and mobile source pollution. The only permit required for this facility was from the U.S. Army Corps of Engineers (Corps) under § 10 of the River and Harbor Act and § 404 of the Clean Water Act. Therefore, air pollution was addressed for this facility in the Environmental Impact Statement (EIS) prepared by the Corps of Engineers pursuant to the National Environmental Policy Act.

The findings of this EIS with regard to fine particle air pollution were significant and serious. It was determined that the air pollution from this facility will likely cause a violation of the fine particle air pollution standard in the year 2010. Any agency may voice objections to the Corps permit in comments on the EIS and EPA may object to a project on environmental grounds under 42 U.S.C. § 7609(a) of the Clean Air Act. However, no agency – not the TCEQ, the EPA or the Corps – objected to the issuance of this permit on air pollution grounds.

Fine particle matter may be the most dangerous pollutant for which the EPA has set a National Ambient Air Quality Standard. Exposure to fine particle matter above certain levels can lead to illness and death. The State of California has gone so far as to adopt air quality standards that are more stringent than those developed by EPA because of the seriousness of this issue. However, here in Texas, no agency will object to a federal permit that identifies a likely violation of the federal air quality standard for $PM_{2.5}$.

The big question here is – where is EPA? Why did EPA allow a port project to go forward if it would lead to a violation of the national standard? Not only are our state institutions lacking, but it seems that the EPA that supposedly protects Texas citizens is also missing in action. We citizens of Texas need help and we are not getting it.

V. CITIZEN ACTION

The story of air pollution control in Texas is a sad one for the people who live in ozone non-attainment areas and adjacent to industrialized areas. Neither the EPA nor the TCEQ offer promised relief from excessive cancer risk, from ozone exposure, or from fine particle matter. If you have asthma or serious cardio-pulmonary disease, you are not being protected. If we want action, then we are going to have to generate it ourselves.

Citizen action is possible under federal law and under state common law. Not surprisingly no right of citizen enforcement exists under the Texas air pollution control statutes. There are several ways that citizens could become active in air pollution abatement activities. The State can be sued for violation of the SIP requirements, as set out in the Notice of Intent in Appendix A. Industries can be sued for violating the federal Clean Air Act or CERCLA release requirements or SARA/ TRI reporting requirements. Every industry signed a statement when they submitted their Title V permit, swearing to amounts of pollutants that they were emitting based on the reported concentrations of ethylene, propylene and butadiene in the air above the Houston Ship Channel. Many industries on the Houston Ship Channel failed to correctly report their emissions. Similarly, many industries failed to correctly report their CERCLA releases and their Toxic Release Inventory (TRI) emissions. Maybe it is time for them to be sued by someone for these failures.

EPA has failed us, and they can also be sued under the Clean Air Act. However, it may be preferable to sue industry rather than suing a government agency that has discretion about its enforcement activities. EPA deserves to be sued, but such a suit may be difficult if not impossible to win.

Perhaps the most direct and most appealing alternative is to sue industry under state common law in state district or even county court. Concepts of negligence and nuisance apply to industrial emissions and its impacts. In many cases, industrial releases cause "shelter-in-place" warnings to be issued. These are situations where the residents of an area are required to stay in their houses and close their windows and shut off the air conditioner. Residents are asked to isolate themselves from the ambient air. If children are at school, the residents are not supposed to go and get them. Instead, the children are to be protected at their school. Of course, parental stress increases dramatically in such events.

Shelter-in-place interferes with a person's use and enjoyment of their property. It is an intrusion into one's rights as a property owner. In some cases, exposure to air pollution from such events causes exacerbation of existing health problems such as asthma or bronchitis. If the release caused the onset of symptoms, a cause of action may exist under negligence or nuisance even if the pollution was not the primary cause of the disease.

The point here is that the citizens are not without some tools. The biggest problem is that attorneys are expensive, and it is often difficult to find attorneys who are willing to take these type of cases on contingency, mainly due to past failures. However, these failures often have been because the attorneys bringing the case were looking for too big of awards and were not selective in the manner in which they applied the facts to the legal theory. A careful lawsuit can be successful.

Additionally, it is time that industry and the community began to see the faces of the victims of air pollution. Litigation puts a face on victims. So does publicity about the victims and the parts of a community where air pollution is a major problem. Today, community image is an important element in attracting new business to a community. Bad air pollution problems are not part of that good image that attracts today's selective industry that is not tied to ports or channels or industrial agglomerations. In today's economic development climate, bad air is bad for business. It's about time the State of Texas figured this, out along with our industries. We are only hurting ourselves health-wise and business-wise by not addressing air pollution.

VI. CONCLUSION

The State of Texas is not protecting public health. The EPA apparently has given up on Texas, leaving our citizens without the freedom from air pollution promised in the Clean Air Act Amendments 1970, 1977 and 1990. Unfortunately, we in Texas are left to protect ourselves, and we should use whatever devices we have at our disposal.

In closing, I would like for you to meet several children from Port Arthur who live adjacent to two refineries and two chemical plants.

Meet Kenneth. Kenneth is 12 months old and diagnosed with upper respiratory problems. Kenneth uses a nebulizer and requires breathing treatments three times a day.

Meet Destiny. Destiny is five years old and has been diagnosed with asthma for the last three years. She also suffers from bronchitis. Destiny also uses a nebulizer, requires breathing treatments and missed four weeks of school last year due to health problems.

Meet Ty'lesha. Ty'lesha is four years old and has been diagnosed with asthma and bronchitis for the last two years. Ty'lesha uses a nebulizer and requires breathing treatments four times a day. Ty'lesha also missed four weeks of school last year.

Meet Laneisha. Laneisha is five years old and suffers from bronchitis, pneumonia and upper respiratory problems. She is also on a nebulizer and requires daily breathing treatments.

These children will soon be going to court to seek damages for their ailments. Maybe some type of justice regarding air pollution and its negative health effects will be afforded them at some point in their lives.

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July 14, 2004

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Re: 42 U.S.C. § 7604(b) NOTICE OF INTENT TO SUE TCEQ FOR FAILURE TO IMPLEMENT HOUSTON-GALVESTON SIP

Dear Chairman White, Commissioners Marquez and Soward, and Mr. Shankle:

This letter is a formal notice of intent to sue pursuant to 42 U.S.C. § 7604(b) as required for actions under the Clean Air Act. By this letter, Galveston Bay Conservation and Preservation Association (GBPCA) is notifying the Texas Commission on Environmental Quality (TCEQ) of its intent to file suit against the TCEQ under the 'Citizen Suits' provision of the Clean Air Act. 42 U.S.C. § 7604. Section 7604(a)(1)(B) provides that any person may commence a civil action against a state governmental agency that is in violation of an order issued by the U.S. Environmental Protection Agency (EPA) with respect to a schedule or timetable of compliance with the Clean Air Act. § 7604(f).

GBPCA intends to file suit against TCEQ (1) for failure to adopt and submit the mid-course review SIP revision for the Houston-Galveston Ozone Non-Attainment Area by May 1, 2004, (2) failure to adopt and submit measures for the needed additional NOx reductions by the deadline of May 1, 2004, and (3) failure to expeditiously adopt rules needed for the additional NOx reductions in violation of the order of the EPA. EPA's final rule on the Texas SIP was published in 66 *Fed. Reg.* 57,160 *et seq.* The relevant pages of this publication are attached hereto.

Ozone is a pollutant for which a National Ambient Air Quality Standard (NAAQS) has been set. The Houston-Galveston Region has been out of attainment with the one-hour ozone standard since the passage of the Clean Air Act of 1970. The State of Texas through its environmental agency has failed to attain the national standard after 34 years. 34 years is enough time. By now, we should have a plan in place that would demonstrate achievement of the one-hour ozone standard yet we do not. That is unacceptable and violates the law.

Acting for the State of Texas, the Texas Natural Resource Conservation Commission (now TCEQ) filed the *Revisions to the State Implementation Plan (SIP) for the Control of Ozone Air Pollution* for the Houston/Galveston Ozone Nonattainment Area on December 6, 2000. This is the plan that should by now be in place, improving the air quality of the region. This TCEQ filing contained a proposal for an enforceable commitment to complete the mid-course review process by May 1, 2004. It also contained proposals for enforceable commitments to adopt and submit measures for the remaining needed additional NOx reductions by May 1, 2004, and to expeditiously adopt the required rules for the additional NOx reductions. The EPA fully approved the Texas SIP and included these three enforceable commitments in the final rule published on November 14, 2001. 66 *Fed. Reg.* 57,160-161.

> "The State's enforceable commitment to perform a mid-course review (including evaluation of all modeling, inventory data, and other tools and assumptions used to develop this attainment demonstration) and to submit a mid-course review SIP revision, with any recommended mid-course corrective actions, to the EPA by May 1, 2004."
>
> "An enforceable commitment to adopt and submit to EPA by May 1, 2004 measures for the remaining needed additional NO[X] reductions."
>
> "An enforceable commitment that the rules needed for the additional NO[X] reductions will be adopted as expeditiously as practicable and the compliance dates will be expeditious."

May 1, 2004 has come and gone. TCEQ has not adopted or submitted the mid-course review as required in the rule. TCEQ has not adopted or submitted the additional required NOx reduction measures as required by the rules. TCEQ has not adopted rules needed for the additional NOx reductions and therefore failed to act expeditiously. Such action is a violation of the Clean Air Act and GBCPA is hereby giving notice of its intent to sue to enforce compliance with a binding rule or order under the citizen suit provisions of the Clean Air Act.

TCEQ is the agency clearly responsible for carrying out these sections of the EPA final rule. The agency and the commissioners themselves are responsible for these violations of the EPA order. These violations occurred and are continuing to occur in Austin, Texas. The first violation occurred on May 2, 2004, and each day beyond that date is another continuing violation.

This notice of intent to sue is issued on behalf of the Galveston Bay Conservation and Preservation Association. GBCPA's address is P.O. Box 323, Seabrook, Texas 77586. The GBCPA telephone number is 281-326-3343, and fax number is 281-326-3312. GBCPA can also be reached through Jim Blackburn, Chair and Counsel, 2900 Weslayan, Suite 400, Houston TX 77027, phone number 713-524-1012 and fax number 713-524-5165.

GBCPA has numerous members who reside in the Houston-Galveston non-attainment area and will suffer from continued exposure to ozone air pollution. Many of these members reside in the eastern section of Harris County and are subjected to some of the higher levels of ozone exposure within the nonattainment area. GBCPA has been opposing the construction of the Bayport container port by the Port of Houston Authority over the last several years. The Bayport project was found by the U.S. Army Corps of Engineers in the Bayport Environmental Impact Statement to be in compliance with the SIP for the Houston-Galveston non-attainment area based upon the assumption that the State of Texas would comply with the SIP requirements and based upon assurances from the TCEQ. That assumption is clearly not true and the determination that the Bayport facility would be in compliance with a legal SIP is not true.

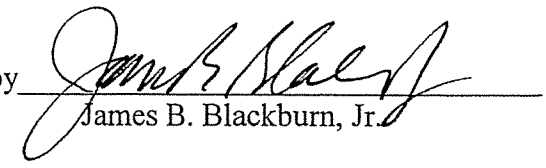
The deficiencies of the State of Texas in its attempt to comply with the SIP are substantial. Among other things, the State of Texas has failed to complete computer modeling demonstrating attainment of the ozone standard and has failed to adopt binding regulations that address the NOx deficiency identified in earlier filings with the agency. At this time, computer modeling used by the TCEQ does not incorporate all of the known sources of reactive hydrocarbon emissions and cannot provide a realistic basis for decision-making. In short, the compliance efforts by the TCEQ are not in keeping with the legal and moral responsibilities that the agency bears.

It is the intent of GBCPA to file suit after the expiration of 60 days as set forth in 42 U.S.C. § 7604(b)(1)(A). Additionally, GBPCA intends to seek attorney's fees pursuant to 42 U.S.C. § 7604(d).

If you have any questions or concerns, please do not hesitate to contact me at 2900 Weslayan, Suite 400, Houston, Texas 77027, or by telephone at 713-524-1012

Sincerely,

BLACKBURN CARTER, P.C.

by 
James B. Blackburn, Jr.

c: Governor Rick Perry — *Via Certified Mail/RRR*
Office of the Governor
P.O. Box 12428
Austin, Texas 78711-2428

Michael O. Leavitt, Administrator — *Via Certified Mail/RRR*
United States Environmental Protection Agency
1101A Ariel Rios Bldg.
1200 Pennsylvania Avenue, NW
Washington, DC 20560

Richard E. Greene, Regional Administrator — ***Via Certified Mai/RRR***
United States Environmental Protection Agency – Region 6
1445 Ross Avenue, Suite 1200
Dallas, TX 75202

John Ashcroft, Attorney General — ***Via Certified Mail/RRR***
U.S. Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530-0001

Galveston Bay Conservation Preservation Association — ***Via Certified Mail/RRR***
2600 NASA Road 1, Suite 103
P.O. Box 323
Seabrook, Texas 77586

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[TX–126–1–7477; FRL–7092–2]

Approval and Promulgation of Implementation Plans; Texas; Houston/Galveston Nonattainment Area; Ozone

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: The EPA is fully approving the Texas one-hour ozone attainment demonstration State Implementation Plan (SIP) for the Houston/Galveston (HG) severe nonattainment area with an attainment date of November 15, 2007. Also, being published in today's **Federal Register** are seven additional actions, approving various measures that support the attainment demonstration.

In this action, the EPA is approving the following related SIP elements: The following local measures relied on in the attainment demonstration: speed limit reduction, voluntary mobile emission programs (VMEP) and transportation control measures (TCM); the Post 1999 Rate of Progress (ROP) plans for the time periods November 15, 1999 to November 15, 2002, November 15, 2002 to November 15, 2005 and November 15, 2005 to November 15, 2007; the Motor Vehicle Emissions Budget (MVEB) contained in the attainment demonstration SIP and the Post 1999 ROP plans; the 15% ROP Plan (Conversion of conditional interim approval to a full approval); certain enforceable commitments to adopt additional measures and perform additional analyses; revisions to the 1990 base year inventory; and the HG area's SIP as meeting the reasonably available control measures (RACM) requirement.

DATES: This final rule is effective on December 14, 2001.

ADDRESSES: Copies of documents relevant to this action are available for public inspection during normal business hours at the Environmental Protection Agency, Region 6, Air Planning Section (6PD–L), 1445 Ross Avenue, Dallas, Texas 75202–2733; and, the Texas Natural Resource Conservation Commission, Office of Air Quality, 12124 Park 35 Circle, Austin, Texas 78753.

FOR FURTHER INFORMATION CONTACT: Guy R. Donaldson, Air Planning Section (6PD–L), 1445 Ross Avenue, Dallas, Texas 75202–2733. Telephone Number (214) 665–7242, E-mail Address: Donaldson.Guy@epa.gov.

SUPPLEMENTARY INFORMATION: Throughout this document "we," "us," and "our" means EPA.

Table of Contents

I. Final Action

A. What Elements of the Texas SIP Are We Approving?

We are fully approving the one-hour ozone attainment demonstration SIP for the HG nonattainment area as meeting the attainment demonstration requirements of 182(c)(2) and (d) of the Clean Air Act (the Act). We proposed this action on July 12, 2001 (66 FR 36655). This demonstration shows, through photochemical modeling and other evidence, that through a combination of adopted measures, recent legislation, and commitments to adopt additional measures the HG area will attain the one-hour ozone standard by November 15, 2007.

As an integral part of the attainment demonstration, we are approving and finding adequate the associated MVEBs only until these emission budgets have been revised pursuant to the State's enforceable commitments to use MOBILE6 and to adopt additional measures necessary for attainment and we have found the revised budgets adequate for the purposes of transportation conformity.

Before approving an attainment demonstration SIP, we must approve all of the control measures relied on in the demonstration. The majority of the control measures relied on in the attainment demonstration have been approved in other **Federal Register** notices. (See Section II for a listing of related **Federal Register** notices.) We are approving in today's action, certain measures relied upon in the attainment demonstration and which were submitted December 20, 2000: the Speed Limit Reductions, the VMEP, and the TCMs. We are also approving the following related SIP elements:

- 15% ROP Plan,
- The Post 1999 ROP Plans and their associated contingency measures;
- A demonstration that all RACM have been adopted for the HG nonattainment area; and
- Revisions to the 1990 Base Year Inventory.

The revisions to the Post 1999 ROP plans and the RACM analysis that we are approving today were parallel processed. (*See* Section I.E. for a discussion of parallel processing.)

In addition, we believe that for the HG area to be successful in attaining the one-hour ozone standard, the State must be committed to certain future actions relating to adopting additional measures and to future evaluations of the inputs to the plan. To that end, Texas has included the following enforceable commitments in their State Implementation Plan which we are approving:

- The State's enforceable commitment to perform a mid-course review (including evaluation of all modeling, inventory data, and other tools and assumptions used to develop this attainment demonstration) and to submit a mid-course review SIP revision, with any recommended mid-course corrective actions, to the EPA by May 1, 2004.
- The State's enforceable commitment to perform new mobile source modeling for the HG area, using

MOBILE6, our on-road mobile emissions factor computer model, within 24 months of the model's official release; that if a transportation conformity analysis is to be performed between 12 months and 24 months after the MOBILE6 official release, transportation conformity will not be determined until Texas submits an MVEB which is developed using MOBILE6 and which we find adequate.

- An enforceable commitment to adopt rules that achieve at least the additional 56 tons/day of NO_X emission reductions that are needed for the area to show attainment of the one-hour ozone standard and as supported by identified measures that could potentially be adopted and could achieve the reductions without requiring additional limits on highway construction.
- An enforceable commitment to adopt and submit the EPA by December 1, 2002 measures to achieve 25% of the 56 tons/day.
- An enforceable commitment to adopt and submit to EPA by May 1, 2004 measures for the remaining needed additional NO_X reductions.
- An enforceable commitment that the rules needed for the additional NO_X reductions will be adopted as expeditiously as practicable and the compliance dates will be expeditious.
- An enforceable commitment to concurrently revise the MVEBs and submit them to EPA as a revision to the attainment SIP if additional control measures reduce the motor vehicle emissions budget (MVEB).

This action also satisfies the last two elements of section 182(d)(1)(A) of the Act to adopt TCMs as necessary to comply with the reasonable further progress and attainment demonstration requirements of the Act. The first requirement to offset growth in emissions from growth in vehicle miles traveled (VMT) or number of vehicle trips is addressed in a corresponding action published separately in today's **Federal Register**. Please see Section III.C.3 for additional discussion regarding the second and third elements. For additional discussion regarding the first element, see the corresponding separate action in today's **Federal Register** regarding the VMT Offset Plan.

For more discussion on the rationale for the actions being approved here, see the proposed approvals with their associated Technical Support Documents (TSD) and our response to comments found in Section II.

B. What Are the Motor Vehicle Emissions Budgets Being Approved in This Action?

Rate of Progress Budgets

The MVEBs established by the Post 1999 Rate of Progress plans and that we are approving today are contained in Table 1. We find the MVEBs consistent with all ROP SIP requirements. In addition, we are finding these budgets adequate for transportation conformity purposes pursuant to the criteria in 40 CFR 93.118(e)(4) as part of our action on the SIP rather than using the web posting process because we have moved forward on this SIP in a quick manner as described in *Guidance on Motor Vehicle Emissions Budgets in One-Hour Ozone Attainment Demonstrations* dated November 3, 1999.

TABLE 1.—ROP SIP MOTOR VEHICLE EMISSIONS BUDGETS

[Tons per day]

Pollutant	2002	2005	2007
VOC	100.07	68.52	79.51
NO_X	260.85	185.48	156.6

The new 2007 budgets are taken from the attainment demonstration modeling rather than directly from the ROP calculations. Emissions estimates used to demonstrate transportation conformity will be derived using the assumptions used to develop these emissions budgets for the 2007 attainment SIP MVEBs, pursuant to 40 CFR 93.122(a)(6). We find such MVEBs consistent with ROP.

Attainment Budgets

Table 2 contains the MVEBs established by the attainment plan. We are approving these budgets today and finding them adequate for transportation conformity purposes pursuant to the criteria in 40 CFR 93.118(e)(4) as limited below.

TABLE 2.—2007 ATTAINMENT YEAR MOTOR VEHICLE EMISSIONS BUDGETS

[Tons per day]

Pollutant	2007
VOC	79.51
NO_X	156.60

We find the MVEBs consistent with all pertinent SIP requirements and, as described in our proposals, the MVEBs are approved and adequate for conformity purposes only until these emission budgets have been revised pursuant to the State's enforceable commitments to use MOBILE6 and to adopt additional measures necessary for attainment and we have found the revised budgets adequate for the purposes of transportation conformity.

All States whose attainment demonstration includes the effects of EPA's Tier II/Low Sulfur program have committed to revise and resubmit their budgets after EPA releases MOBILE6.(MOBILE6 is the latest version of the EPA model for estimating mobile emissions. Its official release is expected in the near future.) The State committed in its April 2000 submission to perform new mobile source modeling for the HG area using MOBILE6 within 24 months of the model's official release. If transportation conformity analysis is to be performed between 12 and 24 months of the official release of MOBILE6, transportation conformity will not be determined until the State submits a new budget which is developed using MOBILE6 and which we find adequate. The State has informed the transportation agencies of this commitment. Texas also commits to concurrently revise the MVEB if adoption of any shortfall measure affects the MVEB and submit the revision to EPA as a revision to the attainment SIP.

We are limiting the duration of our approval as described above because we are only approving the attainment demonstrations and MVEBs because the States have committed to revise them. Therefore, once we have confirmed that revised budgets are adequate, they will be more appropriate than the budgets we are approving today.

C. What Are the Key SIP Submissions Being Approved in This Action?

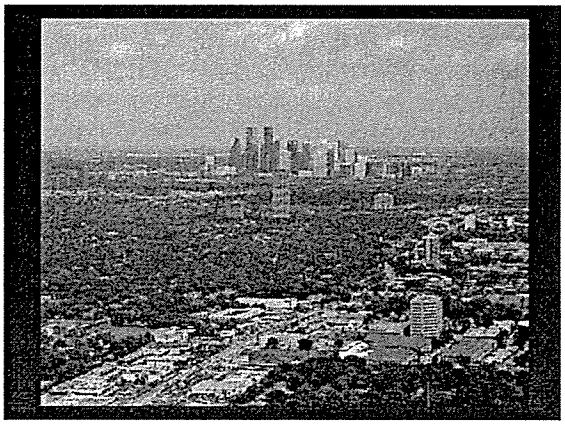
There have been a number of State submissions in response to the attainment demonstration requirements of the Act. In this notice, the key State submissions being considered were provided by the Governor in letters dated December 20, 2000, and October 4, 2001. The items in the October 4, 2001 submission have been parallel processed. Parallel processing means that EPA proposes action on a state rule before it becomes final under state law. Our July 12, 2001 proposal details the history of State and EPA actions that preceded these submissions (66 FR 36655).

D. What Previous Actions Has EPA Taken?

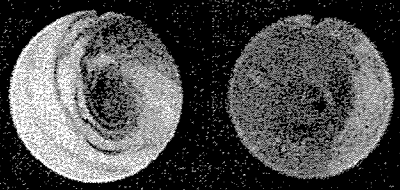
There are three proposals related to this action. First, on December 16, 1999 (64 FR 70548), we issued a proposed approval/proposed disapproval of the HG ozone attainment demonstration plan (the 1998 plan). This action outlined the actions we believed were

THE FAILURE OF TEXAS AIR POLLUTION CONTROL: A CITIZEN'S PERSPECTIVE

By Jim Blackburn
BlackburnCarter Law Firm
August 5, 2004



Lung Inflammation by Ozone



Healthy Inflamed

Houston Air Pollution

- 34 YEARS SINCE PASSAGE OF CLEAN AIR ACT OF 1970
- HOUSTON STILL HAS NOT ATTAINED ONE - HOUR OZONE STANDARD
- INDUSTRY IN CONTROL OF HOUSTON AIR POLLUTION REGULATION
- TEXAS AIR CONTROL BOARD (TACB) CREATED 1965 TO PROTECT INDUSTRY

- "Most of these [industry] interests realized that since pollution control was inevitable and that they would have more power over pollution regulations at the state level than at the federal level, it would be more advantageous to write their own bill than to defeat the [bill creating the TACB]." (G. Todd Norvell and Alexander W. Bell, Comment, Air Pollution Control in Texas, 47 Texas Law Review 1086, 1092 (1969)

Houston Air Pollution

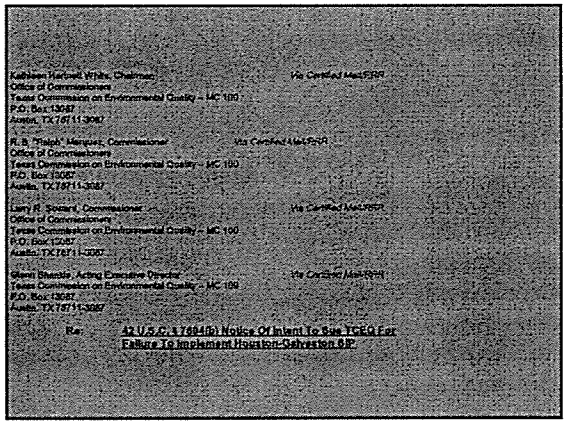
- 1979-Houston Area Oxidant Study (HAOS) – Industry vs. Ozone Standard – IMPACT TODAY
- 1990 Clean Air Act Amendments – 2007 attainment date and NOx Control
- 1995-NOx waiver for Texas
- 1999-NOx control reinstated

Houston Air Pollution

- Dec. 1999 – Initial SIP Disapproved
- Dec. 2000 - 90% NOx control rule
- *BCCA Appeals Group v. TNRCC*
- "It is not good public policy to go forward with stringent, untried controls if there is substantial uncertainty with model results" TNRCC e-mail, Pl. Exh. 8.

Houston Air Pollution

- TNRCC Settles BCCA litigation
  - October, 2001-EPA approval
  - Mid Course Correction and Additional NOx rules Due By May, 2004
  - December, 2002 - 90% rule rescinded
  - May 2004 – No Submission As Required by SIP



Kathleen Hartnett White, Chairman Via Certified Mail/RRR
Office of Commissioners
Texas Commission on Environmental Quality – MC 100
P.O. Box 13087
Austin, TX 78711-3087

R.B. "Ralph" Marquez, Commissioner Via Certified Mail/RRR
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Larry R. Soward, Commissioner Via Certified Mail/RRR
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Austin, TX 78711-3087

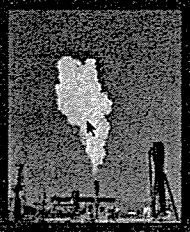
Glenn Shankle, Acting Executive Director Via Certified Mail/RRR
Texas Commission on Environmental Quality – MC 100
P.O. Box 13087
Austin, TX 78711-3087

Re: 42 U.S.C. § 7604(b) Notice Of Intent To Sue TCEQ For Failure To Implement Houston-Galveston SIP

Houston Air Pollution

- Since 1970, VOC has been primary focus of investigation/regulatory control
- TXAQS – 2000 – ethylene, propylene and butadiene (e.g. VOCs) above Houston Ship Channel found in higher concentrations than indicated by current emissions inventory/modeling

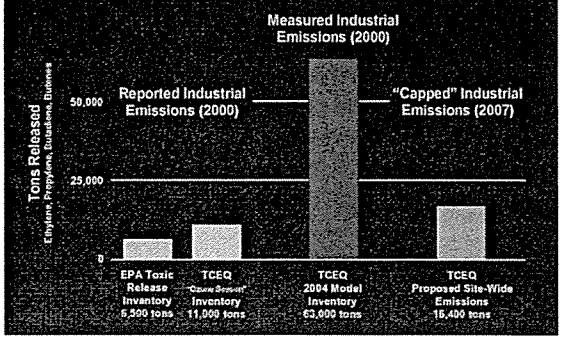
Underreported Flare Pollution



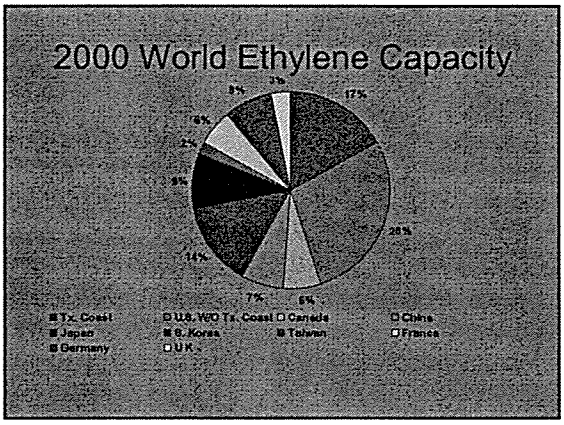
"Clean" Flare "Dirty" Flare

Not Just Vapor: Cooling Towers

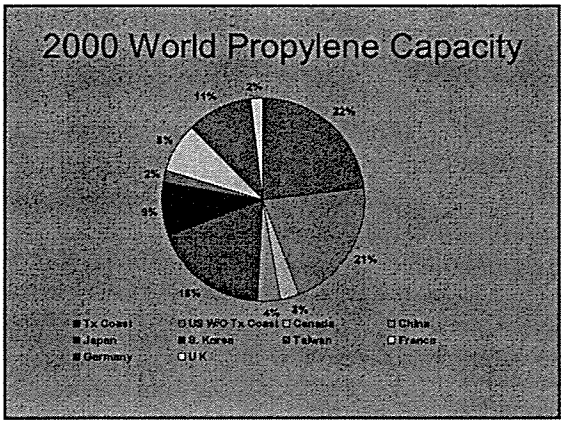
Highly Reactive Petrochemicals (HRVOCs)



2000 World Ethylene Capacity



2000 World Propylene Capacity



NEW PERMIT REVIEW IMPACT ON DFW OZONE AREA

- TRACTEBEL ENNIS II NEW SOURCE
- MORE THAN 400 TONS/YR. NOx
- BELOW VOC THRESHOLD OF 100 T/Y
- DFW AREA EXCEEDS OZONE STANDARD
- DFW OZONE LEVEL INCREASED BY 1 PPB

NEW PERMIT REVIEW IN DFW OZONE AREA

- "BECAUSE THE CURRENT STATE OF THE LAW IS THAT ENNIS II'S NOx EMISSIONS, OZONE PRECURSOR THAT THEY MIGHT BE, DO NOT TRIGGER FURTHER MANDATORY ANALYSIS OF OZONE, IT WOULD BE UNFAIR TO REQUIRE APPLICANT TO DO MODELING THAT OTHER APPLICANTS ARE NOT REQUIRED TO DO." SOAH PFD P. 24.

TCEQ RULES ON NEW SOURCES

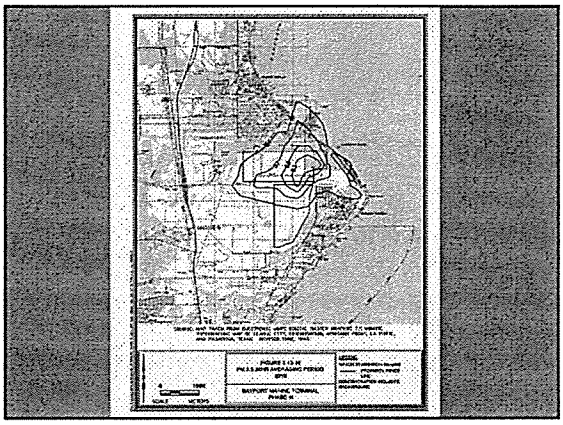
- 30 TAC §116.111(a)(2) – EMISSION MUST COMPLY WITH ALL RULES IN ORDER TO BE PERMITED
- 30 TAC §116.161 – COMMISSION MAY NOT ISSUE A PERMIT IF AMBIENT AIR IMPACTS FROM THE SOURCE WOULD CAUSE OR CONTRIBUTE TO A VIOLATION OF AN AMBIENT STANDARD.

Which of the Following Caused the Most Death in the U.S., in 2001?

a)	Fine Particles:	64,000 (est.)
b)	Flu and pneumonia:	62,000
c)	Motor Vehicles:	43,800
d)	Suicides:	30,600
e)	Drugs:	21,700
f)	Homicides:	20,000
g)	Alcohol:	19,800
h)	Malaria:	9

Source: CDC National Vital Statistics Reports, 2003; 51 (5):1-116.

Houston: 435 deaths per year due to fine particulates according to the Sonoma Study



The modeling was conducted to show the estimated ambient (within the nearby communities and neighborhoods) pollutant levels for NO_2, CO, Sulfur Dioxide (SO_2), PM_{10}, and Particulate Matter less than 2.5 microns in diameter ($PM_{2.5}$) for each averaging time for which there is a NAAQS.

The results of the modeling show that the estimated impact of terminal construction and operations including an assumed background based on existing monitoring data in the area would, with one possible exception, not exceed NAAQS. The 2010 model results for $PM_{2.5}$ suggest the possibility that the 24-hou standard for this pollutant could be exceeded. The area affected would be within the development area o the Proposed Project. Analysis of the model output shows that over 80 percent of the termina complexes' impact on $PM_{2.5}$ levels is caused by the assumed level of fugitive dust emissions from construction activities. This category of emissions may be subject to an estimate of $PM_{2.5}$ emissions tha is higher than what would actually occur. Fugitive dust emissions are also amenable to further contro

Kenneth

- Age: 12 Months
- Diagnosed: Infant with upper respiratory problems
- Other Illnesses: Pneumonia, frequent ear infections
- Medications: Breathing treatments 3 times daily
- Other Problems: Parent lost job due to excessive illness

Destiny

- Age: 5 Years
- Diagnosed: 3 Years with Asthma
- Other Illnesses: Bronchitis, congestion
- Medications: Daily breathing treatments
- Other Problems: Absent from school 4 weeks last year

Ty'lesha

- Age: 4 Years
- Diagnosed: 2 Years with asthma and bronchitis
- Medications: Breathing treatments 4 times daily
- Other Problems: Absent from school 20-25 days last year

Laneisha

- **Age: 5 Years**
- **Diagnosed: Infant with bronchitis, pneumonia, upper respiratory problems**
- **Other Illnesses: Frequent earaches, sore throat, congestion**
- **Medication: Breathing treatments**

James B. Blackburn, Jr., J.D.

Attorney
Blackburn Carter (Houston, Texas)

An attorney for more than 30 years, Jim Blackburn is a partner in Blackburn Carter, a firm devoted to environmental law and planning. Blackburn is also an Adjunct Professor and Lecturer in the Department of Environmental Sciences and Engineering at Rice University, teaching courses in environmental law. His manuscript titled *The Book of Texas Bays*, which focuses upon the current environmental health of bays in Texas and the efforts undertaken to protect them, is being published by Texas A&M Press and is forthcoming in the fall, 2004. Blackburn received both a B.A. in History and a J.D. at the University of Texas at Austin and an M.S. in Environmental Science at Rice University.

CASE SUMMARIES: WATER QUALITY IMPLICATIONS TO WATER SUPPLIES[1]

One of the emerging policy conflicts directly affecting water quality programs of late is the manner in which water quality protections impact water supply planning. This conflict is demonstrated in at least two ways: impacts from stream standards on water rights and the converse effect of interbasin transfers on water quality. The following case summaries highlight some of the interesting reported situations in which the need to promote responsible water supply planning comes up against the goal of water quality protection.

A. The Impact of Stream Standards on Water Rights

At least one state has directly grappled with the manner in which stream standards may affect water rights permitting decisions. In *Methow Valley Irrigation District v. Ecology*, 2003 WL 724314 (Wash. Pol. Control Bd.), the Washington State Department of Ecology initiated an enforcement action against an irrigation district for waste of water and water quality violations. The waste of water allegations were based on the inefficient nature of the Methow Valley Irrigation District's (the "District's") water delivery system, while the water quality allegations were based on portions of the Twisp and Methow Rivers identified on the state's Clean Water Act Impaired Waters 303(d) List as temperature and instream flow impaired. The District's response to the enforcement action did not meet the state's demands, and the case was forwarded for enforcement and an administrative hearing.

In the administrative order issued late Summer 2003, the Washington Pollution Control Hearings Board (the "Board") determined that the District's conveyance system was wasteful. Citing an industry efficiency standard of 55% as "reasonable," the Board held that the District's use of only 4,412 acre-feet per annum of the 13,196 acre-feet per annum of water it diverted was wasteful.[2] Additionally, the Board held that this level of waste was unnecessary when there were public funds available to repair the District's canals and levies, and when the Methow and Twisp rivers were listed on the Washington 303(d) List as impaired.[3] In crafting its Order, the Board affirmed the waste violation and directed the Department of Ecology to re-examine the District's irrigation system "with the goal of issuing a supplemental order adequate to address excessive conveyance losses in light of any funding options available."[4]

On June 20, 2003, the Washington State legislature enacted new law attempting to limit the state agency's authority to regulate water rights. Senate Bill 5028 amended

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[1] Prepared by Lauren Kalisek and Brad Castleberry.

[2] Findings of Fact, Conclusions of Law and Order, Pollution Control Hearings Board, State of Washington, PCHB NO. 02-071, at XX, August 2003.

[3] *Id.*, at XXI.

[4] *Id.*, at Order.

the Washington Water Code to specifically restrict the agency's authority to regulate water quality if it interferes with state water rights.[5] Whether the new legislation will withstand legal challenge remains to be seen, but the *Methow Valley* case, in and of itself, demonstrates how existing water rights may be impacted by the Clean Water Act 303(d) listing process.

B. The Impact of Interbasin Transfers on Water Quality

In addition to existing water rights, as in *Methow Valley*, NPDES discharge requirements may also restrict the use of interbasin transfers as a water-planning tool. Recent cases from the Second and Eleventh Federal Circuit Courts of Appeal indicate that an NPDES permit under Section 402 of the Clean Water Act may be required for interbasin transfers of water. Both *Catskill Mountains Chapter of Trout Unlimited, Inc. v. City of New York* 273 F.3d 481 (2nd Cir. 2001) and *Miccosukee Tribe of Indians of Florida v. South Florida Water Management District* 280 F.3d 1364 (11th Cir. 2002) hold that the transfer of water from one water source to another separate and distinct water source via a man-made device, either a pump station, pipeline, or tunnel, constitutes the addition of pollutants from a point source requiring an NPDES permit. *Miccosukee* was appealed to the U.S. Supreme Court and the decision issued in March, 2004 generally supports this approach in cases where transfers occur between distinct waterbodies, as discussed in detail below.

1. *Catskill Mountains*

Recreational users of Esopus Creek challenged the actions of the City of New York (the "City") in transferring raw water from the Schoharie Reservoir through a man-made tunnel into Esopus Creek. The transfer was required to move Schoharie water to the City's facilities to treat and convey public drinking water. Trout Unlimited brought a challenge alleging the City was in violation of 33 USC §1311(a), thereby requiring a Section 402 permit before it could discharge Schoharie water into Esopus Creek. Although both water sources eventually reach the Hudson River absent the man-made tunnel, Schoharie water would never come in contact with Esopus Creek. Trout Unlimited argued the City was, in essence, discharging the pollutants from the Schoharie Reservoir into Esopus Creek.

The City and EPA did not consider the transfer of raw water from the Schoharie Reservoir as an "addition of pollutants," citing *National Wildlife Federation v. Gorsuch*[6] and *National Wildlife Federation v. Consumer Powers Co.,*[7] both of which are dam permitting cases.[8] The Second Circuit was not persuaded by this analogy, holding that

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[5] S.B. 5028, 57th Leg., 1st Spec. Sess. (Wa. 2003).

[6] *See* 693 F.2d 156, 175 (D.C. Cir. 1982) (holding that dams should be considered a point source only if they "physically introduce a pollutant into water from the outside world").

[7] *See* 862 F.2d 580 (6th Cir. 1988) (holding hydroelectric facilities do not require Section 402 permits for pass-through water even though fish are killed, because the fish were already in the water, although alive, before being killed by the turbine blades).

[8] *Catskill* at 490.

both *Gorsuch* and *Consumers* "accorded unjustified deference to the EPA's interpretation of the term addition," as the EPA's position was never adopted in formal rulemaking.[9] The court held that because the premise of the *Gorsuch* and *Consumers* interpretation of the term "addition" was based on policy statements and opinion letters, it did not warrant deferential precedent.[10] Upon effectively tossing aside the precedent associated with EPA's interpretation of the term "addition," the court of appeals reevaluated the intent of the Clean Water Act.

The court did agree with the *Gorsuch* analysis that a point source must "introduce" a pollutant from the "outside world."[11] The court also agreed with the *Consumers* holding that mutilated fish did not constitute an "addition" because the fish had been in contact with the water prior to being churned up and discharged.[12] Based on these assessments, however, the Second Circuit concluded that "the transfer of water containing pollutants from one body of water to another, distinct body of water is plainly an 'addition' and thus a discharge that demands an NPDES permit."[13] In reaching this conclusion, the court noted that the *Catskill* case "strains past the breaking point" of the "sameness" assumption made by *Gorsuch* and *Consumers*.[14] The court held that the Schoharie and Esopus Creek waters are not the "same," and "[w]hen the water and the suspended sediment therein passes from [the Schoharie through the tunnel and into Esopus Creek], an 'addition' of a 'pollutant' from a 'point source' has been made to 'navigable water' and the terms of the statute are satisfied."[15]

The Second Circuit concluded that even if the Clean Water Act was ambiguous with respect to the facts of this case, a review of the legislative intent in defining an "addition" would not help because the history is silent on the meaning.[16] The court noted that the Clean Water Act "includes a broad and uncompromising policy of restoring and maintaining the chemical, physical, and biological integrity of the Nation's

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[9] *Id.*

[10] *Id.* In coming to the decision that broad deference was not appropriate under *Gorsuch* and *Consumers*, the Court cited *Christenson v. Harris County*, 529 U.S. 576, 120 S.Ct. 1655, 146 L.Ed.2d 621 (2000). In *Christenson*, the Supreme Court held that "[i]nterpretations such as those in opinion letters -- like interpretations contained in policy statements, agency manuals, and enforcement guidelines, all of which lack the force of law -- do not warrant Chevron-style deference." *Id.* at 587. "Instead," the Court continued, "interpretations contained in formats such as opinion letters are 'entitled to respect' ... but only to the extent that those interpretations have the 'power to persuade.'" *Id.* The Court consequently held that an opinion letter by the Department of Labor deserved only this form of limited deference in its interpretation of a provision of the Fair Labor Standards Act.

[11] *Catskill,* 273 F.3d at 491.

[12] *Id.* at 492.

[13] *Id.* at 491.

[14] *Id.* at 492.

[15] *Id.* In reaching this conclusion, the court cited both precedent and a First Circuit decision where there was a transfer of water sources, the more polluted source being conveyed into the more pristine source, and how these actions constituted an "addition." *See Dague v. City of Burlington*, 935 F.2d 1343 (2d Cir. 1991); *Dubois v. U.S. Dep't of Agriculture*, 102 F.3d 1273 (1st Cir. 1996).

[16] *Catskill,* 273 F.3d at 493.

waters," and that "transferring water and pollutants between watersheds...might well interfere with that integrity."[17]

2. *Miccosukee*

In *Miccosukee*, the Eleventh Circuit Court of Appeals reviewed the flood control operations of the South Florida Water Management District (the "SFWMD").[18] The SFWMD owns and operates various canals, levees and pump stations that are used to convey stormwater back and forth between impoundments to prevent flooding in low lying areas.[19] In doing so, the SFWMD, in essence, "transfers" water sources similar to the situation presented in *Catskill*. The dispute in *Miccosukee* arose over the fact that the SFWMD was transferring water between sources, and thereby "discharging pollutants" without an NPDES permit.[20]

The Eleventh Circuit in *Miccosukee* began its analysis of the floodwater transfer by assessing whether a point source was involved. The court held that "for an addition of pollutants to navigable waters to require an NPDES permit, that addition of pollutants must be from a point source."[21] The court further noted that, "the relevant inquiry is whether – *'but for'* the point source – the pollutants would have been added to the receiving body of water."[22] The court further broadened its tort line of reasoning by establishing that, "an addition from a point source occurs if a point source is the cause-in-fact of the release of pollutants into navigable waters," and determining that "when a point source changes the natural flow of a body of water which contains pollutants and causes that body of water to flow into another distinct body of water into which it would not have otherwise flowed, that point source is the cause-in-fact of the discharge of pollutants."[23] In evaluating the SFWMD's operations of transferring flood waters between watersheds to prevent flooding, the court concluded that such operations were indeed altering the natural flow, and that "the pump station's operations constitute an addition of pollutants from a point source."[24]

The U.S. Supreme Court granted the petition to review the Eleventh Circuit's decision in *Miccosukee*. In its opinion issued March 23, 2004, the Court expressly holds that point sources need not generate pollutants in order to be covered by the Clean Water Act permitting requirements,[25] and declined to resolve the argument presented by the United States government that all navigable waters should be treated as unitary for

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[17] *Id.* at 494.

[18] 280 F.3d 1364 (11th Cir. 2002).

[19] *Id.* at 1366.

[20] *Id.*

[21] *Id.* at 1368.

[22] *Id.*

[23] *Id.*

[24] *Id.* at 1369.

[25] *South Florida Water Management District v. Miccosukee Tribe of Indians* ____U.S.___, 124 S. Ct. 1537, 1543 (2004).

permitting purposes under the Clean Water Act because the argument was not presented to the lower courts (otherwise referred to as the "unitary waters" theory).[26] More importantly, the Court concludes that if the trial court determines that the canal and reservoir are not "meaningfully distinct water bodies," then a discharge permit will not be required.[27] Much of the Court's concern centered on evidence in the record suggesting that water would naturally flow from the basin served by the drainage canal into the wetlands reservoir, and that such flow is artificially prevented by levees.[28] In addition, the record contained some evidence that even without the project, water travels as both seepage and groundwater flow between the area served by the drainage canal and the wetlands reservoir.[29] It is interesting to note that the Court favorably cites to the Second Circuit's opinion in *Catskill Mountains*, and refers to its reasoning to illustrate that transfers involving a single water body do not trigger permitting requirements. [30]

The Supreme Court's opinion in *Miccosukee* does not expressly state that discharge permits are required for transfers between water bodies that are "meaningfully distinct," but its remand of the case to the trial court for further development of the record indicates that the Court considers this to be the controlling issue. It is possible that the Court, if the case is again appealed after the remand, could address the unitary waters theory advocated by the government, under which standard a discharge permit would not be required for raw water transfers. However, the Court's discussion of this argument in the opinion, and its concern regarding the factual record of the case, makes this possibility unlikely.

The full implications of *Miccosukee* will only be realized over the coming months and years. However, the opinion represents a significant shift in attention away from traditional permitting issues and places water supply projects, drainage and flood control projects and any other programs that involve the movement of raw water, squarely in the focus of the water quality protections mandated by the Clean Water Act.

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[26] *Id.* at 1545.

[27] *Id.* at 1547.

[28] *Id.*

[29] *Id.*

[30] *Id.*

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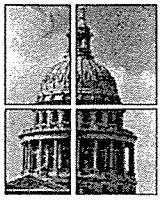

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ATTACHMENT 2

Water Quality Standards Submission Checklist

There is a need to clarify the existing requirements for submissions of water quality standards. This matter has become particularly important in light of the May 30, 2000 revision to the water quality standards regulation at 40 CFR 131.21 (c)(1). This new rule, EPA Review and Approval of State and Tribal Water Quality Standards (65 FR 24659), also referred to as the *Alaska Rule*, affects the effective date of water quality standards submitted by States and Tribes. Under the previous regulation, standards became effective for Clean Water Act (CWA) purposes and immediately available for implementation when adopted and certified by the State. The new regulation requires that EPA approve standards before they become effective for CWA implementation purposes. This underscores the importance for States and Tribes to provide a complete record consistent with the requirements at 40 CFR 131.6 at the time of submission to facilitate a timely review.

40 CFR 131.6 *(CFR text in italics.* **Commentary text in bold/blue.):**

The following elements must be included in each State's water quality standards submitted to EPA for review.

Incomplete submissions will not trigger our CWA 303 (c)(3) statutory time frame for review and action on submitted standards:

a) *Use designations consistent with the provisions of sections 101 (a)(2) and 303 (c)(2) of the CWA.*

If supporting documentation is not provided as a basis for uses inconsistent with the Act, that the standards submittal is not complete. Supporting documentation for use designations that are inconsistent with the Act should conform to 40 CFR 131.10 (g)(1-6). Such documentation should include expert opinion of state, tribal and federal wildlife agencies, academia, or other credible, independent experts and should reflect documentation of full review by the public pursuant to 40 CFR 131.20 and 40 CFR part 25.

b) *Methods used and analyses conducted to support water quality standards revisions.*

Such supporting documentation must be provided to EPA upon submission of the standards to provide the scientific and technical support of state and tribal decision making. Such documentation should include expert opinion of state, tribal and federal wildlife agencies, academia, or other credible, independent experts and should reflect documentation of full review by the public pursuant to 40 CFR 131.20 and 40 CFR part 25. A summary of changes to the WQS rule and/or a redline/strikethrough copy should also be provided for EPA review.

c) *Water quality criteria sufficient to protect the designated uses.*

Supporting documentation is required to provide a defensible basis for criteria that deviate from EPA criteria guidance. If such documentation is not provided, the standards submittal will not be considered complete.

d) *An antidegradation policy consistent with 40 CFR 131.12.*

To be consistent with 131.12, the standards submittal must include methods for implementation of the antidegradation policy. Note that 131.12 (a) specifies that "[t]he State shall develop and adopt a statewide antidegradation policy and identify the methods for implementing such policy . . ."

e) *Certification by the State Attorney General or other appropriate legal authority within the State that the water quality standards were duly adopted pursuant to State law.*

EPA's review pursuant to CWA 303 (c)(3) and 40 CFR 131.21 (a) will not commence without certification that the standards were adopted in accordance with state or tribal rulemaking procedures.

f) *General information which will aid the Agency in determining the adequacy of the scientific basis of the standards which do not include the uses specified in section 101 (a)(2) of the Act as well as information on general policies applicable to State standards which may affect their application and implementation.*

As stated previously, we must receive credible, defensible documentation to support the designation of uses that are inconsistent with CWA 101 (a)(2) and for criteria that are inconsistent with EPA guidance. We also interpret this to include notification by the state or tribe in a summary format of any policies or legislation that may affect the implementation of standards. Unless these policies or legislation have been transmitted to EPA previously, copies should be part of the WQS submittal package.

EPA cannot consider standards submitted for review and approval unless supporting documentation as described in this checklist is provided. Standards that are sent to EPA inconsistent with this checklist will be considered incomplete and our review under 303 (c)(3) and 40 CFR 131.21 (a) will not commence. We recommend that States and Tribes provide an annotated summary of these 40 CFR 131.6 checklist elements as part of the submission package. Inclusion of such a summary will greatly facilitate EPA's review and response concerning fulfilment of 40 CFR 131.6 and ultimately our approval of submitted standards. Incomplete submissions will not trigger our CWA 303 (c)(3) statutory time frame for review and action on submitted standards. EPA will notify the state or tribe within 90 days of receipt of standards regarding the adequacy of the submission.

g) Public Process Documentation:

- Public meeting, workshop, and hearing notices/agendas;
- Oral and written comments received;
- Responsiveness summary/responses;
- References used;
- Evidence of notification of neighbor entities, USFWS, NMFS, and other concerned entities of the proposed WQS action.
- Redline/strike-out version of the revised WQS (or a functionally equivalent document identifying revisions made.).

Steps for Internal Review

Notify state/tribe of the elements required for submission of WQS per 40 CFR 131.6 prior to proposal.

If tribal WQS, clarify status of program authorization and proceed with review accordingly.

Review submitted standards for baseline elements:

Does the standards rule designate uses consistent with the goals of the Act or is supporting documentation provided in their absence?

Are criteria consistent with up-to-date EPA guidance or is a defensible rationale provided for criteria revisions?

Have methods and analyses used to revise standards been provided?

Is antidegradtion included consistent with 40 CFR 131.12?

Has the state/tribe provided AG certification?

Is there documentation of public participation requirements having been fulfilled? Responses to comments included?

If baseline has not been met, notify state/tribe of deficiency and request that these items be provided prior to commencing Agency review under statutory time frames.

If baseline elements are included with the submission, coordinate review of bases for revised standards within Regional program offices and ORC as appropriate, and OST, ORD, OGC, or other Agency expertise as appropriate.

Timeframes: 60 days – approve and notify the State
90 days – disapprove and notify the State of remedy
After 90 days if State does not remedy – promptly propose and promulgate
135 days – complete formal ESA consultation

1st week – review submission against checklist
– ORC partner
– notify OST liaison

2nd week – ID issues: approvable/not approvable and basis for recommendation

– List of T&E species and FWS/NMFS contact

35 days – Draft approval/disapproval letter

45 days – Draft Biological Evaluation/share with Services

50 days – Submit BE to Services, trigger formal consultation if concurrence not forthcoming

60 days – Letter to State notifying of approval/disapproval (note ESA 7(d) in letter as appropriate
– ESA 7(d) memo

90 days – Issue Disapproval

EPA Region 6 Guidance
Water Quality Standards - Backlog Strategy

Goal:

The primary goal in developing this Backlog Strategy to is to outline a process for cooperation between EPA and Region 6 States and Tribes in the water quality standards process. This includes the development process and action on new and revised water quality standards and resolution of the existing standards backlog. This document will provide some background on how the backlog developed and EPA's strategy to resolve it. It will also address EPA and State authorities and statutory responsibilities. More importantly, it will discuss actions that Region 6 and States/Tribes can take outside of the regulatory framework that will help us meet our common goal of timely standards actions.

Background:

EPA's water quality standards regulation at 40 CFR 131.21 previously provided that State and Tribal WQS were in effect once adopted by the State or Tribe. EPA has 60 days to approve or 90 days to disapprove such WQS. State and Tribal WQS remained in effect, even if EPA disapproved them, until the State or Tribe revised them or EPA promulgated a Federal rule to supersede the State or Tribal WQS. This position was successfully challenged, and in 1997, the United States District Court for the District of Washington issued an opinion in this case that noted that the plain meaning of Clean Water Act (CWA) section 303(c)(3) was that new or revised State water quality standards did not become effective for CWA purposes until approved by EPA. As part of a settlement agreement, EPA proposed revisions to 40 CFR 131.21(c) consistent with the Court's opinion. This ruling is commonly referred to as the "Alaska rule."

The Standards Program was not prepared to address the backlog of standards actions this ruling instantaneously created while dealing with States and Tribes ongoing adoption of new and revised standards within the 60 - 90 day statutory time frame described in the CWA and now reflected in the standards regulation. As a result, the backlog led to the Water Quality Standards Program to be declared a Material and Agency Weakness in 1999.

Federal Managers' Financial Integrity Act (FMFIA):

Without timely and consistent approvals, disapprovals and promulgations, needed improvements in water quality could be delayed. EPA's original goal under FMFIA was to reduce the backlog of actions to approve, disapprove and promulgate water quality standards by 2004. The revised goal is to reduce the outstanding disapproval backlog to no more than one State/Tribe in each EPA Region, on average, with a pre-Alaska (submitted prior to May 2000) disapproved standard by 2004. For outstanding submissions, the revised goal is to take action, in each Region, on at least 75% of the State/Tribal submissions within the 90 day statutory timeframe and action on 90% of the State/Tribal submissions within one year.

EPA is employing a two-tiered strategy in an effort to eliminate the existing backlog. In the short term, high priority is being given to resolving the outstanding disapprovals and unreviewed standards. EPA as a whole made considerable progress, reducing both the number of outstanding disapprovals and the number of unreviewed standards. In the longer term the Agency is working to identify and eliminate the problems that have led to the backlogs and other concerns. The FMFIA target for completion of corrective actions is in FY 2004.

Strategy to Eliminate the Standards Backlog:

The FMFIA goal described in the preceding section is reflected in the Region 6 Strategic Plan. The Region 6 Plan commits to the review and approval of State and Tribal submittals in a timely and appropriate manner. However, a strategy to eliminate the *existing backlog* as reported under the GPRA must be integrated with the ongoing need to manage *future submissions* as described in the FMFIA goal and the Region 6 Strategic Plan.

The development of a strategy to address increasingly complex and voluminous State/Tribal submissions in a timely manner and eliminate the existing backlog requires an increase in available resources as well as a redeployment of existing resources. Region 6 Water Division management has recognized this need, resulting in the expansion of the Standards Team. The Standards Team has redeployed existing staff to address the most resource intensive areas of responsibility - managing large and technically complex submissions and Endangered Species Act consultations.

EPA and State/Tribal Authority:

States and authorized Indian Tribes are responsible for reviewing, establishing, and revising water quality standards. Although the water quality standards program is a State/Tribal primacy program, EPA retains an oversight role as described in Section 303(c) of the CWA and the standards regulation at 40 CFR 131. EPA's main oversight objectives when reviewing a State's water quality standards are to ensure that State water quality standards meet the requirements of both the CWA and standards regulation.

Section 303(c)(1) of the CWA requires States and authorized Tribes to hold public hearings to review applicable water quality standards and, as appropriate, to modify and adopt standards at least once every 3 years. The 3-year period is measured from the date of the letter in which the State informs EPA that revised or new standards have been adopted and are being submitted for EPA review or, if no changes were made in the standards for those waters, from the date of the letter in which the State informs EPA that the standards were reviewed and no changes were made.

Understanding the WQS Review and Revision Process:

Initiation of State/Tribe Triennial Revisions:

The standards revision process does not begin with the submission of new and revised standards to EPA, but when a State or Tribe initiates a review of its existing standards. Although there are no specific statutory or regulatory requirements to do so, the Water Quality Standards Handbook discusses the importance of early initial consultation with Regional offices when States or Tribes *begin* activities to revise or adopt new water quality standards, *well before the State/Tribal standards are formally submitted for EPA review* as described in **Attachment 1**.

Although it's not a regulatory requirement for States/Tribes, EPA believes that it is in their own best interest to involve the Region 6 staff as early in the process as practicable to gain assistance and feedback on new/revised provisions under consideration. Region 6 and EPA Headquarters will conduct concurrent reviews of draft standards and supporting documentation and make comments on proposed revisions to assist the State/Tribe in producing standards that are approvable. Initial and continuing cooperation between States/Tribes and EPA is essential to timely approvals. Early consultation with EPA will provide the following benefits:

- Early consultation will allow the State/Tribe and EPA to determine where assistance may be provided;
- States and Tribes will benefit from early identification of potential areas of disagreement. This allows these issues to be discussed and worked out well before submission and formal review.

State/Tribal Standards Submission Management:

State/Tribal standards submissions can vary significantly in volume and/or technical complexity. Complex submissions, particularly those that include significant criteria modifications, large numbers of use attainability analyses and/or water effect ratios can and do overwhelm the "system." The intent of this Strategy document is to identify ways in which Region 6 and States/Tribes can streamline the process to meet our common goal of standards approvals accomplished within EPA's statutory time frame.

There is no specific statutory or regulatory language that allows EPA to avoid review of any new or revised provisions with the exception of instances where the State/Tribe has adopted a "performance-based" approach. The performance-based approach is described in the preamble to the "Alaska rule" [Federal Register: April 27, 2000 (Volume 65, Number 82)]. A performance-based approach relies on adoption of a process (i.e., a criterion derivation methodology) rather than a specific outcome (i.e., concentration limit for a pollutant) consistent with 40 CFR 131.11 and 131.13. When such a ``performance-based" approach is sufficiently detailed and has suitable safeguards to ensure predictable, repeatable outcomes, EPA approval of such an approach can also serve as approval of the outcomes as well. If a particular State or

Tribe's approach is not sufficiently detailed or lacks appropriate safeguards, then EPA review of a specific outcome is still necessary.

Because the types and significance of revisions to water quality standards may differ significantly between submittals and the lack of statutory and/or regulatory language, it is not possible to provide a listing of specific provisions of water quality standards (i.e., definitions, mixing zone provisions, etc.) which may be excluded as part of a differential review process. As a result, the Regional and State/Tribal coordinators must evaluate a submission to determine the resource requirements to complete the technical review and how that review can be streamlined. Streamlining will primarily be accomplished by disseminating portions of large or technically complex submissions to one or more Team members with specific expertise as described in the following section in an effort to meet EPA's statutory 60/90-day time line.

State and Tribal standards submissions must meet the minimum requirements that are detailed in 40 CFR 131.6. In terms of the technical review, this regulation is referring to the methodology and analyses used and detailed supporting scientific data that all new/revised provisions and criteria are based on. It's important that States and Tribes understand why that this level of detail is necessary - it is not because EPA questions the State/Tribes intent, but because the Agency has a statutory obligation to ensure that standards it approves meet the requirements of the CWA and standards regulation. By providing the required detailed supporting documentation, States/Tribes serve their own interests since it will:

- Expedite EPA's formal review and facilitate timely approval;
- Avoid potential disapproval of new and revised standards; and
- Place EPA in a position to respond to both support and defend the revised standards from external challenges.

As part of the initial evaluation, the State/Tribal coordinator will determine if the submission meets these minimum requirements following the **Attachment 2** checklist. When reviewing a State or Tribe's water quality standards, an important part of the State/Tribal coordinator's job is to develop a clear record of decision to support actions taken to approve, and is statutorily required to specify corrective action for disapproved standard provisions. Where a submission or specific provision lacks adequate supporting documentation, it will be considered incomplete and not reviewable. Region 6 will notify the State/Tribe that a submission/provision is incomplete as soon as this determination has been made. It is the State/Tribe's responsibility to provide additional supporting information. If adequate information is not received within the 60 day timeframe, the Region will disapprove or indicate that no action could be taken on that submission/provision.

Team Structure/Assignments:

The Standards Team has historically been structured with individuals working with a particular State(s)/Tribe(s) through the entire triennial revision process. This basic structure

remains appropriate, utilizing new and intern staff to address technical issues that take a significant time commitment, but require less program experience. The Region 6 WQS Team currently consists of 5.5 full-time staff and 1 Intern (temporary). Assignments are as follows:

Russell Nelson - Regional coordination, New Mexico;
Diane Evans - Texas, New Mexico Tribes;
Julia Alderete - Oklahoma, Oklahoma Tribes;
Stephen Bainter - Louisiana, TX/OK WER, TX ESA;
Melinda Nickason - Arkansas, Oklahoma Tribes, TX ESA;
Renee Bellew (0.5 FTE) - TX/OK WER, TX Site-specific criteria/variances, Tribal ESA
Carlie Rodriguez (Intern) - ESA database - toxicity data and species summaries.

EPA Headquarters Staff Redeployment:

Although the expansion of the Region 6 Standards Team will provide needed resources, EPA Headquarters also recognized the need to provide additional technical assistance for all EPA Regions. Within the Office of Science and Technology (OST) eleven people and positions from the Engineering and Analysis Division (EAD) are being redeployed to the Standards and Health Protection Division (SHPD). The redeployed staff have been described as highly qualified, including people with some depth in water quality standards and related areas, and with skills that will help the Regions achieve the goal of eliminating the backlog. Region 6 will determine which portions of State/Tribal standards submissions should be reviewed by OST staff. The first five new SHPD staff will be deployed in early April, 2004. Two more will be deployed in June and the final four in December, 2004.

Endangered Species Act Consultation - Memorandum of Agreement:

The Region 6 Standards Team commits a significant portion of its resources to carrying out consultations under the Endangered Species Act (ESA) with the Services. Preliminary work and these consultations themselves are carried in parallel to work with the State and/or Tribe as shown in **Attachment 1**. The Region 6 Team's actions in consultations have generally been guided by the 2001 Memorandum of Agreement (MOA) between EPA, Fish and Wildlife Service, and National Marine Fisheries Service. The MOA describes National procedures for inter-agency coordination and elevation of issues to speed decisions and improved consultation procedures for EPA approval of State and Tribal water quality standards.

More specific to regional programs, the MOA directs EPA/Services to establish local/regional review teams that will meet periodically to identify upcoming priorities and workload requirements and generally ensure close coordination on the full range of activities involving water quality and endangered/ threatened species protection. It also includes a procedure for elevating issues that may arise among regional and field offices, including formal or informal consultations. These review teams are to develop procedures for working with States and Tribes on standards issues. Although local/regional teams have not formally been

established, the Standards Team and the Service Field offices have generally followed this process with individual Standards Team members consulting with their Service counterparts on State/Tribal standards revisions. Region 6 anticipates establishing local/regional teams following the upcoming CWA/ESA MOA Training that is discussed in the following section.

Both EPA and the Services recognize that Section 7 consultation is a federal responsibility. However, Region 6 believes that it's important for States/Tribes to understand how the consultation process affects the review of standards submissions, and that there are clear benefits to working with both EPA and the Services *early in the standards development process*. As part of the Region's efforts to improve the understanding of how ESA consultation affects the review of standards submission, Region 6 hosted an informal Standards Streamlining workgroup meeting. Attendees included FWS, State/Tribal and EPA staff. One of the goals of this meeting was to describe the requirement to consult under the section 7 of the ESA and that the process is not considered in section 303 of the CWA. An important objective was to demonstrate the that it is difficult if not impossible to complete consultation within the statutory time frame unless there is extensive cooperation between the federal agencies and State/Tribe early during the revision process.

By working cooperatively with both federal agencies early in their revision process, States/Tribes can identify proposed standards that may adversely effect threatened/endangered species and critical habitat, and revise those provision/criteria *before* they are adopted and submitted to EPA for review. This approach will benefit the State/Tribe as well as both federal agencies by:

- Allowing EPA to streamline its review,
- Avoiding potential EPA disapproval, and
- Reduce the number of EPA approvals subject to Section 7(d).

MOA Training:

Although this workgroup should be considered a good first step, the MOA calls for joint EPA/Service training sessions with Regional and Field Office personnel to facilitate better understanding of the two agencies authorities and responsibilities in implementing the MOA.

XXXXXXXXXXXXX Paragraph not current:
MOA training for the Region 6 Standards Team and its Service counterparts has been delayed for over a year because of the Services limited travel resources. This still remains as a potential problem. However, the training has been tentatively scheduled for April 20 - 22, 2004. Once completed, this training will further enable the Region 6, Service and States/Tribes staff to work together as a cooperative team to further streamline the standards review process and parallel consultation processes, conserving resources and allowing timely action on standards submissions.

State/Tribal Submission Evaluation and Assignment:

State/Tribal revisions will be evaluated at the time they are submitted to determine the resource requirements and time that will be necessary to complete the technical review within EPA's statutory time frame. In addition, the resources needed to complete the parallel ESA consultation. The **Attachment 1** flowchart describes the overall process.

Day 1-7 State/Tribal Coordinator evaluation of submission:

The individual State/Tribal Coordinator will make an initial assessment of the submission to evaluate the volume and technical complexity of the submission. This evaluation will include a determination of whether adequate supporting scientific or technical information has been submitted to allow a determination of the adequacy of the new/revised standards, identification of any politically complex/sensitive issues; and a preliminary determination of provisions that are clearly approvable or not approvable. **This information will be discussed with the Regional Coordinator to determine if the submission requires additional staff resources to complete the review within the statutory timeframe.** Individual submissions remain the overall responsibility of the Team member assigned to that particular State or Tribe.

The Regional and State/Tribal coordinators will make an initial determination of how to approach the review during ***Day 1-7*** following submission. This will include an evaluation of provisions are clearly approvable, those that require technical analysis and review, and those that should be deferred while working to reach resolution of issues with the State/Tribe. Depending on the volume and technical complexity of the submission, portions of the technical review or ESA work may be assigned to other Team members. Extensive or technically complex submissions - those that include water effect ratios (WER), multiple use attainability analyses (UAA) and/or politically sensitive issues - will be broken down for differential review by specific staff based on their area of expertise and current work load as described in *Team Structure / Assignments*. On ***Day 10***, the Regional and/or State/Tribal coordinator(s) will brief the Section Chief on the Review Strategy, stressing politically sensitive issues that will typically be out of the Review Team's control.

Day 10-45 State/Tribal Coordinator / Team Review of Submittal

The bulk of the technical review for State/Tribal submissions will be carried out during the ***Day 10-45*** timeframe. Review Team members will make an initial determination of whether the new/revised provision(s) they are reviewing meet the minimum requirements as described in 40 CFR 131.6, specifically the methodology and supporting scientific analyses and used and to carry out and support the revisions. If, during the first **10 days** in the review of particularly complex provisions such as WER or UAA, the provision itself or supporting documentation does not allow a supportable decision, the Review Team member or Coordinator will request additional supporting information from the State/Tribe. Review of WER will be guided by

Attachment 3. If additional supporting information is not provided within a reasonable timeframe to allow completion of the review, the provision should be recommended to the Section Chief for no action or disapproval.

Day 45 - 60 Preparation for and Final EPA Action

The review of all provisions will be complete by the end of the ***Day 10-45*** timeframe. During the ***Day 45 - 55*** timeframe, the State/Tribal Coordinator will prepare a draft letter and Record of Decision (ROD) describing the final EPA action and briefing materials based on the ROD for Region 6 management and EPA Headquarters (as necessary). Briefing will include the status of the concurrent ESA consultation. Action on State/Tribal submissions that EPA has not received concurrence from the FWS/NOAA Fisheries will not be delayed beyond the statutory 60-90 day timeframe, but will be made under Section 7(d) of the Endangered Species Act. During the ***Day 55 - 60*** timeframe, a final EPA approval letter and ROD will be developed and be routed for concurrence.

Reporting Progress:

The current standards backlog is being tracked under Government Performance and Results Act (GPRA). GPRA requires agencies to report each year on their progress towards achieving their strategic goals through Annual Performance Reports. These Performance Reports are intended to allow EPA managers to evaluate and adjust strategies, program directions, and resource allocations to achieve program results.

Reporting under GPRA is often delayed and not illustrative of 1) the progress that has been made on submissions, 2) the dependence on State/Tribal or EPA Headquarters action for resolution, 3) management decisions to delayed action, or 4) instances where submissions may be double counted by being listed in more than category.

The inherent problems with reporting under GPRA described above have been noted. OST is leading an effort to create a Water Quality Standards Tracking Database (WQSTDB) intended to allow more discrimination in reporting. The Region 6 Standards Team is working with OST and other Regions to implement and refine the new database. Refinements sought are to allow consistent reporting and a recognition of the volume and complexity of some submissions that the current GPRA tracking does not provide.

Self-Reporting:

The Standards Team will use the WQSTDB as a basis for reporting status and progress on backlog and new State/Tribal submissions. Progress reports will be provided through monthly briefs to Division management. When schedules prevents direct briefings, these reports will be provided via email.

Leigh Ing, Deputy Director
Office of Permitting, Remediation & Registration (MC-122)
Texas Natural Resource Conservation Commission
P.O. Box 13087
Austin, TX 78711-3087

Dear Ms. Ing:

The Environmental Protection Agency (EPA) has completed its review of Appendix D - Site-specific Receiving Water Assessments of the *Texas Surface Water Quality Standards* (TX WQS). These standards were adopted by the Texas Natural Resource Conservation Commission (TNRCC) on July 26, 2000, and submitted to the EPA for approval on September 27, 2000. I am pleased to inform you that the EPA is approving all of the new and revised elements of Appendix D pursuant to §303(c) of the Clean Water Act (CWA) and the implementing regulation at 40 CFR Part 131.

The new and revised standards in Appendix D include aquatic life uses and dissolved oxygen criteria for perennial and intermittent waterbodies which are not included in the TX WQS as classified segments. Under the TX WQS, a high aquatic life use is presumed for perennial streams and a limited aquatic life use is presumed for intermittent streams with perennial pools. Based on information collected in receiving water assessments, the TNRCC prepared fifty-four Use Attainability Analyses (UAAs) for perennial streams or groups of perennial waterbodies. The EPA's review of each of the UAAs found that the TNRCC's recommendation for an intermediate aquatic life use, a limited aquatic life use and/or site-specific criteria for dissolved oxygen or flow, was "approvable." Table 1 (enclosed) includes the locations and revised standards for these water bodies.

As the TNRCC conducts receiving water assessments, some streams may be found to have higher uses than the presumed uses. These waterbodies and revised uses are incorporated in Appendix D during interim or triennial revisions. During the 2000 revision of the TX WQS, fifteen intermittent streams with perennial pools were designated with intermediate or high aquatic life uses. One unclassified stream with a presumed high aquatic life use was designated with an exceptional aquatic life use. Table 2 (enclosed) includes the locations and designated aquatic life uses for these sixteen waterbodies.

In addition, three streams with previously approved limited or intermediate aquatic life uses in Appendix D were upgraded to high aquatic life uses in the 2000 revision of the TX WQS. Table 3 (enclosed) includes the locations and revised aquatic life uses for these three waterbodies. Finally, the TNRCC's receiving water assessments documented that the presumed uses are appropriate for twenty-eight water bodies. Table 4 (enclosed) includes the locations of these water bodies. The other new and revised standards in Appendix D include spelling

corrections, revised footnote numbers and a boundary revision for Mud Creek in segment 0611 (previously designated as high aquatic life use).

The EPA has also completed consultation with the U.S. Fish and Wildlife Service (USFWS) under §7 of the Endangered Species Act (ESA) on the new and revised standards shown in Tables 1, 2, 3 and 4. §7 of the ESA states that "Federal agencies shall, in consultation with and with the assistance of the Secretary, utilize their authorities in furtherance of the purposes of this Act by carrying out programs for the conservation of endangered species and threatened species listed pursuant to section 4 of this Act" and "each Federal agency shall... insure that any action authorized, funded, or carried out by such agency is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of such habitat of such species." The USFWS concurred with the EPA's finding that approval of the new and revised standards in Appendix D is not likely to adversely affect endangered/threatened species or critical habitat.

I would like to commend the TNRCC staff for its commitment in completing the task of reviewing and revising the state's water quality standards. The EPA will take separate action on the remaining new and revised parts of the TX WQS. If you have any questions or concerns, please contact me at (214) 665-7101, or have your staff contact Diane Evans at (214) 665-6677.

Sincerely,

Sam Becker
Acting Director
Water Quality Protection Division (6WQ-EW)

Enclosures

cc: Jim Davenport, TNRCC- Water Quality Assessment Section (MC-150)
Allen White, USFWS - Austin Ecological Services Office

Table 1. Use Attainability Analyses

Segment	Water body	County	Comments
0202	Bois D'Arc Creek	Fannin	Use changed to intermediate
0202	Pine Creek	Lamar	Use changed to intermediate
0404	Dry Creek & Sparks Branch	Camp	Uses changed to intermediate
0404	unnamed tributary of Okry Creek	Morris	Use changed to intermediate
0407	Beach Creek	Cass	Use changed to intermediate
0505	Rabbit Creek	Gregg	Site-specific criteria for dissolved oxygen and flow adopted; intermediate use (previously approved
0505	Little Rabbit Creek	Rusk	Use changed to intermediate
0505	Wall Branch	Panola	Use changed to intermediate
0505	Wards Creek	Harrison	UAA previously approved in 1997 revision. Stream boundaries clarified in this UAA
0506	unnamed tributary of Grand Saline Creek	VanZandt	Use changed to intermediate; site-specific dissolved criterion of 3 mg/l
0506	Giladon Creek	VanZandt	Use changed to intermediate
0510	Mill Creek & Adaway Creek	Rusk	Uses changed to intermediate (upgrade for Adaway Creek)
0604	Cedar Creek	Angelina	Use changed to intermediate
0605	Little Duncan Branch	Henderson	Use changed to intermediate
0701	Green Pond Gully & Mayhan Gully	Jefferson	Uses changed to intermediate
0702	Jefferson County Drainage Canals	Jefferson	Uses maintained at intermediate; dissolved oxygen criterion changed to 3 mg/l
0704	Willow Marsh Bayou	Jefferson	Use changed to intermediate
0803	Parker Creek & Harmon Creek	Walker	Parker Creek - use changed to intermediate; Harmon Creek - use kept at high
0803	Turkey Creek	Walker	Use changed to intermediate
0804	Mims Creek	Freestone	Use changed to intermediate
0804	Box Creek	Anderson	Use changed to intermediate
0815	Waxahachie Creek	Ellis	Use changed to intermediate
0818	Onemile Creek	Henderson	Use changed to intermediate

Segment	Water body	County	Comments
0827	White Rock Creek & Cottonwood Creek	Dallas	Uses changed to intermediate
0836	Pin Oak Creek	Hill	Use changed to intermediate
1002	Tarkington Bayou	Liberty	Use changed to intermediate
1004	Unnamed Tributary	Montgomery	Use changed to intermediate
1004	East Fork White Oak Creek	Montgomery	Use changed to intermediate
1008	Panther Branch (portion, see Table 4)	Montgomery	Use changed to intermediate
1008	Mill Creek	Montgomery	Use changed to intermediate
1009	Dry Creek	Harris	Uses changed to limited and intermediate
1009	Dry Gully	Harris	Uses changed to limited and intermediate
1012	Robinson Creek	Walker	Use changed to intermediate
1012	Town Creek	Montgomery	Use changed to intermediate
1014	Buffalo Bayou	Harris	Use changed to intermediate
1014	Bear Creek & South Mayde Creek	Harris	Uses changed to intermediate for reaches in Addicks Reservoir; boundaries clarified; limited use (previously approved) retained for upper reach of South Mayde Creek
1014	Langham Creek	Harris	Reach extended - use changed to intermediate; limited use (previously approved) retained for upper reach
1014	Turkey Creek	Harris	Use changed to intermediate
1014	Horsepen Creek	Harris	Reach extended - use changed to intermediate for lower reach; limited use (previously approved) retained for upper reach
1014	Mason Creek	Harris	Intermediate use extended downstream; upper boundary extended
1102	Mary's Creek/ North Fork Mary's Creek	Brazoria	Use changed to intermediate
1105	Flores Bayou	Brazoria	Use changed to intermediate
1202	Beason Creek	Grimes	Use changed to intermediate
1209	Wickson Creek	Brazos	Use changed to limited
1221	Indian Creek	Comanche	Use changed to intermediate
1221	Pecan Creek	Hamilton	Use changed to intermediate

Segment	Water body	County	Comments
1305	Hardeman Slough	Matagorda	Use changed to intermediate
1404	Hamilton Creek	Burnet	Use changed to intermediate
1412	Deep Creek	Scurry	Use changed to intermediate
1418	Hord Creek	Coleman	Use changed to intermediate
1434	Gazley Creek	Bastrop	Use changed to intermediate
2422	Anahuac Ditch	Chambers	Use changed to intermediate
2432	Mustang Bayou	Brazoria	Use changed to intermediate
2201, 2202, 2491, & 2494	perennial drainage ditches	Cameron, Hildago, Willacy	Uses changed to limited

Table 2. New water bodies in Appendix D with upgraded aquatic life uses

Segment	Water body	County	Presumed aquatic life use	2000 TX WQS
0203	Big Mineral Creek ‡	Grayson	limited	intermediate
0203	Little Mineral Creek ‡	Grayson	limited	intermediate
0303	Morrison Branch ‡	Red River	limited	intermediate
0505	Rocky Creek ‡	Gregg	limited	high
0607	Cotton Creek ‡	Jefferson	limited	intermediate
1101	Magnolia Creek ‡	Galveston	limited	intermediate
1206	Kickapoo Creek ‡	Hood	limited	intermediate
1206	Rock Creek ‡	Parker	limited	intermediate
1206	Unnamed Tributary of Rock Creek ‡	Parker	limited	intermediate
1242	Thompson Creek ‡	Brazos	limited	intermediate
1246	Comanche Springs Spring Brook ‡	McLennen	limited	high
1246	Harris Creek ‡	McLennen	limited	high
1402	Cummins Creek ¶	Colorado	high	exceptional
1402	Allen Creek ‡	Fayette	limited	intermediate
1604	East Mustang Creek ‡	Wharton	limited	intermediate
1605	West Navidad River ‡	Fayette	limited	high

‡ intermittent stream with perennial pools
¶ perennial stream

Table 3. Perennial streams in Appendix D with revised uses

Segment	Water body	County	1997 TX WQS	2000 TX WQS
0604	Alto Branch	Cherokee	limited	high
0604	Larrison Creek	Cherokee	limited	high
1244	Brushy Creek	Williamson	intermediate	high

Table 4. Water bodies with presumed uses confirmed

Segment	Water body	County	2000 TX WQS
0402	Hughes Creek ¶	Cass	high
0404	Tankersley Creek ¶	Titus	high
0503	Caney Creek ¶	Newton	high
0506	Wiggins Creek ¶	Smith	high
0506	unnamed tributary of Sabine River (Ninemile Creek) ¶	Wood	high
0513	Trout Creek	Jasper	high
0604	Caddo Creek ¶	Anderson	high
0604	unnamed tributary of Caddo Creek ¶	Anderson	high
0604	Graham Creek ¶	Angelina	high
0606	Prairie Creek ¶	Smith	high
0607	Boggy Creek ¶	Hardin	high
0610	Ayish Bayou ¶	San Augustine	high
0611	Henshaw Creek ¶	Smith	high
0802	Choates Creek ¶	Polk	high
0802	Long King Creek ¶	Polk	high
0803	Harmon Creek ¶	Walker	high
1001	Gum Gully ¶	Harris	high
1001	Jackson Bayou ¶	Harris	high
1001	Rickett Creek ‡	Harris	limited
1004	West Fork White Oak Creek ¶	Montgomery	high
1008	Panther Branch (portion - also see Table 1) ‡	Montgomery	limited
1202	unnamed oxbow slough ‡	Fort Bend	limited
1230	Palo Pinto Creek ¶	Eastland	high
1402	Buckners Creek ¶	Fayette	high
1412	North Fork Champion Creek ‡	Mitchell	limited
1434	Cedar Creek ¶	Bastop	high
1602	Big Brushy Creek ¶	DeWitt	high
1810	Town Branch ¶	Caldwell	high

‡ intermittent stream with perennial pools
¶ perennial stream

T. David Gillespie, Esq.

Mr. Gillespie is an Assistant Regional Counsel in the Region 6 office of the United States Environmental Protection Agency (EPA) in Dallas, TX. His current assignments include defensive litigation and counseling for legal matters in water law and the Resource Conservation and Recovery Act, including water quality standards, national pollutant discharge elimination system permitting (including work on the concentrated animal feeding operation general permits and offshore oil and gas general permits), storm water, total maximum daily loads, solid and hazardous waste identification, and hazardous waste delisting. Mr. Gillespie has been a speaker for numerous organizations and conferences regarding environmental law issues, including the EPA Nonpoint Source Watershed Conference, the EPA MS4 Storm Water Conference, and the Special Library Association Annual Meeting. Before joining Region 6, Mr. Gillespie was a litigation attorney in Little Rock Arkansas at the firm of Williams and Anderson, concentrating in environmental litigation and counseling. Also, as President and member of the Board of Directors, Mr. Gillespie pioneered Tree Streets, Inc., a company specializing in planting and caring for trees in economically depressed communities, into the largest non-profit urban forestry organization in the State of Arkansas. Mr. Gillespie also served as a consultant for the City of Little Rock Land Alteration and Landscape Ordinance Task Force, drafting new city ordinances on construction and landscaping. Mr. Gillespie holds a J.D., *cum laude*, from Vermont Law School, where he concentrated on environmental law studies, and a B.A. in economics and English literature from the University of Michigan. He is admitted to the Arkansas Bar.

WATER RESOURCES IN THE 78TH LEGISLATIVE INTERIM

BY

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Dependable, sustainable, and fresh water is not uniformly abundant in Texas. Whether you view the challenge as one of allocating water supply or as one of allocating water shortage, the challenge this circumstance presents is one of the most controversial that the Texas Legislature faces with regard to the State's natural resources. In this day and time, even the happier task of legislative action to increase available water supply is not without its disagreements.

To put in perspective the water-resource issues facing the Legislature in this interim before the 79th Regular Session onvenes on January 11, 2005, this paper begins with a brief primer on property rights in water. A discussion of select issues of most general interest follows, including background, anticipated legislative activity, and resources for more information. The discussion does not address all water-resource matters being considered in the interim. Please see the attachments for a complete reference to the interim and legislative charges for the following groups: Senate Select Committee on Water Policy, Senate Natural Resources Committee, House Natural Resources Committee, Environmental Flow Study Commission, and Water Conservation Implementation Task Force. Charges to the Texas Commission on Environmental Quality ("TCEQ") Permitting Committee (House Bill 7) are not included because the proposed legislation that served as an impetus to the creation of the Committee did not deal with water rights and the Committee, for that reason, is not expected to focus on water-rights permitting.

1. A BRIEF PRIMER ON TEXAS WATER RIGHTS

1.1 Surface Water Rights

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 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 bay 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).[1] 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

[1] References to "Water Code" are to TEX. WATER CODE ANN. (Vernon 2000 and Supp. 2004).

Texas. *See* Water Code § 11.301, *et. seq.* Adjudication was to settle the rights of 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 for 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.*, 638 S.W. 2d 557 (Tex. App.–Austin 1982) *rev'd* 689 S.W.2d 873 (Tex. 1984).

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). However, when water is taken into possession by the appropriator, the appropriator acquires ownership of the water itself, albeit ownership burdened by the conditions of use. 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.

Outside the Middle and Lower Rio Grande River Basins where rights are based on a proportionate sharing in water stored in two international reservoirs, another element of surface water rights in Texas is the time priority of appropriation. The first in time is the first in right. Water Code § 11.027; TCEQ 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 also can 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.

1.2 Groundwater Rights

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); *Sipriano 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). When water flows in a defined subterranean stream, however, the law recognizes the water to serve as surface water. A subterranean 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 uniformly have held that water flowing in a subterranean stream belongs to the State, no court has squarely found the water flowing in question to be part of a subterranean stream, primarily due to a lack of hydrological evidence needed to override the presumption that water under the ground is "percolating."

Texas is the only Western State that still adheres to the rule of capture for groundwater. State restrictions on groundwater pumpage have been limited to disallowing waste, preventing withdrawal for malicious purposes, and preventing subsidence. Dissatisfaction with the rule of capture, however, has led to the creation of numerous local groundwater districts. Groundwater districts generally exercise those powers that are authorized by Texas Water Code Chapter 36 and those powers that are authorized in special enabling legislation, if any. District regulatory powers generally are expansive and include the authority to regulate the amount of groundwater that can be withdrawn from a well and the amount that may be transported to distant uses. However, in many groundwater districts, and certainly where groundwater is produced outside the boundaries of a district, a landowner may make such commerce in the resource as he wishes, subject to relatively few legal constraints. In considering groundwater rights in relation to permitted surface water rights, it is imperative to recall that the genesis of the former is in ownership of the land while the genesis of the latter is in a conditional grant of water use from the State. Groundwater districts do not grant the right to withdraw groundwater. They regulate that right. Groundwater reduced to possession–just like surface water reduced to possession–is private property.

2. SELECT ISSUES IN THE 78TH LEGISLATIVE INTERIM

2.1 Interbasin Transfers from Existing Water Rights

Background:

Interbasin transfer protection arguably was the single most divisive water-rights issue during three of the past four legislative sessions. Senate Bill 1, 75th Legislative Session ("Senate Bill 1"), with a general focus on encouraging water-rights marketing, made significant changes to the State's interbasin-transfer laws that had been in place in one fashion or another since 1913. Specifically, it repealed provisions of the Water Code that prohibited transfers that would prejudice persons or property in the river basin of origin. Although agency precedent before that time was inconsistent, it is fair to characterize that precedent as more often than not assigning a new time priority to amendments to existing water rights that proposed to include new interbasin transfer authority.

Senate Bill 1 added, to the Water Code, various standards and notice provisions for granting interbasin transfers, related both to new and to existing water rights. To guard basin of origin water rights in light of the proposed repeal of the "no prejudice to persons or property" language, the House also championed the amendment of Senate Bill 1 to add a provision that would compare factors within the regional plan regarding the impact of a proposed amendment to authorize interbasin transfer against the *historic use* of the underlying water right and another provision that would assign *all* new interbasin transfers from existing water rights a time priority based on the date the application for amendment was declared administratively complete—a "junior" time priority.

The junior-priority protection, in essence, presumes injury and mitigates it. The protection has impact on a proposed transfer when there is not enough water reliably available in the basin of origin to satisfy both the new transfer and the existing water uses that remain. Where a proposed transfer is impacted by the provision, that impact often may be addressed by adding storage or other features to the project to make the newly junior water right more reliable. Proponents of the junior-priority protection argue, among other things, that it is appropriate to put the burden of making water supply reliable on the new project, rather than on third-party water users who are not compensated in the transfer. Balancing the needs of the competing basins and providing basin mitigation do not compensate individual users.

In every session since the passage of Senate Bill 1, there have been concerted but unsuccessful efforts to repeal the junior-priority protection. Opponents of the protection argue, among other things, that it precludes interbasin transfers, devalues certain water rights, and creates a windfall benefit to other water users in the basin of origin.

Anticipated Legislative Activity:

The Senate Select Committee on Water Policy has taken testimony regarding the junior-priority protection in interbasin transfers. Both significant support and opposition to the protection are evident among the members, and the 79th Legislative Session will most probably see continued efforts to amend Water Code § 11.085. Compromise positions have been

discussed, including those that would differentiate between water that has been used historically or within a reasonable time on the one hand and water that has *not* been used historically nor within a reasonable time on the other hand, with junior priority attaching only to transfer amendments of the latter category. Considering historic use tends to avoid rewarding speculation in water and preserves the expectations with which other water rights were granted. A key in such a compromise would be treating stored water similarly to perfected water, in part with the rationale that the effects of both already have been felt in the basin of origin.

Additional Resources:

Water Code § 11.085 (k)(2)(F) and (s). *City of San Antonio v. Texas Water Comm'n*, 392 S.W.2d 200 (Tex. Civ. App.–Austin 1965), *aff'd* 407 S.W.2d 752 (Tex. 1966).

2.2 Interbasin Transfers – Transfer Criteria

Background:

Senate Bill 1 also added additional Water Code § 11.085 criteria for determining when an interbasin transfer should be approved. These criteria apply to both amendments to add new interbasin transfer authority to an existing water right and to applications to appropriate water for interbasin transfer. Among other things, § 11.085 requires special notice; consideration of the need for water in both basins for a period not to exceed fifty years; factors in the regional water plan that include economic impact and alternatives; a comparison of benefits and detriments; and the implementation of a water conservation plan that will result in the "highest practicable levels of water conservation and efficiency achievable within the jurisdiction of the applicant." Although the most significant attention has been paid to the junior-priority protections, it is the requirements like those noted here that may be primary impediments to interbasin transfers.

Anticipated Legislative Activity:

No specific initiatives to clarify or modify the transfer criteria in Water Code § 11.085, have yet surfaced although some level of interest in doing so could be expected. A favorable amendment to § 11.085 would make needs, economic impacts, projected impacts and alternatives "straight-up" criteria, rather than filtering them through regional planning. Consistency with the applicable regional water plan already is required for all applications to appropriate water. Controversy surrounding the work of the Senate Bill 1094 Water Conservation Implementation Task Force also has focused particular attention on what the requirement related to water conservation may or may not mean.

Additional Resources:

Water Code §§ 11.085 (interbasin transfer criteria); 11.134 (b)(1)(E) (TCEQ shall grant an application only if it addresses a water supply need in a manner that is consistent with the state water plan and the relevant approved regional water plan, unless a waiver is warranted). Senate Bill 1094, 78th Regular Session (Water Conservation Implementation Task Force).

2.3 No-injury Rule for Amending Water Rights

Background:

There is a level of debate regarding by what standard amendments to water rights were evaluated prior to Senate Bill 1. In any event, and in order to promote the free marketing of water, Senate Bill 1 specified in the law a "four-corners" approach to amendments. Water Code § 11.022 (b) provides 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 [water right] that is sought to be amended was fully exercised according to its terms and conditions as they existed before the requested amendment.

According to positions taken in a recent case, by the TCEQ and the Attorney General, this language requires a "full-use assumption;" removes the TCEQ's discretion concerning granting certain amendments such as those that change the purpose of use from irrigation to municipal purposes; and that notice and hearing regarding such amendments would be futile and unnecessary. Others dispute such an interpretation of the current law, and also question its wisdom as state policy.

Anticipated Legislative Activity:

The four-corners no-injury standard falls squarely within the scope of a Senate Select Committee charge regarding water marketing. We anticipate some interest in clarifying the four-corners no-injury standard, or reversing course entirely if need be, particularly by environmental interests. A focus on transfers of groundwater rights has drawn attention to the merits of protecting third-party interests from the impact of water transfers generally. Comments made by members during Senate Select Committee hearings indicate significant sentiment that Texas currently does not have the regulatory framework necessary to administer water transfers. Proposals likely might emphasize that an historic-use analysis and a public-welfare determination still should be applied to all amendments of existing water rights. It is of note that litigation currently pending before the Supreme Court of Texas and cited below involves application of the four-corners no-injury standard, although with primary focus on whether notice and hearing is required. Argument of that case is scheduled for October 21, 2004.

Additional Resources:

Water Code § 11.122. *City of Marshall v. City of Uncertain,* 124 S.W.3d 690 (Tex. App.–Austin 2004, review granted); *Clark v. Briscoe Irr. Co.*, 200 S.W.2d 674 (Tex. Civ. App.–Austin 1974, writ dism'd).

2.4 Water Reuse and Return Flows

Background:

The regulatory and legislative debate over reuse has been very vigorous since 1996. The debate has largely been one of upstream interests versus downstream interests. The fact that most major reuse projects that were being proposed at that time involved the use of watercourse bed and banks for storage or delivery shaped an agency and then legislative response that left direct reuse relatively unfettered but limited bed and banks reuse, even though both kinds of reuse have the same effect on water right holders downstream. Direct reuse is expected to increase as technology advances and the costs of alternative supplies rise. Under current law, a surface water-rights holder has a right to use his water to complete consumption unless the terms of his water right expressly limit his use. Groundwater users also are considered to have a right of complete consumption. Increased reuse, however, will diminish the amount of flow historically available in the streams to satisfy other water rights and to satisfy environmental values, including freshwater inflows to the bays and estuaries.

Anticipated Legislative Activity:

Some expect water reuse issues to be raised within the context of the Senate Bill 1639 Environmental Flow Study Commission's work, and the issue is not expressly charged to any interim study. Nevertheless, there is a general feeling within the water-supply community that the current Water Code provisions for water reuse are inadequate. Through the Texas Water Conservation Association ("TWCA"), major water suppliers from across the state have worked to formulate recommendations for a new policy on water reuse. To date, those recommendations would: (1) protect, from both direct and indirect reuse, downstream juniors whose rights were granted considering upstream return flows; and (2) ease other restrictions on indirect reuse that would facilitate a water suppliers' ability to reuse return flows according to its best judgment. Work currently is proceeding with regard to how such policies might be implemented in legislation. Possible strategies for accommodating environmental flows also include an environmental "toll" on reuse projects. It should be noted, however, that there is opposition to the recommendations as articulated so far, particularly from downstream seniors who claim a right to return flows from upstream juniors by virtue of their time priority.

Additional Resources:

Water Code §§ 11.042 and 11.046. *Ide v. United States*, 263 U.S. 497, 505-6 (1924) (public policy and natural justice favor reuse of "wastage" water and physical possession is not necessary) (quoting *United States v. Haga*, 276 F. 41, 43 (S.D. Idaho 1921)); *City of San Marcos v. Texas Comm'n on Environmental Quality* 128 S.W.3d 264 (Tex. App.–Austin, 2004, petition filed); *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 and citing *Ide*); *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 Texas 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).

2.5 Environmental Flows

Background:

During the last legislative session, at least six applications to appropriate river flow for instream uses and inflows to the bays and estuaries were pending before the TCEQ. The TCEQ staff had favored recognizing jurisdiction of the first of these applications, by the San Marcos River Foundation. Senate Bill 1639, 78th Regular Session, clarified that state law did not provide for such appropriations and stated expressly that "[t]he commission may not issue a new permit for instream flows dedicated to environmental needs or bay and estuary inflows." It was generally understood, however, that some refinement would be required as to how the State protects environmental flows. It also was provided in the new legislation that the TCEQ may issue amendments to convert existing water rights to environmental uses. The TCEQ dismissed the pending applications to appropriate water for environmental flows, both those that it had already declared proper and administratively complete and those that it had not yet assigned a priority date. District Court appeals have been filed.

Anticipated Legislative Activity:

Senate Bill 1639 created an Environmental Flows Study Commission to study ways to balance the growing demands for Texas' water resources with environmental concerns. To date, the Commission has met only once, although a Scientific Advisory Committee has been more active. Some members of the Committee have been vocal about issues with the state's current modeling for bay and estuary needs. The most significant policy proposals to the Committee so far are those from TWCA, representing the position of water users, and those from the Sierra Club and the National Wildlife Federation, representing the position of environmental interests.

Major components of the TWCA proposal include requiring good science, using a regional-planning approach for identifying environmental needs and strategies while balancing human needs, and TCEQ rulemaking to establish environmental-flow criteria for planning and permitting purposes. This last element is intended to reduce the time and expense of addressing environmental issues in the water-rights permitting process. The Sierra Club and the National Wildlife Federation presented some concerns about the TWCA approach, and also offered their alternative. Their concerns went to the "Balkanization" of environmental-flow policy; delay in protecting the environment while letting water-rights permitting go forward (although the TWCA approach does allow a reopening of permits issued with priority dates after the new law but before rulemaking); and insufficient emphasis on improving the Texas Water Trust.

The Sierra Club and the National Wildlife Federation's proposal centers on a formal system for state issuance of "certificates of reservation." Rather than incorporating regional planning, the proposal calls on Texas Parks & Wildlife Department ("TPWD") to develop reservation recommendations through a "public process," and then on TCEQ to make the final determination on the reservation amounts. A certificate of reservation, according to the proposal, "would have a priority date and an assigned point (or points) of measurement but it would be subject to future adjustment under limited circumstances." TPWD would "manage" the certificates of reservation. The Sierra Club and the National Wildlife Federation also propose a

state-funded acquisition program for converting existing consumptive rights to environmental-flow protection.

Additional Resources:

Water Code §§ 11.023 (purposes for which water may be appropriated); 11.134 (action on an application); 11.147 (effects of permits on bays and estuaries and instream uses); 11.150 (effects of permits on water quality); 11.152 (effects of permits on fish and wildlife habitats). *San Marcos River Foundation v. Texas Comm'n on Environmental Quality*, in the 200th District Court, Travis County, Cause Nos. GN3-01251 and GN3-01925.

2.6 Regional Planning

Background:

Senate Bill 1 replaced the existing state water-planning process with one that is based on regional decision-making. Although billed as a "bottom-up" approach, the Regional Planning Groups that were established remain creatures of statute and are influenced heavily by agency policy and information-gathering. Again, consistency with an adopted regional plan is a criterion for granting water rights permits and amendments.

Anticipated Legislative Activity:

Within the Regional Planning Groups, legislative committees have been formed to develop new policy recommendations for water resources and for regional planning. Legislative initiatives, no doubt, will come from within the Regional Planning Groups, just as initiatives will come from outside. For example, several applications for water rights recently have been returned to the applicants for lack of consistency with regional planning. More clarity may be desired about execution of those criteria. It also is the case that proposals discussed above with regard to environmental flows and water reuse may "pitch" aspects of these issues to regional planning.

Additional Resources:

Water Code § 11.134 (b)(E) (permitting criterion for compliance with state water plan and an approved regional plan); Chapter 16, Subchapter C (water development planning). Texas Water Development Board website at: www.twdb.state.tx.us.

2.7 Rule of Capture, Groundwater Districts, and Historic Use

Background:

The rule of capture as a basis of Texas groundwater rights has been controversial for many years. The last few legislative sessions have seen a surge in the creation and empowerment of groundwater districts. Senate Bill 2, 77th Leg. for example, gave groundwater districts the authority to regulate groundwater production based on a mix of regulatory theories

that includes any combination of rule of capture, correlative rights (based on acreage or tract size), historic use considerations, and a preference of use limited to retail water utilities. As districts have exercised this discretion through rulemaking and consideration of permit applications, there has been a growing recognition that the lack of common standards and procedural guidance is problematic. Dissatisfaction with the actions of some groundwater districts, and with the rule of capture generally, mitigates toward greater state oversight.

Among the more controversial groundwater district powers are those that protect historic uses of groundwater within districts, putting the greater burden of production limitations on new users. The methods of regulation for this purpose range from theories akin to prior appropriation for surface water to simply grandfathering existing uses. A most divisive issue is the extent to which historic-use rights may be marketed. Can the historic use quantity be transferred to another user? Another location? Another type of use? Pressure is being brought to bear by both those interests that wish to market groundwater for use off the land from which it is produced and those that wish to protect their existing uses.

The funding of groundwater districts also is a continuing issue. Generally, groundwater districts are underfunded, and it is recognized commonly that most districts would be crippled financially by a protracted lawsuit..

Anticipated Legislative Activity:

Charges to the Senate Select Committee on Water Policy on the issues of the role of groundwater conservation districts; conjunctive use of both ground and surface water resources; rule of capture; historic use standards; and water marketing lead one to expect extensive legislative activity on groundwater issues. Among the most likely subjects of legislative change are historic use regulation, strengthening protections against third-party impacts from groundwater transfers, strengthening district powers to protect landowners from water-level drawdown or to require mitigation, district funding, increased state oversight of districts, standardizing certain district procedures, and strengthening the authority to shape regulations that have a disparate impact on new uses. Separate groundwater-related charges were focused on regulation of the Edwards Aquifer (in and around Bexar County) and on the marketing of groundwater from state lands.

Additional Resources:

Water Code Chapter 36 (groundwater districts). *Bragg v. Edwards Aquifer Authority*, 71 S.W.3d 729 (Tex. 2002) (district permitting rules within exception to the Property Rights Act); *Sipriano v. Great Spring Waters of America, Inc.*, 1 S.W.3d 75 (Tex. 1999) (applying rule of capture but inviting legislative action); *Barshop v. Medina County Underground Water Conservation Dist.*, 925 S.W.2d 618 (Tex. 1996) (district act was valid exercise of police power); *Beckendorff v. Harris-Galveston Coastal Subsidence Dist.*, 558 S.W.2d 75 (Tex. Civ. App.–Houston [14th Dist.] 1977) *affm'd* 563 S.W.2d 249 (Tex. 1978) (district enabling act did not violate equal protection); *Houston & Texas Central R.R. Co. v. East*, 98 Tex. 146, 81 S.W. 279 (1904) (adopting the rule of capture); *South Plains Lamesa R.R. v. High Plains Underground Water Conservation Dist. No. 1*, 52 S.W.3d 770 (Tex. App.–Amarillo 2001, no petition) (district action denying a permit was unreasonable); *Guitar Holding Co., L.P. v.*

Hudspeth County Underground Water Conservation Dist. No. 1, 205th District Court of Hudspeth County No. 3703-205 (addressing historic use regulation). Texas Water Development Board, Report No. 361, "100 Years of Rule of Capture: From *East* to Groundwater Management" (2004) (available on the TWDB website).

2.8 Water Conservation

Background:

Water conservation legislation flourished during recent sessions. Part of the impetus of certain measures is based on the legitimate concern that Regional Planning Groups around the state have included conservation among the strategies for meeting future water needs, when there is no accountability with regard to whether or not conservation actually is being implemented. Legislation passed last year included provisions requiring the setting of 5-year and 10-year water conservation targets (House Bill 2660), new drought planning measures (House Bill 2663), water audits and leakage reduction programs (House Bill 3338), the creation of the Senate Bill 1094 Water Conservation Implementation Task Force, and various other measures that deal directly with specific conservation strategies.

Anticipated Legislative Activity:

The Task Force is specifically charged to review, evaluate, and recommend optimum levels of water use efficiency and conservation for Texas and to concentrate that effort on issues related to best management practices, the implementation of conservation strategies contained in the regional water plans, a statewide public awareness program, state funding of incentive programs, goals and targets for per capita water use, and state oversight and support of conservation.

The Task Force had broad support for its recommendation of a public awareness initiative along the lines of the very successful "Don't Mess With Texas" campaign against littering. Quoting from the Task Force's draft report, "The statewide conservation awareness program will focus on delivering a simple, enduring, universal water awareness message as opposed to a varying assortment of secondary messages endorsing specific, regional conservation practices. The basic 'product' that the statewide public-awareness program will 'sell' is the notion that water conservation is relevant to every Texan." The Task Force also formally and unanimously supported the proposition that there is a role for State funding of incentive programs to facilitate implementation of best-management practices and water conservation strategies.

Among the more controversial activities to date, the Task Force has formulated its best management practices guide; recommended a municipal water consumption goal of 50 gallons per capita per day indoor residential use and 125 gallons per capita per day total use; and recommended that legislation be passed to require water rights holders to submit annual status reports on conservation subject to administrative penalties. The Task Forces' final report is due to the Legislature by November 1, 2004. The Task Force also has recommended the creation of a permanent Water Conservation Advisory Council.

There is an additional possibility that problematic water rate legislation that was introduced last session, but which failed as House Bill 3367, may be re-introduced. As filed, that bill inappropriately and inadvertently reached contract sales of water, including sales of wholesale water, and wastewater service.

Additional Resources:

Water Code §§ 11.134 (applicant must provide evidence that reasonable diligence will be used to avoid waste and to achieve water conservation); 11.085(l)(2) (TCEQ may grant an application for an interbasin transfer only to the extent that the applicant has developed and implemented a water conservation plan that will result in the highest practicable levels of water conservation and efficiency achievable within the jurisdiction of the applicant). Senate Bill 1094 (Water Conservation Implementation Task Force). TCEQ proposed rules at www.tnrcc.state.tx.us/oprd/rule_lib/proposals/04004288_PRO.pdf (rulemaking to implement House Bill 2663, 78th Regular Session, e.g.); Texas Water Development Board website at: www.twdb.state.tx.us/assistance/conservation/taskforce.asp (regarding the work of the Water Conservation Implementation Task Force).

2.9 TCEQ Rate Jurisdiction

Background:

In the common law and in statutory provisions regarding regulation of the rate that may be charged for water, a tension exists between enforcing the letter of a contract and protecting the public interest in utility service. As a general matter, if a contract is deliberately made and is not contrary to public policy or illegal, it is to be enforceable by its terms. Nevertheless, the public interest has long been held to require oversight of the use of water in the provision of utility service. There are constitutional and common-law principles that address a right to receive public-utility service without discrimination.

Acting under appropriate Water Code Chapters, the TCEQ can review and even supplant the rates charged for water supply pursuant to some contracts. They can do so whether the contest is initiated by the purchaser or the supplier, under certain circumstances. The applicability of statutes and rules related to the agency's rate jurisdiction vary with regard to whether a contract involves wholesale service, whether the supply is raw or treated, and whether the complaining party is a retail provider of potable water, among other things. The TCEQ also can compel water service to an entity that does not have a contract if a petitioner can show that it is entitled to water, that it is willing and able to pay a just and reasonable price, that the party owning or controlling the water has water not contracted to others and available for the petitioner's use, and that the party owning or controlling the supply refuses to make it available or to make it available at a just and reasonable price.

Anticipated Legislative Activity:

Legislation was proposed last year to significantly limit TCEQ jurisdiction over water rates that, although they may violate the public interest, are entered by contract. The issue of rate

oversight is included within the charges to the Senate Select Committee on Water Policy, and testimony on the issue has been taken. Generally, the TCEQ has supported clarifying and limiting its authority in this regard in the past. However, there is significant interest among water users, and even those that also are water suppliers, for preserving the agency's jurisdiction to prevent overreaching and unfair prices. Concern regarding groundwater contracts has tended to pull the tide of opinion against diminishing the TCEQ's jurisdiction, even though the agency does not now have a comparable jurisdiction over groundwater supplies.

Additional Resources:

Water Code §§ 11.041 (complaint regarding denial of water), 12.013 (rate-fixing power) 13.043 (appellate jurisdiction over rates). *Federal Power Comm'n v. Sierra Pacific Power Co.*, 350 U.S. 348, 76 S.Ct. 368 (1956); *Borden v. Trespalacios Rice & Irr. Co., 86 S.W. 11 (Tex. 1905); Texas Water Comm'n v. City of Fort Worth,* 875 S.W.2d 332 (Tex. App.–Austin 1994, writ denied); *High Plains Natural Gas Co. v. Texas Railroad Comm'n*, 467 S.W.2d 532 (Tex.Civ.App.–Austin 1971, writ ref'd n.r.e.); *Garwood Irr. Co. v. Lower Colorado River Auth.,* 387 S.W.2d 746, 750 (Tex. Civ. App.–Austin 1965, writ ref'd n.r.e.) (citing *Registering Co. v. Sampson,* L.R. 19 Eq. 465, for proposition that you are not lightly to interfere with the freedom of contract and holding that when evaluating a claim that a contract is void as against public policy, courts are to keep in mind that public policy also requires liberty of contracting, and that contracts entered into freely and voluntarily by competent parties are to be held "sacred"). Travis County District Court Cause No. GN400211 (related to appeal of agency decisions under rate juridiction). Texas Natural Resource Conservation Commission, 19 Tex. Reg. 6229 (August 9, 1994) (with particular reference to the preamble adopting public interest rules related to rate jurisdiction).

3. LIST OF ATTACHMENTS

3.1 Lieutenant Governor's Charge to the Senate Select Committee on Water Policy
3.2 Senate Bill 1639 / Environmental Flow Study Commission
3.3 Speaker's Charge to the House Natural Resources Committee
3.4 Lieutenant Governor's Charge to the Senate Natural Resources Committee
3.5 Senate Bill 1094 / Water Conservation Implementation Task Force

SELECT COMMITTEE ON WATER POLICY

Membership
Armbrister, Chairman; Averitt, Deuell, Duncan, Fraser, Lindsay, Lucio, Madla, Shapleigh, Staples, Williams.

Subcommittee on Lease of State Water Rights: Madla, Chairman; Duncan, Fraser, Lucio, Shapleigh.

Interim Charges

1. Study all issues related to ground and surface water law, policy and management, including, but not limited to:
   - the role of federal, state, regional and local governments, and their coordination in setting consistent, nondiscriminatory water policies;
   - the authority of the Texas Commission on Environmental Quality (TCEQ) as it relates to water contracts;
   - the role of the Edwards Aquifer Authority;
   - the role of groundwater conservation districts;
   - regional water planning process;
   - conjunctive use of both ground and surface water resources;
   - rule of capture;
   - historic use standards;
   - water infrastructure and financing,
   - interbasin transfers;
   - junior water rights;
   - conservation;
   - water quality standards;
   - drought preparedness; and
   - water marketing.

2. *Subcommittee on the Lease of State Water Rights:* Study proposals to lease permanent school fund and permanent university lands and their water rights for the purposes of developing and marketing water.
   - Analyze the present and future effects of such proposals on local aquifers, historic stream flows, local underground water conservation districts, and other public and private water interests.
   - Study the process by which the General Land Office considers proposals to lease state water rights, including methodology for holding open meetings, obtaining public input, meeting competitive bidding requirements, and coordination with TCEQ and other governmental units with possible regulatory oversight.

- Study and evaluate the current and future value of water rights that may be leased to private entities, including the value to state, residential and commercial interests.

3. Monitor the three on-going demonstration desalination projects by the Texas Water Development Board as one step toward securing an abundant water supply to meet Texas' future water supply needs. Study regulatory barriers that impair cost effectiveness of desalination (coastal and brackish) and how to facilitate use of this water source by municipalities.

Reports

The committee shall submit copies of its final report no later than December 1, 2004. The printing of reports should be coordinated through the Secretary of the Senate. Copies of the final report should be sent to the Lieutenant Governor (5 copies), Secretary of the Senate, Senate Research, Legislative Budget Board, Legislative Council, and Legislative Reference Library.

The final report should include recommended statutory or agency rulemaking changes, if applicable. Such recommendations must be approved by a majority of the voting members of the Committee. Recommendations should also include state and local fiscal cost estimates, where feasible. The Legislative Budget Board is available to assist in this regard.

Budget and Staff

The Committee shall seek administrative and policy staff support from the staff of the Senate Natural Resources Committee. Travel costs shall be paid from the operating budgets of Senate members. All other costs shall be borne be the Senate Natural Resources Committee.

The Committee should also seek the assistance of legislative and executive branch agencies where appropriate.

Interim Appointments

Pursuant to Section 301.041, Government Code, it may be necessary to change the membership of a committee if a member is not returning to the Legislature in 2005. This will ensure that the work of interim committees is carried forward into the 79th Legislative Session.

[ ] = Deleted Language
< > = New Language

Bill Number: TX78RSB 1639 Date: 06-02-2003
ENROLLED

AN ACT

relating to regulating the waters of the state, including the spacing and production of groundwater and the control of instream flows.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF TEXAS:

SECTION 1. ****

SECTION 2. Subchapter B, Chapter 11, Water Code, is amended by adding Sections 11.0235, 11.0236, and 11.0237 to read as follows:

<Sec. 11.0235. POLICY REGARDING WATERS OF THE STATE.>

<(a) The waters of the state are held in trust for the public, and the right to use state water may be appropriated only as expressly authorized by law.>

<(b) Maintaining the biological soundness of the state's rivers, lakes, bays, and estuaries is of great importance to the public's economic health and general well-being.>

<(c) The legislature has expressly required the commission while balancing all other interests to consider and provide for the freshwater inflows necessary to maintain the viability of the state's bay and estuary systems in the commission's regular granting of permits for the use of state waters.>

<(d) The legislature has not expressly authorized granting water rights exclusively for:>

<(1) instream flows dedicated to environmental needs or inflows to the state's bay and estuary systems; or>

<(2) other similar beneficial uses.>

<(e) The fact that greater pressures and demands are being placed on the water resources of the state makes it of paramount importance to reexamine the process for ensuring that these important priorities are effectively addressed in clear delegations of authority to the commission.>

<Sec. 11.0236. STUDY COMMISSION ON WATER FOR ENVIRONMENTAL FLOWS. (a) In recognition of the importance that the ecological soundness of our riverine, bay, and estuary systems and riparian lands has on the economy, health, and well-being of the state there is created the Study Commission on Water for Environmental Flows.>

<(b) The study commission is composed of ****

<(j) The study commission shall conduct public hearings and study public policy implications for balancing the demands on the water resources of the state resulting from a growing population with the requirements of the riverine, bay, and estuary systems including granting permits for instream flows dedicated to environmental needs or bay and estuary inflows, use of the Texas Water Trust, and any other issues that the study commission determines have importance and relevance to the protection of environmental flows. In evaluating the options for providing adequate environmental flows, the study commission shall take>

<delegations of authority to the commission.>

<Sec. 11.0236. STUDY COMMISSION ON WATER FOR ENVIRONMENTAL>
<FLOWS. (a) In recognition of the importance that the ecological>
<soundness of our riverine, bay, and estuary systems and riparian>
<lands has on the economy, health, and well-being of the state there>
<is created the Study Commission on Water for Environmental Flows.>

<(b) The study commission is composed of 15 members as>
<follows:>

<(1) two members appointed by the governor;>

<(2) five members appointed by the lieutenant governor;>

<(3) five members appointed by the speaker of the house>
<of representatives;>

<(4) the presiding officer of the commission or the>
<presiding officer's designee;>

<(5) the chairman of the board or the chairman's>
<designee; and>

<(6) the presiding officer of the Parks and Wildlife>
<Commission or the presiding officer's designee.>

<(c) Of the members appointed under Subsection (b)(2):>

<(1) one member must represent a river authority or>
<municipal water supply agency or authority;>

<(2) one member must represent an entity that is>
<distinguished by its efforts in resource protection; and>

<(3) three members must be members of the senate.>

<(d) Of the members appointed under Subsection (b)(3):>

<(1) one member must represent a river authority or>
<municipal water supply agency or authority;>

<(2) one member must represent an entity that is>
<distinguished by its efforts in resource protection; and>

<(3) three members must be members of the house of>
<representatives.>

<(e) Each appointed member of the study commission serves at>
<the will of the person who appointed the member.>

<(f) The appointed senator with the most seniority and the>
<appointed house member with the most seniority serve together as>
<co-presiding officers of the study commission.>

<(g) A member of the study commission is not entitled to>
<receive compensation for service on the study commission but is>
<entitled to reimbursement of the travel expenses incurred by the>
<member while conducting the business of the study commission, as>
<provided by the General Appropriations Act.>

<(h) The study commission may accept gifts and grants from>
<any source to be used to carry out a function of the study>
<commission.>

<(i) The commission shall provide staff support for the study>
<commission.>

<(j) The study commission shall conduct public hearings and>
<study public policy implications for balancing the demands on the>
<water resources of the state resulting from a growing population>
<with the requirements of the riverine, bay, and estuary systems>
<including granting permits for instream flows dedicated to>
<environmental needs or bay and estuary inflows, use of the Texas>
<Water Trust, and any other issues that the study commission>
<determines have importance and relevance to the protection of>
<environmental flows. In evaluating the options for providing>

<adequate environmental flows, the study commission shall take>
<notice of the strong public policy imperative that exists in this>
<state recognizing that environmental flows are important to the>
<biological health of our parks, game preserves, and bay and estuary>
<systems and are high priorities in the permitting process. The>
<study commission shall specifically address ways that the>
<ecological soundness of these systems will be ensured in the water>
<allocation process.>
<(k) The study commission:>
<(1) shall appoint an advisory scientific committee>
<that will:>
<(A) serve as impartial scientific advisors and>
<reviewers for the study commission; and>
<(B) have a membership of no fewer than five and no>
<more than nine total members chosen by the study commission to>
<represent a variety of areas of relevant technical expertise;>
<(2) may appoint additional advisory committees to>
<assist the study commission; and>
<(3) may draft proposed legislation to modify existing>
<water rights permitting statutes.>
<(l) Not later than December 1, 2004, the study commission>
<shall issue a report summarizing:>
<(1) any hearings conducted by the study commission;>
<(2) any studies conducted by the study commission;>
<(3) any legislation proposed by the study commission;>
<and>
<(4) any other findings and recommendations of the>
<study commission.>
<(m) The study commission shall promptly deliver copies of>
<the report to the governor, lieutenant governor, and speaker of the>
<house of representatives.>
<(n) The study commission shall adopt rules to administer>
<this section.>
<(o) The study commission is abolished and this section>
<expires September 1, 2005.>
<Sec. 11.0237. WATER RIGHTS FOR INSTREAM FLOWS DEDICATED TO>
<ENVIRONMENTAL NEEDS OR BAY AND ESTUARY INFLOWS. (a) The>
<commission may not issue a new permit for instream flows dedicated>
<to environmental needs or bay and estuary inflows. This section>
<does not prohibit the commission from issuing an amendment to an>
<existing permit or certificate of adjudication to change the use to>
<or add a use for instream flows dedicated to environmental needs or>
<bay and estuary inflows.>
<(b) This section does not alter the commission's>
<obligations under Section 11.042(b), 11.046(b), 11.085(k)(2)(F),>
<11.134(b)(3)(D), 11.147, 11.1491, 16.058, or 16.059.>
<(c) This section expires September 1, 2005.>
SECTION 3. Subsections (d) and (e), Section 11.147, Water Code, are amended to read as follows:
(d) In its consideration of an application to store, take, or divert water, the commission shall <include in the permit, to the>
<extent practicable when considering all public interests, those>
<conditions considered by the commission necessary to maintain>
[consider the effect, if any, of the issuance of the permit on]
existing instream uses and water quality of the stream or river to

which the application applies.

(e) The commission shall <include in the permit, to the> <extent practicable when considering all public interests, those> <conditions considered by the commission necessary to maintain> [also] [consider the effect, if any, of the issuance of the permit on] fish and wildlife habitats.

SECTION 4. This Act takes effect immediately if it receives a vote of two-thirds of all the members elected to each house, as provided by Section 39, Article III, Texas Constitution. If this Act does not receive the vote necessary for immediate effect, this Act takes effect September 1, 2003.

_____ _____

President of the Senate Speaker of the House

I hereby certify that S.B. No. 1639 passed the Senate on May 1, 2003, by the following vote: Yeas 31, Nays 0; May 29, 2003, Senate refused to concur in House amendments and requested appointment of Conference Committee; May 30, 2003, House granted request of the Senate; June 1, 2003, Senate adopted Conference Committee Report by the following vote: Yeas 31, Nays 0.

_____

Secretary of the Senate

I hereby certify that S.B. No. 1639 passed the House, with amendments, on May 23, 2003, by the following vote: Yeas 145, Nays 0, two present not voting; May 30, 2003, House granted request of the Senate for appointment of Conference Committee; June 1, 2003, House adopted Conference Committee Report by the following vote: Yeas 131, Nays 8, two present not voting.

_____

Chief Clerk of the House

Approved:

_____

Date

_____

Governor

78th LEGISLATIVE SESSION

HOUSE INTERIM CHARGES

NATURAL RESOURCES

Charge No. 1: Assess the current condition of the Edwards Aquifer and the Edwards Aquifer Authority, including the authority's ability to meet the current statutory requirements of it's enabling legislation, specifically it's ability to meet or alter pumping limits contained in the Edwards Aquifer Act.

Charge No. 2: Examine the issues associated with the Texas Commission on Environmental Quality's authority to amend, impair, interpret or modify the terms of water contracts between willing parties, including the possible impacts this authority could have on the financing of public/private water projects.

Charge No. 3: Evaluate the availability and cost effectiveness of using brackish groundwater and surface water as an alternative source of water supply, including assessing the regulatory restrictions or impediments that impact cost and what measure or regulatory changes are needed to facilitate use of this water source by political subdivisions.increment reinvestment zones.

Senate Standing Committee
Interim Charges
78th Legislature

NATURAL RESOURCES

INTERIM CHARGES

The Senate Natural Resources Committee is charged with conducting a thorough and detailed study of the following issues, including state and federal requirements, and preparing recommendations to address problems or issues that are identified.

1. Study the ongoing efforts, and make recommendations, as needed, to achieve cleaner air in Texas including: * Implementation of HB 1365, 78" Regular Session; * State Implementation Plan revisions; * Texas Commission on Environmental Quality's (TCEQ) implementation of the 8- hour air quality standard; * Early action compacts and other innovative air quality planning tools; * Emissions transport issues, including recent court decisions and federal legislation implementing transport policy; * Transition of the Texas Council on Environmental Technology to TCEQ; and * Regional air quality challenges.

2. Study long-term funding and planning solutions to combat erosion along the Texas coast with particular attention to: the National Flood Insurance Program, securing, matching and additional federal dollars, and alternative funding approaches.

3. Study and make recommendations regarding current state and federal laws relating to the permitting and operation of landfills. Issues to be considered include the generation and transportation of waste; the selection, approval, and regulation of treatment and storage facilities; the projected demand for new facilities; and the adequacy of existing technology to safely dispose of waste.

4. Study the consistent implementation of federal and state air and water quality standards by local governments and make recommendations for improving the consistency and effectiveness of the requirements.

Reports

The Committee shall submit copies of its final report no later than December 1, 2004. The printing of reports should be coordinated through the Secretary of the Senate. Copies of the final report should be sent to the Lieutenant Governor (5 copies), Secretary of the Senate, Senate Research, Legislative Budget Board, Legislative Council, and Legislative Reference Library..

The final report should include recommended statutory or agency rulemaking changes, if applicable. Such recommendations must be approved by a majority of the voting members of the Committee. Recommendations should also include state and local fiscal cost estimates, where feasible. The Legislative Budget Board is available to assist in this regard.

Budget and Staff

Travel costs shall be paid from the operating budgets of Senate members. All other costs shall be borne by the Senate Natural Resources Committee's interim budget, as approved by the Senate Administration Committee. Due to overall budget constraints, it is recommended each interim committee budget include only critical expenditures and, where possible, reductions from previous spending levels.

The Committee should also seek the assistance of legislative and executive branch agencies where appropriate.

Interim Appointments

Pursuant to Section 301.041, Government Code, it may be necessary to change the membership of a committee if a member is not returning to the Legislature in 2005. This will ensure that the work of interim committees is carried forward into the 79th Legislative Session.

S.B. No. 1094

AN ACT

relating to the creation of a task force to evaluate matters regarding water conservation.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF TEXAS:

SECTION 1. DEFINITION. In this Act, "task force" means the water conservation implementation task force created under Section 2 of this Act.

SECTION 2. WATER CONSERVATION IMPLEMENTATION TASK FORCE. (a) The Texas Water Development Board shall select members of the water conservation implementation task force to represent the following entities and interest groups from applicants recommended by the following entities and interest groups:

(1) Texas Commission on Environmental Quality;
(2) Department of Agriculture;
(3) Parks and Wildlife Department;
(4) State Soil and Water Conservation Board;
(5) Texas Water Development Board;
(6) regional water planning groups;
(7) federal agencies;
(8) municipalities;
(9) groundwater conservation districts;
(10) river authorities;
(11) environmental groups;
(12) irrigation districts;
(13) industries;
(14) institutional water users;
(15) professional organizations focused on water conservation; and
(16) higher education.

(b) The executive administrator of the Texas Water Development Board or the administrator's designee is the presiding officer of the task force.

SECTION 3. DUTIES OF TASK FORCE. The task force shall review, evaluate, and recommend optimum levels of water use efficiency and conservation for the state by:

(1) identifying, evaluating, and selecting best management practices for municipal, industrial, and agricultural water uses and evaluating the costs and benefits for the selected best management practices;
(2) evaluating the implementation of water conservation strategies recommended in regional and state water plans;
(3) considering the need to establish and maintain a statewide public awareness program for water conservation;
(4) evaluating the proper role, if any, for state funding of incentive programs that may facilitate the implementation of best management practices and water conservation strategies;
(5) advising the Texas Water Development Board and the Texas Commission on Environmental Quality on:
(A) a standardized methodology for reporting and using per capita water use data;
(B) establishing per capita water use targets and

goals, accounting for such local effects as climate and demographics; and

(C) other possible uses as appropriate; and

(6) evaluating the appropriate state oversight and support of any conservation initiatives adopted by the legislature.

SECTION 4. ASSISTANCE OF STATE AGENCIES. The task force may request the assistance of state agencies, departments, or offices to carry out its duties, including necessary staff support.

SECTION 5. PUBLIC MEETINGS. The task force may hold public meetings as needed to fulfill its duties under this Act.

SECTION 6. BEST MANAGEMENT PRACTICES GUIDE; REPORT. Not later than November 1, 2004, the task force shall develop a best management practices guide for use by regional water planning groups and political subdivisions responsible for water delivery service and shall make a final report to the lieutenant governor, the speaker of the house of representatives, and the legislature evaluating the issues described in Section 3 of this Act.

SECTION 7. EXPIRATION OF ACT AND ABOLITION OF TASK FORCE. This Act expires and the task force is abolished on January 1, 2005.

SECTION 8. EFFECTIVE DATE. This Act takes effect immediately if it receives a vote of two-thirds of all the members elected to each house, as provided by Section 39, Article III, Texas Constitution. If this Act does not receive the vote necessary for immediate effect, this Act takes effect September 1, 2003.

_____ _____

President of the Senate Speaker of the House

I hereby certify that S.B. No. 1094 passed the Senate on April 22, 2003, by the following vote: Yeas 31, Nays 0.

_____

Secretary of the Senate

I hereby certify that S.B. No. 1094 passed the House on May 6, 2003, by the following vote: Yeas 143, Nays 0, two present not voting.

_____

Chief Clerk of the House

Approved:

_____

Date

_____

Governor

LAW OFFICES OF
BOOTH, AHRENS & WERKENTHIN
A PROFESSIONAL CORPORATION
515 CONGRESS AVENUE, SUITE 1515
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BIOGRAPHICAL INFORMATION

CAROLYN AHRENS WIELAND practices primarily in the areas of water, utility and environmental law. She also has been active in representing clients on water issues before the Texas Legislature. Carolyn is a dedicated participant in professional associations that are focused on water resources for public water supply. She is a Director and former Water Laws Chair of the Texas Water Conservation Association; the Chair of the American Water Works Association Water Allocation and Regulation Committee; and an incoming Trustee and former Director of the Water Environment Federation. Among her special projects as a member of the Executive Board of the Water Environment Association of Texas ("WEAT"), is convening the Texas Water Forum, a network of Texas associations that share perspectives on legislative and regulatory issues facing water suppliers.

Carolyn is a past recipient of the TWCA President's Award for outstanding dedication, contribution and service to the water resources of the State of Texas, of the WEAT President's Service Award, and of two Watermark awards for raising the public's level of understanding of Texas water issues.

PAPER NOT SUBMITTED

ABOUT CHAIRMAN CARRILLO:

A native of Abilene, Texas, Victor Carrillo joined the Texas Railroad Commission in February 2003 when Governor Rick Perry appointed him to fill the unexpired term of Tony Garza who became U.S. Ambassador to Mexico. Carrillo's colleagues unanimously elected him Chairman of the agency in September of 2003. He is also Chairman of the newly created Texas Energy Planning Council whose mission is to create a comprehensive energy plan for the State of Texas.

Much of Carrillo's education and professional experience relate to oil and gas exploration and production. He has a B.S. degree in geology from Hardin-Simmons University and a M.S. degree in geology from Baylor University. In 1988, he joined Amoco Production Company in Houston as a petroleum geophysicist where he gained experience in the full spectrum of oil and gas exploration and production activities.

From 1990-1994, while working professionally for Amoco by day, Victor attended the University of Houston Law Center at night, earning his law degree in 1994 with an emphasis in environmental and oil and gas law. From 1994-96, Victor worked as an energy attorney at the General Land Office where he advised the land commissioner on oil and gas, environmental, and general government issues.

In 1996, Victor and his family returned to Abilene, his hometown, where he served as assistant city attorney and later taught political science and legal studies at Hardin-Simmons University, his alma mater. He ran for and won election to the Abilene City Council, where he served until he was appointed as Taylor County Judge. In November of 2002, he was elected to a four-year term as Taylor County Judge, the position he held when the governor appointed him to the Texas Railroad Commission.

A host of organizations have benefited from Victor's commitment to volunteering and public service, including: Salvation Army of Abilene, Keep Abilene Beautiful, and the Abilene Hispanic Leadership Council. Victor proudly served on the Military Affairs Committee of the Abilene Chamber of Commerce where he promoted Dyess Air Force Base on a variety of military issues. The Abilene Young Lawyers' Association honored Victor as the Young Lawyer of the Year in 2001. In 2003, Victor was awarded the first Young Alumni of the Year award from Hardin-Simmons University.

This December, Victor and his wife, Joy, will have been married 20 years. They are blessed with three daughters whom they home educate: Laura (16), Christina (12), and Grace (3). The family attends Christ the King Presbyterian Church in Austin.

Chairman Carrillo is running a statewide election for a full six-year term in 2004.

PAPER NOT SUBMITTED

Tracy D. Hester
Bracewell & Patterson, L.L.P.

Profile

Tracy Hester heads the environmental law section in the Firm's Houston office. Mr. Hester has assisted clients in regulatory counseling with an emphasis on enforcement defense, environmental permitting and cost recovery litigation. He also provides advice on the environmental aspects of corporate transactions. He has represented clients from diverse industrial sectors, including petrochemical manufacturers, petroleum and natural gas pipelines, petroleum refineries, utilities, cement kilns, newspaper printers, hazardous waste disposal operations, and financial institutions. Mr. Hester has represented companies and local governments in litigation or compliance negotiations on ozone regulatory policy and total maximum daily load water quality projects. He also assists companies with emergency response planning and security assurance legal requirements.

In *Chambers & Partners' America's Leading Business Lawyers 2003-04*, Mr. Hester was named among Texas' leading environmental attorneys and applauded in it by contributing clients and colleagues as "someone who knows how to win a battle" and a lawyer with an "effective approach to solving problems." Also in 2003, he earned the distinction of Texas Super Lawyer in environmental/land use law.

In 2004, he was elected to the prestigious American Law Institute.

Prior to joining Bracewell & Patterson in 1993, Mr. Hester practiced six years with Sidley & Austin in Washington, D.C. and the Houston office of Baker & Botts, L.L.P. He advises clients on legal issues arising from hazardous waste and wastewater management, including RCRA compliance, CERCLA consent decree negotiations, private cost recovery litigation, release reporting, state Superfund actions, environmental auditing, and environmental enforcement litigation. Mr. Hester has also taught advanced seminars on Environmental Enforcement, Practice of Environmental Law and Hazardous Waste Law as an Adjunct Professor at the University of Houston Law Center.

Affiliations

District of Columbia Bar
State Bar of Texas, Environmental Law Section
American Law Institute, member
State Bar of New York
Houston Bar Association, chair, Environmental Section, 2000-2001
Fellow, Texas Bar Foundation
American Bar Association, Environment, Energy and Resources Section, vice-chair, Environmental Crimes and Enforcement Committee, ABA SEER, 2002-2004; vice-chair, Corporate Counsel Committee, 1999-2000
Houston Local Emergency Preparedness Committee, pro bono counsel
Greater Houston Partnership, chair, Waste Subcommittee, 1999-2003; member, Environmental Advisory Committee, 1999-present
The University of Houston Law Center, adjunct professor
Environmental Enforcement, 1999-present
Advanced RCRA Seminar, Fall 1997
Practice of Environmental Law, 1995, 1996
Virtuosi of Houston, board of directors
Galveston Bay Foundation, trustee, 2004-2005
Galveston Bay Council, member, 2004
Texas Risk Reduction Program Advisory Group, steering committee, 2004
Texas Association of Environmental Professionals, board of directors, 2004

TCEQ Enforcement Process Review

Jennifer A. Sidnell
Division Director
Field Operations Division
August 5, 2004

Background

- ED announced comprehensive review of enforcement process on December 5, 2003.
- ED appointed Steering Committee to oversee process and make recommendations to commission.
- Steering Committee appointed review committees to study issues.

Focus of the Review

- Improving the use of the agency's criteria for initiating enforcement.
- Assuring consistency across regions and programs.
- Evaluating implementation of new compliance history requirements.
- Maximizing compliance in enforcement policies.
- Maximizing benefit to the environment.

Review Committees

- Enforcement Process
  - -- Enforcement initiation/investigation prioritization/notices of violation.
  - -- Enforcement case processing.
  - -- Complaint procedures.
  - -- Collection of past due penalties/financial inability to pay.
  - -- Communications.

Review Committees (cont.)

- Penalties and Corrective Action
  - -- Ordering provisions.
  - -- Penalty policy.
  - -- Supplemental Environmental Projects (SEP's).

- Compliance History
  - -- Components/definitions
  - -- Classifications
  - -- Use

Public Participation

- Questionnaire on the agency's website.

- Public meetings.
  - -- Arlington
  - -- Midland
  - -- Harlingen
  - -- Houston

Timeline

- February 9 - March 31 - Public comment period.
- March 4 - April 12 - Identification and prioritization of key issues by committees.
- May 3 - Key issues presented to commissioners and posted on website.
- July 15 - Committees submit draft final reports and recommendations on key issues to Steering Committees.
- July 29 - August 13 - Commissioner review of draft final recommendations.
- August 20 - September 17 - Post draft final recommendations to website.
- October 15 - Present final recommendations to commissioners at work session.

Identification of Key Issues

- Public comment.
- Commissioner input.
- Staff input.
- State Auditor's Office report.

Key Issues

- Enforcement Process
  - -- Investigation prioritization and investigation strategy.
  - -- Investigation prioritization addressing unauthorized facilities.
  - -- Credit for investigation activities.

-- Enforcement initiation criteria.

Key Issues - Enforcement Process (cont.)

-- Enforcement initiation relating to small business and local government.
-- Appeal process for violations.
-- Verbal notice of violation (NOV) policy.
-- Notice of violation (NOV) policy approval.
-- Notices of enforcement (NOE)
-- Compliant guidance document.
-- Nuisance odor protocol.
-- Compliant reporting.
-- Citizen collected evidence.
-- Complaint access.
-- Streamlining the existing enforcement process.
-- Fast tracked enforcement process.
-- Timing of the financial inability to pay procedures.
-- Timing of the SEP process.
-- Investigation/enforcement resources.
-- Investigation/enforcement training.
-- External communication.
-- Internal communication.
-- Complaint education.
-- Enforcement education.
-- Compliance history education.

- Penalties and Corrective Action
  - -- Penalty policy simplification.
  - -- Recovering economic benefit.
  - -- Penalty policy for small entities.
  - -- Deterrence through penalties.
  - -- Promulgation of penalty policy by rule.
  - -- Consideration of respondent's pollution control investment.
  - -- Mandatory minimum penalty for each occurrence of significant noncompliance.
  - -- Partial credit for correction actions.
  - -- Use of deferrals in case settlements.
  - -- Penalties in default orders.
  - -- Cases with low penalty amounts.
  - -- PST certification and fuel distribution violations.
  - -- Closing out of enforcement orders.
  - -- Consequences of failing to comply.
  - -- Internal agency coordination.
  - -- Ordering provision language.
  - -- Additional ordering provisions for repeat violators.
  - -- Continuance of Supplemental Environmental Projects (SEP) program.
  - -- SEP discussions with respondent.
  - -- SEP process.
  - -- Type and location of SEPs.
  - -- Outreach and input on SEPs.
  - -- Monitoring and evaluation of SEPs.
  - -- SEP classification system.

-- Offset amounts and restrictions for SEPs.

Key Issues - Penalties and Corrective Action (cont.)

-- Fee and penalty collections.
-- Evaluation and inability to pay.
-- Payment plans.
-- Interest charges.
-- Additional collection tools.
-- Statutory requirement to dispute fee payment.

- Compliance History
  -- The nature of notices of violation (NOVs) considered.
  -- Definition of investigations.
  -- Definition of person and/or site.
  -- Consideration of positive components.
  -- Types of enforcement actions considered.
  -- Nature and quality of data used to evaluate compliance history.
  -- Overall approach to classifications.
  -- Classification formula.
  -- Small business and local government classifications.
  -- Compliance history appeals.
  -- Repeat violators.
  -- Due process rights.
  -- Data accuracy and retention.
  -- General use of compliance history.
  -- Compliance history and its relationship to permitting.
  -- Shutdowns and permit revocation based on compliance history.

Key Issues - Compliance History (cont.)

-- Early use of compliance history in permitting process.
-- Basis for awarding incentives.
-- Use of compliance history in the calculation of agency fees.

Next Steps

- Committees present draft recommendations to executive management and commissioners.
- Recommendations may include modification of agency policy, rules, or identify need for statutory change.

TCEQ Enforcement Process Review

Jennifer A. Sidnell
Division Director
Field Operations Division
August 5, 2004

Background

- ED announced comprehensive review of enforcement process on Dec. 5, 2003.
- ED appointed Steering Committee to oversee process and make recommendations to commission.
- Steering committee appointed review committees to study issues.

Focus of the Review

- Improving the use of the agency's criteria for initiating enforcement
- Assuring consistency across regions and programs
- Evaluating implementation of new compliance history requirements
- Maximizing compliance in enforcement policies
- Maximizing benefit to the environment

Review Committees

- Enforcement Process
  - Enforcement initiation/investigation prioritization/notices of violation
  - Enforcement case processing
  - Complaint procedures
  - Collection of past due penalties/financial inability to pay
  - Communications

Review Committees (con't)

- Penalties and Corrective Action
  - Ordering provisions
  - Penalty policy
  - Supplemental Environmental Projects (SEP's)

Review Committees (con't)

- Compliance History
  - Components/definitions
  - Classifications
  - Use

Public Participation

- Questionnaire on the agency's website
- Public meetings
  - Arlington
  - Midland
  - Harlingen
  - Houston

Timeline

- Feb.9-March 31 – Public comment period
- March 4-April 12 – Identification and prioritization of key issues by committees
- May 3 – Key issues presented to commissioners and posted on website
- July 15 – Committees submit draft final reports and recommendations on key issues to steering committees

Timeline (con't)

- July 29-Aug. 13 – Commissioner review of draft final recommendations
- Aug. 20-Sept. 17 – Post draft final recommendations to website
- Oct. 15 – Present final recommendations to commissioners at work session

Identification of Key Issues

- Public comment
- Commissioner input
- Staff input
- State Auditor's Office report

Next Steps

- Committees present draft recommendations to executive management and commissioners
- Recommendations may include modification of agency policy, rules, or identify need for statutory change

BIOGRAPHICAL INFORMATION

Jennifer A. Sidnell has been with the Texas Natural Resource Conservation Commission, or its predecessor agencies since September, 1982. Prior to that date, she received her B.S. and M.S. in Biology and Aquatic Ecology, respectively at Stephen F. Austin State University.

Since her tenure with the Agency, she has worked in various agency programs. Beginning in September, 1982 and through December, 1985 she worked as a water quality investigator in the Houston Regional Office.

In January, 1986 she accepted a position as Wastewater Enforcement Coordinator in the Austin Central Office. In September, 1987 she was promoted to Section Chief over the Wastewater Enforcement Section and held that position until she transferred to the Municipal Solid Waste Division on March 1, 1993 to oversee and manage implementation of the Automotive Waste Recycling Section.

In August, 1996 she moved to accept the position of director over water programs for Field Operations Division. With the reorganization of Central Office Field Operations Division in February, 1999, she became Assistant Division Director over Program Support. In that capacity she supervised a central office staff of nineteen and directed the technical inspection, enforcement and emergency response activities of 750 field staff in 26 air, water, and waste programs in 16 Region offices.

In February, 2001 she moved to assume the responsibilities of Special Assistant for the Office of Compliance and Enforcement reporting directly to the Deputy Director, and management of the Information Technology Section which is responsible for the development, implementation and maintenance of all OCE data systems.

In February, 2002 she moved to assume the responsibilities of Special Assistant for the Office of Permitting, Remediation and Registration reporting directly to the Deputy Director. In addition to addressing general permitting, TARA and Remediation issues, she also manages operation of the Information Technology Section which is responsible for the development, implementation, and maintenance of all OPRR data systems. She also oversights operation of the Central Registry project and its interaction and migration/integration of Legacy systems.

Effective November, 2002 she accepted the position of Director, Field Operations Division. In that capacity she is responsible for management and operation of the almost 800 field staff located in 16 TCEQ Regional Offices in Texas. She oversights and ensures implementation of 26 agency programs that are mandated to perform investigations at the approximately 220,000 regulated facilities across the state. She is also responsible for the Dam Safety, Edwards Aquifer, and Water Master programs which are entirely housed in FOD. Citizen requests for assistance, complaints, and nuisance odor investigations are conducted by the Field Operations Division. Also, the Citizen's Collected Evidence program is managed by Field Operations Division.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
OECA – OFFICE OF REGULATORY ENFORCEMENT – SPECIAL LITIGATION AND PROJECTS
WASHINGTON, DC 20460

March 2004

Animal Feeding Operations
Proposed Air Compliance Agreement Facts

Status

- EPA negotiators have worked with industry representatives, EPA regions, state and local governments, environmental groups and other stakeholders to develop a draft Air Compliance Agreement for Animal Feeding Operations (AFOs).
- EPA negotiators and industry representatives are close to agreement on most issues, and the negotiations are expected to conclude in Spring 2004.
- EPA will then publish a draft agreement in the Federal Register for public comment.
- EPA expects to be able to publish a final version of the proposed agreement in the Federal Register in late Spring / early Summer 2004.
- Once the proposed agreement is published, interested, qualifying AFOs will be given a limited opportunity to sign identical agreements with EPA.

Background

- A 2002 report by the National Academy of Sciences emphasized that scientifically credible methodologies for estimating emissions from animal feeding operations (AFO) need to be developed.
- During the Summer of 2002, industry representatives submitted a proposal to EPA that would facilitate development of these methodologies. Under this proposal participating AFOs would be given a covenant not to sue for alleged past Clean Air Act, CERCLA and EPCRA violations in return for funding a monitoring program and complying with all Clean Air Act, CERCLA and EPCRA provisions found applicable to their facilities.
- During 2002-2003, EPA met with many groups to discuss the proposal, including:
  - Agricultural industry representatives
  - State and local government officials including the State and Territorial Air Pollution Program Administrators (STAPPA), and Association of Local Air Pollution Control Official (ALAPCO)
  - Environmental organizations
  - Citizen groups

Primary Goals of Compliance Agreement

- Ensure compliance with applicable Clean Air Act, CERCLA and EPCRA provisions
- Reduce pollution
- Evaluate AFO emissions
- Promote a national consensus on methodologies for estimating emissions from AFOs.

Key Provisions in Compliance Agreement

- Participating AFOs will be required to:
  - Pay a small civil penalty, ranging from $500 to $100,000
  - Ensure that, for each participating facility, $2,500 is paid into a fund for a nationwide emissions monitoring program
  - Make participating facilities available for monitoring, if necessary
  - Apply for all applicable air permits and comply with permit conditions.
  - Install Best Available Control Techology or LAER on all sources that exceed the "major source" threshold for their area.
  - Report any qualifying releases of ammonia (NH_3) and hydrogen sulfide (H_2S) as required by section 103 of CERCLA and section 304 of EPCRA.

- AFOs that satisfy these requirements will receive, from EPA, a covenant not to sue for past violations of:
  - Clean Air Act permitting requirements in Title V, and Title I Parts C & D (PSD/NSR), and State Implementation Plans arising from emissions of Hydrogen Sulfide (H_2S), Volatile Organic Compounds (VOCs), or Particulate Matter (PM) from animal confinement structures and agricultural livestock waste lagoons.
  - CERCLA section 103 and EPCRA section 304 reporting requirements arising from releases of ammonia (NH_3) and hydrogen sulfide (H_2S) from animal confinement structures and agricultural livestock waste lagoons.

- Conditions and Limits of the covenant not to sue:
  - The covenant not to sue applies to past violations and will terminate after a short "cure period" following the monitoring program.
  - The covenant not to sue covers only violations related to emissions from agricultural livestock and agricultural livestock waste and does not cover emissions from generators or other internal combustion engines, waste-to-energy systems, land application of animal waste, or emissions from sources not participating in the agreement.
  - The covenant not to sue does not affect permits required for new construction or modification of existing AFOs.
  - The covenant not to sue will be nullified if AFOs fail to comply with state nuisance final orders arising from air emissions.
  - AFOs that are subject to a federal or state Clean Air Act, CERCLA section 103 or EPCRA section 304 enforcement action may not eligible to enter into the agreement.
  - EPA will continue to prosecute cases that may present an imminent and substantial endangerment to human health

- Additional Protections and Benefits:
  - AFOs that install waste-to-energy systems in compliance with all applicable permitting and control requirements, will get additional time to apply for air permits for their emissions from agricultural livestock and livestock waste.
  - The agreement will provide an opportunity for AFOs to remedy violations of fenceline ambient air quality standards.
  - The agreement will complement ongoing state and local efforts to promote research into AFO air emissions and to improve air quality.

Nationwide Monitoring Program

- Based on EPA criteria, an independent organization will select for monitoring at least 28 farms that represent major animal groups (e.g. swine and poultry), different types of operations, and different geographic regions. EPA will ensure the farms selected for monitoring are representative.
- Monitoring will occur at the selected lagoons and barns for approximately 22 months.
- Pollutants to be monitored include PM (TSP. PM_{10} and $PM_{2.5}$), H_2S, VOCs, and NH_3.

Timeline

- Publish final agreement in Federal Register in Spring/Summer 2004
- Nationwide monitoring of AFOs from Summer/Fall 2004 through Summer/Fall 2006
- Develop emissions estimating methodologies based on monitoring results and other available data
- Using newly developed emissions estimating methodologies, AFOs apply for applicable air permits and submit required CERCLA reports per EPA guidance or regulation.

Summary of Injunctive Relief Sought in EPA's National Refinery Initiative - Global Settlements

The National Refinery Initiative focuses on four marquee issues that were historically found to be areas of significant non-compliance within the refinery industry

These four areas are: New Source Review/Prevention of Significant Deterioration (NSR/PSD), acid gas flaring/sulfur recovery plants, leak detection and repair (LDAR), and benzene in wastewater.

These marquee issues targeted the processes and equipment at the refineries that are the largest sources of air emissions.

A cooperative approach unlike traditional enforcement actions was pursued in this initiative. The government gained commitments for large emission reductions and, in return, the companies obtain comprehensive releases from past liability and lowered penalties.

Summary of enhanced injunctive relief in settlements:

(4) NSR/PSD:

Emission reduction targets at fluidized catalytic cracking units and heaters and boilers.

FCCU control measures -

SO_2 < 25 ppm @ 0% O2 (WGS or deep hydrotreating plus catalyst additives)
NO_x < 20 ppm @ 0% O2 (SCR or SNCR plus catalyst additives)
PM < 1 lb /1000 lb coke (ESP or WGS) reduced in later CDs
CO < 100 ppmv @)% O2 (COB or Full Burn)
SO_2, NO_x, CO and opacity CEMS
NSPS Subpart J Applicability

Heaters and Boilers Controls -

SO_2 < 160 ppm H_2S in fuel gas and elimination of liquid and solid fuel firing
NO_x < 0.012 lb NO_x /mmBTU (next generation ULNB or current generation and SCR)
NO_x and H_2S CEMS
NSPS Subpart J applicability

(5) Acid Gas Flaring/Sulfur Recovery Plants (SRPs):

Incorporation of the 1999 BP-Toledo Consent Decree - Root Cause Failure Analysis procedures to eliminate gas/sour water stripper gas flaring except for true malfunctions in accordance with good air pollution control practices.

Past Flaring Incident Analysis, Investigation and Reporting and Corrective Action.

Stipulated Penalties for Flaring Incidents that EPA determines to be caused events that do not meet the definition of malfunction in NSPS (40 C.F.R. § 60.2.

Flare gas recovery systems to minimize flaring.

NSPS Subpart J applicability of all SRPs (SO_2 emission limit of 250 ppm).

NSPS Subpart J applicability of all fuel gas combustion devices (FGCDs) (fuel gas < 160 ppm H_2S).

(6) Benzene NESHAP FF

Implement enhanced programs (beyond the requirements in the regulations) incorporating standardized language to continue EPA's goals for a level playing field in this industry. The program includes:

One-Time Review and Verification of Each Refinery's TAB and, as applicable, each Refinery's Compliance with the 2 Mg or 6 BQ Compliance Options and annual reviews.

Performing quarterly "end-of-the-line" benzene analysis allowing a facility to recognize and correct benzene emissions.

Employee training in proper sampling methods

Audits of laboratories doing the analyses

Serial carbon canisters and immediate replacement when a leak is detected

(7) LDAR (leak detection and repair)

Implementation of a program to ensure compliance by:

Employee training in proper sampling methods

Third-party audits of LDAR program to ensure that all components are included

Requiring repair of leaking valves at 500 ppm rather than 10,000 ppm, and a first attempt at repair when a valve is leaking at 200 ppm; for pumps repair at 1000 ppm.

More frequent monitoring with no skip periods

CHARLES J. SHEEHAN
REGION 6 REGIONAL COUNSEL

Chuck has served as Regional Counsel since August, 2003. He manages the seventy-three person office responsible for handling administrative and judicial challenges to regional decisions on air, waste and water permits, and approval of state programs and plans, and for civil and criminal enforcement, hazardous waste cleanups, and compliance with agency grants and procurement regulations.

He came to the Region in March, 1999, as Deputy Regional Counsel for Enforcement, overseeing the legal arm of the Region's civil and criminal, administrative and judicial regulatory enforcement program. In April 2002, he became Acting Regional Counsel. In the six months prior to assuming this position, he was on detail from the Region to EPA Headquarters, in the Office of Enforcement and Compliance Assurance, Office of Site Remediation Enforcement, Regional Support Division, as Acting Deputy Director. There he managed national Superfund enforcement, in coordination with the Regions.

Prior to joining Region 6, he was an attorney in the U.S. Department of Justice, Environment and Natural Resources Division. He litigated cases in the federal district and appellate courts, with EPA as the principal client, in all Regions, and under all major pollution and natural resources protection statutes. During his fifteen years at the Department of Justice, Chuck also served terms as an Assistant U.S. Attorney, bringing criminal prosecutions in the District of Columbia, and with the Legal Adviser's Office of the U.S. Department of State.

Between his Department of Justice service and Region 6, Mr. Sheehan was, for nearly two years, the first General Counsel to the U.S.-Mexico Border Environment Cooperation Commission, located in Ciudad Juarez, Chihuahua, Mexico.

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"SURVIVING" THE PROCESS - THE REALITY OF STATE AND FEDERAL ENVIRONMENTAL ENFORCEMENT

AN INDUSTRY PERSPECTIVE

Sixteenth Annual Texas Environmental Superconference
State Bar of Texas
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* Opinions expressed herein are those of the authors, and not those of Baker Botts L.L.P. or any of its partners or employees.

"SURVIVING" THE PROCESS - THE REALITY OF STATE AND FEDERAL ENVIRONMENTAL ENFORCEMENT

AN INDUSTRY PERSPECTIVE

I. Introduction

State and federal enforcement of environmental laws is an evolving process that necessarily reflects changing priorities. Large, complex industrial facilities are faced with literally thousands of state and federal environmental regulatory requirements that are constantly changing as new laws are passed and interpretations change. Although the vast majority of regulated entities expend considerable resources to remain in constant compliance, this complicated maze of requirements is an ongoing, daily challenge. The hundreds of detailed, daily recordkeeping requirements and almost constant reporting obligations place a considerable burden on the regulated community. While 100 percent compliance is always the goal, clerical errors can result in noncompliance with paperwork requirements. While these technical non-compliances rarely have any impact on human health or the environment, scarce resources are expended by regulators to enforce these requirements, often at the expense of violations that actually impact the environment.

Following the U.S. Environmental Protection Agency's ("EPA") lead, the Texas Commission on Environmental Quality ("TCEQ") has identified maximizing the benefit to the environment in the agency's enforcement policies as a key goal of its ongoing enforcement review process. From consistency across regions to compliance history and enforcement policies on the state side, to selecting enforcement priorities on the federal side, the face of environmental enforcement is shifting away from a focus on technical non-compliances with no impact on the environment to actual violations that directly impact human health and the environment. While TCEQ appears to have made this sensible shift in priorities an important component of its review of state enforcement policies, it remains to be seen whether a practical change in the agency's approach to enforcement will result.

Within a framework of changing state and federal enforcement priorities, this article opens with a brief overview of the environmental enforcement process in Texas, followed by a discussion of TCEQ's ongoing enforcement review. In addition, an industry perspective on several key issues being considered as part of the enforcement review is provided. After addressing state enforcement, federal enforcement of environmental laws is addressed through a brief overview of the federal enforcement process and a discussion of recent trends in federal enforcement. Finally, two such recent trends—EPA's New Source Review ("NSR") and wet weather enforcement initiatives—are discussed.

II. State Environmental Enforcement

A. Overview

TCEQ is the primary Texas agency charged with enforcing state environmental laws and rules, including federal rules incorporated into state laws. Within the agency, the Enforcement Division of the Office of Compliance and Enforcement is responsible for investigating violations and ensuring corrective action. Administrative enforcement can proceed formally or informally, depending on the nature of the alleged violation, among other factors. Enforcement, whether formal or informal, typically begins with a scheduled inspection or an investigation resulting from a complaint. Informal enforcement often results in the issuance of a notice of violation ("NOV"), and is resolved without monetary penalty and with a return to compliance. Formal enforcement can include a formal administrative enforcement action, civil judicial enforcement, or criminal judicial enforcement.

A formal administrative enforcement action usually begins with issuance of a Notice of Enforcement ("NOE"). A proposed administrative enforcement order, including monetary penalties and prohibitions on future conduct, typically follows receipt of a NOE. Resolution usually involves negotiation of an agreed order between the executive director and the respondent, which is then entered by the TCEQ Commissioners at an agenda meeting. However, where agreement cannot be reached, a respondent has the right to a contested case hearing on the violation in question and the amount of the penalty.[1]

If TCEQ believes that due to the seriousness of a violation administrative enforcement is not appropriate, it can initiate civil judicial enforcement by referral to the Attorney General's office. Such matters are either resolved through an agreed judgment or trial. Penalties are often higher when enforcement action is handled through the courts, and the activity in question can be enjoined by court order. Finally, where intentional and knowing violations of environmental laws are alleged, TCEQ can seek criminal enforcement.

B. TCEQ's Enforcement Review

1. Background

TCEQ is currently in the process of conducting what its web site describes as "a comprehensive review of its enforcement functions to ensure that the agency is enforcing environmental laws fairly, effectively, and swiftly."[2] According to TCEQ, the enforcement review will focus on the following key issues: (1) how the agency's use of criteria to decide whether to pursue enforcement actions could be improved; (2) enforcement consistency across regions and programs; (3) how the agency's implementation of the new compliance history requirements is working; (4) how the agency's use of compliance history information could be improved; (5) maximizing compliance in enforcement policies; and (6) maximizing the benefit to the environment in the agency's enforcement policies.[3] Although limited, stakeholder

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[1] *See* TEX. WATER CODE § 7.058.
[2] *See* http://www.tceq.state.tx.us/comm_exec/enf_rev/index.html.
[3] *Id.*

involvement has been facilitated through public meetings and the submission of comments through an on-line questionnaire.

The review is being conducted by various subcommittees organized around subtopics. Reports prepared by these subcommittees are currently under review. A second round of public comment is scheduled for late August/early September 2004, and presentation of the final draft recommendations is scheduled for the October 15, 2004 Commissioners' work session. Industry's experience with the review to date has been somewhat limited. While the Commission has posted a "Key Issues" document on its web site,[4] the review for the most part has been internal. Stakeholders have not had an opportunity to meet with individual committee and subcommittee members.

2. Key Issues

The following discussion sets forth key issues facing the regulated community and proposes changes to the process that would improve efficiency and conserve resources while protecting human health and the environment:

a. Focus on Environmental Harm

TCEQ enforcement resources are often directed at identifying clerical violations that have no impact on the environment. While such violations may be easy to identify, companies that strive for compliance and scrupulously examine and report, may end up being penalized more severely than less conscientious companies. For example, companies that create records of non-reportable emission events that may not satisfy TCEQ's interpretation of how such records are to be completed end up being penalized much more severely than companies that fail to record any emission events. The vast majority of companies are attempting to comply with environmental rules at all times. However, these same companies pay high penalties for violations that have no impact on the environment. As discussed above, TCEQ has identified maximizing the benefit to the environment in the agency's enforcement process as one of the key goals of the current enforcement process. Focusing agency resources on violations that impact the environment instead of clerical violations will conserve agency resources while ensuring protection of human health and the environment.

b. Pre-Enforcement Meetings

Many stakeholders have complained that an administrative enforcement action at TCEQ is too often a long, drawn-out process, plagued by significant delays. In fact, a recent report released by the State Auditor's Office criticized the delays inherent in resolving enforcement actions.[5] Many matters could be resolved early in the process—saving both the agency and the regulated community time and resources—if a meeting were held prior to issuance of a NOV or NOE. Such a meeting would allow company representatives to discuss

[4] Available at http://www.tceq.state.tx.us/assets/public/comm_exec/epreview/epr_77_key_issues.pdf.

[5] *See An Auditing Report on the Commission on Environmental Quality's Enforcement and Permitting Functions for Selected Programs*, Texas State Auditor's Office, December 2003, available at http://www.sao.state.tx.us/reports/2003/04-016.pdf.

factual and legal issues with knowledgeable and experienced TCEQ staff qualified to make decisions on the allegations at issue. Improving the criteria for deciding whether enforcement should be pursued has been identified by TCEQ as a key goal of its enforcement review. Through the sharing of information early in the process, including facts that may not have been readily apparent at the time of the inspection, many of these matters could be resolved.

Holding such meetings early in the process, before issuance of a NOV or NOE, would not be unprecedented in TCEQ's history. TCEQ's predecessor agencies held similar meetings. Under this approach, TCEQ would provide a summary of issues to the company in a notice of the meeting. The meeting would include an explanation of the allegations by TCEQ with the opportunity for the regulated entity to address factual and legal issues in an attempt to resolve some or all of the issues prior to issuance of a NOV or NOE. The time and resources saved would benefit both the agency and industry, while protecting human health and the environment.

c. Consistency Across Regions

As mentioned above, enforcement consistency across regions and programs is a key goal of TCEQ's ongoing enforcement review. Although TCEQ has made and continues to make efforts to ensure that inspectors and penalty assessments are consistent across regions, the reality is that there is wide variation. Because regional enforcement coordinators often lack sufficient experience with the particular medium at issue, a great deal of deference is afforded the inspector and his or her opinion regarding whether a violation has taken place. This is true even where a similar matter has been determined not to be a violation in another region. In addition, inspectors in certain regions tend to conduct frequent, small inspections, while inspectors based in other regions may conduct more comprehensive reviews, less frequently. This inconsistency results in an unequal assessment of penalties and a disproportionate impact on compliance history. Because companies that operate in multiple regions within the state are often forced to bring a matter to Austin to ensure consistency, the time it takes to resolve enforcement actions can be greatly extended. By promoting consistency across regions through increased training and awareness, TCEQ will ultimately conserve resources and improve environmental protection in the state.

d. Compliance History

Over the course of a year and a half and through two separate rulemakings, TCEQ implemented rules addressing the components, classification and use of compliance history. The result is a complex formula that takes into account arguably unreliable indicators of compliance history and fails to adequately account for size and complexity. Instead of trying to fit every facility into a formula that cannot possibly differentiate in any meaningful way between vastly different operations, TCEQ should develop a more focused, risk-based compliance history classification process that puts greater weight on actual violations that harm human health or the environment. Some of the issues that plague the current rules are discussed below.

i. Basing Compliance History on Allegations

TCEQ's current rules base compliance history in part on NOVs. However, NOVs contain *allegations* of violations that may be without merit, having no bearing on the compliance status of a regulated entity. Accordingly, they have no place as components of a formula that attempts to measure compliance history. TCEQ staff have justified the inclusion of NOVs in compliance history by assigning relatively less weight to NOVs as compared to enforcement orders or court judgments. However, this is not an adequate justification to support their consideration as part of compliance history. No weight should be given to an unproven allegation when assessing a company's compliance history.

Under TCEQ's compliance history rule, multiple major violations can result in "repeat violator" status under which a company's compliance history can be severely impacted. Despite the serious consequences of repeat violator status and the agency's apparent recognition of the difference between a NOV and an enforcement order through the assignment of relatively little weight to a single NOV, major violations *alleged* in NOVs are still counted toward "repeat violator" status. The serious impact that "repeat violator" status can have on both a company's compliance history and reputation should not be based on unproven allegations.

ii. Adequately Accounting for Size and Complexity

The failure of the current formula to adequately account for size and complexity is directly responsible for how difficult it is to attain and maintain "high performer" status. TCEQ's insistence on expending agency resources on clerical violations that have no impact on the environment often results in the classification of large, complex facilities with excellent compliance records as "average performers." A few alleged violations of the thousands of recordkeeping and reporting requirements a complex facility is subject to should not dictate the facility's compliance history classification.

iii. Compliance History under the Penalty Policy

In conjunction with its 2001-2002 compliance history rulemaking, TCEQ also issued a revised penalty policy. The revised policy counts the negative components of compliance history twice, once for the entity's classification, and once based on percentage increases for each individual negative component. Base penalties can be substantially increased based solely on individual component enhancements, with no offsetting consideration given to positive components or the number of investigations. Accordingly, TCEQ's policy should be revised to more fairly consider compliance history.

iv. "Repeat Violator" Status

"Repeat violator" status should be based only on violations that have an actual impact on human health or the environment and which arise from the same proximate cause, at the same facility. The purpose behind "repeat violator" status should be to address situations where an owner or operator repeatedly fails to address the underlying cause of a serious

violation. Multiple emission events at the same site very often result from entirely different underlying causes, and should not be treated as "repeat" events.

e. Media-Specific Enforcement Policies

TCEQ should develop media-specific enforcement policies. Establishing appropriate penalties and *de minimis* thresholds for individual media would streamline the enforcement process and help prevent lengthy delays in resolving enforcement actions.

III. Federal Environmental Enforcement

A. Overview

EPA exercises primary enforcement authority under most federal environmental protection statutes, including, but not limited to, the Clean Air Act ("CAA"), 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"). Federal environmental enforcement can be addressed through administrative actions, civil actions, and federal criminal actions. Most federal environmental protection statutes provide for administrative enforcement through the issuance of compliance orders to address violations or releases, emergency orders, and formal administrative complaints. In addition, civil judicial enforcement is usually authorized.[6] Civil enforcement can involve, for example, securing civil penalties, enforcement of administrative orders, and recovery of response costs. Finally, federal environmental enforcement can also include criminal actions for significant violations of environmental laws.

Most of the trends in federal environmental enforcement observed over the past decade or more (some of which are discussed below) are reflected in the civil judicial enforcement of environmental statutes. EPA typically develops and refers enforcement matters to the Environment and Natural Resource Division ("ENRD") of the Department of Justice ("DOJ") when it believes administrative enforcement is not appropriate. A number of factors are used to determine whether civil judicial enforcement is appropriate, including, but not limited to, the seriousness of the violation and whether similar violations have taken place in the past. Many civil judicial enforcement actions are resolved through entry of a consent decree. Settlements increasingly include requirements for the implementation of environmental management systems and performance of environmental audits. In addition, settlements often include supplemental environmental projects ("SEPs") which offset a portion of the penalty with a commitment to undertake an environmentally beneficial project. SEPs are limited to projects that the company is not already required to implement, and must meet the requirements of EPA's SEP Policy.[7] SEPs often involve environmental restoration and public health projects. Common examples include conservation easements and school bus retrofits.

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[6] *See e.g.*, 42 U.S.C.A. § 7414.

[7] *See* 63 *Fed. Reg.* 24,796 (April 10, 1998).

B. Federal Enforcement Trends

1. General Trends

Over the past decade, federal environmental enforcement has been moving "away from smaller cases with more limited environmental impacts to cases addressing violations that have much greater impacts on public health and the environment."[8] Other trends in federal environmental enforcement include a shift toward multimedia cases and cases that address multiple facilities and multiple events.[9] Finally, as discussed below, beginning in the early 1990s, EPA undertook a series of enforcement initiatives aimed at various industry sectors. Although by no means an exhaustive discussion of federal enforcement initiatives covering all the environmental statutes under which EPA exercises primary enforcement authority, the following discussion focuses on enforcement trends under the CAA and CWA.

2. New Source Review Enforcement Initiatives

Beginning in 1988 with the wood products industry[10]—and expanding to include the petroleum refining industry, coal-fired power plants, and most recently, ethanol producers—EPA has brought a series of civil actions under the NSR provisions of the CAA. The CAA's NSR requirements apply to the construction of new stationary sources and to existing stationary sources that undergo a "major modification." A "major modification" is a physical change or a change in the method of operation that results in a significant net increase in emissions of an air pollutant regulated under the Act.[11] Physical changes or changes in the method of operation do not include: routine maintenance, repair or replacement, certain fuel or raw material switches, increases in hours of operation or production rate, and pollution control projects.[12] In each industry, EPA alleged that a pattern of "major modifications" was undertaken without authorization that resulted in increased emissions. Although certainly not the only legal issue addressed in NSR enforcement, what constitutes "routine maintenance, repair or replacement" has been a main focus of these cases.[13]

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[8] John C. Cruden and Bruce S. Gelber, *Federal Civil Environmental Enforcement: Process, Actors, and Trends*, 18 A.B.A. SEC. NAT. RES. & ENV. 4 (2004).

[9] *Id.*

[10] In 1988, beginning with Louisiana-Pacific, Inc. and subsequently expanding to cover other large companies, EPA began investigating NSR compliance within the wood products industry. Settlements reached by 2000 had resulted in $289 million in penalties and required each company to install best available control technology ("BACT"), conduct compliance audits, and perform SEPs.

[11] 40 C.F.R. § 52.21(b)(2)(i).

[12] *Id.* at § 52.21(b)(2)(iii).

[13] In October 2003, EPA published a final rule addressing the "replacement" prong of the routine maintenance, repair or replacement exclusion from the definition of "modification." Under the rule, replacement of components that costs no more than 20 percent of the cost of the original process unit is not a "modification" under NSR. However, the rule was challenged, and in December 2003 the U.S. Court of Appeals for the District of Columbia stayed the rule. Because of the stay, the revisions have no legal effect pending the court's consideration of legal challenges.

a. Petroleum Refining Industry

In 1998, EPA began investigating various refiners across the country for compliance with NSR requirements, New Source Performance Standards ("NSPS"), leak detection and repair requirements ("LDAR") and the Benzene NESHAP ("BWON."). Complaints were ultimately filed against various refiners while EPA simultaneously pursued settlement negotiations. The complaints allege, in part, that many sources were making improper use of the various exclusions from the NSR program, including the routine maintenance, repair and replacement exclusion. Although EPA took an arguably narrow view of what constitutes routine maintenance, and despite reasonable arguments that EPA's reinterpretation of existing regulations required a rulemaking, many companies opted to enter into settlement negotiations. According to EPA, settlements to date cover over 40 refineries and will result in significant reductions in nitrogen oxide and sulfur dioxide emissions, as well as benzene, volatile organic compounds and particulate matter.[14] The settling refineries have agreed to pay civil penalties of close of $40 million and to perform SEPs valued at $25 million.[15]

b. Coal-Fired Power Plants

Based on an apparent belief that certain older, coal-fired power plants would be unable to meet increased demand without periodically going through NSR permitting, in November 1999, EPA and DOJ moved against seven major utilities in the Midwest and Southeast alleging widespread NSR noncompliance. In a related action, EPA issued an administrative order against the Tennessee Valley Authority ("TVA") for similar violations. While many companies ultimately entered into settlement negotiations that resulted in consent decrees—most recently, South Carolina Public Service Authority in March 2004—EPA's Environmental Appeals Board ("EAB") heard arguments in the TVA case and ultimately issued an opinion largely in favor of EPA. TVA appealed the EAB ruling to the U.S. Court of Appeals for the Eleventh Circuit, but the court dismissed the action without addressing the merits of the case, ruling that it lacked jurisdiction over EPA's decision in an administrative compliance order ("ACO") that TVA had violated NSR permitting requirements. The court held that ACOs cannot constitute final agency action sufficient for judicial review, reasoning that ACOs are "legally inconsequential" because portions of the CAA making ACOs independently enforceable are unconstitutional. In May 2004, the United States Supreme Court declined EPA's request for review of the Eleventh Circuit's decision. The Supreme Court's decision forecloses any substantive review of the issues unless EPA refiles its action.

c. Ethanol Producers

In 2002, EPA began investigating the ethanol industry for alleged noncompliance with NSR requirements. EPA initially targeted twelve facilities in Minnesota. In October 2002, EPA announced that it had entered into agreements with all twelve facilities. According to EPA, the agreements will require installation of BACT and result in annual reductions of 2400-4000 tons of VOCs and carbon monoxide, 180 tons of nitrogen oxides, 450 tons of particulate matter

[14] *See* http://www.epa.gov/compliance/civil/programs/caa/oil/index.html.
[15] *Id.*

and 250 tons of hazardous air pollutants.[16] More recently, EPA entered into a global settlement with Archer Daniels Midland covering 52 facilities in sixteen states.

3. Clean Water Act Enforcement Trends - Wet Weather

The CWA's point source requirements are widely touted as one of the most successful environmental programs of the past 30 years. In addition, although recent court decisions have called into question the reach of federal jurisdiction over intrastate wetlands,[17] EPA's approach to enforcement under section 404 has remained more or less consistent in recent years. One clear trend in CWA enforcement, however, is EPA's focus on wet weather areas, including concentrated animal feeding operations ("CAFOs"), storm water, and sewer overflows.

a. CAFOs

In early 2003, EPA published new rules adding additional requirements for CAFOs and expanding National Pollutant Discharge Elimination System ("NPDES") permitting of CAFOs.[18] In part because the regulation of CAFOs as point sources blurs the distinction between point source discharges and agricultural run-off, the agricultural community has expressed serious concerns about these rules. One key component of the new rules requires CAFO owners or operators to apply for a NPDES permit based on the "potential" to discharge into waters of the United States, as opposed to actual discharge. The new rules also eliminate the 25-year, 24-hour storm permitting exception under which many CAFOs previously avoided permitting requirements. EPA believes the new rules are necessary to address discharges and runoff of manure and associated nutrients, improper land application, and inadequate maintenance of waste lagoons, due to alleged noncompliance with previous regulations. Currently, EPA is targeting large CAFOs that have been regulated since the early 1970s.

b. Storm Water

The NPDES program includes permit requirements for municipal and industrial storm water discharges. EPA believes that water quality impairment due to storm water runoff is a serious environmental problem.[19] As a result, EPA has targeted various watersheds that are impaired due to sediment and industry sectors that it maintains are in widespread noncompliance. A high profile example is the current focus on large box stores (e.g., Walmart) and residential construction companies. The Walmart settlement resulted in a commitment to implement a company-wide environmental management system to ensure proper storm water controls, in addition to a $1 million penalty.[20]

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[16] *See* http://www.epa.gov/compliance/civil/prgrams/caa/ethanol/index.html.
[17] *See Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers*, 531 U.S. 159 (2001); *see also Rice v. Harkin Exploration Co.*, 250 F.3d 264 (5th Cir. 2001)
[18] 68 *Fed. Reg.* 7176 (Feb. 12, 2003).
[19] *See* http://www.epa.gov/compliance/civil/programs/cwa/cwaenfpriority.html.
[20] *See* http://www.epa.gov/compliance/resources/cases/civil/cwa/walmart.html

c. Sewer Overflows

EPA has identified combined and sanitary sewer overflows ("CSOs" and "SSOs") as a key concern. CSOs are a major cause of beach and shellfish bed closures and advisories. According to EPA, widespread noncompliance with minimum controls and work plans exists. With regard to SSOs, due to decaying infrastructure and population growth, as well as ineffective operation and maintenance, frequent overflows are common. Accordingly, EPA has targeted dry weather discharges and areas impaired by bacteria. Recent enforcement actions include cases involving the cities of Baltimore, Maryland and Baton Rouge Louisiana.[21]

IV. Conclusion

TCEQ's enforcement review process provides an excellent opportunity for the agency to reform a number of aspects of the enforcement process in order to provide more prompt and fair administration of environmental laws.

[21] *See* http://www.epa.gov/compliance/resources/cases/civil/cwa/baltimore.html and http://www.epa.gov/compliance/resources/cases/civil/cwa/batonrouge.html, respectively.

Ms. Giblin is a senior partner in the Austin office of Baker Botts and chairs the firm's Environmental Department. She has practiced environmental law since 1970 and has had extensive experience in advising clients on a broad array of environmental issues. She is listed in the Environmental Law section of The Best Lawyers in America and is the first woman to receive the Distinguished Lawyer Award from the Travis County Bar Association.

Ms. Giblin received her B.A. with honors in 1967 from the University of Texas and her J.D. in 1970 from the University of Texas School of Law. Ms. Giblin is certified in Administrative Law by the Texas Board of Legal Specialization, and is a member of the State Bar of Texas (Environmental and Natural Resources Law Section).

Ms. Giblin, whose maternal grandfather was one of the signers of the Mexican Constitution and a former Mayor of Mexico City, has lived in Mexico and South America and is fluent in Spanish. She has represented a wide range of clients doing business throughout Latin America.

Ms. Giblin served as General Counsel of the Texas Air Control Board and chaired the first City of Austin's Commission on Electric Rates. She is a frequent speaker at seminars and conferences on environmental law issues. She is one of four Texas members of the Federal Clean Air Act Advisory Committee, a diverse group that advises EPA on national air quality issues. Ms. Giblin has been active in the Austin community and serves on the Board of the Mexic-Arte Museum, one of four Hispanic museums in the country. She is also a member of the Board of the Seton Fund and serves on that group's Task Force for the Poor.

PREPARED FOR THE
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Panel on Enforcement

BACK TO BASICS

SELECT ISSUES FOR TCEQ'S ENFORCEMENT PROCESS REVIEW

By

Richard Lowerre
Lowerre & Kelly

&

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TexPIRG

July 2004

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SELECT ISSUES ON TCEQ'S ENFORCEMENT PROCESS REVIEW

"The execution of the laws is more important than the making of them."

Thomas Jefferson

"I think the world is beginning to see America will deal with corporate scandals in a tough way. It doesn't matter whether you're -- we will hold people to account. . . there has to be consequences for bad behavior, and clear consequences, and that's how you deter bad behavior."

George W. Bush (Press Release, Office of the Press Secretary November 17, 2003) http://www.usembassy.org.uk/potusnov03/6potusnov03.html.

I. INTRODUCTION

In 2003, a report of the Texas State Auditor on Texas Commission on Environmental Quality's (TCEQ's) enforcement substantiated a number of prior criticisms by EPA and environmental groups. Moreover, given the Auditor's report and TCEQ's response with its Enforcement Process Review, there does not appear to be a dispute on the need for effective enforcement or the need for TCEQ to change its practices.

The Commission Appears to Understand the Needs: In their press release of December 8, 2003, the three TCEQ Commissioners indicated that the agency would address the needs. They said:

The cornerstone of our agency's mission statement is protection of public health and the environment. This [Enforcement Process] review will aid us in determining what are the most effective means of deterring violations. Kathleen Hartnett White

Compliance is our number one goal. Where our efforts to promote and encourage voluntary compliance are not effective, we must rely upon our enforcement program. Larry R. Soward

We need to be able to answer some basic questions, such as is the air, water and land getting cleaner as a result of our enforcement efforts. R.B. Marquez

The first steps of TCEQ's recent Clear Streams Initiative on pollution from rock mining also send a clear signal that the Commission understands that timely and effective enforcement is needed and can be used to protect the public health and the environment.

The Executive Director's Staff May Not Understand the Needs: TCEQ's detailed description of its Review of its enforcement process is not, however, a consistent statement.[1] Instead of attempting to focus on "what works" given the available resources, the outline of the staff process reads like a laundry list of enforcement options with no indication that the outcome or resources matter. In its "Key Issues for the Enforcement Process Review," of April 30, 2004, the agency appears mired in the very details that prevent the agency from being effective. In addition, fully one-third of the document focuses on compliance history in its role in permitting, an issue not addressed in any significant way in either the report of the State Auditor or prior criticisms.

Moreover, while the list of "Key Issues" appears, at first glance, to be comprehensive, it clearly is also selective, excluding many of the sacred cows of regulated industries from the review. For example, TCEQ is not reviewing programs, like the small business audit-immunity program. That and other programs discussed below can be major barriers to effective enforcement and/or major drains on TCEQ's limited resources. There are no "Key Issues" or related questions focused on the cost and benefits of such programs.

The "Key Issues" list also reveals how complex TCEQ's enforcement process has become. Clearly, the more complex the program, the more difficult it is to implement, and the more it favors violators.

This paper addresses two sets of issues:

Ways to bring the enforcement process back to basics; and

Ways to make the process more effective.

For each set of issues, one example is discussed in detail.

II. TCEQ'S ENFORCEMENT PROCESS REVIEW

A. The Antecedents to the Review: TCEQ may have intended to review its enforcement programs before the State Auditor got involved, but the timing suggests that the Auditor's Report[2] is more of a driving force than TCEQ has acknowledged. There were, however, important studies before the Auditor's efforts that focused on problems in Texas,[3]

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[1]The *Quorum Report* asked the question, TCEQ Enforcement Reform - or Whitewash? Article by Duggan Flanakin, March 17, 2004. See http://www.quorumreport.com.

[2] State Auditor's Office*: An Audit Report on Permitting and Enforcement Functions at the Commission on Environmental Quality,* Report No. 04-016, December 2003, http://www.sao.state.tx.us/reports (summary attached).

[3]A good general article on enforcement strategies is found in the Environmental Law Reporter, by Clifford Rechtschaffen & David Markell, "Improving State Environmental Enforcement Performance Through Enhanced Government Accountability and Other Strategies," http://www.eli.org/publications/33.10559.htm, at 33 ELR 10559.

including:

1. EPA: Office of Inspector General Audit Report. NPDES Majors Performance Analysis. February 2003.[4]

2. Alliance for a Clean Texas: *Environmental Enforcement in Texas,* February 2003, (Executive Summary attached)

3. TexPIRG: *Asleep on the Beat: How Texas' Environmental Cops Have Failed to Deter Illegal Water Polluters,* August, 2003.[5]

4. OMB Watch: States Slack Off on Environmental Enforcement.[6]

B. TCEQ's Explanation of Its Enforcement Process Review: TCEQ described its review in a series of press releases and documents. [7]

In TCEQ's press release dated December 8, 2003, the Executive Director called the agency's action a "comprehensive review of the agency's enforcement functions," a review that would focus on:

The "criteria" used "to decide whether to pursue enforcement,"

The "consistency across regions and programs,"

The "implementation of the new compliance history requirements," and

Making "people comply" and protect the environment.

Then, in its 19 page statement of April 30, 2004, entitled "Key Issues for the Enforcement Process Review" (http://www.tceq.state.tx.us/comm_exec/enf_rev/index.html.),

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[4]EPA Office of Inspector General also published a prior audit report. *Water Enforcement: State Enforcement of Clean Water Act Dischargers Can Be More Effective.* 2001-P-00013. August 2001.

EPA, Region VI also provides periodic review of the federal programs that have been delegated to Texas. For example, from its review of the Texas TPDES program in the Summer of 2003, EPA sent TCEQ its "Program Review," with an accompanying letter dated December 11, 2003 from Robert Murphy, Chief, Water Enforcement Branch, EPA Region VI to John Sadler, Manager, Water and Multimedia Section, Enforcement Division, TCEQ.

[5]See http:// www.texpirg.org, More recently, *Mandatory Minimum Penalties: An Effective Tool for Enforcement of Clean Water Laws,* May 2004.

[6]See, http://www.ombwatch.org/article/articleview/413/1/4/.

[7]See http://www.tceq.state.tx.us/comm_exec/enf_rev/index.html.

TCEQ identified the issues it would review, with a series of detailed questions for each issue. The statement listed 9 issues in the following order:

* Compliance History (6½ pages),
* Enforcement Initiation/Investigation Prioritization/NOV Policy (2½ pages),
* Penalty Policy (2 pages),
* Ordering Provisions (2 pages),
* Supplemental Environmental Projects (2 pages),
* Collections/Financial Inability (1 page),
* Complaints (1 page),
* Enforcement Process (1 page), and
* Communications (1 page).

C. What TCEQ Is Really Doing: A comparison of the list of "Key Issues" with the issues raised by the Auditor's report and with the statements of the Commissioners in the December 8, 2003 press release raises some disturbing questions, including:

1. Is the Review Focusing on Issues Raised by the Commissioners? In brief, the Commissioners focused their comments on determining what works to encourage compliance and protect public health and the environment. The list of "Key Issues" neither includes these issues explicitly nor addresses issues or questions in language suggesting the Commissioners' focus.

Moreover, if the types of goals identified by the Commissioners are going to be made, there clearly needs to be some measures of success, at least for the future. The list of "Key Issues" does not address any questions related to success measurement.

2. Why is there a Major Focus on Compliance History? Nowhere in the reports that preceded the TCEQ Enforcement Process Review was compliance history raised as a significant issue. Yet, in the list of "Key Issues" it is the first issue raised and takes nearly one-third of the document. Use of compliance history was not discussed in the summaries or recommendations of the State Auditor's report, the reports of EPA, ACT or TexPIRG.

Compliance history certainly can be a consideration for enforcement, it is a factor in the penalty policy, for example. The agency's focus, as indicated on the list of "Key Issues," however, is on the role of compliance history in permitting and other agency authorizations.

Issues on the quality of information used in permitting and enforcement are important, but compliance history data is only one such area of information. Thus, for example, Texas law and TCEQ have rules that seek to prohibit the submission of misrepresentations or the omission

of material data,[8] yet no issue addresses misrepresentation or omission of information by applicants or respondents to an enforcement action.

Issues of the quality of information are valid enforcement issues, but would not appear to be "Key Issues" if the purpose is to find ways to make enforcement more effective and more protective of the environment. In fact, given the dominating role of compliance history on the "Key Issues" list, it would appear to be a diversion.

3. Where are the Evaluations of Enforcement Resources and Measures of Success? The Texas Legislature is not likely to provide TCEQ a significant increase in appropriations for enforcement. TCEQ must understand that it needs to be efficient in its use of enforcement funds. Thus, in addition to looking at what works, there would appear to be two other important issues not included in the "Key Issues."

a. How should TCEQ and others measure the success of any changes TCEQ makes as a result of the Enforcement Process Review? It would be valuable to identify measures that allow comparison of the past practices with any changes.

b. Are the current resources being used efficiently and effectively? For example, dozens of inspectors and other TCEQ staff have been moved to the audits program for small business and local governments program, as TCEQ tried an experiment taking over the role normally played by private engineering consultants. Yet, this experiment is not in the review. The costs versus the benefits of the free audits and consulting, and of the immunity from penalties gained through participation, are apparently not being considered.

There are many other experiments or new complications to TCEQ's enforcement process that are also not being reviewed for effectiveness. Thus, while Supplemental Environmental Projects (SEPs) are discussed in a number of questions on the list of "Key Issues," there is no focus on the costs and benefits of SEPs. For example, what benefit to compliance results from staff time spent negotiating and monitoring SEPs? Do SEPs help deter violations?

In addition, TCEQ clearly relies upon the resources of the Office of the Attorney General and local governments such as Harris and El Paso Counties to supplement TCEQ's enforcement resources. How the resources of the AG and local governments can best be called upon to help improve the state enforcement program is not on the list of "Key Issues." Moreover, ut appears that TCEQ has made no effort to include representatives of the Attorney General or of any local

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[8] For example, see §361.089, TEX. HEALTH & SAFETY CODE and 30 TEX. ADMIN. CODE §305.66(a). TCEQ has clear examples where applicants have submitted false information and where regulated entities have submitted only the monitoring data that supported their position. There are also many examples of applicants making false claims that information in applications is confidential, adding to costs for both TCEQ staff and any person interested in reviewing the application. It does not appear that TCEQ has ever taken any enforcement action for these violations. Similarly, in the Voluntary Clean-up Program, TCEQ has no record of taking effective steps to create incentives for those who participate in the program to submit all information or to meet deadlines.

governments on its committees or otherwise in the Review. Likewise, EPA is not involved. Of course, involving EPA in such a review is contrary to TCEQ's basic goal of keeping the feds out, and EPA will not involve itself unless invited by the state.

III. ONE EXAMPLE OF THE BASICS: COMMITMENTS TO EPA

A. Keeping it Simple: As can be seen from the "Key Issues" list, the current enforcement process in Texas is not simple. It is far more complex than in the early days during which "significant" violations were referred to the Texas Attorney General. Then, the limited resources required the state to provide high profile examples of enforcement, thus creating the "fear factor." Everyone could not be treated the same, and the state used its discretion to decide how to create the incentives to comply. The state still can.[9]

Incentives for compliance were created by large penalties. Juries in Texas understood the need for such incentives and certainly did not have to be consistent with other juries. The use of the courts and the related publicity was viewed as an effective deterrent.

TCEQ's recent Clear Streams Initiative, at least the initial action, appears to recognize the valuable role that court actions can have. Court actions be handled very quickly and can be very effective.

With the addition of administrative penalties, immunity and privilege programs, SEPs, deferrals, etc., the process is now much more complex. There are clearly benefits and costs for the more complex process. More and more consistent enforcement actions are expected.

The basic requirements and goals of TCEQ's enforcement program, however, still need to be the focus. In the list of "Key Issues" they are not.

The Texas Water Code provides the basic authority and requirements. EPA's requirements, in its authorizations for federal air, water and waste programs, provide for a second basic set of principles, one with much more guidance. Since TCEQ's list of "Key Issues" does not appear to address federal requirements, they are discussed here.

B. The Example: Texas Commitments for Authorizations for Federal Programs: Texas has made a number of agreements with EPA on state enforcement.[10] Texas has had to prove to EPA that its program meets the requirements of federal law for consistent enforcement across the nation, and, in doing so, Texas has made a number of commitments on enforcement.

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[9] *Texas v. Malone Service Co.*, 829 S.W.2d 763, 766 (Tex. 1992).

[10] See, for example, *Multi-Media/Multi-Year Enforcement Memorandum of Understanding* between TNRCC and EPA, dated April 1999. There are also MOAs (not MOUs) for most, if not all, federal programs "delegated" by EPA to Texas.

Thus, federal requirements and Texas agreements with EPA should form one of the basic foundations for any enforcement process review, if only to identify problems that the federal constraints may pose for changes to TCEQ's enforcement process.[11]

The EPA standards for state programs are not strict. The standards (along with EPA's related recommendations), are found in EPA rules at:

For NPDES programs: 40 C.F.R. Part 123 (§123.26 & § 123.27.)

For hazardous waste programs: 40 C.F.R. Part 271 (§271.15 & §271.16.)

For underground injection control programs: 40 C.F.R. Part 145 (§145.12 & §145.13.)

For air pollution programs:

SIP requirements: 40 C.F.R. Part 51 (§ 51.112, §51.160, § 51.212, §51.230,& §51.493.)

Title V programs: 40 C.F.R. Part 70 (§70.11.)

While these requirements are stated in general terms, EPA has a number of guidance and policy documents that explain requirements, such as the requirement for timely enforcement.[12] Because similar commitments and requirements apply in most states, many of the issues that can arise for such enforcement efforts have been subject to federal guidance and other state evaluations. For example, on the issue of SEPs, TCEQ identified 9 issues. Most of the issues are addressed in EPA policy or guidance documents.[13]

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[11]In a January 30, 1996 interoffice memorandum from Joe Vogel to the Commissioners' Work Session, some such constraints were identified and discussed. A copy is attached.

[12]Generally, timeliness is measured by EPA for completion, not initiation, of enforcement. It is often limited to 180 days in grant agreements with states. See Interoffice memo from Joe Vogel, attached.

[13] See EPA's website http://cfpub.epagov/compliance/resource/policies/civil/seps for SEP memos on:

Interim Guidance for Community Involvement in Supplemental Environmental Projects, 6-17-03.

Clarification and Expansion of Environmental Compliance Audits under the SEP Policy, 1-10-03.

Importance of the Nexus Requirement in the Supplemental Environmental Projects Policy, 10-02.

Supplemental Environmental Projects Policy, 3-22-02.

Appropriate Penalty Mitigation Credit under the SEP Policy, 4-14-00.

Supplemental Environmental Projects Model Consent Agreement & Order, SEP CAFO, 1-1- 99.

Using the federal guidance, or results of other state's experience with federal requirements, TCEQ would find that many of its issues have been addressed. In addition to guidance on SEPs discussed above, and for recovery of the economic benefits of non-compliance discussed below, TCEQ has access to federal guidance on:

* Penalty policies:[14]

Civil Monetary Penalty Inflation Adjustment Rule, 40 C.F.R. Parts 19& 72, 2/13/04.

RCRA Civil Penalty Policy, 6/23/03.

Issuance of Revised CWA Section 404 Settlement Penalty Policy, 12/21/01.

Reduced Penalties for Disclosure of Certain Clean Air Act Violations, 9/9/99.

Civil Penalty Policy for Section 311(b)(3) and Section 311(j) of the Clean Water Act, 8/1/98.

Modifications to EPA Penalty Policies to Implement the Civil Monetary Penalty Inflation Rule (Pursuant to the Debt Collection Improvement Act of 1996, 5/9/97).

Clarification of the Use of Appendix I of the Clean Air Act Stationary Source Civil Penalty Policy, 7/23/95.

Ability to Pay Short Sheet (RCRA), 6/19/95.

Issuance of Revised Interim Clean Water Act Settlement Penalty Policy, 3/01/95.

Ability to Pay or Profit Entities: An Analysis of Judicial and Administrative Interpretation, 08/01/93.

Clean Air Act Stationary Source Civil Penalty Policy, 10/25/91.

Guidance on Determining a Violator's Ability to Pay a Civil Penalty (CAA), 12/16/86.

* Timely and appropriate enforcement, for example:

Revised Approval Procedures for Supplemental Environmental Projects, 7-21-98.

[14]The guidance documents listed below can be found on EPA's website at: http://cfpub.epa.gov/compliance/resources/policies/civil/penalty/.

Office of Enforcement and Compliance Assurance Workbook: The Timely and Appropriate Enforcement Response to High Priority Violations, 6/23/99.[15]

* Audits and Immunity:

Incentives for Self-Policing: Discovery, Disclosure, Correction and Prevention of Violations, 5/11/00.[16]

Audit Policy Update, Vol. 5, Number 1, Office of Regulatory Enf., Spring 2001.[17]

Moreover, TCEQ has access to organizations that can assist with identifying enforcement tools that work best in other states. Those organizations include the Environmental Council of the States, National Association of Governors (http://www.nga.org), National Association of Attorneys General (http://www.naag.org)[18], and the National Conference of State Legislatures (http://www.ncsl.org).

In any case, TCEQ should not be spending time trying to reinvent enforcement policies and practices. Instead, it should be evaluating the basic requirements and identifying aspects that have proven to work in the past.

IV. WHAT WORKS: ONE EXAMPLE - RECOVERING THE ECONOMIC BENEFIT OF NON-COMPLIANCE

One of the best examples of what works involves the recovery of the economic benefit of non-compliance ("EBN"). (There is some indication, that TCEQ's Review is looking at other state programs for ways TCEQ could improve its efforts to remove the profit incentive for non-compliance.)

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[15]The guidance document can be found on EPA's website at: http://www.epa.gov/compliance/resources/publications/civil/federal/airsnc.pdf.

[16]See http://www.epa.gov/compliance/resources/policies/incentives/auditing/auditpolicy.pdf.

[17]See http://www.epa.gov/compliance/resources/newsletters/incentives/auditupdate/spr2001.pdf.

[18]This association has recently published a report entitled *Guidelines for Joint State/Federal Civil Environmental Enforcement Litigation.* March 2003.

A. History of TCEQ's Policy on Recovery of Economic Benefits of Non-Compliance: Texas law requires TCEQ to "consider" the EBN in setting penalties, Sec. 7.06(3)(D), TEX. WATER CODE. Currently, TCEQ does, but its penalty policies allow many of the entities that violated Texas law to escape repayment of all or part of EBN. According to a review of eighty enforcement cases over three years by the Texas State Auditor, TCEQ staff estimated that violators enjoyed an economic benefit of $8,647,005 through non-compliance. However, the fines assessed by TCEQ amounted to only $1,683,635, approximately 19 per cent of the violators' economic benefit. The Auditor attributed this failure to TCEQ's penalty policy.

A more recent review by TexPIRG confirms that the TCEQ practice continues. A review of a number of enforcement cases since September 2003 reveal that most of the EBNs calculated by TCEQ were not collected as penalties. (Figures are from TCEQ Penalty Worksheets.)

Facility	**County**	**Order Date**	**Media**	**Economic Benefit**	**Penalty Imposed**
Equistar Chemicals	Harris	4/5/04	Water Quality	$494,946	$ 54,725
City of Trenton	Fannin	10/10/03	Water Quality	$653,589	$ 6,120
Harris County WCID No. 1	Harris	11/16/03	Water Quality	$630,604	$ 66,000
City of Whitehouse	Brazoria	12/21/03	Water Quality	$606,456	$ 24,890
Pilgrim Poultry, G.P.	Camp	4/19/04	Water Quality	$449,177	$200,000
Galveston Environmental Svs.	Galveston	3/22/04	Industrial Waste	$ 82,462	$ 48,125
Luce Bayou Public Utility District	Harris	9/25/03	Water Quality	$ 76,542	$ 19,475
Thousand Trails, Inc.	Rains	3/22/04	Water Quality	$ 14,026	$ 10,800
Calidad Environmental Svs.	Bexar	3/14/04	Industrial Waste	$ 11,049	$ 4,080

The State Auditor was not the first to encourage the agency to recover the EBN. In 1993, the Comptroller of Texas issued a Performance Review of the Texas Air Control Board (one of three agencies merged into what is now TCEQ), that documented problems with the failure of the agency to assess fines that recovered the EBN.[19]

[19]See website of the Texas State Comptroller, http://www.window.state.tx.us/tpr/atg/atgnr/nr04.html.

The report pointed out that several states, including Florida, Illinois, Minnesota and Virginia, were recovering the EBN in the early '90s. While Texas statutes already gave regulators the authority to recover the full EBN, the Performance Review recommended that legislation be passed that explicitly directed agency staff to recover EBN.

In 1994, the newly formed TNRCC included as part of its enforcement philosophy:

> Some entities may – consciously or unconsciously – decide that the costs of compliance are just too great when considered against the likelihood of being caught and substantially penalized...If non-compliance yields considerable cost savings, and there is little expectation of enforcement...being accompanied by substantial monetary consequences beyond the costs of coming into compliance at that later date, then an entity driven primarily by economic considerations will choose to pollute and take the consequences later.
>
> To offset the advantages of non-compliance for entities driven primarily by such economic considerations, enforcement penalties must at least exceed the costs saved by a company operating in violation of environmental laws before any real deterrent effect is achieved. This requires recovering economic benefits of non-compliance plus a penalty component designed to achieve deterrence in appropriate cases.[20]

By 1997, however, TNRCC had moved away from this philosophy and developed new policies that did not seek to ensure recovery of the EBN. Thus, EPA wrote when approving the state's application for authorization to implement the federal NPDES program in 1998:

> Although EPA urges states to implement penalty authority in a manner equivalent to EPA's, it is not required.... While authority to collect economic benefit exists, TNRCC's policy allows for mitigation of penalties to zero in some instances. Therefore, there is no guarantee that economic benefit, at a minimum, will be collected by TNRCC in all cases.[21]

The agency's policy at the time did not provide for collection of the EBN if the benefit was less than $25,000. If the benefit was over $25,000, TCEQ staff increased the base penalty by

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[20]TNRCC's 1994 Enforcement Philosophy, page 3.

[21]63 Fed. Reg.51164, 51174 (Sept. 24, 1998). EPA added,

> Through its oversight role, EPA will work with TNRCC to ensure that the penalties collected under the TPDES program are consistent with those required by the NPDES program including, where appropriate, the collection of an economic benefit.

10% to 50%, depending on 'culpability'. Later, the threshold was lowered to $15,000 [22]

Thus, if a person was found to have gained an economic benefit of $100,000 through non-compliance, but their base penalty was only $1000 (which was the average TCEQ penalty for clean water violations in 2001), the penalty enhancement for economic benefit apparently would be $500. The person would have saved $98,500.

In its December 11, 2003 report on TCEQ's TPDES enforcement program, EPA recommended TCEQ change its penalty policy to

> Collect at least the economic benefit of noncompliance and the gravity portion for the actual time period of noncompliance. This practice would serve to 'level the playing field' and make it economically impractical to violate the permit requirements.[23]

B. EPA Policies: EPA's position is that recovery of the EBN

> helps level the economic playing field by preventing violators from obtaining an unfair financial advantage over their competitors who made the necessary expenditures for environmental compliance. Penalties also serve as incentives to protect the environment and public health by encouraging the prompt compliance with environmental requirements and the adoption of pollution prevention and recycling practices. Finally, appropriate penalties help deter future violations.[24]

This policy is still in place. For example, on March 11, 2003, Attorney General John Ashcroft announced that the number one priority for the Department of Justice's Environment and Natural Resources Division was to "[l]evel the playing field" and

> focus on bringing recalcitrant members of a regulated industry into compliance with applicable laws and on recovering the economic benefit gained by recalcitrants when they avoid compliance costs. [25]

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[22]This current policy is found in the agency's penalty policy, found in TCEQ Publication RG 253, dated September 2002, and available on TCEQ's website.

[23]Page 3 of the Executive Summary of EPA's "Program Review," with an accompanying letter dated December 11, 2003 from Robert Murphy, Chief, Water Enforcement Branch, EPA Region VI to John Sadler, Manager, Water and Multimedia Section, Enforcement Division, TCEQ.

[24]EPA has a number of guidance documents on EBN. See, for example, "Identifying and Calculating Economic Benefit that goes Beyond Avoided and/or Delayed Costs," 5/25/03, available at EPA's website at: http://www.epa.gov/compliance/resources/publications/civil/programs/ecoben-costs.pdf.

[25]Prepared Remarks of Attorney General Ashcroft, March 11, 2003.
See http://www.usdoj.gov/ag/speeches/2003/031103agenrdremarks.htm.

C. Policies of Other State: In early 2004, TexPIRG performed a survey of states to determine how EBN was handled in other states. Most states responding to a TexPIRG survey list recovery of EBN as one of several factors to be "considered" when calculating penalties. A number of states, however, require full recovery of EBN.

For example, **Oklahoma's** Department of Environmental Quality (ODEQ) has the policy that uses the economic benefit of non-compliance as the floor for its penalties.

> In determining an appropriate fine, the starting point is to estimate, in so far as possible, the economic benefit (if any) which has accrued to the respondent by virtue of the non-compliance...the assessed fine should at least recover the economic benefit of non-compliance. ODEQ Administrative Procedures Manual, Enforcement Section, page 6, revised 12/26/01.

Illinois law requires that:

> In determining the appropriate civil penalty to be imposed...the Board shall ensure, in all cases, that the penalty is at least as great as the economic benefits, if any, accrued by the respondent as a result of the violation, unless the Board finds that imposition of such penalty would result in an arbitrary or unreasonable financial hardship. 415 ILL. COMP. STAT. 5/42 (Civil Penalties at § 42(h)(5)(7)).

Tennessee's Department of Environment and Conservation indicated that it uses EPA's penalty policies, at least for hazardous wastes violations, and referenced EPA guidance[26] that requires for the recapture of:

> significant economic benefit of non-compliance that occurs to a violator from non-compliance with the law. It is incumbent on all enforcement personnel to calculate economic benefit. An economic benefit should be calculated and added to the gravity-based penalty component when a violation results in significant economic benefit to the violator.

South Dakota's Department of Environmental and Natural Resources responded to TexPIRG's survey with a letter from its Surface Water Quality Program that stated that the state's policy

> requires a penalty to include that amount which will offset any advantage to the entity for non-compliance. It does not prescribe a process to calculate that penalty but requires that a reasonable method be used. . . The policy . . .specifies

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[26]Letter of February 20, 2004 from Tennessee Dept. Of Envi. And Cons. to Luke Metzger, TexPIRG, in the files of the authors.

that the EPA computer program BEN . . . can be used . . .[27]

Moreover, even in the other 20 states that responded to the TexPIRG's survey and that do not explicitly require recovery of the EBN, none provide for the type of limited recovery in TCEQ's penalty policy. Instead, these states' policies largely direct enforcement staff to attempt to recover any economic benefit.

D. Calculating the Economic Benefit of Non-Compliance: Understandably, regulated industries, which oppose the recovery of EBN in general or for their violations, question how economic benefit is calculated. The courts that have reviewed the standard models, and have upheld them. The Third Circuit ruled:

> Precise economic benefit to a polluter may be difficult to prove. The Senate Report accompanying the 1987 amendment that added the economic benefit factor to section 309(d) recognized that a reasonable approximation of economic benefit is sufficient to meet plaintiff's burden for this factor. . . The determination of economic benefit or other factors will not require an elaborate or burdensome evidentiary showing. Reasonable approximations of economic benefit will suffice.[28]

In the mid-1980s, EPA developed a computer model to assist enforcement officials in making this 'reasonable approximation'. This 'BEN' model' quantifies economic savings that result from delaying capital investments in pollution control equipment and avoiding related operations and maintenance expenses. The model seeks to use standard financial cash flow and net present value analysis techniques based on generally accepted financial principles. The model attempts to calculate the costs of complying on time and of complying late, adjusted for inflation and tax deductibility. However, the BEN model for calculating economic benefit is not all that needs to be examined.[29]

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[27]Letter of February 20, 2004 from South Dakota Dept. of Envi. and Nat. Res. to Luke Metzger, TexPIRG, in the files of the authors.

[28] *Public Interest Research Group of New Jersey, Inc. v. Powell Duffryn Terminals, Inc.*, 913 F.2d 64 (3d Cir. 1990), *cert. denied*, 498 U.S. 1109 (1991). The Fifth Circuit also holds that reasonable approximations of economic benefit will suffice, stating:

> Finally, and most importantly, we note that a court need only make a "reasonable approximation" of economic benefit when calculating a penalty under the CWA. *Sierra Club, Lone Star Chapter v. Cedar Point Oil Co.*, 73 F.3d 546, 576 (5th Cir. 1996), *cert. denied*, 519 U.S. 811 (1996), citing *Powell Duffryn* at 80.

[29]For example, in *U.S. v. Municipal Authority of Union Township,* 150 F.3d 259 (3d Cir. 1998), the court affirmed the right of enforcement officials to calculate economic benefit from wrongful profits. The case examined penalties assessed by EPA for illegal discharges to a township's POTW. The increased volume of discharges led to higher usage fees from the POTW in excess of the cost of compliance. EPA calculated that the company gained wrongful profits from the violation. The court stated "it is significant that neither the statute nor the case law

In 1999, EPA conducted a public review of the model.[30] In addition to improving BEN's precision and user-friendliness, EPA developed a separate model to calculate any competitive advantage gained by a violator through increased market share or sale of products containing banned materials.

TexPIRG's survey of twenty-seven states found that over 50% of the respondents use the BEN model. TCEQ generally does not.

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supports the contention that the cost-avoidance method is the only permissible method of determining the amount the polluter has gained from violating the law." *Id.* at 266. In this case, use of the BEN model would not have adequately penalized the company for the violation.

[30] U.S. EPA Calculation of the Economic Benefit of Noncompliance in EPA's Civil Penalty Enforcement Cases. 64 Fed. Reg. 32797, 32947 (June 18, 1999).

An Audit Report on

The Commission on Environmental Quality's Enforcement and Permitting Functions for Selected Programs

December 2003

Report No. 04-016

Lawrence F. Alwin, CPA
State Auditor

An Audit Report on

The Commission on Environmental Quality's Enforcement and Permitting Functions for Selected Programs

SAO Report No. 04-016
December 2003

Overall Conclusion

For the air, water quality, and public water supply programs we evaluated, the Commission on Environmental Quality's (Commission) enforcement function does not consistently:

- Issue enforcement orders or settle enforcement cases within its required timeframes. For the cases we tested, late enforcement orders included $299,489 in penalties and yielded economic benefits of $720,253 to the violators.
- Classify supplemental environmental projects (SEPs) according to established criteria or monitor SEPs administered by third parties. The misclassification of the 2002 and 2003 SEPs we tested resulted in a loss of $319,590 to the State.
- Calculate penalties accurately or fully collect delinquent penalties. As of May 2003, the Commission had outstanding delinquent penalties of $571,322.

Commission on Environmental Quality

The Commission on Environmental Quality permits and regulates environmental activities in Texas. The Commission had approximately 3,000 employees, 16 regional offices, and a $365.4 million annual appropriated budget for fiscal year 2003. Most of this budget is funded by program fees. The Commission issues and enforces 101 types of permits. In fiscal year 2002, the Commission collected $276 million in fee revenue, assessed $5.6 million in penalties, and arranged for violators to offset $2.2 million in penalties through supplemental environmental projects.

Sources: General Appropriations Act, 2002 Annual Financial Report, and 2002 Annual Enforcement Report

If unaddressed, these inconsistencies could limit the Commission's ability to collect penalties on a timely basis, hold environmental violators accountable, and deter future instances of noncompliance.

The Commission's permitting function for these programs generally operates in accordance with state statute and agency policy, although we noted some areas for improvement in the availability of information used for permitting. In addition, while the Commission complies with federal law regarding notification about pending air permits, the Commission's current process can reduce the effective public comment period to less than the federally required 30 days.

Finally, we noted that the Commission's recent changes to its penalty policies may reduce their effectiveness as a deterrent to polluters. We also found that current statutes related to air emissions caps and policies for discounted fees could be modified to increase agency revenue by approximately $25 million per year.

State Auditor's Office
Lawrence F. Alwin, CPA
State Auditor

This audit was conducted in accordance with Government Code, Sections 321.0131 and 321.0132.

For more information regarding this report, please contact Julie Ivie, Audit Manager, at (512) 936-9500.

Key Points

The lack of timely enforcement orders and settlement of enforcement cases could allow violations to continue and slows penalty collections.

The Commission does not consistently issue enforcement orders to alleged violators within required timeframes. Forty-five percent of the cases from 2001 to 2003 that we tested had enforcement orders that were not mailed out on time, exceeding the deadline by an average of 76 days. The assessed penalties for these cases totaled $299,489, and the alleged violations yielded economic benefits to the violators estimated at $720,253. In addition, the Commission does not always settle enforcement cases within its established timeframe. The Commission's philosophy is to promote voluntary compliance. The Commission reports that it works with entities to correct violations prior to finalizing the enforcement order and collecting the penalty. However, in accordance with the Commission's philosophy statement, a strong enforcement function is important in protecting the State's human and natural resources. Therefore, these delays in the enforcement process could result in violators' continuing to pollute and cause the State to lose the use of penalty funds.

The Commission does not have an effective process for collecting delinquent penalties.

The Commission's Financial Administration Division lacks an adequate process to collect delinquent administrative penalties. As of May 2003, the outstanding delinquent administrative penalties for air, public drinking water, water quality, and multimedia totaled $571,322.

Misclassifications and inadequate monitoring of supplemental environmental projects reduces environmental benefits owed to the State.

The misclassification of supplemental environmental projects (SEPs) that were started in fiscal year 2002 or 2003 resulted in a loss of $319,590 in environmental benefits. Additionally, while the Commission has an adequate process to monitor the SEPs directly administered by violators or by the Commission, the lack of adequate monitoring for third-party SEPs increases the risk that the associated funds could be used inappropriately, resulting in an overall loss of environmental benefits to the State. SEPs are an option available to violators to offset all or part of a penalty. Based on Commission records, the Commission assessed $67,896,295 in penalties from September 1995 through August 2003. Of this, $15,325,964 (22.6 percent) was offset by SEPs.

The Commission complies with notification requirements for air permits but could better promote public participation for some citizens.

The Commission complies with federal requirements regarding public comment for pending air permit applications. However, the Commission's policy establishing the beginning of the 30-day public comment period for prospective air permits could reduce the amount of time that some members of the public who miss the newspaper notice have to comment.

Poor file management limits the availability of information for public participation and permitting processes.

The Commission is not properly maintaining the files in its central records. Many of the files we requested for testing purposes could not be located. There is a risk that these files may not be readily available for permitting and enforcement processes or for public review.

Data used to monitor compliance with some water quality permits is not accurate.

The Commission does not monitor or review data that a contractor enters and that the Commission uploads to the Environmental Protection Agency's (EPA) Permit Compliance System. We tested four months of 2003 data entry and found that 20 percent of the records contained errors or were not entered into the database. Ninety-seven percent of these errors were attributable to the contractor. The Commission provides this data to the EPA and also uses it to identify entities that have exceeded their discharge limits.

Other Issues for Consideration

Recent changes to penalty calculation policies may not deter violations.

Recent changes to penalty policies may reduce their effectiveness as a deterrent to polluters. Violators often have economic benefits that exceed their penalties, which could reduce their incentive to comply. For 80 fiscal year 2001, 2002, and 2003 cases we tested, the total economic benefit gained by violators during the period of noncompliance was $8,647,005. However, these entities were fined only $1,683,635, which is approximately 19 percent of the economic benefit gained from being out of compliance.

Eliminating the air emissions fee cap could result in increased revenue and decreased emissions.

Current statute (Health and Safety Code, Section 382.0621[d]) precludes the Commission from imposing a fee for certain air emissions over 4,000 tons. As a result, a facility that reports emissions of 4,000 tons of air pollutants pays the same fee as a facility that reports emissions of 85,990 tons, thus not providing an incentive for facilities to limit their emissions once they exceed 4,000 tons. Based on fiscal year 2002 data, we calculated that if the cap were eliminated, the Commission's potential revenue could increase by approximately $25 million per year.

Summary of Management's Response

The Commission generally agrees with our recommendations and has agreed to implement them. However, it does not agree with our conclusions in two areas, supplemental environmental projects and public comment for pending air permit applications.

Summary of Information Technology Review

During our fieldwork, the two information systems we reviewed did not require users to change passwords from their initial passwords, which are assigned by the Central Registry system administrator. The Central Registry contains general data about regulated entities. The Consolidated Compliance and Enforcement Data System (CCEDS) contains data about enforcement actions. Without periodic password changes, there is a greater risk that a password could be compromised and that an unauthorized individual could gain access. Also, the Commission lacks a business continuity plan, which leaves it unprepared for a disaster.

Summary of Objectives, Scope, and Methodology

The primary objectives of this audit were to determine whether the permitting and enforcement functions for selected Commission programs ensure that the Commission (1) issues and enforces permits in accordance with state statutes and Commission policies and (2) collects and accounts for fees appropriately.

Our scope generally included data and processes completed in fiscal year 2002, but in some cases we reviewed data from September 1, 2001, to May 31, 2003, as indicated.

Our methodology consisted of gathering information by interviewing management and staff from the Commission's headquarters and regional offices, observing Commission operations, mapping permitting and enforcement processes, reviewing policies and procedures, testing controls and related documentation, and reviewing data from information technology systems.

Table of Results and Recommendations
💻 denotes entry is related to information technology

The lack of timely enforcement orders may allow violations to continue and slows penalty collection. (Page 1)

The Enforcement Division should:

- Develop a system of benchmarks for meeting enforcement report deadlines. These deadlines should be closely monitored, and if a deadline is missed, the reason for the delay should be noted within the report.
- Monitor upcoming and overdue cases on a weekly basis and ensure that it issues enforcement orders within the timeframes established in policy.

Delays in settling enforcement cases may affect the timely collection of fines. (Page 3)

The Commission should ensure that enforcement coordinators forward cases to the Litigation Division once settlement negotiations have exceeded 60 days.

Field note destruction policy prevents accountability. (Page 4)

The Commission should revise its policy of destroying field notes and checklists and should retain these records to facilitate the review of inspection reports and data in CCEDS.

Misclassification of SEPs results in a loss of environmental benefits. (Page 6)

The Commission should:

- Expand the SEP categories to clarify in detail what qualifies as a direct environmental benefit, what qualifies as an indirect environmental benefit, and why.
- Develop a classification system to account for projects that consist of both direct and indirect benefit characteristics to accurately apply offset values to SEPs.

Monitoring of third-party SEPs may not ensure that funds are used appropriately. (Page 8)

The Commission should:

- Enter report due dates on SEP tracking sheets to increase visibility and aid in tracking.
- Standardize reporting timeframes.
- Standardize the format for reporting financial information and expenditures to simplify and expedite the review process.
- Incorporate third-party reporting requirement data into a monthly "Pending SEPs for Required Reporting" log in order to generate a single report log that includes respondent and third-party reporting dates.
- Require refunds of SEP monies from third parties that are not complying with their agreements.

Information in the SEP database does not agree with the SEP documentation. (Page 10)

The Commission should:

- Ensure that all pertinent data from the respondent's file is entered into the SEP database.
- Ensure that all data is merged into the SEP tracking sheet to assist in monitoring ongoing SEP projects.
- Enter report due dates on SEP tracking sheets to assist in identifying delinquent reports.
- Revise the current SEP tracking sheet to include the respondent/third-party reporting schedule.

Penalties are not always calculated accurately. (Page 11)

The Commission should:

- Revise its review process to ensure that deferrals are offered in accordance with policies.
- Revise and streamline its penalty policy and penalty calculation worksheet.

The cost of penalty deferrals may outweigh the benefits. (Page 12)

The Commission should determine whether the cost of deferrals is worth the benefit of shortening the settlement time, given that offering a deferral generally does not shorten the settlement time enough for the Commission to meet its deadline.

The Commission does not have an effective process for collecting delinquent penalties. (Page 13)

The Commission should:

- Develop and implement written policies and procedures for the handling of administrative penalties in default. These policies and procedures should include:

Table of Results and Recommendations
💻 denotes entry is related to information technology

- ♦ The frequency of sending out delinquency letters.
- ♦ The circumstances and timing of warrant holds.
- ♦ Guidelines on when to refer delinquent accounts to the Office of Legal Services.

- Request tax identification numbers on permit, license, and registration application forms to facilitate placing default accounts on warrant hold.
- Ensure that CCEDS data is current and complete so that the Commission can send delinquent letters to all delinquent accounts.

Public comment policy could reduce the effective comment period. (Page 15)

The Commission should:

- Ensure that notices and letters contain instructions on how to contact the Commission about the dates of the public comment period so that citizens can find out when the comment period begins and ends.
- Ensure that the Office of the Chief Clerk and other applicable Commission staff are aware of the public comment period dates or know to whom to refer citizens when they have inquiries about public comment periods.

Poor file management limits the availability of information for public participation and permitting. (Page 16)

Central Records should enforce current policies and ensure that it addresses procedures for the creation, maintenance, and inventory of files.

The Commission does not monitor contractor data entry for accuracy. (Page 18)

The Enforcement Division should:

- Implement a process to perform a quality review of data entry provided by contractors.
- Develop additional procedures to ensure that all of the submitted reports are entered into PCS.

Allowing the Commission's compliance-monitoring coordinators to edit permit limits in PCS creates a risk of unauthorized edits. (Page 19)

The Commission should request that the EPA modify the user rights to reflect the job functions of entering permit limits and requirements and of monitoring compliance.

Unauthorized solid waste disposal fee discount reduces the Commission's revenue. (Page 21)

The Commission should reconsider the discount granted to federal facilities. If the Commission decides to continue the discount, it should update its current rules and, if necessary, request statutory authority to officially authorize the discount.

Delays in annual revenue reconciliations may prevent the Commission from reporting accurate data in its Annual Financial Report. (Page 21)

The Financial Administration Division should reconcile amounts recorded in Prophecy against USAS data in a timely manner to ensure that revenue is properly recorded, accounted for, and reported in its AFR.

Outdated MOU could create difficulties in revenue transfers. (Page 22)

The Department of Public Safety and the Commission should update their MOU as required. The revenue directors and staff involved in the collection, transfer, and receipt of funds should meet annually to discuss changes that affect these processes.

The funds transfer process between the Commission and the Department could be improved. (Page 23)

The Department should establish better communication with the Commission in order to address any changes that may affect the process of transferring funds.

In particular, the Department should take steps to:

- Transfer funds using the Commission-requested Program Cost Accounts and fund numbers.
- Transfer interagency transfer voucher sales on a regular basis.
- Reconcile its monthly reports to its accounting system prior to providing them to the Commission.
- Provide the Commission with appropriate documentation so it can independently determine its share of sales by certificate type.

Table of Results and Recommendations denotes entry is related to information technology
The lack of required password changes in the Central Registry and CCEDS puts data security at risk. (Page 25)
The Commission should activate the feature that prompts users to change their initial passwords when they first log in. Periodic changes to passwords should be required for the Central Registry.
The lack of a business continuity plan jeopardizes the Commission's ability to provide services during a disaster. (Page 26)
The Commission should finalize its business continuity plan and have it approved by executive management. The plan should be tested at least annually.

Recent SAO Work		
Number	Product Name	Release Date
03-040	A Review of Fiscal Year 2002 Encumbrances and Payables at Selected Agencies	June 2003
01-020	An Audit Report on the Petroleum Storage Tank Program at the Natural Resource Conservation Commission	February 2001
00-005	An Audit Report on Revenue Processing at Four State Agencies	November 1999
99-019	A Follow-up Audit Report on the Texas Natural Resource Conservation Commission	December 1998
98-070	A Review of the Enforcement Function at the Texas Natural Resource Conservation Commission	August 1998

Other SAO Products		
Number	Product Name	Release Date
03-360	A Legislative Summary Document Regarding Texas Commission on Environmental Quality (formerly the Natural Resource Conservation Commission)	January 2003
01-445	Natural Resource Conservation Commission Legislative Summary Document	March 2001

Alliance For A Clean Texas

The Alliance for a Clean Texas (ACT) is a network of 21 state-wide environmental, religious and consumer organizations representing over a quarter million Texans.

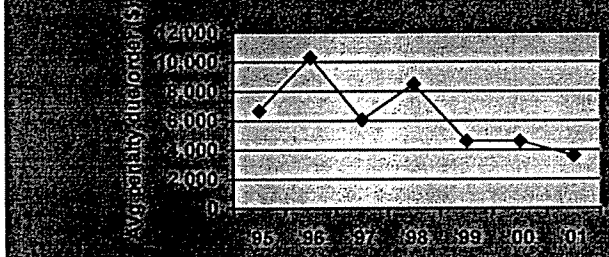
For more information about member groups:

http://www.alliancecleantexas.org

ENVIRONMENTAL ENFORCEMENT IN TEXAS:
A review of trends and issues

Prepared by

Mary L. Kelly



February 2003

Forward and Acknowledgments

The report was prepared by Mary Kelly, when she served as Executive Director of the Texas Center for Policy Studies. Ms. Kelly is now a Senior Attorney in the Texas office of Environmental Defense. TCPS expresses it appreciation to staff at the Texas Commission on Environmental Quality (TCEQ), who answered several questions regarding the content of the agency's Annual Enforcement Report, from which the data in this report were obtained. The statements and opinions herein, however, are the sole responsibility of TCPS and the author.

This report was made possible by a generous grant from the Beldon Fund to the Texas Center for Policy Studies.

T|C|P|S

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Table of Contents

I. EXECUTIVE SUMMARY

This report analyzes trends and issues in environmental enforcement at the state's primary environmental agency, the Texas Commission on Environmental Quality (formerly the Texas Natural Resource Conservation Commission). Enforcement is never an easy job for a regulatory agency, and certainly Texas is no exception, with its powerful industrial base and plentiful supply of lawyers and consultants working to keep their clients out of the enforcement spotlight. Agency inspectors and lawyers are generally over-worked and underpaid, and are sometimes constrained by less than enthusiastic political support for aggressive enforcement actions. Moreover, Texas has been a leader among states in promoting "voluntary compliance" and "compliance assistance" programs, sometimes leading to conflicting messages about the role of more traditional enforcement programs.

Nevertheless, trends in enforcement actions (number of inspections, trends in violations, and penalties) are still important indicators—for the public and for the legislature—of whether TCEQ is implementing statutory enforcement mandates and meeting public expectations for the protecting human health and the environment.

It is in this spirit that we have prepared this analysis of TCEQ enforcement trends from 1996 to 2001, with some preliminary data from the end of the year report for FY 2002 (Chapter II). The report also examines several enforcement policy and enforcement data reporting issues (Chapter III). These issues relate to the overall effectiveness and credibility of the TCEQ enforcement program, and to whether there are adequate data available to evaluate the effectiveness of enforcement and/or voluntary compliance programs.

A. Major Findings

While it is difficult to draw broad conclusions about the effectiveness of TCEQ's enforcement efforts based on the available data there are certain important trends that emerge from this analysis.

Inspection Coverage

The number of inspections per year declined in the agricultural, air quality, municipal waste and petroleum storage tank programs through FY 2001. The steepest decline was in the agricultural program area [confined animal feeding operations, or CAFOs], with inspections reaching their lowest level since 1996. Unfortunately, because the annual enforcement reports do not include information on the number of regulated facilities in each program, it is not possible to determine whether "inspection coverage" (i.e. the percent of regulated facilities inspected each year) is decreasing or whether the decline in inspections reflects a decline in the number of regulated facilities.

Compliance Rates

The annual enforcement reports do not directly report the percentage of inspections that result in notices of violation (NOVs). The best approximation available (total NOVs divided by total inspections) indicates that about 1/3 of the inspections result in NOVs.[1]

This is a much different picture of "facility compliance" than the 95 to 99 % "compliance" rates TCEQ reports in the annual enforcement report. This difference is due to the fact that, for reporting purposes, TCEQ considers a facility "in compliance" following an investigation if no *formal* enforcement action (e.g. administrative order or judicial enforcement order) is issued. It characterizes violations that did not result in such orders as "minor". As discussed in Chapter III, however, a review of TCEQ's procedures for deciding whether or not to initiate a *formal* enforcement action allows violations such as operating without a permit, contaminating groundwater without "documented" health effects and similar violations to be resolved *without* formal enforcement action, even though such violations would warrant an NOV. Thus, NOVs are not strictly "minor" violations and they should be considered reflective of a facility's compliance status at the time of investigation. Instead, TCEQ's current approach results in an artificially rosy picture of the compliance performance of the regulated community as a whole.

Recent analyses of the performance of federal and state governments with respect to enforcement of the Clean Water Act found that polluters routinely and brazenly violate the law. An evaluation of the EPA's Permit Compliance System data reveals that 56% of major facilities in Texas were in Significant Non-Compliance (SNC) of their permits for at least one quarter during the 15 months beginning January 1, 2000 and ending March 31, 2001. This was nearly twice the national average of 30% of major facilities in violation. 14 Texas facilities violated their permits for all five quarters studied. Texas ranked 2nd in the nation for percentage of major facilities in violation.

Analysis of Clean Water Act compliance data, many other reviews and studies,[2] and the recent analysis by EPA's Office of Inspector General[3] demonstrate that serious and chronic discharge violations are routinely ignored. These studies also have argued that enforcement actions taken by EPA and states are frequently ineffective in returning violators to compliance. The EPA's Inspector General notes that penalties assessed for polluters are

[1] Since one inspection could result in more than one NOV, this is not a perfect representation of compliance rate, but it is a reasonable approximation.

[2] See for example: General Accounting Office. *Water Pollution: Many Violations Have Not Received Appropriate Enforcement Attention.* GAO/RCED-96-23. March 1996.; Victor B. Flatt. "A Dirty River Runs Through It (The Failure of Enforcement in the Clean Water Act)." 25 *Boston College Environmental Affairs Law Review.* Fall 1997.; Clifford Rechtschaffen. "Deterrence vs. Cooperation and the Evolving Theory of Environmental Enforcement." *Southern California Law Review.* Vol. 71, No. 6. September 1998.; Robert Worth. "Asleep On The Beat." *The Washington Monthly.* November 1999.; John H. Cushman.. "E.P.A. and States Found to be Lax on Pollution Law: Enforcement is Faulted: Agencies Are Failing to Inspect, Issue Permits and Report Violations, Audit Says." *New York Times.* 7 June 1998.

[3] EPA Office of Inspector General Audit Report. *Water Enforcement: State Enforcement of Clean Water Act Dischargers Can Be More Effective.* 2001-P-00013. August 2001.

often too small to offset the economic gain received by breaking the law, establishing a perverse incentive to pollute while creating a competitive disadvantage for law-abiding companies. This, in addition to the large disparity between state penalties, exacerbates the "race to the bottom" for states trying to attract polluting industries that the Clean Water Act was designed in part to prevent.[4]

Administrative Orders and Penalty Amounts

With a few exceptions (agriculture and air quality programs), the annual number of administrative enforcement orders issued in the various programs has been increasing each year. This trend is especially evident in the air, municipal solid waste, water quality and public water supply programs. However, between FY 1996 and FY 2001, the average penalty per order has plummeted in most program areas. Overall (excluding water rights), the average penalty *assessed* per order dropped from about $ 15,000 in FY 1996 to about $ 7,500 in FY 2001. In addition, an increasing use of penalty deferrals and penalty offsets through supplemental environmental projects (SEPs) has resulted in a steady decline in the average penalty *due* per order, to the point where—on average—violators are paying only about 50% of the penalty assessed.[5]

Decreases in average penalty amounts have been particularly precipitous in some programs. For example, in the water quality program the average penalty due per order declined from about $ 13,000/order in FY 1994 to just over $ 1,000 per order in FY 2001.[6] A similar sharp decline in the average penalty due is evident in the municipal solid waste program.

Enforcement Policy

What factors might explain why average penalties (both assessed and due) have declined so dramatically? First, as noted above, TCEQ has been making increased use of deferrals and SEP offsets, which reduce the amount of penalty due the state. In fact, between FY 1995 and FY 2001, deferrals and SEP offsets resulted in a loss of about $ 22 million for the state general revenue fund.

Second, despite a clear statutory mandate,[7] TCEQ's penalty policy was changed in 1997 to no longer require specific consideration of "deterrence" in setting penalty amounts. Indeed, the goal of deterrence (i.e. setting penalty amounts high enough to discourage future violations by the violators or others in the regulated community) is not mentioned anywhere in the TCEQ penalty policy. Thus, in the water quality program, where the number of inspections, the number of NOVs and the number of administrative orders

[4] Worth, 1999.
[5] Deferrals reflect penalties deferred contingent on the violator carrying out certain actions. Penalty "offsets" are granted in return for the violator agreeing to use the money on a supplemental environmental project (SEP).
[6] Preliminary FY 2002 data show an average $ 4000 due per order in the water quality program.
[7] TEX. WATER CODE § 7.053(3)(D).

have each increased significantly in the last few years since full delegation of the federal wastewater permitting program to Texas, average administrative penalties due per order in FY 2001 had very little deterrent value.

Third, the current TCEQ penalty policy does not require that penalties be set to ensure that any economic benefit gained by the violator is recovered.[8] This approach contrasts sharply with the agency's 1994 enforcement philosophy, which expressly recognized that penalties should be set high enough to recover economic benefit and prevent companies from gaining a competitive advantage through their non-compliance. As that earlier policy stated:

> *Some entities may–consciously or unconsciously–decide that the costs of compliance are just too great when considered against the likelihood of being caught and substantially penalized...If non-compliance yields considerable cost savings, and there is little expectation of enforcement...being accompanied by substantial monetary consequences beyond the costs of coming into compliance at that later date, then an entity driven primarily by economic considerations will choose to pollute and take the consequences later.*

Of course, other factors such as the nature of the violations or the types and sizes of facilities being inspected could partially account for the penalty trends. It is not possible, however, to assess these factors with existing data in the enforcement reports. Hopefully, planned improvements in TCEQ's enforcement data base will facilitate such analysis in the future.

B. Recommendations

The following recommendations fall in two areas: (1) enforcement policy and (2) enforcement data and reporting issues. Details behind these recommendations are provided in Chapter III.

The recommendations regarding enforcement policy are intended to help ensure that TCEQ has a credible, equitable enforcement program that responds to legislative mandates and legitimate citizen complaints.

While TCEQ currently does track and report quite a bit more enforcement information than many other states, and while its enforcement reporting has improved greatly over the last few years, some improvements are necessary. Better reporting of enforcement activities

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[8] The TCEQ penalty policy does reference "economic benefit." It requires TCEQ staff to evaluate a series of questions to determine whether a violator gained an economic benefit (e.g. delayed capital expenditures, reduced operating costs, increased revenues or competitive advantage) through its non-compliance. If TCEQ finds that a violator has gained less than $15,000, there is no attempt to either recover economic benefit through the penalty or even to enhance [increase] the penalty by some amount. Thus, under the Commission's current policy, there is a $ 15,000 "free-ride" on economic benefit for any violator. If the economic benefit grained through non-compliance is greater than $ 15,000, then TCEQ will enhance the base penalty by 50% if the violator is "culpable" or by 10% if the violator is not culpable.

is important not only to legislative oversight and public understanding of the agency's efforts, but also to the agency's own self-evaluation of whether it is using its limited enforcement resources most effectively.

Enforcement Policy Recommendations

1. TCEQ should immediately revise its penalty policy to be consistent with the authorizing statute by including consideration of the need to deter future violations as a factor in determining the appropriate penalty.

2. Texas law and TCEQ penalty policy should be revised to require that administrative penalties recover, to the extent feasible, the quantifiable economic benefit of non-compliance.

3. TCEQ should formally clarify its nuisance policy to avoid requiring demonstrated health effects before declaring a nuisance condition. It should also provide that citizen affidavits regarding nuisance conditions are sufficient for at least issuance of an NOV.

4. TCEQ should provide 1:1 offsets only for those SEPs that provide significant, measurable, direct benefits to the environment. In addition, TCEQ should ensure that it has adequate staff to represent the agency in enforcement hearings in order to prevent violators from leveraging low penalties or high deferrals by refusing to settle.

5. TCEQ should repeal the verbal notification policy and instead require that all violations discovered during an inspection be documented in a written NOV. The agency can then rely on its multi-layered and flexible criteria for deciding whether to initiate formal enforcement actions to move forward on the more serious of the NOVs. This policy change would provide a strong incentive for full compliance, especially as TCEQ moves to the more "performance-based" regulatory structure required by the 2001 Sunset bill.

6. TCEQ should automatically initiate formal enforcement action for all entities that are found operating without a required permit, registration or other authorization. If the entity has a compelling reason for failing to be aware of such requirements, that could be used to adjust any penalty amount. TCEQ should also work with the Texas Secretary of State to provide each new business incorporating in Texas with a brief summary of where they can find environmental permit requirement information.

7. The enforcement initiation criteria should be revised to include automatic initiation of formal enforcement action for violations that have the *potential* to cause harm to human health or the environment.

8. The Category B repeat violator criteria should be revised to delete the term "scheduled" so that repeat violations are more readily referred to formal enforcement action.

Enforcement Data and Reporting Recommendations

1. The annual enforcement report should include, for each program area, the number of facilities regulated in that area. It should also differentiate between physical inspections, records review and other actions that might currently be lumped together under the term "inspections".

2. The annual enforcement report should include, by program, information sufficient to determine the percentage of inspections that result in notices of violation.

3. The annual enforcement report should include data from major local enforcement programs, including, by program area if feasible, data on inspections, NOVs, percent inspections resulting in NOVs, penalties and deferrals or SEPs.

4. Given the TCEQ's strong emphasis on voluntary compliance, the agency should prepare a more complete and comparable annual analysis of results of enforcement v. voluntary programs (in terms of direct pollution reduction) within the resources available to gather and analyze such data.

Texas Natural Resource Conservation Commission

INTEROFFICE MEMORANDUM

To: Commissioners' Work Session **Date:** January 30, 1996

Thru: Joe Vogel, Deputy Director, Office of Compliance and Enforcement
Ann McGinley, Director, Enforcement Division
Mark R.Vickery, Manager, Waste Enforcement Section, Enforcement Division

From: J. Mac Vilas, Team Leader, I&HW Team 1, Waste Section, Enforcement Division

Subject: Executive Summary for February 9, 1996 Commissioners' Work Session

Issue: Federal constraints on the TNRCC enforcement programs

Background: The TNRCC Enforcement Division is responsible for enforcing the statutes and rules for seven major program areas including Air, Public Water Supply, Agriculture, Water Quality, Industrial & Hazardous Waste, Municipal Solid Waste and Petroleum Storage Tank. The Occupational Certification Section, Compliance Support Division, is responsible for enforcing the statutes that apply to individuals considered environmental professionals.

Several teams are responsible for ensuring compliance with state equivalent federal standards. When we accept the responsibility for implementing federal programs, we are also obligating ourselves to accept their program direction and "equivalent" policies. These responsibilities are contained in either Memoranda of Understanding (MOU), Memoranda of Agreement (MOA) or State Enforcement Agreements (SEA) between the state and the EPA. The Air, Industrial & Hazardous Waste, and Water Quality programs have specific Federal Constraints that we discuss below.

One specific constraint within these enforcement agreements that impacts both I&HW and Air Enforcement is EPA's requirement of "timely and appropriate" enforcement response. In Air there is a 150-day deadline from Notice of Violation (NOV) issuance to "ensur[ing] that the source is in compliance, or [under] a legally enforceable schedule, or subject to a referral to the Attorney General or for a state adjudicatory enforcement hearing." [105 Grant, Objective II-3, Milestone 3] I&HW has a similar requirement with a 180-day deadline. Staff continues to have difficulty in meeting this deadline because the EPA holds that a schedule is not legally enforceable until after an agreed order becomes effective. This issue places limits on how much time we may want to allow for negotiations. The I&HW Program has convinced the EPA to accept an Executive Director's Preliminary Report to suffice for the deadline. Additionally, in the Air Program, Texas Register publication of proposed settlements make it difficult to issue an agreed order within deadlines. The division has begun drafting enforcement orders on less complex cases to send with a notice-of-enforcement letter to speed up the process. We anticipate that this change will shorten the time necessary to obtain a final agreed order. We do want to point out that we are meeting other constraints and requirements in the MOUs and Grants.

The EPA recently issued a draft Enforcement Response Policy that extends time frames to 180-days from the date of the NOV for formal enforcement and reduces the categories of types of violators from three to two. The two categories of violators include Significant Non-Compliers (SNCs) and Secondary Violators (SVs). The violators are classified based on an analysis of the facility's overall compliance with the

hazardous waste rules and history of non-compliance or prior recalcitrant behavior. Significant Non-Compliers include: facilities which cause actual exposure or likelihood of exposure of hazardous waste or hazardous constituents; are chronic or recalcitrant violators; or deviate substantially from the terms of a permit, order, agreement or regulatory requirement. Secondary Violators include: violators which are not SNCs; and first time offenders and violators which pose no actual threat or a low potential threat of exposure of hazardous waste or constituents; and usually allow prompt return to compliance. Formal enforcement is mandated for a SNC. Beginning in FY 1995, EPA Region 6 has also agreed to allow the I&HW Program to use Expedited Orders in place of a petition with an Executive Directors Report. This process has made it easier to meet EPA mandated deadlines for formal enforcement actions.

The Water Quality Program constraints are specified in an SEA with EPA. This requires coordination of efforts with EPA on cases with overlapping jurisdiction (NPDES has not been delegated to the State). This sometimes causes delays in processing a potential enforcement action. The SEA does not specify requirements for type or degree of enforcement action.

All programs experience the problem of trying to maintain an efficient process in spite of the complexity and constantly changing federal regulations and the expansion of the regulated universe.

Attachments

cc: Dan Pearson, Executive Director
Bill Campbell, Deputy Executive Director
Geoff Conner, General Counsel

RICHARD W. LOWERRE
July 2004

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Education

1975	Doctor of Jurisprudence	University of Texas, Austin
1972	Graduate Work, Chemical Engineering	University of Calif., Berkeley
1971	Masters, Chemical Engineering	Rice University, Houston
1970	B.A., Chemical Engineering	Rice University, Houston

Professional Experience

1980-1986 & 1988-present - Private practice of law: Emphasis on environmental law and policy. Practice includes work on air and water pollution, hazardous, municipal and radioactive waste, pesticide contamination, water resources, and uranium and coal mining. Clients include regional and local governments, citizen organizations and individuals.

1986-1988 - Assistant Commissioner, Texas Department of Agriculture: Responsible for the management of the regulatory programs of the Department, including pesticides, consumer services, food quality, and weights and measures.

1977-1980 - Assistant Attorney General, Texas Attorney General's Office; Environmental Protection Division, representing state environmental agencies in actions to enforce environmental laws and in cases brought to challenge agency decisions.

1975-1977 - Staff Officer, National Academy of Sciences: Responsibilities for research and writing for studies including "Decision Making at the Environmental Protection Agency."

Luke Metzger is the public interest advocate for TexPIRG. He represents public interest concerns before the Texas legislature and state regulatory agencies. He is responsible for research, advocacy and development for TexPIRG. Metzger works extensively with the media as a spokesperson for TexPIRG and as an expert on environmental and consumer issues. He has been interviewed and quoted by numerous media outlets including the BBC, CNN, NPR, NBC Nightly News with Tom Brokaw, USA Today and others. He is also a prolific writer and his articles and op-eds have been published by newspapers including the Los Angeles Times, the Dallas Morning News, the Houston Chronicle. His article, "Polluting the Brazos, Sullying Texas Soul" is featured in the college writing textbook, the Longwood Guide to Writing. Prior to joing TexPIRG, Metzger worked as a organizer for CALPIRG, the California State Employees Association and Frontlash. He holds a Bachelor's degree in Political Science and Theater from the University of Southern California.

PAPER NOT SUBMITTED

ANN R. KLEE

General Counsel
Environmental Protection Agency

Ann Klee was appointed by the President to be General Counsel of the United States Environmental Protection Agency in May 2004. As General Counsel, she is responsible for providing legal advice to Administrator Mike Leavitt and the Agency's program offices. The Office of General Counsel has 350 lawyers and support staff in D.C. Headquarters and 10 regional offices across the country.

Prior to joining EPA, Ann served as Counselor to the Secretary of the Department of the Interior coming on board in January 2001 with Secretary Gale Norton. She was responsible for advising the Secretary and developing policy options on major issues pending before the Department on matters ranging from the Endangered Species Act, Indian water rights settlement and mining to the Everglades. When offered a job at the Department, she was foolish enough to condition her acceptance on the promise of a portfolio of difficult issues. Suffice it to say that she got what she asked for.

Ann was the Chief Counsel to the Senate Environment and Public Works Committee where she was responsible, among other things, for developing legislative strategies for the Chairman on the Clean Water Act, hazardous waste issues, NEPA, the Endangered Species Act, general oversight and enforcement issues. She previously served as Counsel to Senator Dirk Kempthorne's Subcommittee on Drinking Water, Fisheries and Wildlife. She joined Senator Kempthorne's staff in 1995 and, as his environmental counsel, worked on his legislation to reauthorize the Safe Drinking Water Act. In the 105th Congress, she was one of the principal staff responsible for drafting and negotiating Senator Kempthorne's Endangered Species Recovery Act of 1997.

Prior to joining Senator Kempthorne's staff, Ann was a partner and Chair of the Environmental Group in the D.C. office of the law firm of Preston Gates & Ellis. Her practice covered all aspects of environmental law and policy, including legislation, regulatory developments, general counseling and litigation under the Endangered Species Act, the Clean Water Act, Superfund, and the Resource Conservation and Recovery Act ("RCRA"). She has represented transportation, mining and timber trade associations, as well as individual companies in the mining, timber, engineering, high tech, and waste management industries.

Ann received her J.D. from the University of Pennsylvania in 1986, and her B.A. with High Honors from Swarthmore College in 1983. She and her husband live on a farm in the Shenandoah Valley with their five dogs and a bunch of cows.

Natural Resource Damages Litigation: Are States Acting in the Best Interest of the Public?

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The public emergence of natural resource damages claims occurred in 1989 in the wake of Captain Hazelwood's grave mistake of leaving the bridge of the *Exxon Valdez* in the hands of his third mate. Minutes later, 11 million gallons of crude oil began to empty into the ecologically fragile Prince William Sound. The images of wildlife and birds covered in oil were indelible. In addition to its massive expense to clean up the oil, Exxon shelled out close to $1 billion to the United States for damages to the natural resources. In the eyes of the natural resource trustees, the claim for damages was just and the settlement amount was fair. The case was settled out of court.

In October 1999, approximately 10 years after the *Exxon Valdez* incident, the State of New Mexico hired five law firms, working on a contingency basis, to file a lawsuit against General Electric, ACF Industries, Chevron, Texaco, the federal government and others seeking $2 to $4 billion for injury to the groundwater resources at the South Valley Superfund site located in Albuquerque, New Mexico. After almost 5 years of full-throttle litigation and an estimated $50 to $60 million in legal fees and costs, the case was dismissed on the eve of trial. Instead of seeking an early resolution which would have been in the best interest of the state's natural resources, the state's lawyers wanted cash and a lot of it. Now, given the result, many are questioning whether the State of New Mexico would have been better off seeking an out-of-court settlement in the form of restoration projects rather than playing high-stakes poker by litigating for large sums of money. Despite what this answer might be, so long as cash-strapped states can farm out these cases at little to no cost, there is great likelihood that litigating claims for natural resource damages will continue into the future. The real question is whether a Trustee's litigation of these claims seeking to recover a monetary award is ultimately in the best interest of the public.

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I. THE EMERGENCE OF NATURAL RESOURCE INJURY LITIGATION

In large part the natural resource trustees across the nation have been and continue to act in the best interest of the public by protecting their trust resources; however, in a handful of states that have resorted to litigation this commitment has been called into question. For example, in New Mexico and New Jersey, outside plaintiff's counsel have been retained to pursue legal actions against potentially responsible parties at little to no cost to the state. According to some sources, close to twenty other states are carefully watching the progress of these "contingent fee" type actions and are considered following suit. This should not be a surprise as state governments have sought to employ outside lawyers who finance the cases themselves for quite some time, most notably as part of the large scale tobacco litigation which produced enormous settlements. The same concept is now being applied to claims for injury to natural resources.

Perhaps the best case example involves the NRD claim brought by the State of New Mexico alleging injury to the groundwater resources at the South Valley Superfund Site in Albuquerque. In this case, the New Mexico Attorney General hired five law firms in order to file claims seeking up to $4 billion in damages. The State's claims were brought under Section 107 of the Comprehensive Emergency Response Compensation & Liability Act ("CERCLA"), the State's NRD statute and common law theories such as negligence, nuisance, trespass and unjust enrichment. In May 2004, after hundreds of days of depositions, extensive motions practice[2] and 25 days in pre-trial conference, the visiting federal district court judge (all local district court judges were recused) dispensed with the case by granting summary judgment for the defendants and opening the path for an appeal. The Court found that the State's interest in the groundwater was custodial in nature, that the measure of injury to the groundwater was an exceedance of the drinking water standards (e.g., Maximum Contaminant Levels), and that the defendants were already under orders by the U.S. Environmental Protection Agency ("EPA") and New Mexico Environment Department ("NMED") to remediate (restore) the groundwater to drinking water standards. On July 21, 2004, the State filed its Notice of Appeal to the 10th Circuit, setting the stage for the State's appeal on a number of the Court's rulings. For a more complete discussion of the South Valley matter, please see Exhibit 1 to this paper.

As the door in New Mexico was shut (perhaps temporarily), another one opened. On May 20, 2004, New Jersey Attorney General Peter C. Harvey and Environmental Commissioner Bradley M. Campbell announced the filing of 10 natural resource damage complaints, representing the first round in an unprecedented initiative to make polluters compensate the residents of New Jersey for damage to or loss of natural resources due to pollution.[3] The suits target companies alleged to have polluted 12 sites in nine counties and focus principally on injuries to the groundwater resource. Six of the 10 lawsuits are being financed and prosecuted by a prominent Louisiana plaintiff attorney. According to

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[2] According to the Court Clerk, over 37 linear feet of motions had been filed in the case, excluding exhibits, as of May 2004.

[3] *See* http://www.nj.gov/lps/newsreleases04/pr20040520c.html for the New Jersey Attorney General 's May 20, 2004 press release.

the press release, these natural resource damage actions, which have been brought under New Jersey's Spill Compensation and Control Act and the common law (e.g., public nuisance and trespass), seek to have the defendants "compensate the citizens of New Jersey for the injury to their natural resources" caused by discharges of hazardous substances and award attorney's fees and costs.[4] While the principal resource of injury is groundwater, the claims also address both ecological injuries to wetlands, wildlife, or surface water, and human use injuries such as closure of a waterway to fishing, a beach to swimming or an aquifer to drinking water supply.

Back home in Texas. While some trustees (feds, states and tribes) have resorted to litigation as a means to obtain injunctive relief and recover money damages for injuries to natural resources,[5] others, such as Texas, continue to reap successful settlements without the involvement of the courts. These out-of-court settlements often originate from an open and cooperative dialogue with the trustee agencies who are more interested in performing ecologically meaningful restoration projects than counting the number of dollars they have recovered from responsible parties. In Texas, the federal and state trustee agencies – Texas Commission on Environmental Quality ("TCEQ", formerly Texas Natural Resource Conservation Commission or TNRCC), Texas Parks and Wildlife Department ("TPWD"), Texas General Land Office ("TGLO"), National Oceanic and Atmospheric Administration ("NOAA"), and the Department of Interior ("DOI," technical arm is U.S. Fish and Wildlife Service) – have traditionally stated that they are more interested in cooperative settlements than adversarial litigation and have focused the settlement discussions on compensatory restoration, not the contentious dollar valuation of the lost resources. A summary of several matters settled by the trustees in Texas over the past several years is provided as Exhibit 2 to this paper.

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[4] *Id.*

[5] The State of Montana has litigated CERCLA NRD claims. See *State of Idaho v. Southern Refrigerated Transport, Inc.*, No. 88-1279, Mem. Opinion and Order, January 25,1991 (D. Idaho). Trial was underway for well over a year on the State of Montana's CERCLA and state law claims regarding natural resource damage on the Clark Fork river. *State of Montana v. Atlantic Richfield Company*, CV-83-317-HLN-PGH. That case, along with damage claims by two Indian Tribes and response cost and NRD claims by the United States, were then settled by ARCO in 1998 for approximately $260 million. $158 million of the total was for natural resource damages. 63 Fed. Reg. 68296 (December 10, 1998), this settlement was entered by the Court on April 19, 1999. Montana later attempted to recover for unresolved claims related to restoration costs at the "Upland Areas" which were not addressed by the settlement. However, the Court ruled that Montana was not entitled to recover damages for this area, based on the language of CERCLA § 107(f)(1), and the fact that Montana did not prove at trial that injuries to or destruction or loss of natural resources occurred in the Upland Areas after December 11, 1980. Similar Montana state law natural resource damage claims under the Montana superfund statute were also denied as the language of the statute is, by its express terms, prospective only and applies to damage to natural resources after 1985. *State of Montana v. Atlantic Richfield Company*, 266 F.Supp.2d 1238 (D. Montana, 2003).

Additionally, one substantial case set for trial in the Fall 2004 involves claims for response costs and natural resource damages filed by the Coeur d'Alene Tribe and the United States at the Bunker Hill NPL site and Coeur d'Alene River in Idaho. *Coeur d'Alene Tribe v. Asarco Inc., et al.* and *U.S. v. Asarco Inc.* in U.S. District Court for the District of Idaho (Case No. CV 91-0342-N-EJL and CV-96-0122-N-EJL). In September 2003, the Court issued its findings of fact and conclusions of law regarding the defendant's liability for response costs and for damages to natural resources under CERCLA and damages under the CWA. The next phase of the trial, scheduled to start in the Fall 2004, will be on damages. The State of Idaho is not a party to the lawsuit as it settled with the defendants in the 1990s. *Coeur d'Alene v. Asarco et al.*, 280 F. Supp. 2d 1094 (D. Id., September 3, 2003).

The threat of litigation, however, is alive and well and should not be ignored, even in Texas. With a simple change in a state's political leaders, what had once been a state that sought to achieve out-of-court cooperative settlements could easily change to one that uses the courts to seek significant sums of money from liable parties for injury to natural resources. While most NRD cases involve a complex set of facts and multiple trustees (both federal and state), perhaps the most straightforward type of claims involve injury to groundwater. It is generally undisputed that the highest and best use of groundwater is for drinking water purposes and there are mechanisms for determining affected volume. The real debate on these claims is what dollar value is assigned to a quantum of water and what is the injury threshold (e.g., MCLs or non-detect). Additionally, for groundwater NRD claims, there is typically only one trustee who has CERCLA jurisdiction over the groundwater resource. In Texas, for example, the TCEQ is the trustee for the state's groundwater resources. In other states, the jurisdiction may still reside in the governor.

Litigating these types of claims will result in the development of case law that has been lacking to date. In that regard, the ruling in the New Mexico is considered a potentially devastating blow to trustees across the nation. After almost 4 years of discovery and on the eve of trial, the state's case summary judgment was granted for the defendants. Due to the state's aggressive position on a number of issues such as the measure and valuation of the injury, the law developed in this case more than likely will influence groundwater NRD cases for years to come. Conversely, as a result of the New Mexico litigation, other states and their counsel will learn from the mistakes that were made and adjust their complaints accordingly. This has already occurred. In order to avoid the possibly limiting arguments such conflict preemption and impermissible attacks on the remedy (CERCLA § 113), new claims are being filed in state courts which plead claims under the state's NRD statute and common law theories.

The following discussion describes in general terms the statutory and regulatory framework for asserting claims for natural resource damage under federal law. It sets forth the potential defenses and limitations on recovery available under those statutes, with emphasis on the significant substantive and procedural differences between cost recovery and natural resource damage claims. Finally, the paper addresses considerations in the settlement process and how to properly structure and protect your settlement so that it does not come unraveled if challenged.

II. FEDERAL STATUTORY AUTHORITY FOR NRD CLAIMS

The natural resource trustees have statutory authority for asserting NRD claims under the Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA"), the Oil Pollution Act of 1990 ("OPA"), and the Federal Water Pollution Control Act ("FWPCA" or the Clean Water Act, or "CWA").[6] Each of these statutes is

[6] Some other federal statutes of more limited application also provide for recovery of natural resource damages. *E.g.*, Trans-Alaska Pipeline Authorization Act, 43 U.S.C. § 1653(c)(13); Marine Protection Research and Sanctuary Act, 16 U.S.C. § 1443(c)(4). In addition, many states have enacted state "superfund" and "oil spill response" statutes that include provisions for the recovery of natural resource damages similar to their federal counterparts.

discussed below. The basic authority that would be relied upon in most instances would be CERCLA, which applies to any releases of hazardous substances to the environment. The potential value of OPA and/or the CWA is that these statutes apply to releases of petroleum products, which are excluded from coverage under CERCLA.

While these are three of the basic environmental response statutes, the statutes are administered differently in prosecuting a claim for damages. There are two major differences:

(1) natural resource damage claims, unlike response cost claims under these statutes, are brought by the United States, a state, or a Tribe, on behalf of natural resource "trustee" agencies. In the case of the United States that is not EPA; for States it may be, but need not be, the state's EPA equivalent;[7] and

(2) there is no natural resource damage equivalent to CERCLA's Section 106 order. As a general rule, trustees do not have authority to issue administrative orders to responsible parties, directing those parties to carry out damage assessment or restoration activities.[8]

The NRD provisions and related regulations of these three federal statutes are provided below. The state trustees also have authority for NRD claims under state law and, in matters being litigated, will plead common law claims. A general overview of state claims is provided following the federal statutes.

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[7] For federal resources, the trustee agencies are typically the Department of the Interior (for terrestrial resources) or the Department of Commerce, through the National Oceanic and Atmospheric Administration ("NOAA") (for marine resources). States typically assign trustee responsibilities to the agency(ies) responsible for resource management, although the trustee may also be the environmental regulatory agency. In Texas, trustee claims may be prosecuted by several agencies, including the Texas Natural Resource Conservation Commission ("TNRCC"), Texas Parks and Wildlife Department ("TPWD") and Texas General Land Office ("GLO").

[8] However, as indicated above, the state of New Jersey has now amended its administrative cleanup procedures to include assessment and restoration of natural resource damages. At the federal level, President Clinton, on August 28, 1996, issued Executive Order 13016, which amended Executive Order 12580. E.O. 13016 expands the delegation of CERCLA's Section 106 administrative order authority beyond EPA and the Coast Guard to five other federal agencies: the Departments of Commerce, Interior, Agriculture, Energy and Defense. While Section 106 authority is limited to ordering necessary response actions, in practice such response actions may be no different that the actions that a resource trustee might require as "restoration." However, since these agencies are limited in their use of Section 106 authority to those sites where neither EPA nor the Coast Guard is the lead, there may be few opportunities for trustee agencies to use this power. In response to numerous concerns expressed by corporations and states over the scope of the new authority, the agencies and the Department of Justice signed in 1998 a memorandum of understanding which provides other limits on the agencies' use of the executive order. See Superfund Report, June 24, 1998, pp. 9-17. It is also our understanding that EPA is encouraging resource agencies to use this Executive Order authority, in particular in connection with mining sites on agency owned or managed lands.

A. The Comprehensive Environmental Response, Compensation and Liability Act[9]

Statutory Provisions The natural resource damage provisions in CERCLA are contained within the general liability section, 42 U.S.C. § 9607 (CERCLA § 107).[10] Under Section 107, past or current owners/operators, generators, and/or transporters are liable for the unauthorized releases of hazardous substances from a site to the environment, with that liability extending to "...damages for injury to, destruction of, or loss of natural resources, resulting from a release of a hazardous substance."[11]

A NRD claim under CERCLA is in major respects similar to a government cost recovery claim. A public trustee, in order to establish the liability of a potentially responsible party for NRDs, must prove all of the elements of a CERCLA Section 107(a) action for recovery of response costs:

- the release;
- of a hazardous substance,
- from a vessel or at a facility;
- by a responsible party as defined in the statute, including current and past owners and operators, and the generators and transporters of the hazardous substances.

In addition, for an NRD action, the Trustee must demonstrate that there has been "injury to, destruction of, or loss[12] of "natural resources"[13] resulting from such a release

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[9] 42 U.S.C. §§ 9601-9675. Trustee natural resource damage claims are authorized pursuant to CERCLA § 107(a)(4)(C) and § 107(f)(1).

[10] A person is liable if he falls into at least one of the following four categories: (1) existing owner or operator of a vessel or facility, (2) owner or operator of facility at the time of disposal, (3) any person who arranged for disposal of hazardous substances, or (4) any person who transports hazardous substances for disposal. *Id.* at § 107(a) (paraphrased).

[11] *See* CERCLA § 107(f), 42 U.S.C. § 9607(f). SARA also amended CERCLA to provide that the trustee must be an official or agency specifically designated by the President or by the Governor of a State. *See* 42 U.S.C. § 9607(f)(1).

[12] The terms injury, destruction or loss are not defined in CERCLA, however, DOI regulations define "injury" as a measurable adverse change, either long- or short-term, in the chemical or physical quality or the viability of a natural resource...." 43 C.F.R. § 11.14(v). *See also In Re Acushnet River & New Bedford Harbor: Proceedings re Alleged PCB Pollution*, 716 F. Supp. 676, 685 (D. Mass. 1989) ("*Acushnet V*") (finding that "injury" to fish and aquatic organisms existed because PCB levels in these natural resources exceeded "tolerance levels" set by the Food and Drug Administration. Additionally, the trustee must establish an injury that results in a change in "baseline" conditions, *i.e.*, the conditions that would have existed had the release not taken place. *See* 43 C.F.R. § 11.14(e).

[13] Both CERCLA and the implementing natural resource damage assessment (NRDA) rule promulgated by the Department of Interior (DOI) define natural resources to include:

> . . . land, fish, wildlife, biota, air, water, ground water, drinking water supplies, and other such resources belonging to, managed by, held in trust by, appertaining to, or otherwise controlled by the United States . . ., any State or local government, any foreign government, any Indian tribe . . . .

[of a hazardous substance]."[14] Trustees may also seek to recover damages for injury to natural resources not only from the direct effects of the contaminant on the resource but also from the effects of remedial actions taken at the site, *e.g.*, the ecological effects of dredging contaminated sediments from a stream or wetland. This requirement of a causal link between the release and the injury is the major difference between response cost and NRD claims, and, given the difficulties inherent in proving that link in many instances, it has been a highly contentious issue.[15] All available defenses to response cost liability are available (such defenses are described below).

DOI's NRDA Regulations. Pursuant to CERCLA Section 301(c), damage assessment regulations were promulgated by the Department of the Interior ("DOI") and are codified at 43 C.F.R. Part 11.[16] CERCLA provides that "[s]uch regulations [which also apply to assessments under the CWA] shall identify the best available procedures to determine such damages, including both direct and indirect injury, destruction, or loss and shall take into consideration factors including, but not limited to, replacement value, use value, and ability of the ecosystem or resource to recover."[17] Assessments conducted in compliance with the DOI and NOAA regulations have a rebuttable presumption of correctness in any judicial proceeding to recover the natural resource damages.[18]

CERCLA provides for promulgation of regulations governing two types of assessments.[19] They are: (1) simplified assessments (referred to as "Type A" assessments) and (2) complex assessments (referred to as "Type B" assessments). The regulations for Type A assessments provide standard procedures for simplified assessments requiring minimal field observations, including establishing measures of damages based on units of discharge or release, or of affected areas.[20] These assessments rely heavily on computer models instead of expensive field observations and studies. The

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Id. at § 9601(16). *See also* 43 C.F.R. § 11.14(z). The NRDA rules further state that these natural resources fall into five general groupings: surface water resources, groundwater resources, air resources, geologic resources, and biological resources. *Id*

[14] CERCLA § 107(a)(4)(C).

[15] The standard of proof required has been held to require simply that the release be a "contributing factor" to the injury. *In re Acushnet River and New Bedford Harbor: Proceedings re Alleged PCB Pollution*, 722 F.Supp. 893, 897 (D.Mass 1989) (hereafter, decisions in this case cited as *AVX*); *Coeur D'Alene Tribe v. Asarco*, 280 F. Supp. 2d. 1094, 1124 (2003). The court in *United States v. Montrose Chemical*, 788 F.Supp. 1485 (C.D. Cal. 1991), held that the Torts Restatement 2d. "substantially contributing factor" test should be applied.

[16] The DOI damage assessment regulations were promulgated in two parts – Type B and Type A – on August 1, 1986 and March 20, 1987 respectively. While DOI's effort to limit damage recoveries to "the lesser of" the cost of restoration and the value of the resource was rejected, the provisions of those regulations were upheld in virtually every other respect by the D.C. Court of Appeals in 1989. *State of Ohio v. DOI, 880 F.2d 432* (D.C. Cir. 1989*); State of Colorado v. DOI,* 880 F.2d 481 (D.C. Cir. 1989). In 1996, the D.C. Court of Appeals upheld virtually all of the revised Type B regulations promulgated by DOI in response to the *Ohio* decision. *Kennecott Utah Copper Corp v. DOI*, 88 F.3d 1191 (D.C.Cir. 1996). The revised Type A procedures were approved by that court as well in *National Association of Manufacturers v. DOI,* 134 F.3d 1095 (D.C. Cir. 1998).

[17] 42 U.S.C. § 9651(c)(2).

[18] *Id.*, § 9607(f)(2)(c); 33 U.S.C. § 2706(e)(2).

[19] The procedures are not exclusive, and a trustee can use both Type A and Type B procedures in a single damage assessment. 43 C.F.R. § 11.36; *National Assn of Manufacturers, supra,* at 1117-21.

[20] *See* CERCLA Section 301(c)(2), 42 U.S.C. § 9651(c)(2).

initial set of Type A regulations was promulgated in 1987 and applied only to coastal and marine environments. After revision to comply with the decision of the Court of Appeals in *Colorado v. U.S. Department of Interior*, the Type A regulations were reissued in 1996, and include regulations covering releases in Great Lakes environments.[21]

Type B assessments are site–specific, detailed assessments involving more complex releases.[22] The regulations for these types of assessments specify the procedures by which the trustee will plan the assessment process, determine the extent and cause of the injury, and develop a plan for restoration, replacement or acquisition of equivalent resources. Under the Type B regulations, the natural resource damages process consists of four major phases: (1) preassessment; (2) assessment planning; (3) assessment; and (4) post–assessment.[23] In the "preassessment" phase, the trustees initially perform a "preassessment screen" to ascertain whether the hazardous release may have affected natural resources and whether the potential injury is significant enough to continue with the assessment actions.[24] If so, trustees must send a Notice of Intent to Perform an Assessment to all identified potentially responsible parties and invite their participation.[25]

In the Assessment Planning phase, the trustee develops the assessment process, including preparation of an Assessment Plan. The Assessment Plan identifies the scientific and economic methodologies to be used in the assessment, 43 C.F.R. § 11.31(a), and describes how the assessment will be coordinated with any response actions taking place at the site, 43 C.F.R. § 11.31(b)(3). In developing the Plan, the trustee prepares an initial estimate of damages to be used for scoping the Assessment Plan and to ensure that the assessment is performed at a reasonable cost.[26] The Assessment Plan is available for review by potentially responsible parties, other natural resource trustees, and the public.[27] The preliminary estimate of damages is not available to the public or potentially responsible parties until completion of the assessment, when that estimate would be part of the final Report of Assessment.[28]

In the third phase, the trustees implement the Assessment Plan, which has three steps: Injury Determination, Injury Quantification, and Damage Determination. In the Injury Determination step, the trustees determine what injuries have occurred to those natural resources subject to the trustee's jurisdiction.[29] Injury Quantification refers to quantification of the reduction in services to humans and to other resources provided by the natural resources that results from the injury.[30] In the Damage Determination step, trustees calculate the amount of monetary damage caused by the release. Responsible

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[21] 61 *Fed. Reg.* 20560 (May 7, 1996).
[22] CERCLA Section 301(c)(2), 42 U.S.C. § 9651(c)(2).
[23] 43 C.F.R. § 11.13.
[24] *See Id.*, §§ 11.23–.25.
[25] *Id.*, § 11.32(a)(2)(iii).
[26] *See Id.*, § 11.14(ee).
[27] *Id.*,. § 11.32(c).
[28] *Id.*, § 11.35(d)(3).
[29] *Id.*, §§ 11.60–.64.
[30] *Id.* at §§ 11.14 (nn), 11.70–.73.

parties are allowed to participate in the assessment process, although their function is characterized as "strictly ministerial."[31]

The damage amount is based upon the costs of restoration, replacement or acquisition of the equivalent of the injured natural resources.[32] The trustee may also recover the value of the lost public use of the damaged natural resource pending its restoration or recovery to "baseline" conditions; *i.e.*, the condition of the resource absent exposure to the hazardous release.[33]

Upon completion of the assessment, the trustee prepares a Report of Assessment, which would support a demand for payment made to the responsible party and serve as the administrative record in litigation of the claim, if necessary.[34] After the trustees recover natural resource damages, they prepare a final Restoration Plan, subject to public review and comment, to apply the damage recovery for the restoration, replacement, or acquisition of equivalent resources.[35]

B. The Oil Pollution Act[36]

Statutory Provisions. As its name indicates, OPA applies only to releases of oil, not to releases of hazardous substances in general. Liability for natural resource damages is established in section 1002(a) of the Act, which provides that

> [n]otwithstanding any other provision or rule of law, and subject to the provisions of this Act, each responsible party for a vessel or a facility from which oil is discharged, or which poses the substantial threat of a discharge of oil, *into or upon the navigable waters or adjoining shorelines* or the exclusive economic zone is liable for the removal costs and damages specified in subsection (b)....[37] (emphasis added)

OPA further provides for the recovery of "[d]amages for injury to, destruction of, loss of, or loss of use of, natural resources, including the reasonable costs of assessing the damage...,"[38] and specifically authorizes the federal and state trustees to pursue claims for injuries to natural resources.[39] OPA only applies to discharges of oil and their resulting damage to natural resources occurring after August 18, 1990, the effective date of the Act.

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[31] *Id.*, § 11.32(d); *Ohio*, 880 F.2d 467.
[32] "Restoration" and "replacement" refer to actions taken with respect to the same resources or type of resources injured. "Acquisition of the equivalent" refers to actions taken to replace the equivalent of the services to humans or to the environment provided by those resources. *Id.*, at § 11.14(ll) and (a), respectively.
[33] *Id.*, § 11.14(e).
[34] *Id.*, §§ 11.90(a), (c).
[35] *Id.*, § 11.93(a).
[36] 33 U.S.C. §§ 2701 to 2761.
[37] *Id.*, § 2702(a).
[38] *Id.*, § 2702(b)(2)(A).
[39] *Id.*, § 2706(c).

OPA's applicability to releases of oil directly to groundwater is not entirely clear. While the definition of natural resources includes groundwater, OPA liability only attaches when there has been a discharge of oil " ...into or upon the navigable waters or adjoining shoreline..."[40] Whether the definition of "navigable waters" includes groundwater has been considered by the courts under several CWA cases (*See* below for discussion).

Assuming that groundwater is not a "navigable water", OPA would only apply to groundwater injuries occurring as a result of discharges to surface waters that subsequently injure the groundwater, *e.g.,* releases of petroleum to surface waters that recharge the groundwater. However, as a general rule, groundwater discharges into surface waters, not vice versa, making a groundwater NRD claim by the trustees under OPA unlikely.

NOAA's NRDA Regulations. Pursuant to OPA Section 1006, regulations were promulgated by the National Oceanic and Atmospheric Administration ("NOAA") in 1996 and are codified at 15 C.F.R. Part 990.[41] The NOAA regulations use a different vocabulary in some instances, *e.g.*, discussing primary restoration (for restoration to baseline) and compensatory restoration (for compensatory values such as interim loss), but the processes described are quite similar to the DOI Type A and B regulations.[42] The NOAA assessment procedure provides for (1) a preassessment of the injury and determination of the need for further action; (2) restoration planning, which includes injury determination and quantification, and restoration selection; and (3) implementation of the restoration method selected.[43] In selecting a restoration method, the trustees, as under the DOI regulations, are to evaluate a range of restoration alternatives for primary and compensatory restoration, including natural recovery.[44] The six criteria required at a minimum for evaluation of alternatives, include cost-effectiveness, technical effectiveness and likelihood of success, and the benefits of each option to natural resources and the public health and safety.[45]

While the NOAA regulations follow a staged approach similar to the DOI regulations, they do appear to place a greater emphasis on quickly moving to restoration. For example, where the injury has resulted in the loss of ecological services, the NOAA regulations dictate the consideration of the use of habitat equivalency analysis and similar

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[40] *See* 33 U.S.C. § 2701(23).

[41] The NOAA damage assessment regulations were upheld with very limited exceptions by the D.C. Court of Appeals in *General Electric Co. v. Dept of Commerce,* 128 F.3d 767 (D.C. Cir. 1997). One significant exception was the recovery of attorneys' fees as "assessment costs", which NOAA conceded were not recoverable under the Supreme Court's decision in *KeyTronic Corp. v. United States,* 511 U.S. 809 (1994). *General Electric, supra* at 776.

[42] OPA does not provide for the development of a separate set of regulations providing a simplified assessment procedure. However, the NOAA damage assessment regulations provide considerable flexibility in the selection of assessment procedures, including, *e.g.*, the use of compensation formulae and schedules, and emphasize selection of the most appropriate and cost–effective approach. 15 C.F.R. § 990.27.

[43] 15 C.F.R. Part 990, Subparts E-F.

[44] *Id.*, § 990.53.

[45] *Id.*, § 990.54(a).

"resource to resource" and "service to service" approaches for scaling restoration.[46] In addition, the NOAA regulations give substantial consideration to participation by the responsible parties in the assessment process.[47]

C. The Clean Water Act[48]

NRD liability under the CWA is created upon the unauthorized discharge of oil or hazardous substances "...into or upon the navigable waters of the United States...which may affect natural resources belonging to, appertaining to, or under the exclusive management authority of the United States...in quantities harmful to...the environment of the United States, including, but not limited to, fish, shellfish, wildlife, and public and private property, shorelines, and beaches.[49] Should a claim be brought under the Clean Water Act, the owner or operator of a vessel or onshore facility is liable for, *inter alia*, "any costs or expenses incurred by the Federal Government or any State government in the restoration or replacement of natural resources damaged or destroyed as a result of a discharge of oil or a hazardous substance."[50]

The term "navigable waters" is defined very broadly in the statute to mean "the waters of the United States, including the territorial seas."[51] Courts dealing with the CWA had interpreted "navigable waters" broadly under Congress' commerce power, even so far as to exclude from consideration any concept of navigability, in law or in fact.[52] However, this changed with the Supreme Courts decision in *Solid Waste Agency of Northern Cook County v. United States Army Corps of Engineers,*[53] where the court held that the CWA had jurisdiction over waters that "were or had been navigable in fact or which could reasonably be so made." [54] After the Court's decision in *Solid Waste*, courts have struggled with the jurisdictional reach of § 404(a) of the CWA, and have split into two camps; those courts who call into question the validity of CWA jurisdiction over waters that are neither actually navigable or directly adjacent to navigable waters, and those courts who believe the case applied to "isolated waters," and would permit

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[46] *Id.*, § 990.53(d).
[47] *Id.*, § 990.14(c).
[48] 33 U.S.C. §§ 1251 to 1387.
[49] *Id.*, § 1321(b).
[50] *Id.*, § 1321(f)(4). *See also Id.* § 1321(f)(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").
[51] *See* 33 U.S.C. § 2701(21) (OPA definition of "navigable waters") and 33 U.S.C. § 1362(7) (Clean Water Act definition of "navigable waters"). The definitions are identical.
[52] *United States v. Byrd*, 609 F.2d 1204 (7th Cir. 1979); *Leslie Salt Co. v. Proehike*, 578 F.2d 742 (9th Cir. 1978); *Quivira Mining Co. v. United States EPA*, 765 F.2d 126, 129 (10th Cir. 1985). *See, Solid Waste Agency of Northern Cook County v, United Army Corps of Engineers*, 531 U.S. 159 at 172 (2001) (holding that the CWA had jurisdiction over waters that "were or had been navigable in fact or which could reasonably be so made."); *See also, D.E. Rice v. Harken Exploration Co.*, 250 F.3d 264, 269 (5th Cir. 2001) (holding that under the Supreme Court's reasoning, "a body of water is subject to regulation under the CWA if the body of water is actually navigable or is adjacent to an open body of navigable water); In contrast, *see, Headwaters, Inc. v. Talent Irrigation District*, 243 F.3d 526, 533-534 (9th Cir. 2001) (holding that non-navigable tributaries of navigable waters are "waters of the United States," and therefore equivalent to navigable waters for purposes of the CWA jurisdictional analysis.)
[53] *Id.*
[54] *Id.*

continued CWA jurisdiction over all waters which have at least a minimal hydrological connection to navigable waters.[55] As with OPA, the CWA does not expressly indicate whether "navigable waters" includes groundwater.

However, the application of the CWA to releases to groundwater is not without risk, as courts have generally split on the issue of whether the discharge of pollutants into groundwater hydrologically connected to waters regulated by the CWA are subject to CWA regulation.[56] In 1997, two district court decisions in the Ninth Circuit rejected the general interpretation that hydrologically connected groundwater is regulated under the CWA. In the first decision, *Umatilla Water Quality Protective Association v. Smith Frozen Foods, Inc.,*[57] the district court held that discharges of pollutants to groundwater that is hydrologically connected to surface water are not covered by the CWA's NPDES permitting program. The *Umatilla* court analyzed the legislative history behind the CWA, and the applicable case law, and concluded that "the [CWA] as written, as intended by Congress, and as applied in Oregon for over two decades does not regulate even hydrologically connected groundwater."[58] Following on the heels of *Umatilla*, the Idaho district court in *United States v. ConAgra, Inc.,*[59] dismissed the government's suit alleging violations of the CWA as a result of discharges to groundwater that was hydrologically connected to surface water.[60] In its ruling, the court carefully reviewed

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[55] *Id.*

[56] Cases that have held for and against regulation of groundwater as a "navigable water" under the CWA include, but are not limited to, the following: *Sierra Club v. Colorado Refining Corp.*, 838 F.Supp. 1428, 1431 (D. Colo. 1993) (discussed in dicta that "case law addressing the regulation of ground water under the Clean Water Act reveals that 'isolated/nontributary groundwater,' such as confined wells, has been unequivocally excluded from the Act by some courts." Yet, the court went on to state that "these cases and others do not preclude the Act from applying to the regulation of 'tributary groundwater,' ... which migrate from groundwater back to surface water.); *Exxon Corp. v. Train*, 554 F.2d 1310 (5th Cir. 1977) (the court held that the Clean Water Act does not require permits for discharges into non-tributary groundwater); *United States v. GAF Corp.*, 389 F.Supp. 1379 (S.D. Tex. 1975) ("[t]he disposal of chemical wastes into underground waters which have not been alleged to flow into or otherwise affect surface waters does not constitute a 'discharge of a pollutant' within the meaning of 33 U.S.C. § 1311(a) [CWA § 301(a)]") (footnote omitted); *Kelley v. United States*, 618 F.Supp. 1103 (W.D. Mich. 1985) (the court held that the Clean Water Act was not applicable where ground water was contaminated with toxic chemical pollutants and the plume of contamination was migrating and eventually discharging into the East Arm of Grand Traverse Bay); *McClellan Ecological Seepage Situation (MESS) v. Weinberger*, 707 F.Supp. 1182 (E.D. Cal. 1988), (the court concluded that ground water would fall within the regulatory purview of the Clean Water Act if it were established that such ground water was "naturally connected to surface waters that constitute 'navigable waters' under the Clean Water Act." Yet, the court went on to say that "[t]he mere fact that the groundwater might ultimately be consumed or might be used for irrigation [agricultural] purposes ... is not enough to bring the alleged discharges within the parameters of the NPDES program."); *New York v. United States*, 620 F.Supp. 374 (E.D.N.Y. 1985), the court declined to discuss the scope of Section 1311 of the Clean Water Act, apparently assuming that the Clean Water Act was applicable to tributary ground water); and *Inland Steel Co. v. EPA*, 901 F.2d 1419 (7th Cir. 1990), (more tentatively, the court acknowledged that "the legal concept of navigable waters might include groundwaters connected to surface waters--though whether it does or not is an unresolved question.").

[57] 962 F.Supp. 1312 (D. Ore. 1997).

[58] *Id.* at 1318.

[59] No. 96-0134-S-LMB (D. Idaho 1997) (Memorandum of Decision and Order; December 31, 1997). The court fully endorsed the *Umatilla* decision by stating that it agreed "...with the well reasoned and scholarly opinion of the Oregon district court,...." *Id.*, p. 11.

[60] *Id.*

the *Umatilla* decision and dismissed for lack of subject matter jurisdiction on the basis that "...discharges of pollutants into groundwater are not subject to the CWA's NPDES permit requirement even if that groundwater is hydrologically connected to surface water."

Courts holding the opposite from *Umatilla* and *ConAgra* base their decisions on the legislative intent of Congress, finding that Congress intended to regulate the discharge of any pollutants that could affect surface waters of the United States, whether it reaches the surface water directly or through groundwater.[61] The rationale supporting this conclusion is based on the observation that "since the goal of the CWA is to protect the quality of surface waters, any pollutant which enters such waters, whether directly or through groundwater, is subject to regulation by NPDES permit."[62]

Therefore, for the same reasons cited above for OPA, there is significant risk for the trustees in bringing a groundwater NRD claim solely under the CWA.

D. Federal NRD Litigation Issues

1. Use of the Administrative Process. Recovery of response costs under CERCLA requires compliance with the provisions of the NCP, 42 U.S.C. § 9607(a)(1-4)(A). EPA's determinations regarding remedial decisions are reviewed on the administrative record under the lenient "arbitrary and capricious" standard. In contrast, recovery of natural resource damages under CERCLA, OPA or the CWA does not require compliance with the DOI or NOAA damage assessment regulations.[63] However, even if the trustees do comply fully with the damage assessment regulations, it does not appear that the trustees will receive the benefit of "record review."[64] Instead, compliance with the damage assessment regulations will simply provide the trustee with the benefit of a "rebuttable presumption."[65]

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[61] *McClellan Ecological,* 707 F.Supp. 1182.

[62] *Washington Wilderness Coalition v. HECLA Mining Co.,* 870 F. Supp. 983, 990 (E.D. Wa. 1994).

[63] 15 CFR § 990.11; 43 C.F.R. § 11.10.

[64] State and federal trustee efforts to obtain record review for the results of a damage assessment conducted under the DOI regulations have been rejected by two district courts. *United States v. ASARCO, Incorporated, et al.,* CV 96-0122-N-EJL (D.Idaho, March 31, 1998); *State of Montana v. Atlantic Richfield Company*, CV-83-317-HLN-PGH (D.Montana, March 3, 1997). In reaching that conclusion, both district courts noted and relied on a second significant difference between response cost and natural resource damage claims under CERCLA – the availability of a jury trial in the damage action. However, note that record review may be available under the different tack taken by the state of New Jersey, *supra.* In the Conceptual Draft, DOI states its regulations will not include a position on record review, but the draft does offer the opinion that where an assessment conducted in accordance with the regulations and is entitled to the rebuttable presumption, the court's consideration of the assessment's results would be limited to the administrative record before the agency, thus barring the introduction of new evidence at trial by a defendant challenging the assessment.

[65] 42 U.S.C. § 9607(f)(2)(C); 33 U.S.C. § 2706(e)(2). The precise value of the "rebuttable presumption" to a trustee remains unclear but does not appear high. *See Montana v. Atlantic Richfield, supra.* (the rebuttable presumption merely operates to shift the burden of production to the opposing party to rebut the presumption; once rebutted, the presumption disappears from the case*); U.S v. ASARCO, supra.* (the court does not defer to the agency, but exercises its own judgment to determine whether the evidence introduced by the opposing party rebuts the presumption). The D.C. Court of Appeals also observed recently in approving NOAA's assessment regulations that the presumption did not seem to provide the "powerful

Under CERCLA, it has not been unusual for the trustees to give notice of suit well before the completion, or even the initiation, of a damage assessment because of statute of limitations concerns.[66] Where the damage claim is already in litigation, the public nature of the assessment process, including requirements for public notice and comment regarding the Assessment Plan, and the opportunities for responsible party involvement, can hinder a trustee's development of its case.[67] In those circumstances, the limited benefit of the rebuttable presumption is often not considered sufficient to justify formal compliance with the assessment regulations, unless prior to filing suit potentially responsible parties have been willing to toll the operation of the statute of limitations. Even under OPA, where the limitations period does not commence until completion of the damage assessment, a trustee may see relatively limited value in following every procedure in the assessment regulations.

2. Injury and Causation. To establish the liability of a potentially responsible party for natural resource damages, a trustee must prove the elements of a claim for recovery of response costs. Thus, for example, in a CERCLA natural resource damage action, the trustee, like EPA in a cost recovery action, must establish: (1) the release; (2) of a hazardous substance; (3) from a vessel or at a facility; (4) by a responsible party as defined in the statute, including current and past owners and operators, and the generators and transporters of the hazardous substances.[68]

However, the trustee plaintiff, unlike EPA, has the burden of demonstrating that the release of the hazardous substance or oil resulted in an actual adverse effect on the resource or on the services provided by that resource to humans or the environment.[69] Where the trustee needs to establish injury by demonstrating a change in the resource's "baseline" condition, *i.e.*, the condition that would have existed had the release not taken place, it will often find that such "baseline" information, including data from suitable reference areas, is wholly absent or very limited. The trustee must also establish a causal link between the release of the hazardous substance and the resource injury, damage or loss.[70]

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advantage" envisioned by the corporate challengers to those regulations, but rather appeared from the argument of NOAA's counsel to be "nothing more than a 'burden shifting exercise.'" *General Electric v. Dept. of Commerce, supra* at 772.

[66] The Superfund cannot be used by trustees to pay for assessments or to carry out restoration. In addition, trustees have no authority to order a responsible party to conduct the assessment or to carry out the restoration action itself. Because of these limits on carrying out assessment and restoration activities, trustee agencies have often waited to begin serious consideration of natural resource damage claims at National Priorities List ("NPL") sites until they are forced to act by the impending expiration of the limitations period.

[67] *See, e.g., People of State of California ex rel. Wheeler, et al. v. Southern Pacific Transportation Company, et al.*, CIV S-92-1117 LKK (E.D. Cal. Oct. 20, 1993) (work product protection denied to damage assessment documents because damage assessment by state agency not for sole purpose of litigation).

[68] 42 U.S.C. § 9607(a).

[69] The trustees may seek recovery for both the direct impacts of the hazardous substance on the resource, and also for the indirect effects of the releases, *e.g.*, where the loss of natural resources results from the implementation of remediation at a site, such as the destruction of a wetland through dredging of contaminated sediment. 43 CFR 11.15(a)(1)(ii).

[70] *State of Ohio v. DOI*, 880 F.2d at 470–72.

The threshold injury issue may not be difficult to satisfy in many instances. Natural resources are broadly defined as "land, fish, wildlife, biota, air, water, ground water, drinking water supplies, and other resources" that are managed, belong to or are otherwise controlled by the United States.[71] "Injury" is also broadly defined to include essentially any adverse impact on a resource.[72]

In addition, the DOI damage assessment regulations provide a set of technical criteria for establishing injury, and also list a number of conditions that are considered injuries without regard to those criteria.[73] To simplify the damage assessment, trustees will often focus damage claims on specific conditions listed in the DOI regulations as resource injuries, such as exceedances of federal or state soil, sediment and water quality standards, and contaminant levels in food resources that exceed FDA limits or are sufficient to cause a state health agency to issue a consumption advisory.[74]

The standard of causation required, however, is still an unsettled issue. The district court in *In re Acushnet River & New Bedford Harbor: Proceedings re Alleged PCB Pollution* held that the common law and Restatement 2d "substantial factor" standard did not apply, and that the trustee must only demonstrate that the contaminant is a "contributing factor" to the injury.[75] The district court in *U.S. v. Montrose Chemical* subsequently held that a "sole or substantially contributing factor" test applies.[76]

In sum, the requirement that the trustee establish injury and causation makes a natural resource damage action more akin to a tort claim, and adds technical complexity to the assessment of natural resource damage claims that is largely avoided in a traditional CERCLA cost recovery action. Establishing baseline resource conditions, injury, the extent of resulting change in those baseline conditions, and the causal link between injury and the release is often not easily accomplished. Those issues have occupied a major part of the debate between trustees and potentially responsible parties in the promulgation of natural resource damage assessment regulations. Likewise, those issues can complicate the trustee's litigation of a natural resource damage case.

3. Measurement of Damages. Given the nature of the claim and the low standard of proof required in cost recovery actions, only rarely does the determination of costs raise something beyond minor accounting issues. The measurement of damages, however, is one of the most controversial aspects of a natural resource damage action.

Natural resource damage claims include three elements: cost of restoration, replacement or acquisition of equivalent resources; other "compensable" values, including interim lost use of the resource and lost "non-use" values; and reasonable

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[71] 42 U.S.C. § 9601(16).
[72] 43 CFR § 11.14(v); 15 CFR § 990.30.
[73] *See* 43 CFR § 11.62.
[74] One unresolved issue often raised in damage assessments is whether a biological manifestation resulting from exposure to a contaminant is an "injury," even though the condition produces no significant impact on the organism or on the population. The trustees are highly resistant to any assertion that injury requires "population level" effects on the resource.
[75] 722 F. Supp. 893, 897 (D. Mass. 1989).
[76] 788 F. Supp. 1485 (C.D. Cal. 1991).

assessment costs.[77] These elements are consistent with those available in any tort action. The difficulties are presented by the need to establish what is "restoration, replacement or the equivalent" in the absence of reliable (or any) baseline information and/or a good understanding of the services provided by the injured resource, and the limited ability to put a value on the loss of resources for which there is no established economic value.[78]

In the *Ohio* decision, DOI lost its argument that "restoration" damages required "the lesser of" the cost of restoration and the "value" of the lost use of the resource.[79] The *Ohio* court also approved the use under the DOI regulations of "contingent valuation," a highly controversial survey approach for valuing resources.[80] That decision was not the end of the argument, as evidenced by the nearly five year delay in the promulgation of revised regulations.

In the subsequent revision of the DOI regulations and particularly in the 1996 NOAA regulations, the agencies have attempted to deal with industry concerns over the valuation issues by providing substantial flexibility in the selection of valuation methods, and by placing emphasis on "cost-effectiveness" in the decision-making process.[81] The trustees' emphasis on "resource to resource" and "service to service" approaches, as opposed to "contingent valuation" is an important matter. It is likely to reduce substantially the cost of trustee demands, even though the regulations retain the "eight hundred pound gorilla" of contingent valuation at least as a possibility for major cases. Concerns remain about how agency flexibility and discretion in the assessment process will be applied in practice.

Scaling primary and compensatory "restoration" requires that the trustees consider the efficacy of natural recovery, and evaluate issues such as whether "restoration and replacement" or "acquisition of the equivalent services" of the lost services is the more effective response in a given situation.[82] The answer to questions of scale for restoration may depend in turn on whether one is examining the chemical or other physical qualities of the resource, or the services to humans or the environment provided by the injured resource.[83]

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[77] The federal government apparently concedes that it will not be able to recover litigation costs as part of the reasonable costs of assessment. *General Electric supra,* 128 F.3d at 776.

[78] One commentator has noted that "[o]nly about five percent of some resources, such as plants and animals, possess an established economic value." Cross, *Natural Resource Damage Valuation,* 42 Vand. L. Rev. 269, 301 (1989).

[79] *State of Ohio v. DOI,* 880 F2d at 457-59 (Congress recognized that natural resources have value that is not readily measured by traditional means and established a distinct preference for restoration cost as the measure of recovery).

[80] *Id.* at 474-81.

[81] As noted in the discussion of the administrative process, both the DOI and NOAA regulations provide for consideration of restoration alternatives using a number of criteria, including cost-effectiveness. The regulations also identify a number of alternative valuation techniques in addition to contingent valuation. NOAA included with its preamble to the final regulations a bibilography of agency guidance documents and an appendix explaining the alternative valuation procedures. 61 Fed. Reg. 495-500 (January 5, 1996).

[82] 43 CFR § 11.82. *See Kennecott supra,* 88 F.3d at 1229-31.

[83] For example, restoration of the chemical quality of contaminated groundwater to a "baseline" of pristine quality might require decades of "pump and treat" remediation, if it were possible at all. Restoration of the "services" provided by that groundwater, even if used as drinking water, might be produced with

In most instances, these determinations as well as the scaling of the restoration or compensation activities, will require data and assumptions about ecological services, injury, recovery and productivity rates that are much easier to describe than to develop in practice. If the parties use the alternative procedures reasonably, the utility of those new procedures for facilitating settlement is very high. It remains to be seen whether, if settlement fails, a court will consider those procedures adequate measurement tools for the trustees in litigation, even with the benefit of the rebuttable presumption.

4. Statutory Defenses and Limitations on Recovery. A potentially responsible party has all of the defenses available to it in a natural resource damage claim that it would have to a response cost claim under that statute, *e.g.*, the Section 107(b) defenses provided under CERCLA. In addition, CERCLA provides some defenses unique to natural resource damage claims. As a general matter, the courts have strictly construed the application of legal defenses and limits on liability in interpreting CERCLA.

Statute of limitations. Section 113(g) of CERCLA, 42 U.S.C. § 9613 (g), provides a three–year statute of limitations for natural resource damages claims.[84] However, the commencement of that period is different, depending on the status of remedial action with respect to the releases. The natural resource claim at NPL sites is intended to be residual to the remedial action. That is, the natural resource damages claim is intended to be available for the restoration of resources only to the extent that the condition has not been dealt with by the remedial action. Accordingly, for facilities that are on the NPL or otherwise scheduled for remedial action under CERCLA, the three-year statute of limitations does not begin until the completion of the remedial action, excluding operation and maintenance.[85] Under that limitations provision, the statute at many sites will not run for several years.[86]

For non–NPL sites, the limitations period runs three years from the later of the date of promulgation of the U.S. Department of Interior (DOI) damage assessment regulations, or the date on which the injury and its connection to the releases is discovered. The regulation date has been held to be no later than March 20, 1987.[87] The discovery date is

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substantially less expense. After *Kennecott*, the DOI regulations appear to require that the restoration only address services; the NOAA regulations are less clear. See *Kennecott, supra,* 88 F.3d at 1220. Cf. 15 C.F.R. § 990.53(b), (c), referring to restoration of "resources and services." However, DOI's "Conceptual Draft" document does not appear to cure the conflict that produced the *Kennecott* holding, as it uses definitions of "injury" and "damage" that refer to the "condition" of the resource, as opposed to any effect on the services provided by the resource. In contrast, DOI describes the restoration required to obtain the benefit of the rebuttable presumption in terms of replacement of a biological resource injured by exceedance of a regulatory standard, or the replacement of resources providing the function lost by the injury.

[84] The statute of limitations for actions under OPA is three years from the completion of the damage assessment. 33 U.S.C. § 2712(h)(2). That approach avoids the difficulty which trustees have often had completing an assessment under the limitations period in CERCLA. There is no limitations period in the CWA. The applicable limitations period for CWA claims appears to be the six year general limitations period for damage claims by the United States provided in 28 U.S.C. § 2415.

[85] 42 U.S.C. § 9613 (g)(1).

[86] Section 113(g) further provides that at an NPL site, an action for natural resource damages may not be filed until after the remedy has been selected for the site. 42 U.S.C. § 9613(g)(1).

[87] *Kennecott, supra,* 88 F.3d 1191 (D.C.Cir. 1996); *State of California and U.S. v. Montrose Chemical,* 104 F.3d 1507 (9th Cir.1997).

a factual matter likely to always be subject to dispute, with the federal government asserting that the requisite knowledge must be shown to have been held by the "authorized official" responsible for prosecution of trustee damage claims.[88] In addition, issues have been raised in some cases, such as the Coeur d'Alene litigation, over what constitutes the NPL site for statute of limitations purposes, when the alleged injuries have occurred many miles from the area of EPA's remedial activities.[89]

Liability Cap. CERCLA limits recovery of natural resource damages for each "release ... or incident involving release" to $50 million, exclusive of response costs, where the release is not the result of willful misconduct or willful negligence, or from the violation of federal safety or operating standards.[90] However, the provision is applied to each responsible party per release or incident, per facility.[91] Given the broad definition of "release or incident" and "facility," and the existence of multiple parties at many sites, the actual limit applied to any site or any facility would likely be far more than $50 million. The Court of Appeals for the Ninth Circuit, while not deciding the appropriate application of the cap provision, reversed a district court ruling in the *Montrose* litigation that had applied that cap to all releases and responsible parties at an industrial facility in operation for over forty years.[92]

Pre-1980 Damages. Section 107(f) of CERCLA provides that the trustees cannot recover natural resource damages "where such damages and the release of a hazardous substance from which such damages resulted have occurred wholly before December 11, 1980."[93] Courts have interpreted this section to require that both the release and the damage must take place prior to December 11, 1980, before the trustee is barred from seeking damages.[94] Where the releases and damage occurred over a period spanning the 1980 cutoff, there is limited court authority suggesting that recovery may be had for both pre- and post-1980 damage, unless the post-1980 damage is readily divisible. There is a

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[88] See *United States v. Montrose Chemical, 883* F. Supp. 1396 (C.D. Cal. 1995), reversed on other grounds, 104 F.3d 1507(9th Cir. 1997).

[89] Such site boundary issues are not unusual in situations where contamination has spread several miles from the original source facility. *Cf., Montrose v. United States,* 132 F.3d 90, 93 (D.C. Cir. 1998), where the court noted EPA's inconsistent position on whether it would consider offshore DDT contamination part of the Montrose NPL site, located several miles inland. In the *Couer d'Alene* litigation, the district court ruled in September 1998 that a claim for damages in the areas downstream from the 21 mile-square "box" that EPA considered the NPL Site was not a claim "with respect to" an NPL site within the meaning of CERCLA Section 113(g)(1). *United States v. ASARCO Incorporated, et al.*, 28 F.Supp. 2d 1170 (D. Idaho, 1998). However, the district court also suggested that it might revisit the issue if EPA subsequently decided to expand the NPL site to include the downstream area. The United States appealed the district court's decision and, in response, the 9th Circuit vacated the district court's decision on the basis that it lacked jurisdiction to adjudicate the validity of including the Coeur d'Alene Basin within the Bunker Hill Superfund site. The remedy for the defendants was to petition the D.C. Circuit for review of the site designation. (*United States v. ASARCO Incorporated et al.,* 214 F.3d 1104 (2000).

[90] 42 U.S.C. §§ 9607(c)(1)(D) & (c)(2). The CWA and OPA have similar liability limitations. 33 U.S.C. § 1321(f); 33 U.S.C. § 2704.

[91] The provision explicitly does not cap a party's liability for "the total costs of response." 42 U.S.C. § 9607(c)(1)(D).

[92] *State of California and U.S. v. Montrose Chemical, supra,* at 104 F.3d at 1518-21.

[93] 42 U.S.C. § 9607(f)(1).

[94] *See In re Acushnet River & New Bedford Harbor: Proceedings re Alleged PCB Pollution*, 716 F. Supp. 676, 684–86 (D. Mass. 1989); *State of Idaho v. Bunker Hill Co.*, 635 F. Supp. 665, 675 (D. Idaho 1986)

split in those cases—only two courts have actually analyzed the issue beyond reciting the statutory language[95]—on which party bears the burden of demonstrating the divisibility of damages. Normally, that burden of proof issue would be determinative on which party prevails. However, if a plaintiff used habitat equivalency analysis to establish the value of "lost use," the damages would in fact be readily divisible by time period.

EIS or similar analysis. CERCLA also provides that trustees cannot recover for natural resource damages that were identified as an irreversible and irretrievable commitment of natural resources in an environmental impact statement or similar environmental assessment, and that were subsequently authorized by permit.[96] The only reported decision on the application of that provision has held it should be strictly and narrowly construed, and that a subsequently issued permit would not provide protection from liability for pre-existing releases of hazardous substances.[97]

III. TRUSTEE COORDINATION ISSUES

A. Multiple Trustees

Procedurally, NRD claims are brought by the "trustee" agencies, not remediation agencies. It is often the case that claims involve several federal, state and tribal trustee agencies, with multiple injury claims based on the same releases, and overlapping claims for injury to the same resources. For example, a site may have affected ground water resources, generally only a State claim, and also injured migratory birds or federally listed endangered species that would be under both state and federal trustee trusteeship, and where tribal lands are involved, under tribal trusteeship as well. In addition, government land managers, e.g., the Forest Service, Bureau of Land Management, Department of Defense, Texas General Land Office, and similar state agencies, may pursue claims for alleged impacts on their properties.

The agency damage assessment regulations and the National Contingency Plan ("NCP") require the agencies to coordinate their claims, and it is usually the case that the trustees have brought joint claims without attempting to parse out their individual interests.[98] This has permitted the trustees to avoid the legal issue of "double recoveries", which are explicitly prohibited.[99] Likewise, coordination delays the practical issue of dividing damage recoveries until the completion of the litigation.

However, cooperation and coordination among trustees is not always the case, and each trustee has a separate cause of action, subject to the prohibition on double recovery. Accordingly, it is important for a responsible party to identify all trustee agencies with potential claims in connection with a site. In Texas, the state and federal trustees operate

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[95] *In re Acushnet River & New Bedford Harbor, supra*, 716 F. Supp. at 687–88; *U.S. v. Montrose, supra*, 883 F. Supp. at 1396.
[96] 42 U.S.C. § 9607(f)(1).
[97] *State of Idaho v. Hanna Mining*, 882 F.2d 392 (9th Cir. 1989).
[98] *See* National Oil and Hazardous Substances Pollution Contingency Plan ("NCP"), 40 C.F.R. § 300.615; 15 C.F.R. § 990.14(a); 43 C.F.R. § 11.32(a)(1).
[99] 42 U.S.C. § 9607(f)(1) and 33 U.S.C. § 2706(d)(3).

under a Memorandum of Agreement wherein the trustee agencies have agreed to coordinate activities at sites and cooperate together, rather than working against each other.[100] While perhaps not its stated intent, the agreement would preclude a trustee agency from negotiating a separate deal with the responsible party, which, if it occurred, would subject any subsequent NRD action by another trustee to a double recovery defense. In many cases, a trustee agency may elect to not participate in an assessment simply because it believes its trust resources are not injured, e.g., NOAA would not become involved at a site in the panhandle.

Since the MOA is non-binding and can be terminated at anytime by any trustee, the possibility of dealing separately with a trustee still remains. However, the perils to a responsible party doing this are apparent in the *Coeur d'Alene* litigation, where the State of Idaho settled its damage claim against the mining company defendants several years ago in separate litigation. Indian tribes with similar claims subsequently brought a separate suit as trustees. That claim was also settled with some, but not all, of the companies. In 1996, the federal trustees brought a third natural resource damage action, which was consolidated with the remaining tribal claims. The district court has held that "CERCLA does not prohibit more than one potential trustee from bringing a natural resource damages action."[101]

B. Interplay with the Remediation Process

The natural resource damage action is intended to supplement the response action efforts taken at the site; it is not intended to result in a wholly independent, "second cleanup."[102] Accordingly, to the extent practicable, coordination of the efforts of the response agencies and the trustee agencies is required under the damage assessment regulations as well as the NCP.[103]

Coordination with EPA and other response agencies is extremely important from the trustees' point of view. Damage assessments under CERCLA, for example, cannot be paid for from the Superfund. Accordingly, it is highly desirable to the trustees to have EPA or the responsible party conduct ecological risk studies and collect data on the condition of ecological resources in the course of the Remedial Investigation/Feasibility Study ("RI/FS"), so that the trustees can limit the additional work their assessment will require. Likewise, trustee agencies will often comment on response agency consideration

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[100] MEMORANDUM OF AGREEMENT AMONG THE TNRCC, TPWD, TXGLO, NOAA, AND DOI, effective September 5, 1995.

[101] *United States v. ASARCO,* CV96-0122-N-EJL (D. Idaho March 31, 1998). The restriction in CERCLA on double recoveries may permit a PRP to use a separate settlement to its advantage where trustees have markedly different views of the value of the claim, and the "more reasonable" trustee has trusteeship over most, if not all, potentially injured resources. The separate settlement would provide at least a set-off as to jointly held resources, forcing a co-trustee plaintiff into the potentially difficult position of sustaining a significant separate claim for further relief.

[102] "...fulfilling the 'restorative purpose' of [CERCLA] is not entirely dependent on trustees' efforts to recover damages for harm to natural resources. Their efforts are in addition to the 'response' actions, which clearly serve a restorative purpose in removing hazardous waste and 'prevent[ing] or minimiz[ing] the release of hazardous substances into the environment." *Kennecott,* 88 F.3d at 1231.

[103] NCP, 40 C.F.R. § 300.615(c); 15 C.F.R. § 990.14(b); 43 C.F.R. § 11.23(f).

of listing decisions and remediation decisions such as clean-up levels because those decisions can have an impact on the timing of the 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, a potentially responsible party should understand that many legal defenses are available to that party that does not otherwise exist in the remedial context (see discussion below). Thus, in determining whether it makes sense to coordinate with the trustees during the ecological risk assessment, the party needs to assess the likelihood that it may be able to prevail on one or more of these defenses in court.

In Texas, the State promulgated the Texas Risk Reduction Program ("TRRP") that addresses the protection of human health and ecological receptors against exposure to contaminants of concern (COCs) in environmental media (*e.g.* soil, groundwater, sediment, surface water, etc.). The TRRP provides a consistent, statewide approach for, *inter alia*, conducting risk assessments and cleaning up affected sites. Risk management is made part of the process by virtue of the establishment of protective concentration levels (PCLs) for each COC detected at elevated levels in environmental media.

At sites where actual chemical constituent concentrations exceed their respective protective concentration level (PCL), responsible persons must (1) identify the critical PCL (the lower of the human health or ecological PCLs) and then (2) perform a remedy to address the chemical constituents in media greater than the critical PCL. In many cases, remedies will be dictated by the occurrence of ecological risks, as opposed to human health risks. As a result, a responsible person could be required to undertake a costly and invasive remedy for the sole purpose of addressing ecological risks, regardless of the overall ecological benefits or detriments of the remedy. In fact, some remedies could result in greater damage to the environment than the actual exposure to the chemical constituents themselves.

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 can 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."[104] This remedy option is under Remedy Standard B and is referred to as the ecological services analysis ("ESA") 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 trustee agencies 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 TCEQ 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 effect of the trustees involvement in an ESA will essentially result in a *de facto* settlement of the potential NRDs for future resource injuries (as they relate to the ecological risks), but not for historical lost uses or recreational losses.

To date, there have been three ESAs performed for remediation sites – Mabel Davis Park in Austin, Texas; the Col-Tex State Superfund Site in Colorado City, Texas; and the Joint Outfall Canal in Port Arthur, Texas. Each of the ESAs applies the ecological risk results in order to determine the service losses associated with continued exposure to constituents exhibiting concentrations in excess of their PCLs. Options ranging from removal to capping are also evaluated. The result of the process is a solution that is based upon sound science and provides the greatest overall benefit for the environment, as opposed to costly remediation that, in some instances, can cause more harm than the chemicals themselves.

IV. Reaching and Protecting NRD Settlements

In most instances, NRD settlements will result in the lodging and entry of a consent decree in federal district court, and then to publish notice of the settlement in the Federal Register.[105] In cases where only the State trustees are involved, the settlements may be administrative only (i.e., not involving the courts), but will still have some public notice component and may be challenged. Whether by consent decree or administrative agreement, the public notice will very generally describe the settlement, state its availability on request, and give notice that comments on the settlement will be received for a period of (usually) thirty days. At the federal district court level, after closure of the comment period, the government will review any comments and assuming it still considers the settlement appropriate, file a motion for entry of the consent decree. As an attachment to the motion, the government will include the comments received and its written response to the comments. The following text in this section focuses on reaching and protecting NRD settlements at the federal court level.

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[104] *See* 30 T.A.C. 350.33(a)(3)(B) and 350.77(f)(2).

[105] In some instances notice of the settlement in the Federal Register is required by statute. See 42 U.S.C. §122(d)(2). In other cases, the Department of Justice has provided by regulation that such notice should ordinarily be provided. 28 U.S.C. §50.7. However, in practice, if a settlement is at all significant, such notice will be provided, even where such notice is not required either by statute or regulation.

Non-settling PRPs opposing the consent decree will likely provide both comments to the government, and also seek to intervene and oppose approval of the settlement by the district court. Given the contribution protection afforded by the settlement, a non-settling PRP is likely to be permitted to intervene as a party if it requests. As intervening parties, they may then seek appellate review of the court's approval of the settlement, if necessary.

Non-PRP objectors, such as environmental groups, will also file comments, and may also seek to intervene. They have been less successful in obtaining party status.[106] However, by virtue of their comments and their motion for intervention, they will have ample opportunity to put their views before the district court, even if not as a party with a right of appeal.

In ruling on the motion, the court will often just rule on the papers, but may have a motion hearing. Although opponents often make the request, It is unusual for a court to have an actual evidentiary hearing, or to block a settlement based on the limited factual record in a case, based on the reasoning that the point is to determine whether based on the existing record, the proposed settlement has a rational basis, not to force a trial of the case.[107]

A. Timing and Scope of the Settlement

As a condition to settling, parties typically expect to (1) resolve all their NRD liability for the matter in question, and (2) obtain contribution protection against suits by other PRPs. Contribution protection is available by statute for parties resolving their liability to the United States and/or a State.

CERCLA Contribution Protection. Section 113 (f)(2) of CERCLA expressly and unequivocally provides that a person settling its liability with the US or a State "shall not be liable for claims for contribution regarding matters addressed in the settlement."[108] The existence of a claim (or as is very often the case, a cross-claim in a pending government lawsuit) by another PRP pending at the time of settlement, does not provide a basis for rejecting the settlement.[109] The appropriate action would be to seek dismissal of the claim based on the statutory provision.

The possibility that other PRPs may get wind of the potential settlement and file contribution claims should not affect the negotiation strategy. Nothing in the statute suggests that the availability of that contribution protection is affected by whether or not

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[106] In connection with the settlement of the EDC spill in the Calcasieu Estuary, Conoco successfully opposed intervention by an environmental group. Similarly, in settling NRD claims at the Vertac dioxin site, we successfully opposed intervention and defeated opposition to a consent decree by adjacent landowners. *U.S. v. Hercules Incorporated*, 4:99CV00022 GH (September 6, 2000, E.D. Ark.)

[107] *See, E.g., United States v. Rohm & Haas*, 721 F. Supp. 666, 685 (D.N.J. 1989); *U.S. and State of Wisconsin v. Fort James Operating Company*, 313 F. Supp. 2d 902 (E.D. Wisc. 2004). However, there are instances of substantial settlement hearings. E.g., in *Utah v. Kennecott Corp.*, the district court held a week-long hearing before rejecting a proposed NRD settlement. 801 F. Supp. 553 (D.Utah, 1992).

[108] 42 U.S.C. §9613(f)(2).

[109] *United States v. Bay Area Battery*, 895 F.Supp. 1524 (N.D. Fla. 1995).

a contribution claim has been made against a party prior to the lodging or entry of the consent decree. There is nothing in the rationale for contribution claims or contribution protection that would make the timing of the settlement key to whether the statutory right to protection should apply. Indeed, for courts to hold otherwise, would encourage parties to file contribution suits at the earliest possible date, not an approach likely to find favor with overburdened courts.

Covenants Not to Sue. The more complex issue is the justification for the scope of the covenant not to sue, and the accompanying contribution protection. There is precedent for covenants not to sue covering an entire site, even where the work performed by the settling party did not address the entire site. In *U.S. v. SEPTA*, et al., No. 99-1479 (3d Cir. December 26, 2000), the Third Circuit rejected a challenge to a consent decree based on the fact that the settling PRP group had received a site-wide release and contribution protection in exchange for performing remediation at one part of the site and paying a portion of the NRD claims. In doing so, the Court cited with approval a commentator's statement that in the absence of an explicit provision to the contrary, contribution protection should be presumed to be site-wide. The Court again reiterated this point in a later proceeding for the same case.[110]

The issue, as with any settlement, is whether the value provided by the settling party is commensurate with a rough estimate of its fair share of the entire cleanup responsibility. In the case of natural resource damages, a site-wide release of liability is particularly appropriate, given that that potentially affected resources (e.g., aquatic and avian species) roam widely within and even beyond the entire site.

B. Potential Bases for Objection

In entering a consent decree, the district court must determine that the settlement is procedurally and substantively fair, reasonable, and consistent with the purpose of the statute. This is done in response to a motion for entry, and may or may not involve a court hearing. Where the settlement is with the government, there is a strong presumption that the settlement is valid and should be approved, and in most cases, that approval is obtained without difficulty. However, in some instances courts have refused to approve, or have overturned lower court approval of, settlements entered into under CERCLA, including NRD settlements.

In general, where a settlement has not been approved, the basis proffered is a perceived failure to meet the goals of the statute, not the impact of the settlement on non-settling PRPs. That is, the district court is protecting the public's interest, as set out in the statute. In some cases, however, it is clear that the effect on third parties is the paramount factor, or a factor that along with a "consistency with the statute" concern, leads the court to reject the settlement. Some of the more relevant court decisions are reviewed below.

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[110] *U.S. v. SEPTA.*, et al., 58 ERC (BNA) 1473 (3d. Cir. January 8, 2004). Moreover, at the South Valley NPL Site in Albuquerque, EPA gave a PRP contribution protection for the entire site in connection with the PRP's consent decree to perform the work required for its operable unit. Similarly, the State of New Mexico gave the same scope of covenant to the PRP when it later settled its NRD claims at the site.

A key element in approval of CERCLA settlements is providing assurance that the settlement will clean up the problem. In one of the first NRD settlements reviewed by a district court, the court accepted the adequacy of the major substantive provisions of the settlement, but was convinced that the decree should contain a "reopener" provision and be signed by the resource trustee, to be consistent with the general intent of Congress in CERCLA, even though that was not required by the specific wording of the statute. Accordingly, it rejected the proposed settlement.[111] Similarly, in *Utah v. Kennecott Corp., supra*, n. 3, the court determined that the groundwater contamination could not be remediated, and that the settlement would not adequately "restore and protect" the resource, as it held CERCLA required. Accordingly, it rejected the settlement.

Where EPA attempted to completely "cash out" (i.e., with a full covenant not to sue) other federal agencies at the site at an early stage of remediation, the district refused to approve the consent decree, determining that it was not satisfied that EPA could be assured at that stage that it would have adequate resources to meet the statutory goal of complete remediation of the site, in the absence of those federal PRPs.[112]

In other cases, the courts have relied on mistakes or omissions in fundamental facts relied on by the parties or the lower court in reaching or approving the settlement. On appellate review, the Ninth Circuit overturned a decision approving a consent decree *in US v. Montrose Chemical,* 50 F.3d 741 (9th Cir. 1995), and remanded the settlement for further review. The Court of Appeals held that "fairness" is a comparative term, and that it could not review the district court's determination of fairness because the district court judge himself did not know the total settlement amount being sought for all parties, and thus could not determine whether the share paid by the settling parties was fair under the circumstances.

In *Utah v. Kennecott Copper,* the district court refused entry of a NRD consent decree, based on the State's failure to adequately support its position, including its failure to include the "passive use" values of the resource in assessing the damage to the groundwater resource.

Where courts have looked to the procedural and substantive fairness of the decree, in terms of its effect on other parties, it is usually in the context of claims of "backroom" and "sweetheart" deals. The procedural fairness requirement in these cases is largely for "arms-length" dealing by competent counsel, and some showing that all parties have had a chance to settle on similar terms. Accordingly, a "fairness" challenge has little chance for success in the absence of manifest substantive unfairness. On the latter, the courts have also recognized that, with joint and several liability, there may well be some disproportionate impact on non-settlers, if the settlement is approved and contribution protection granted.[113] Courts have reasoned that the threat of disproportionate liability is

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[111] *In re Proceedings re Alleged PCB Pollution in the Acushnet River and New Bedford Harbor*, 712 F. Supp. 1019 (D.Mass. 1989).
[112] *U. S. v. Pesses*, 39 ERC 1951 (W.D. Pa. 1994).
[113] *See, e.g., U.S. v. Cannons Engineering*, 899 F.2d 79 (1st Cir. 1990).

fair as this threat is intended to motivate early settlements "and discourage dilatory and strategic behavior."[114]

However, where circumstances make it appear that a party has been unfairly granted favorable treatment, courts have rejected the proposed settlement. *E.g., State of New York v. SCA Services*, 25 CWLR 1175 (S.D.N.Y. 1993)(rejecting settlement where settlement would leave 2/3 of response cost and virtually all NRD liability with non-settlers, and release parties that produced 90% of the waste). *United States v. Anderson, Greenwood & Co,* 42 ERC 1980 (W.D. Tex. 1996) (court would not rely accept disingenuous downward estimates of costs); *Kelley v. Wagner,* 930 F.Supp. 293(E.D. Mich. 1996)(rejecting settlement where State's contribution protection to PRP purported to cover costs incurred by federal government as well as State). *Cf. U.S. v. Pesses, supra,* (where the highly favorable cash out deal given to government PRPs was rejected because it was inconsistent with the statutory obligation to assure that the resources would be available to remediate the site).

C. Protecting the Settlement

The key to protection of the settlement from attack is to outline in advance the potential bases on which a settlement might be vulnerable, and to address those issues in the language of the decree, *e.g.*, in the prefatory language, and to discuss how to make certain those issues can be properly addressed in the response to comments prepared by the governments.

More specifically, to address reasonableness, the decree should outline the scope of the claim, and the way in which the settlement addresses the elements of the claim, both in terms of scope of resources, and resource values. In addition, where there are strong potential defenses to the claims, those should be identified and recognized.[115] In sum, it should be clear that this settlement fully protects the legitimate interests of the public, as required by the statute.

To reflect procedural fairness, the parties may want to outline the settlement process, possibly including reference to earlier multiparty negotiations, to indicate that the negotiations have been "arms-length" and that all parties have had a fair opportunity to resolve their claims.[116]

In terms of substantive fairness, the decree should reflect in some manner the relationship of the settlement to the alleged releases and alleged damage associated with the settling party, in the context of the entire estuary. In addition, if settling party is arguably doing more than its "fair share," every effort should be made to reflect that directly or indirectly in the language of the decree. The decree should also set out other factors, such as early cooperation, early implementation of remediation and/or restoration, the avoidance of contested litigation over complex issues, etc, that reflect the

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[114] *United States v. BASF Corp.*, 990 F. Supp. 907, 912 (E.D. Mich. 1998).

[115] See, *e.g., U.S. v. Charter Int'l Oil Co.*, 83 F.3d 510 (1st Cir. 1996), where the potential availability of a substantial defense to any liability was recited as a significant factor.

[116] See, *Cannons Engineering, supra; US v. Nicolet Inc.*, 30 ERC 2065.

public interest in the settlement, and justify any perceived favorable treatment of the settling parties in this settlement.

V. CONCLUSION

Settlements of NRD claims continue to occur across the nation and are more frequently tied to the remedial actions at a site. As the trustees become more and more involved in the assessment of ecological risks at remediation sites, so too will joint settlements of a party's response action and NRD liabilities. In instances where the federal trustees are involved, there will always be a desire to reach out-of-court settlements of a party's NRD liability. These instances largely involve cases where coastal resources (NOAA jurisdiction) and threatened and endangered species and migratory birds (DOI jurisdiction) are potentially affected. The single and only litigation counsel for NOAA and DOI is the Department of Justice.

On the other hand, where the resource is a state-only resource – groundwater is a prime example – States with little cash or resources to pursue NRD claims may be lured into hiring contingent-fee lawyers to litigate these claims often resorting to highly controversial damage theories. Sadly, however, there is little incentive by the state's hired counsel to ever settle these types of claims before trial unless it involves a substantial sum of cash.

The purpose of the NRD statutes and the associated regulations is to make the resource whole by restoring the services that the resource was providing before the spill or release. For example, rather than equating the value of an acre of impacted wetlands in dollars, natural resource trustees should focus on what needs to be done to restore, rehabilitate or acquire and equivalent acre of wetland habitat. The whole nature of NRD claims is to compensate the public for its loss and restore or rehabilitate the injured resource, not to collect a bunch of money which will be siphoned off to pay litigation fees and costs and disappear into the state's general revenue fund.

While there may be some legitimate NRD claims that should be litigated, the focus any such litigation should be on first seeking injunctive relief to protect and restore the injured resource(s) and, second, on fees and costs. An NRD case for $4 billion dollars is excessive and does an injustice to those states, trustees and scientists who are truly committed to protecting and restoring their injured natural resources.

EXHIBIT 1

Summary of South Valley NRD Litigation

16th Annual Texas Environmental Superconference
August 6, 2004

EXHIBIT 1

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF NEW MEXICO

STATE OF NEW MEXICO; and STATE OF NEW MEXICO ex rel PATRICIA A. MADRID, Attorney General of the State of New Mexico	§	
Plaintiffs,	§	No. CIV 99-1118 BSJ
vs.	§	No. CIV 99-1254 BSJ
	§	(Consolidated by 6/14/00 Order)
GENERAL ELECTRIC COMPANY, et al.,	§	
Defendants.	§	

SUMMARY OF SOUTH VALLEY NRD LITIGATION
TEXAS ENVIRONMENTAL SUPERCONFERENCE
AUGUST 6, 2004

I. Background

The South Valley litigation arose out of petroleum and chlorinated solvent groundwater contamination in the South Valley area of Albuquerque, New Mexico. In the late 1970s, contamination was detected in one of the City of Albuquerque's municipal drinking water well located in an area to the south of the downtown area knows as South Valley. The municipal well, San Jose No. 6 ("SJ-6"), was located in the midst of several industrial complexes that included an air craft engine parts manufacturer, bulk fuel storage facilities, petroleum pipelines, and a chemical tolling facility that had operated in the area since the mid-1950s. Subsequent to the discovery of the contamination in SJ-6, the U.S. Environmental Protection Agency ("EPA") designated a one square mile of the area as a federal Superfund site. The remedial investigations conducted by the parties

discovered contamination of the shallow, intermediate and deep groundwater zones. Petroleum hydrocarbons were detected in the shallow zone and part of the intermediate zone, whereas the deep zone was largely impacted by chlorinated solvents.

Since the early 1980s, EPA has overseen the investigation and remediation of the non-petroleum constituents, chlorinated hydrocarbons, pursuant to the federal Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA"). Under this authority, EPA had ordered General Electric ("GE"), present owner and operator of the air craft engine parts manufacturing plant, to install a groundwater remediation system, which GE has operated since 1996. The remediation has been successful and is expected to be completed by 2015. Additionally, EPA ordered Univar/Van Waters & Rogers (hereinafter "Univar"), the owner and operator of the chemical tolling and packaging facility, to remediate the soil and groundwater underlying and emanating from its facility within the South Valley Superfund site. Cleanup of the petroleum contamination has been overseen by the State of New Mexico's Environment Department ("NMED"). In the 1990s, NMED entered into remediation agreements with Chevron, Texaco and ATA Pipeline to install and operate remediation systems in the shallow and intermediate zones.

II. The Litigation

In 1999, the State Attorney General sued Chevron, Texaco, GE, ACF, the federal government and other companies under CERCLA and New Mexico law seeking natural resource damages for the South Valley groundwater contamination. Following the tobacco litigation model, the State Attorney General hired five plaintiff's firms from

Texas, California and New Mexico on a contingency basis to file the law suit. The case involved complex issues of water rights, administrative and environmental law.

Through novel groundwater and economic modeling and an extensive expert team, the State estimated its damages to be in the range of $2 to $4 billion. It alleged that, despite the companies' on-going remediation of the groundwater to drinking water standards, the impacted groundwater was permanently lost. It advocated a market value damages approach for the cost of replacing groundwater that was contaminated at levels at or in excess of above 1 ppb, as well as the clean groundwater contained within a 4000 foot buffer zone around the 1 ppb plume. The State also sought the cost to build a hypothetical aboveground reservoir to hold the replacement groundwater, and pled damages relating to lost tax revenues, lost amenities (referred to as "disamenity" value), the trustee's assessment costs, punitive damages and attorney's fees. The damages originally sought by the State are summarized below in Table 1.

Table 1.
Summary of State of New Mexico's Alleged Damages (as of Sept. 2002)
State of New Mexico v. General Electric et al.

Item No.	Description of Plaintiffs' Damages	Low	High
1	Loss of groundwater stock and safe yield. Replacement of all groundwater contaminated by 1 ppb or more of VOCs and all groundwater within a 4,000' buffer zone (281,000 acre-feet stock + 7,400 acre-feet/year in lost safe yield). The low/high range is based upon 3.5% and 0% discounting	$ 1,448,900,000	$ 3,040,600,000
2	Replacement of groundwater storage container (i.e. the geologic unit or "broken bottle") - range based upon new reservoir project (low) and Elephant Butte Pump Back and Conjunctive Use Plan project (high)	$ 1,130,000,000	$ 1,760,000,000
3	Lost amenity value (i.e., the disamenity associated with loss in property value based upon hedonic model)	$ 17,608,000	$ 17,608,000
4	Lost tax revenues (personal income tax, gross receipt taxes and property taxes)	$ 77,740,000	$ 77,740,000
5	Trustee "assessment" costs	$ 1,500,000	$ 1,500,000
6	Punitive Damages & Attorney's Fees	TBD	TBD
	TOTAL ALLEGED DAMAGES:	**$ 2,675,748,000**	**$ 4,895,948,000**

The discovery in the case was substantial, involving for example millions of pages of document management, high-tech databases and modeling programs, in excess of 60 subject matter experts and well over 100 fact witnesses. For periods of time, the case employed 50 to 70 attorneys. In the world of environmental litigation, this case was the "Big Kahuna."

Up until the pre-trial conference in September 2002, the Court had refused to grant any dispositive motions preferring to hold almost all issues for resolution at pretrial. The pretrial conference began in September 2002 and extended over eighteen months, with 20 days of pretrial, plus a two week *Daubert* hearing. During the lengthy pretrial, the Court gradually began granting Defendants' motions (e.g., summary judgment on lost tax revenue, lost amenity value and punitive damages) which reduced the State's damages case. Realizing that the Court had serious questions about the its damages theories and in an effort to move to a more friendly state court, the State dismissed its CERCLA claim with prejudice against all parties and dismissed the federal government as a Defendant in the midst of the pre-trial conference. Yet, despite the State's non-suit and subsequent arguments for a remand, the Court retained the case.

The key rulings that began unraveling the Plaintiff's case and culminated in the Court's April 6, 2004 Order included: (1) limiting the State's interest in the groundwater to a custodial interest, which narrowed the legal theories under which it could pursue damages; (2) defining injury by drinking water standards or MCLs, as opposed to the presence of any contamination (e.g., 1 ppb standard); (3) limiting the measure of damages to the cost of restoring the groundwater; and (4) ordering that any damage award be placed in a trust dedicated to remediating the South Valley groundwater, as opposed to

the New Mexico general fund. These rulings were contained in an April 6, 2004 Order by the Court identifying the triable issues remaining in the case. The Court also issued a 702 Order on May 7, 2004 ruling that the opinions of the Plaintiffs' three key expert witnesses were largely inadmissible because they were not relevant to the remaining triable issues in the case.

After the April 2004 ruling limiting the State's potential damages to the cost of restoring the groundwater, the Defendants renewed previously denied summary judgment motions under several legal theories arguing that, given the Court's April 2004 order on the scope of the recoverable damages, any remedy that the State might recover in Court was already addressed through the consent decrees and remediation agreements with the EPA and State, respectively. The notion was that the remediation programs to which the Defendants were obligated were not inflexible and would morph to any new or changing circumstances in the contamination. The end result was that the Defendants were committed to cleaning up the groundwater to the remediation standards set forth by the EPA and NMED and, therefore, there was no remaining water in excess of the drinking water standards that was not being addressed by the Defendants.

In May 2004, the Court granted the summary judgment motions and dismissed all Defendants from the litigation. The Court's ruling was that there remained no genuine issue of material fact for a jury to decide since the New Mexico environment department was already directing the cleanup of the groundwater. If the State, through the Attorney General, felt that additional remediation should be conducted or different cleanup standards should apply, then the Court advised the State to seek changes within the New Mexico environment department.

III. Status of Case

Because this was a case brought by the Attorney General, it has been highly publicized and politicized. The Attorney General's handling of the case and the Judge's ruling on New Mexico law when he is from Utah (all New Mexico judges had recused themselves from the case) have been headlines in the local newspapers. On July 21, 2004, the State filed is Notice of Appeal to the 10th Circuit. Key rulings that the State most likely will appeal include the Court's: (1) denial of Plaintiff's motion to remand after it dismissed the federal government and the federal claims; (2) defining injury as an exceedance of drinking water standards, as opposed to more stringent abatement standards; (3) measuring damages as the cost of restoring the groundwater; and (4) limiting the State's interest in the groundwater and the aquifer. It is expected that the appeal will be filed in July/August 2004.

Respectfully submitted,

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EXHIBIT 2

Summary of Natural Resource Damage Assessment cases settled 1999-2004
Provided by Don Pitts, Texas Parks & Wildlife Department
(Don.Pitts@tpwd.state.tx.us)

16th Annual Texas Environmental Superconference
August 6, 2004

EXHIBIT 2

Summary of Natural Resource Damage Assessment cases settled 1999-2004
Provided by Don Pitts, Texas Parks & Wildlife Department (Don.Pitts@tpwd.state.tx.us)

Incident/ Initiation Date	Location	Discharge/ Release	Potentially Impacted Resources	Compensation/ Restoration
OIL AND CHEMICAL SPILLS				
Bow Sun May 5, 1994	Texas City Ship Channel, Galveston Co.	36,414 gal Fuel Oil	Aquatic Biota, Birds, Emergent Marsh, Water Quality	1 acre estuarine wetlands construction $25,000
Colonial and Texaco Pipeline October 20, 1994	San Jacinto River, Upper Galveston Bay, Harris & Chambers Co.	1,450,000 gal Diesel & Gasoline 224,700 gal Crude Oil	Terrestrial Habitats, Birds, Aquatic Biota, Fresh Water and Estuarine Wetlands, Water Quality, Air Quality, Recreation	100 acres mixed forest preservation, construction of 9 acres estuarine wetlands & 1 acres freshwater wetlands
Koch Pipeline October 8, 1994	Gum Hollow, Nueces and Corpus Christi Bays, San Patricio and Nueces Co.	90,342 gal Light Crude Oil	Aquatic Biota, Birds, Shoreline, Emergent Marsh, Water Quality	2.5 acres estuarine wetlands construction, preservation of 14 acres high marsh & 10 acres riparian habitat
Koch Pipeline May 12, 1997	Aransas River, Refugio Co.	Crude Oil	Aquatic Biota, Birds, Estuarine Wetlands, Air Quality	335 acres estuarine high marsh and riparian habitat preservation
M/V Skau Bay and M/V Berge Banker February 5, 1995	Offshore Galveston, Bolivar Roads to Lower Texas Coast	38,000 gal Fuel Oil	Birds, Beach and Dune Habitat, Sand, Recreation, Water Quality	$122,000 for bird &, $169,000 for dune habitat restoration, $1.1 million for lost recreational use
M/V New Amity September 22, 2001	Upper Galveston Bay	42,000 gal Fuel Oil	Birds, Estuarine Wetlands, Sand and Shell Shoreline Habitat, Riprap, Water Quality	1 acre estuarine wetlands & 0.1 acre oyster reef construction $40,000
Phillips Petroleum November 12, 1994	Sweeny, Brazoria Co.	126,000 gal Topped Crude Oil	Birds, Aquatic Biota	404 acres forested bottomlands preservation
T/B Buffalo Marine 286 May 27, 1996	Upper Galveston Bay Chambers Co.	25,998 gal Fuel Oil	Birds, Estuarine Wetlands, Sand, Recreation, Water Quality	0.75 acre estuarine wetlands construction $15,146
FEDERAL SUPERFUND SITES				
Bailey August 29, 1989	Neches River, Orange Co.	Petrochemical Wastes	Estuarine Wetlands, Aquatic Biota, Water Quality	30 acre estuarine wetlands construction $522,000
International Creosoting February 17, 1993	Brakes Bayou, Jefferson Co.	Creosote	Aquatic Biota, Water Quality, Sediment	Preservation of 150 acres bottomlands hardwoods,
Tex-Tin July 1997	Swan Lake, Galveston County	Arsenic, Copper, Lead, Silver	Estuarine Wetlands, Aquatic Biota, Sediment, Birds	93 acres estuarine wetlands construction $3.1 million

Exhibit 2. Continued.

Incident/ Initiation Date	Location	Discharge/ Release	Potentially Impacted Resources	Compensation/ Restoration
STATE SUPERFUND SITES				
Col-Tex January 1996	Colorado City, Mitchell Co.	Refinery Wastes	Terrestrial Habitat, Wildlife, Aquatic Biota, Surface and Ground Water Quality	21 acres riparian, 25 acres upland & and 1.5 acres pond habitat construction; 35 acre upland habitat preservation, wildlife water guzzler, erosion control structures
National Foam September 1998	Colorado City Mitchell Co.	Solvents	Aquatic Biota, Surface and Ground Water Quality	106 acres prairie construction, create local ecotype seed bank for prairie plants $25,000

"I love solving problems. I 'm most proud of our ability to craft creative and common sense solutions for our clients that equally incorporate sound environmental science and the law. Those are the solutions that stand the test of time."

Andrew L. Strong, *Managing Partner*, Houston
Campbell George & Strong, LLP

Andrew represents clients in resolving complex environmental and natural resource problems. Applying his background as an environmental engineer and experience as a consultant, he approaches legal problems from the perspective of making the science work first and then developing the legal arguments or approaches to support the science. Andrew applies these skills in representing clients litigating environmental disputes in state or federal courts and at the negotiation table with state and federal agencies. He has particular expertise in matters involving sites that have been affected by releases of oil and/or hazardous substances, which often result in a myriad of legal issues including claims for natural resource damages, agency enforcement, site investigations and risk assessments, and litigation. With his engineering background, Andrew has been involved in many complex compliance and enforcement matters involving air emissions, waste management practices and wastewater discharges.

Andrew has been active in working with youth and the needy in the Houston area and across the state. He recently served as the President of the Texas Young Lawyers Association and on the boards of the environmental law sections of the State Bar and the Houston Bar Association. His work in the community earned Andrew recognition from the Points of Light Foundation in Washington, D.C. and he was honored as one of the Five Outstanding Young Houstonians.

Andrew holds a Doctorate of Jurisprudence from South Texas College of Law and is licensed to practice law in Texas and Louisiana. He also holds a B.S. degree in Civil Engineering from Texas A&M University and is a licensed Professional Engineer in Texas. Andrew has published several articles and speaks frequently on environmental and natural resource legal matters.

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AGENCY DATA IN THE INFORMATION AGE

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TEXAS ENVIRONMENTAL SUPERCONFERENCE
August 5 - 6, 2004
Four Seasons Hotel
Austin, Texas

Table of Contents

Agency Data in the Information Age

I. The Migration of Data from Paper to Electronic Files.

Agencies have traditionally gathered and distributed large amounts of information. However, the use of the Internet has made agency information available on a scale never before seen. The use of electronic data has been encouraged at both the federal and state levels. But several considerations temper the otherwise enthusiastic embrace of the submission and disclosure of electronic information. First, the possibility exists that the data published is misleading or false, which could unfairly adversely affect the regulated entity. Second, the possibility exists that an agency could disseminate confidential commercial or trade secret information. Third, a possible risk to national security exists.

A. Information-Driven Policy in the Information Age.

1. Regulating by Disseminating Information: The Toxics Release Inventory.

The push towards the widespread dissemination of environmental information began in 1986, when Congress passed the Emergency Planning & Community Right-to-Know Act ("EPCRA").[1] The impetus for EPCRA was the 1984 incident in Bhopal, India in which more than two thousand people were killed, and hundreds of thousands injured, by a release of methyl isocyanate from a manufacturing facility.[2] The theory underlying the right-to-know movement is that local governments and citizens, who know the hazards in their neighborhoods, are in the best position to protect themselves. To facilitate the widespread dissemination of information, section 313 of EPCRA established the Toxic Release Inventory ("TRI"), which is an inventory of certain chemicals released by certain facilities into the air, water, or land, or which are transferred off-site.

TRI applies only to facilities that are in particular SIC codes and that employ more than ten employees.[3] A facility covered by the TRI must report its releases of each of the listed chemicals and chemical categories for which it manufactures over 25,000 pounds per year, processes over 25,000 pounds per year, or otherwise uses over 10,000 pounds per year.[4] The TRI covers both permitted and nonpermitted releases. Rather than impose monitoring requirements, TRI allows companies to use data gathered under other law or, in the absence of such data, to estimate releases using available information.[5]

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[1] *See* Emergency Planning & Community Right to Know Act of 1986, Pub. L. No. 99-499, Tit. III, § 313, 1000 Stat. 1741 (codified at 42 U.S.C. § 11023 (2000)).

[2] *See How are the Toxics Release Inventory Data Used?* EPA-260-R-002-004 (May 2003); *see also* Joseph A. Siegel, *Terrorism and Environmental Law: Chemical Facility Site Security vs. Right-To-Know*?, Widener L. SYMP. J. 2003 [hereinafter Siegel].

[3] 42 U.S.C. § 11023(b)(1) (1995).

[4] 42 U.S.C. § 11023(f) (1995).

[5] 42 U.S.C. § 11023(g)(2) (1995).

The Pollution Prevention Act of 1990 increased the information-collection requirements of the TRI to incorporate information on waste prevention, source reduction, and other forms of release reduction.[6] Under the Pollution Prevention Act, facilities must report in the TRI:

- The quantity of the chemical entering any waste stream, or otherwise released, before recycling, treatment, or disposal;
- The amount of the chemical recycled (at the facility or elsewhere); and
- The amount of the chemical treated (at the facility or elsewhere), and the percentage change from the previous year.

EPA is required by law to make TRI information available to the public through a computer database.[7] EPCRA also permits health professionals and local emergency-planning committees to request certain additional information directly from the facility.[8]

The TRI has been described as a "watershed" and a "surprising success" by many commenters.[9] TRI is viewed as a success because – even though EPCRA does not contain coercive provisions – industry has gone to great lengths to reduce the releases of reported chemicals. The volume of TRI releases has steadily declined, dropping by over 45% from 1988 to 1995.[10]

But, despite the lavish praise heaped on TRI, several problems have been identified. First, it is hard to know how much of the reported decline in TRI releases has been real.[11] Because no uniform standards for TRI data exist, information can be inaccurate even if a company sincerely attempts to fill out the forms accurately.[12] A facility is not required to verify the data it submits.[13] And, if no monitoring data is available, a facility may estimate its releases. One survey reported that only 31% of all TRI estimations are based on actual monitoring and mass balance calculations, which are the most accurate methods of estimation; 69% used less verifiable and less accurate techniques.[14]

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[6] 42 U.S.C. § 13101-13109 (1995).

[7] 42 U.S.C. § 11023(j) (1995).

[8] 42 U.S.C. § 11022(e) (1995).

[9] *See* Bradley C. Karkkainen, *Information as Environmental Regulation: TRI and Performance Benchmarking, Precursor to a New Paradigm?* 89 GEO. L J. (2001) [hereinafter Karkkainen]; Archon Fung & Dara O'Rourke, *Reinventing Environmental Regulation from the Grassroots Up: Explaining and Expanding the Success of the Toxics Release Inventory*, 25 ENVTL. MGMT. 115, 116 (2000) (describing TRI as "an accidental success story"); Sidney M. Wolf, *Fear and Loathing About the Public Right-to-Know: The Surprising Success of the Emergency Planning and Community Right-to-Know Act*, 11 J. LAND USE & ENVT. L. 217, 312-13 (1996). *See also* Daniel C. Esty, *Next Generation Environmental Law: A Response to Richard Stewart*, 29 CAP. U. L. Rev. 2001.

[10] Alexander Volokh, *The Pitfalls of the Environmental Right-to-Know*, UTAH L. REV. (2002) [hereinafter Volokh].

[11] *Id.* at 815.

[12] *Id.* at 816.

[13] *Id.*

[14] *Id.*

Also, TRI data are sensitive to changes in reporting guidance estimation methods and changes in production levels.[15] A 1994 General Accounting Office report concluded that many of the decreases in the TRI numbers resulted from changes in the instructions and guidance on reporting specific chemicals and changes in estimating methods.[16] A 1992 survey reported that fewer than half of the top fifty facilities reporting reductions between 1989 and 1990 also claimed to have changed their manufacturing processes or reduced the use of chemicals; in those circumstances, the reported decrease in TRI releases could have been caused by a change in the estimation method rather than by a real reduction in the manufacture or use of toxic chemicals.[17] Further, decreases in TRI levels may very well result from changes in production, rather than shifts in the manufacturing process.[18]

Second, TRI does not take into account the relative toxicity of the chemicals.[19] So, by reducing TRI numbers, "governments may . . . be spending scarce resources to prevent extremely low or nonexistent risks, industry may be incurring emission-control costs that are unrelated to risks, and ultimately, consumers may be paying more for products that pose infinitesimal risks in their production or in their use."[20] For that reason, some states have added a toxicity element that seeks to evaluate the toxicity as well as the tonnage of the chemical released.[21]

Third, TRI fails to take into account how the chemical is managed and how many people, if any, are exposed.[22]

Fourth, releases are sometimes double-counted.[23] "Production-related waste" may in fact include recycling, energy recovery, and treatment since solvent-recovery services and commercial hazardous-waste treatment facilities are now included in the list of industries that must file TRI forms.[24] The shipment to the recovery or treatment facility is counted as a transfer. Then, once the facility recovers or treats the waste, that is also reported as a transfer or release. Therefore, if a TRI-reporting firm recycles a chemical four times off-site, the chemical may be counted four times; but, if the recycling is done by another TRI-reporting firm, the chemical may be counted eight times.[25]

Fifth, possible biases result from incomplete coverage of both facilities and chemicals.[26] Facilities with fewer than ten full-time employees or outside of the reportable SIC codes are exempt from EPCRA requirements.

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15 58 Fed. Reg. 4802, 4806 (Jan. 15, 1993).

16 General Accounting Office, Toxic Substances: Status of EPA's Efforts to Reduce Toxic Releases, GAO/RCED-94-207, at 4.

17 Volokh *supra* note 10, at 817.

18 *Id.* at 818-819.

19 62 Fed. Reg. 23834, 23882 (May 1, 1997); Volokh, *supra* note 10, at 816-817.

20 Volokh, *supra* note 10, at 816-817.

21 *Id.*

22 *Id.* at 829.

23 *Id.*

24 *Id.*

25 *Id.*

26 *Id.* at 835-36.

Yet, despite these shortfalls, industry responds by reducing releases, toxic or not, to preserve their reputations.[27] The availability of the information itself drives corporations to take actions that are perceived as valuable regardless of their true effect on the environment.

Another information-driven statutory scheme is California's Proposition 65, which requires that manufacturers label products as potentially unsafe. Proposition 65 also suffers from similar limitations and inherent problems.[28]

Texas' regulation of toxic chemical release reporting basically mimics the federal program.[29] Texas does not attempt to make the data any more meaningful by, for example, adding a toxicity component.

2. The Advantages of Using Information as a Policy Tool

The use of the dissemination of information as a "policy tool" continues regardless of the shortcoming of information-based regimes. There are several perceived advantages of using information as a regulatory tool.

Governmental perspective. From the government's perspective, information disclosure has numerous advantages over traditional regulation as means of promoting regulatory goals. First, publishing information is much quicker than pursuing traditional regulation through the rulemaking process.[30] A rulemaking may take years from initiation of the rule-making process to the conclusion of judicial review.[31] By contrast, a database or other information can be assembled and placed online in a matter of months.[32] Also, the data can also be easily revised without the need for another round of notice and comment.[33] Second, the dissemination of the information is generally "more efficient than rulemaking, especially if the agency already possesses the information or can gather it cheaply."[34] Finally – but perhaps most attractively, for the government – the dissemination of information by an agency may not be subject to judicial review, giving the agency more flexibility and eliminating the possibility that the action will be undone by a single judicial decision.[35]

Regulated entities' perspective. Regulated entities may also benefit from regulation by information disclosure.[36] Posted information creates no enforceable obligations. "To the extent the dissemination of information has the practical effect of coercing action, it does not require any particular action, and so is more flexible and performance-based."[37] Industrial interests have

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27 Karkkainen, *supra* note 9, at 327.
28 *Id.* 812-815.
29 *See, e.g.* Tex. Health & Safety Code Ch. 370.
30 James W. Conrad, Jr., *The Information Quality Act—Antiregulatory Costs of Mythic Proportions?* 12 KAS. J. L. AND PUB. POL'Y., at 529-530 (2003) [hereinafter Conrad].
31 *Id.*
32 *Id.*
33 *Id.*
34 *Id.*
35 *Id.*
36 *Id.*
37 *Id.*

praised the TRI program because it requires only that a facility report; what further steps the facility takes, and when it take such steps, are up to the facility.[38] This approach is perceived as more efficient overall than any "command-and-control" regulatory system.[39]

The general public's perspective. The widespread and readily available disclosure of information has broad public appeal from a right-to-know perspective.[40]

3. The Disadvantages of Using Information as a Policy Tool

On the other hand, if the government's disclosures are inaccurate or misleading, those disclosures can unfairly harm private parties and "disserve the public and the government."[41] Improper disclosures can also compromise "legitimate interests in business confidentiality and can "jeopardize domestic security."[42] "In contrast to traditional regulatory activities, however, the federal government's use of information tools was subject to few, if any, procedural protections" before the promulgation of Information Quality Act, which is discussed below.[43] As also discussed below, there appear to be even fewer restraints on the State's use of information.

B. Federal Initiatives Encouraging Electronic Interaction and Information.

Regardless of the concerns of the quality of information-driven policy, the push towards both obtaining more information, and publishing that information on the Internet, continues.

Congress passed the Electronic FOIA Amendments in 1996.[44] EFOIA required agencies to establish websites containing policy and guidance documents and all documents that the agency determines have become or are likely to become the subject of future FOIA requests.[45]

Then, in 2002, President Bush signed the E-Government Act of 2002[46] into law.[47] The E-Government Act addresses the use of information technology and the Internet, together with the operational processes and people needed to implement those technologies, to deliver services and programs to constituents, including citizens, businesses and other government agencies. It

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38 *Id.*

39 *Id.*; *see also* Karkkainen, *supra* note 9, at 27-38.

40 *Id.*

41 Conrad, *supra* note 30, at 526.

42 *Id.*

43 *Id.*

44 Electronic Freedom of Information Act Amendments of 1996, Publ L. No. 104-231, 110 Stat. 3048, codified at 5 U.S.C. § 552.

45 5 U.S.C. § 552(a)(2) (1996).

46 Public Law 107-347, 44 U.S.C. §§ 3601-3604 (West Supp. 2004).

47 *See* FY 2003 Report to Congress on Implementation of the E-Government Act (March 8, 2004) [hereinafter 2003 E-Government Report to Congress]. For technical information on the problems that inhere with e-signatures, see The National Electronic Commerce Coordinating Council, Management of Electronic Transactions and Signed Records, NECCC Annual Conference, December 4-6, 2002. For technical information on e-government, see The National Electronic Commerce Coordinating Council, Electronic RecordKeeping, NECCC Annual Conference, December 4-6, 2002.

also seeks to protect the privacy of persons doing business with the government over the Internet. Relevant provisions require that agencies:

- Develop common authentication services to support electronic signature and remote access control. According to the 2003 E-Government Report to Congress, by July 2004, the E-Authentication Initiative is expected to provide full operational capability for common authentication services.[48]
- Improve the methods by which government information, including information on the Internet, is organized, preserved, and made accessible to the public.[49]
- Address privacy concerns that arise when Americans interact with their government. OMB Guidance Memorandum M-03-22 directs agencies to review how information about individuals is handled when the agencies uses IT to collect new information, or when agencies develop or buy new IT systems to handle collections of personally identifiable information. Privacy guidance is available on the OMB website at http://www.whitehouse.gov/omb/.
- Limit the government's use of persistent tracking technology.[50] Persistent tracking technology refers to technologies such as persistent cookies, web bugs, web beacons, that permit the tracking, monitoring or surveillance of a visitor's activity on the Internet after the web session has ended. In most cases, tracking technology may not be employed to follow the activities of identifiable users of the site.[51] However, exceptions may be granted when a proper authorizing official approves its use for a compelling agency purposes.[52] In such instances, the agency must report to OMB the reasons necessary for tracking the individual's activities and safeguards instituted to protect the information collected.

C. Texas Initiatives Encouraging Electronic Interaction and Information.

In 1999, Senate Bill 974 established a Task Force to assess the feasibility of establishing a common electronic system using the Internet through which state and local governments can:

- Send documents to members of the public and regulated entities;
- Receive applications for licenses and permits and receive documents for filing from members of the public and regulated entities; and
- Receive payments from members of the public and regulated entities.

Section 552.009 of the Texas Government Code establishes an Open Records Steering Committee that it required to "periodically study and determine the types of public information for which it would be useful to the public or cost-effective for the government if the type of information were made available by state governmental bodies by means of the Internet or another electronic format." The committee must report its findings and recommendations to the governor, the presiding officer of each house of the legislature, and the budget committee and

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48 2003 E-Government Report to Congress, *supra* note 46, at 18.
49 *Id.* at 20.
50 *Id.* at 24-25.
51 *Id.*
52 *Id.*

state affairs committee of each house of the legislature.

D. Electronic Monitoring data at the TCEQ.

At the Texas Commission on Environmental Quality ("TCEQ"), a number of data are submitted to the agency in electronic format.

Air monitoring data. The TCEQ has continually expanded its ambient air quality network over the last twenty years, in terms of both the number of monitoring stations and the number of air pollutants measured. The sophistication of the air monitoring technology currently allows the TCEQ to gather pollutant measurements every second. These one second measurements are rolled up to five minute and then hourly averages for comparison to the appropriate National Ambient Air Quality Standards ("NAAQS").

A relatively new development is the on-line availability of vast amounts of air monitoring data. One can now view pollutant measurements at each of the monitoring stations and monitor how those measurements change over the course of the day. In the case of ozone in the Houston Galveston area, which does not attain either the one hour or eight hour NAAQS, the data has been animated to show how the ozone cloud grows and moves over the course of the day. By visiting the following web site, http://www.tnrcc.state.tx.us/cgi-bin/monops/ozone_animation?12, one can select the day of interest and watch the color coded increases and decreases of ozone concentrations, including the time and location of the peak ozone levels.

With increasing knowledge of the underlying science of ozone formation in the Houston Galveston area, the TCEQ has enhanced the monitoring capabilities of the network to specifically measure four categories of pollutants that disproportionately play a role in the creation of ozone. These pollutants – termed Highly Reactive Volatile Organic Compounds (HRVOCs) – are currently targeted in a proposed TCEQ rulemaking. To enhance the scientific understanding of how and to what extent HRVOCs contribute to ozone formation, the TCEQ earlier this year announced the installation of eleven new monitors – seven of which are funded and paid for by industry. These monitors will collect information on ethylene, propylene, 1,3 butadiene and certain butenes and will help the TCEQ determine how much of these pollutants the airshed can hold and still meet the ozone standards. In the coming year, the TCEQ intends to publish the data collected by these stations.

Air emissions event data. House Bill 2912 of the 77th Legislature directed the TCEQ to collect data on emission incidents in a central database and make the data available to the public. Subsequently, the TCEQ adopted rules that require companies to submit through STEERS, within twenty-four hours of the discovery of an emission event, initial reports on emission events, opacity events and maintenance activities.[53] Then, within two weeks of the unauthorized emission, the company is also required to file a final report.[54]

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[53] 30 Tex. Admin. Code § 101.201.

[54] *Id.* at 101.201(b)

The information electronically reported to the TCEQ is posted on the web within 72 hours of submittal. The information reported includes the site of the incident, the time the event began and when it ended, the cause of the emission, the actions taken to mitigate or eliminate the emission, the authorization for the emission and the amount of pollutants released. One can search STEERS at the following web site, http://www2.tnrcc.state.tx.us/eer/main/index.cfm?fuseactin=searchForm#gotcust, to view the reports made by a regulated entity since January 31, 2003.

Water monitoring data. Real-time water monitoring has lagged behind real-time air monitoring. One reason is that water quality monitoring has traditionally been at less frequent intervals, such as quarterly testing.[55] Another reason is that the monitoring equipment is submerged in water, which causes more technical problems than many types of air monitoring equipment.[56] However, the TCEQ currently has eight real-time monitors in place and plans to expand this network in the near future.

The TCEQ has made the data available for viewing by going to the following link, http://www.tnrcc.state.tx.us/cgi-bin/monops/select_water_daily, which provides hourly data on several water parameters including surface water temperature, specific conductance, dissolved oxygen and pH. The TCEQ is expanding both the number of monitors and the pollutants monitored and is currently planning to install monitors to measure the concentration of nitrates, orthophosphates, total phosphorous and ammonia. A summary of TCEQ's planned water quality monitoring stations is appended at Attachment A.

TRI data. According to TCEQ's web site, the TCEQ accepts TRI Form R and Form A submissions on paper or magnetic media such as a diskette. However, the TCEQ does not accept TRI forms by direct electronic submission using the TRI-ME software.[57] By contrast, EPA encourages the electronic and magnetic submittal of the Form R and Form A reports, but still accepts paper forms. Electronic and magnetic media reporting save preparation time in data entry and photocopying and reduce errors via on-line validation routines and the use of pick lists.[58]

E. Other Electronic Data at the TCEQ.

Combined Compliance Enforcement Data System ("CCEDS"). This electronic database contains components of compliance history, such as NOVs, audits, orders, and court judgments. CCEDS, although stored in electronic form, is not itself on-line and may be accessed only by generating certain reports that search on predefined fields.

Central Registry. The Central Registry is a searchable, online database that records common information, such as the name, address, and telephone number of regulated entities.

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[55] July 13, 2004 Telephone Conference with Dale Brymer, Office of Compliance and Enforcement, Monitoring & Operations, Lab & Mobile Monitoring.

[56] *Id.*

[57] *See* http://www.tnrcc.state.tx.us/exec/oppr/tri/deadline.html .

[58] *Id.*

Compliance history. Chapter 60 of Title 30 of the Texas Administrative Code requires the TCEQ to rate the compliance history of every owner or operator of a facility that is regulated under any of these state environmental laws:

- the water quality control laws of chapter 26 of the Texas Water Code;
- laws for the installation and operation of injection wells under chapter 27 of the Texas Water Code;
- the Texas Solid Waste Disposal Act, codified at chapter 361 of the Texas Health & Safety Code;
- the Texas Clean Air Act, codified at chapter 382 of the Texas Health and Safety Code;
- the Texas Radiation Control Act, codified at chapter 401 of the Texas Health and Safety Code.

The compliance history – which pulls information from CCEDS – is on-line. Under the compliance history program, entities are evaluated on a scale, with zero indicating the most compliant entity.

II. Reliability of Data – Garbage In, Garbage Out.

A. Data Quality at the Federal Level.

In any regime in which data is made widely available, the quality of that data is an issue. Federal data quality legislation was promulgated as part of the Fiscal Year 2001 Consolidated Appropriations Act[59] generally known as the Information (or Data) Quality Act ("IQA"). Section 515 of the Information Quality Act directed the Office of Management and Budget ("OMB") to issue government-wide guidelines that "provide policy and procedural guidance to Federal agencies for ensuring and maximizing the quality, objectivity, utility, and integrity of information (including statistical information) disseminated by Federal agencies." By October 1, 2002, agencies were required to issue their own implementing guidelines that include "administrative mechanisms allowing affected persons to seek and obtain correction of information maintained and disseminated by the agency" that does not comply with the OMB guidelines.[60]

OMB, when it promulgated its guidelines, recognized its charge, stating:

> In accordance with section 515, OMB has designed the guidelines to help agencies ensure and maximize the quality, utility, objectivity and integrity of the information that they disseminate (meaning to share with, or give access to, the public). It is crucial that information Federal agencies disseminate meets these guidelines. *In this respect, the fact that the Internet enables agencies to communicate information quickly and easily to a wide audience not only offers great benefits to society, but also increases the potential harm that can result*

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[59] Public Law 106-554.

[60] *See* 67 Fed. Reg. 369, 369 (January 3, 2002).

from the dissemination of information that does not meet basic information quality guidelines. [61]

The Information Quality Act was criticized as "death by data quality" by persons afraid it would stymie agency action.[62] A recent article by James W. Conrad, Jr., entitled *The Information Quality Act--Antiregulatory Costs of Mythic Proportions?*, explores the current effects and possible future effects of the Information Quality Act. The article reports that, before the passage of the Information Quality Act, many facilities discovered substantial errors in compliance data EPA published as part of its Sector Facility Indexing Project, and also experienced difficulties getting these errors corrected.[63] Another pre-IQA example of erroneous information posted on-line is Pennsylvania Department of Environmental Protection's website of facilities that had underground storage tank violations, which had to be taken down when it turned out to be "massively in error."[64] It is too soon after the passage of the IQA – and the underlying guidance – to assess the effectiveness of the IQA, but Conrad believes that the act and its guidance would positively affect the quality of agency data without unduly burdening the agency with picayune requirements. The extent to which the IQA may create a private cause of action is discussed in Section III, which discusses remedies for an agency's publication of erroneous data.

B. Data Quality at the State Level.

No state statute directly parallels the federal Information Quality Act. However, Section 2054.052(a) of the Government Code provides that the Department of Information and Resources ("DIR") may adopt rules as necessary to implement its responsibilities under the Information Resources Management Act.[65] Under that authority, DIR promulgated a series of rules aimed at preserving the integrity and security of the data collected by agencies.[66]

Section 202.2 of Title 1 of the Texas Administrative Code provides:

> Information resources residing in the various agencies of state government are strategic and vital assets belonging to the people of Texas. These assets must be available and protected commensurate with the value of the assets. Measures shall be taken to protect these assets against unauthorized access, disclosure, modification or destruction, whether accidental or deliberate, as well as to assure the availability, integrity, utility, authenticity, and confidentiality of information. Access to state information resources must be appropriately managed.[67]

Section 202.3(D) requires that the owner of an information resource must specify appropriate controls to protect the state's information resources from unauthorized modification, deletion, or disclosure. Section 202.3(E) provides that the owner must confirm that controls are

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61 *Id.*, 369-70.
62 Conrad, *supra* note 30, at 521.
63 *See* Conrad, *supra* note 30, at 536.
64 *Id.* at 531.
65 Tex. Gov't Code Ann. §2054.052(a).
66 1 Tex. Admin. Code §§ 202.1-202.8.
67 1 Tex. Admin. Code § 202.2.

in place to ensure the accuracy, authenticity, and integrity of data. Section 202.6 requires agencies to plan for business continuity so that the agency can maintain or quickly resume functions after a loss of business functionality due to an interruption of computing and/or infrastructure support services. Finally, section 202.7 requires that confidential information is accessible only to authorized users, and that information containing any confidential data shall be identified, documented, and protected in its entirety.

III. Remedies for the Publication of Misleading or False Data.

A. Remedies Under Federal Law.

A recent article by James O'Reilly, entitled *Libels on Government Websites: Exploring Remedies for Federal Internet Defamation*,[68] discusses the role of legal remedies such as libel and the availability of administrative correction tools in dealing with a federal agency's Internet mistakes or misstatements.

The article focuses on the theoretical publication on EPA's Envirofacts website of misleading or incorrect information regarding the pollution practices of a corporation, or of the toxicity of its product. The easiest method by which to correct a website error is to use EPA's online website correction mechanism, which may be accessed at http://oaspub.epa.gov /enviro/ets_grab_error.smart_form?P_CALLER_URL=http://www.epa.gov/epahome/comments.htm. This online error correction program may deter litigation by giving EPA the option of rewording or deleting web statements that may adversely affect regulated entities.[69]

If EPA does in fact correct the misstatement, the problem is resolved – although the harm may have already been done. If the agency made its misstatement at an inopportune time, such as an agency's declaration just before Thanksgiving that cranberries may be contaminated, the harm may not be readily remedied by a later retraction.[70] Further, if EPA simply refuses to correct the misstatement, it is unclear what remedy may lie.

For those seeking a judicial remedy for an agency's publication of erroneous data, O'Reilly's article is not encouraging: it concludes that current federal statutes do not provide much recourse for the entity that disagrees with an EPA publication, web posting or other dissemination. One problem is that an Internet posting by an agency may not be seen as a final agency action appealable under the federal Administrative Procedures Act ("APA"). A case decided by the Fourth Circuit in 2002, *Flue-Cured Tobacco Cooperative Stabilization Corp. v. EPA*,[71] analyzed the reviewability of a report EPA issued under the Radon Act. The Radon Act – which addresses indoor air pollutants – expressly forbade EPA from regulating, and limited EPA's activities to research, development and related reporting, disseminating information, and coordinating activities. Regardless, when EPA issued a report on the deleterious health effects of second hand smoke, the tobacco industry believed it had been adversely affected by EPA's acts –

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[68] James O'Reilly, *Libels on Government Websites: Exploring Remedies for Federal Internet Defamation*, 55 ADMIN. L. REV. 507 (Summer 2003) [hereafter O'Reilly].

[69] *See id.* at 533-534.

[70] O'Reilly, *supra* note 68, at 533.

[71] 313 F.3d 852 (4th Cir. 2002).

a belief seemingly justified when the General Services Administration relied in part on the report to justify its ban on the use of tobacco in GSA motor vehicles. The district court agreed, holding that the report carried "indirect regulatory effects" sufficient to convert the report into reviewable final agency action. The court of appeals reversed.

First, the court held the Radon Act's explicit limitation on EPA's power meant that the report could have no regulatory effect. Next, the court considered whether agency action producing only coercive pressures on third parties is reviewable under the APA. The court believed that question had already been addressed by the United States Supreme Court in *Bennett v. Spear*,[72] in which the Supreme Court held that agency action which carried no "direct and appreciable legal consequences" is not reviewable.[73] In the case at hand, the court held, "while the Report's persuasive value may lead private groups to impose tobacco-related restrictions, these decisions are attributable to independent responses and choices of third parties."[74] Therefore, the report was not reviewable. Finally, the court held that, as a practical matter, a publication that merely produces pressure on third parties could not be reviewable under the APA because then almost any agency policy or publication would then be subject to judicial review. Under the holding of this case, it appears unlikely that a court would consider a federal agency's decision to post information on the Internet as a final agency action.

Further, according to O'Reilly, federal case law has not otherwise recognized a remedy for alleged data inaccuracy or misleading posting of information on federal websites.[75] The few cases that have arisen appear to have been settled or resolved through a means outside of litigation.

A different author posits that the Information Quality Act may in fact provide a means of obtaining review of a federal agency's denial of a request that it correct information posted on the Internet.[76] But the first case to consider that issue, *In re Operation of the Missouri River System*,[77] held the language of the IQA indicates that a court may not review an agency's decision to deny a party's information quality complaint. In that case, the plaintiffs argued that federal defendants failed to comply with their request for "information and science" regarding an augmented spring pulse and proposed default flow plan.[78]

B. Remedies Under Texas Law.

The TCEQ does offer to the public some administrative method by which to correct some of its databases. Only an entity whose compliance history rating exceeds a particular threshold

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[72] 520 U.S. 154 (1997).

[73] *Id.* at 859.

[74] *Id.* at 861.

[75] O'Reilly, *supra* note 68, at 511-512.

[76] Conrad, *supra* note 30, at 538.

[77] 2004 WL 1402563, 24 (D. Minn. 2004).

[78] Interestingly, although the Information Quality Act was seen as favoring industry groups, the first two reported IQA claims were brought by environmental groups. *See also U.S. Pub. Interest Research v. Stolt Sea Farming Group*, 301 F. Supp.2d 46, 49 (D. Maine 2004) (segregating attorney's fees awarded under the Clean Water Act from those spent to pursue an IQA claim).

may appeal its rating.[79] But anyone can ask that an error in the information contained in the compliance history be corrected.[80]

The viability of a judicial remedy under Texas law, as under federal law, is uncertain. Sovereign immunity bars many causes of action. As usual, a prospective plaintiff would have to review each agency's governing legislation to determine the availability of judicial review of a particular agency act. Regardless of the breadth of the statute authorizing judicial review, it is likely that finality will be a problem at the state level just as it is the federal level.

Under Texas law, no single formula or rule disposes of all finality problems in administrative orders.[81] A flexible approach must be employed, recognizing the need to both "minimize disruption of the administrative process and to afford regulated parties and consumers with an opportunity for timely judicial review of actions that affect them."[82] Administrative orders are generally considered final and appealable if "they impose an obligation, deny a right or fix some legal relationship as a consummation of the administrative process."[83] An agency's decision to post information – or to refuse to withdraw the posted information – may not be seen as the imposition of an obligation or the denial of a right.

Another option – which is also unlikely to be viable – is the Tort Claims Act.[84] First, the Tort Claims Act only compensates for property damage, personal injury, and death caused by "a condition or use of tangible personal or real property." Additionally, the State retains its sovereign immunity from suits arising from its discretionary acts and omissions. [85] Finally, because a series of Texas Supreme Court decisions held that "information" was not "tangible property," it appears that the Tort Claims Act will not lie for the wrongful publication of data on an agency website. In *Texas Department of Pubic Safety v. Petta*,[86] the Court explained that supervision and training involve information and that information is not tangible; rather it is "an abstract concept that lacks corporeal, physical, or palpable qualities."[87] Similarly, in *Dallas*

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79 30 Tex. Admin. Code § 60.3(e).

80 *Id.* § 60.3(f).

81 *Browning-Ferris, Inc. v. Brazoria County*, 742 S.W.2d 43, 48 (Tex. App.–Austin 1987, no writ).

82 *Tex.-New Mex. Power Co. v. Tex. Indus. Energy Consumers*, 806 S.W.2d 230, 232 (Tex. 1991).

83 *Id.*

84 A governmental unit in the state is liable for:

(1) Property damage, personal injury, and death proximately caused by the wrongful act or omission or the negligence of an employee acting within his scope of employment if:

(A) the property damage, personal injury, or death arises from the operation or use of a motor-driven vehicle or motor-driven equipment; and

(B) the employee would be personally liable to the claimant according to Texas law; and

(2) Personal injury and death so caused by a condition or use of tangible personal or real property if the governmental unit would, were it a private person, be liable to the claimant according to Texas law.

Tex. Civ. Prac. & Rem.Code Ann. § 101.021 (West Supp. 2004).

85 The "discretionary exception" of section 101.056 provides that immunity is not waived with respect to (1) the failure of a governmental unit to perform an act that the unit is not required by law to perform; or (2) a governmental unit's decision not to perform an act or on its failure to make a decision on the performance or nonperformance of an act if the law leaves the performance or nonperformance of the act to the discretion of the governmental unit. § 101.056.

86 44 S.W.3d 575, 580 (Tex. 2001).

87 *Id.*

County v. Harper,[88] the Court concluded that the distribution of an expunged indictment was not actionable under the Tort Claims Act because simply reducing information to writing on paper does not make the information "tangible personal property." And in *Kassen v. Hatley*,[89] the Court held that the information in an emergency room procedure manual is not tangible personal property. These cases make it appear unlikely that a Tort Claims Act cause of action alleging harm caused by the agency's wrongful publication of data would survive a plea to the jurisdiction.

IV. Confidentiality of Data.

Another consideration as information is submitted, stored or made available in electronic format is how to preserve confidential information that the government collects.

A. Confidential Information Under the Public Information Act.

The Public Information Act ("PIA") contains a number of exemptions listed at sections 552.101 through 552.142 of the PIA.[90] The exceptions most likely to apply to information submitted by persons reporting to the TCEQ are the exceptions for trade secrets and for confidential business information.

1. Confidential Commercial or Financial Information.

Section 552.110(b) of the PIA exempts from disclosure "[c]ommercial or financial information for which it is demonstrated based on specific factual evidence that disclosure would cause substantial competitive harm to the person from whom the information was obtained."

2. Trade Secret Information Under Section 552.110(a).

Section 552.110(a) of the PIA exempts trade secrets from disclosure. A trade secret is private property protected by the Takings Clause of the Fifth Amendment of the United States Constitution.[91]

The Texas Supreme Court, in *In re Bass*,[92] recently adopted the definition of a trade secret under section 39 of the Restatement (Third) of Unfair Competition. Section 39 defines a trade secret as "any information that can be used in the operation of a business or other enterprise and that is sufficiently valuable and secret to afford an actual or potential economic advantage over others." Under section 39, no single factor is conclusive to any trade secret analysis, as "[i]t is not possible to state precise criteria for determining the existence of a trade secret. The status of information claimed as a trade secret must be ascertained through a comparative evaluation of all of the relevant factors, including the value, secrecy, and definiteness of the information. . . ."[93]

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88 913 S.W.2d 207,208 (Tex. 1995).
89 887 S.W.2d 4, 14 (Tex. 1994).
90 *See* Tex. Gov't Code Ann. §§ 552.101-.144 (West Supp. 2004).
91 *See Ruckelshaus v. Monsanto Co.*, 467 U.S. 986, 104 S.Ct. 2862, 81 S.Ct. 815 (1984).
92 113 S.W.3d 735 (Tex. 2003).
93 Restatement (Third) of Unfair Competition § 39, comment d (replacing § 757 of the Restatement of Torts).

Even under section 39 of the Restatement (Third) of Unfair Competition, a court can consider the six factors defining a trade secret under former section 757 of the Restatement (Second) of Torts. Although the court in *In re Bass* still looked to the former section 757 factors, it held that not all of the six factors must be proven to establish a trade secret.[94] Former section 757 defined a trade secret as "any formula, pattern, device or compilation of information which is used in one's business and presents an opportunity to obtain an advantage over competitors who do not know or use it."[95] The six factors of former section 757 provide that a court, in determining what a trade secret is, must consider:

(1) the extent to which the information is known outside of the holder's business;
(2) the extent to which it is known by employees and others involved in the holder's business;
(3) the extent of the measures taken by the holder to guard the secrecy of the information;
(4) the value of the information to the holder and its competitors;
(5) the amount of effort or money expended by the holder in developing the information; and
(6) the ease or difficulty with which the information could be properly acquired or duplicated by others.[96]

B. Confidential Information Under Statutes Particular to the TCEQ.

Texas Health and Safety Code section 361.037 provides that if the owner of a record relating to hazardous waste management and control "shows to the satisfaction of the executive director that the records would divulge trade secrets if made public, the commission shall consider the copied records confidential." However, the commission is not required to consider the composition or characteristics of solid waste to be confidential.

Texas Health and Safety Code section 361.085 provides that financial information submitted to comply with the financial assurance rules are protected if "confidential under applicable law."

Texas Health and Safety Code section 361.508 provides that a source reduction and waste minimization plan is not a public record, but the executive summary and annual report are public records, unless they are also trade secret.

Texas Health and Safety Code section 382.0216 provides that a corrective action plan to reduce emissions from excessive emissions events is not public information to the extent that it is trade secret.

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[94] Section 757 of the Restatement (Second) of Torts has been replaced by section 39 of the Restatement of Unfair Competition.

[95] *Computer Assoc. Int'l, Inc. v. Altai, Inc.*, 918 S.W.2d 453, 455 (Tex. 1996).

[96] *Ctr. for Econ. Justice v. Am. Ins. Ass'n*, 39 S.W.3d 337, 344 -345 (Tex. App.–Austin 2001, no pet.).

Finally, Texas Health and Safety Code section 382.041 provides that except for certain disclosures to EPA, "a member, employee, or agent of the commission may not disclose information submitted to the commission relating to secret processes or methods of manufacture or production that is identified as confidential as submitted." For Public Information Act purposes, the Attorney General has concluded that the "confidential information" protected by section 382.041 is similar to "trade secret" information.[97] One question that arises is the extent to which section 382.041 creates a private cause of action against a member, employee or agent of the commission. A second question is what (assuming that cause of action exists) circumstances may give rise to that cause of action. Certainly, an intentional act such as selling one company's information to a competitor would suffice. A further question is whether negligently releasing the data, say, for example, by releasing the information without seeking an Attorney General's opinion, would also suffice.

C. Confidential Information Under Texas' Homeland Security Act.

The Texas Homeland Security Act, codified at chapters 418 and 421 of the Texas Government Code, provides that certain type of information deemed critical to the security of the state is exempt from disclosure under the PIA:

Information relating to emergency response providers. Section 418.176 provides that information is confidential if the information is collected, assembled, or maintained by or for a governmental entity for the purpose of preventing, detecting, responding to, or investigating an act of terrorism or related criminal activity and
(1) relates to the staffing requirements of an emergency response provider, including a law enforcement agency, a fire-fighting agency, or an emergency services agency;
(2) relates to a tactical plan of the provider; or
(3) consists of a list or compilation of pager or telephone numbers, including mobile and cellular telephone numbers, of the provider.

For purposes of sections 418.177-418.185, a "governmental entity" includes the governing body of a nonprofit corporation organized under Chapter 67 of the Water Code, that provides a water supply or wastewater service, or both, and is exempt from ad valorem taxation under Section 11.30 of the Tax Code.

Information relating to risk or vulnerability assessment. Section 418.177 provides that information is confidential if (i) the information is collected, assembled, or maintained by or for a governmental entity for the purpose of preventing, detecting, or investigating an act of terrorism or related criminal activity and (ii) relates to an assessment by or for a governmental entity, or an assessment that is maintained by a governmental entity, of the risk or vulnerability of persons or property, including critical infrastructure, to an act of terrorism or related criminal activity.

Information relating to the construction or assembly of weapons. Section 418.178 provides that information is confidential if it is information collected, assembled, or maintained by or for a governmental entity and (1) is more than likely to assist in the construction or

[97] Tex. Att'y Gen. ORD-652 (1997).

assembly of an explosive weapon or a chemical, biological, radiological, or nuclear weapon of mass destruction; or (2) indicates the specific location of (A) a chemical, biological agent, toxin, or radioactive material that is more than likely to be used in the construction or assembly of such a weapon; or (B) unpublished information relating to a potential vaccine or to a device that detects biological agents or toxins.

Information relating to certain encryption codes and security keys for communications systems. Section 418.179 provides that information is confidential if the information is collected, assembled, or maintained by or for a governmental entity for the purpose of preventing, detecting, or investigating an act of terrorism or related criminal activity and relates to the details of the encryption codes or security keys for a public communications system.

Certain information prepared for the United States. Information, other than financial information, in the possession of a governmental entity is confidential if the information is part of a report to an agency of the United States, relates to an act of terrorism or related criminal activity, and is specifically required to be kept confidential under Section 552.101 because of a federal statute or regulation, in order to participate in a state-federal information sharing agreement or in order to obtain federal funding.

Information relating to critical infrastructure. Section 481.181 provides that those documents or portions of documents in the possession of a governmental entity are confidential if they identify the technical details of particular vulnerabilities of critical infrastructure to an act of terrorism.

Information relating to security systems. With certain exceptions, information, including access codes and passwords, in the possession of a governmental entity that relates to the specifications, operating procedures, or location of a security system used to protect public or private property from an act of terrorism or related criminal activity is confidential. But financial information in the possession of a governmental entity that relates to the expenditure of funds by a governmental entity for a security system is public information that is not excepted from required disclosure under Chapter 552. Also, information that relates to the location of a security camera in a private office at a state agency, including an institution of higher education is public information and is not excepted from required disclosure under Chapter 552 unless the security camera is either located in an individual personal residence for which the state provides security or is used for surveillance in an active criminal investigation.

The question of what documents can be protected under the Homeland Security Act has been considered a few times by the Attorney General's office. So far, a utility plan, drainage plan and engineering plan for a data processing center for a bank was held to be confidential, while exterior elevations, a landscape plan, and a tree survey for the same facility were not.[98] A caveat: the Attorney General's office has held that a governmental entity's failure to submit a request by the statutory deadline in section 552.301(e) waives the governmental entity's right to withhold the information, even if the entity asserts the information is protected under the Homeland Security Act. Although the AG has traditionally held that waiver can be overcome by

[98] Informal Letter Ruling No. OR2004-5232 (June 25, 2004).

a "compelling reason why the information should not be disclosed," apparently Homeland Security is not one of those compelling reasons.[99]

V. The Security of the On-Line System.

Another countervailing concern with the widespread collection of electronic information is the security of the government's databases. Two GAO reports issued in 2000 sharply criticized the security of EPA's computer system.[100] GAO stated that its review found "serious and pervasive problems that essentially rendered EPA's agency-wide information security program ineffective," and criticized the agency's security program planning and management as largely a "paper exercise that has done little to substantively identify, evaluate and mitigate risks to the agency's data and systems."[101] GAO concluded EPA's system access controls were ineffective:

> Our tests showed that EPA's access controls were ineffective in adequately reducing the risk of intrusions and misuse. Using widely available software tools, we demonstrated that EPA's network was highly susceptible to intrusions through the Internet and that user and system administrator passwords could be easily accessed, read, or guessed. In addition, we identified weaknesses in all of EPA's computer operating systems that made it possible for intruders, as well as EPA employees or contractors, to bypass or disable computer access controls and undertake a wide variety of inappropriate or malicious acts. These acts could include tampering with data; browsing sensitive information; using EPA's computer resources for inappropriate purposes, such as launching attacks on other organizations, and serious disrupting or disabling computer-supported operations.
> . . .
> *In short, we identified weaknesses that if exploited, could have allowed us to control individual EPA computer applications and the data used by these applications. As such, we could have copied, changed, deleted, or destroyed information*, thus rendering any security controls implemented for software used in specific EPA office networks virtually ineffective.[102]

GAO also reported that it was able to gain access to EPA's major computer systems and the applications supported by them. As a result, GAO explained, it "could have browsed, altered, or deleted data associated with these applications or disrupted their operation." As a result of

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[99] Informal Letter Ruling No. OR2004-2451 (March 29, 2004). The requestor sought a copy of the current water distribution map and flush valve report.

[100] *See* General Accounting Office, Information Security: Serious and Widespread Weaknesses Persist at Federal Agencies (Sept. 2000) GAO/AIMD00- 295 Federal Information Security (hereinafter GAO's September 2000 Report); *see* General Accounting Office, Information Security: Fundamental Weaknesses Place EPA Data and Operations at Risk (July 6, 2000) GAO/AIMD00- 215 EPA Information Security (hereinafter GAO's July 2000 Rerpot). *See also* Joseph D. Jacobson, *Safeguarding National Security Through Public Release of Environmental Information: Moving the Debate to the Next Level*, 9 ENVIRONMENTAL LAWYER, February 2003. [hereinafter Jacobson].

[101] GAO's July 2000 Report at 4.

[102] GAO's July 2000 Report at 8-9.

GAO's report, EPA was forced to temporarily shut down its website while it addressed the problems.[103]

Since September 11, 2001, the federal government has also begun to protect information relating to critical infrastructures, including computer systems. On October 16, 2001, President Bush issued an executive order on critical infrastructure protection. The executive order declared:

> The information technology revolution has changed the way business is transacted, government operates, and national defense is conducted. Those three functions now depend on an interdependent network of critical information infrastructures. The protection program authorized by this order shall consist of continuous efforts to secure information systems for critical infrastructure, including emergency preparedness communications, and the physical assets that support such systems. Protection of these systems is essential to the telecommunications, energy, financial services, manufacturing, water, transportation, health care, and emergency services sectors.[104]

Progress has purportedly been made at EPA: a 2004 report from the Office of Management and Budget ("OMB") states there are no "material weaknesses" in EPA's computer systems.[105]

Those who are interested in OMB's analysis of computer security systems by agencies, including the protection of critical infrastructures, may obtain further information via this link: http://www.whitehouse.gov/omb/inforeg/infopoltech.html#cs

VI. The Countervailing Wind: National Security Concerns Arising from the Dissemination of Information.

Another and more recent consideration in the release of environmental data has been national security concerns. The most controversial disclosure provision involved in this debate has been the Risk Management Program ("RMP") found in section 112(r) of the Clean Air Act ("CAA"). [106] The treatment of the offsite consequence analysis required by section 112(r) is an interesting approach to balancing of the community's right to know with the danger of posting sensitive data on the Web – a practice dubbed "Terrorism for Dummies."[107]

Section 112(r) required owners and operators of stationary sources producing, processing, handling, or storing certain listed hazardous substances to (1) identify hazards which may result from releases of listed chemicals, (2) design and maintain a safe facility taking such steps as are necessary to prevent releases; and, (3) minimize the consequences of accidental releases which do occur. Facilities covered by section 112(r) had to develop and implement a risk management

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[103] Office of the Inspector General, Audit Report, Government Information Security Reform Act, Status of EPA's Computer Security Program, Report No. 2001-P-00016 (September 7, 2001).

[104] Exec. Order No. 13231, 66 Fed. Reg. 53,063 (October 18, 2001).

[105] Office of Management and Budget, FY 2003 Report to Congress on Federal Government Information Security Management (March 1, 2004).

[106] *Id.*

[107] Jacobson, *supra* note 100, at 371. *See also supra* note 2.

program ("RMP"). The RMP must include a hazardous assessment, a management program, and a prevention plan. A common element of each RMP is that the owner and operator of the covered facility must analyze the off-site consequences of a release through the development and submission of "worse case scenarios." A worst-case scenario is generally defined as:

> [t]he release of the largest quantity of a regulated substance from a vessel or process line failure, including administrative controls and passive mitigation that limit the total quantity involved or the release rate. For most gasses, the worst-case release scenario assumes that the quantity is released in 10 minutes. For liquids, the scenario assumes an instantaneous spill; the release rate to the air is the volatilization rate from a pool 1 cm deep unless passive mitigation systems contain the substance in a smaller area. For flammables, the worst case assumes an instantaneous release and a vapor cloud explosion.[108]

With information obtained from the worst-case scenario, one can estimate the numbers of people potentially at risk from a release of chemicals at the facility. While that information is a valuable figure in planning for accident prevention and emergency response, the information is also viewed as dangerous in the hands of terrorists.[109]

Section 112(r) mandates that risk management plans be made available to the public. EPA originally interpreted this to mean that all sections of every risk management plan were to be made available electronically, and began making plans to make them available for downloading on its website.

In response to comments from the Federal Bureau of Investigation and other representatives of the law enforcement and intelligence communities, EPA decided to post the risk management plans on the Internet without the offsite consequence analysis. However, executive summaries of risk management plans were posted and the offsite consequences analysis ("OCA") sections were still subject to release in electronic format under FOIA.[110]

The later-promulgated Chemical Safety Information, Site Security, and Fuels Regulatory Relief Act ("CSISSFRRA")[111] sought to (among other things) address the problem of public access to potentially sensitive data. The CSISSFRRA added subsection 112(r)(7)(H) to the CAA in an attempt to control public access to off-site consequence information. Section 112(r)(7)(H) required the President to assess:

(1) the increased risk of terrorist and other criminal activity associated with the posting of off-site consequence analysis information on the Internet, and
(2) the incentives created by public disclosure of off-site consequence analysis for reduction in the risk of accidental releases.

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[108] 61 Fed. Reg. 31668, 31671 (June 20, 1996).
[109] *Id.* at 359-360.
[110] *Id.*
[111] CSISSFRRA, Publ. L. No. 106-40, 113 Stat. 207 (1999).

Congress reached an interesting compromise in the struggle between the right to know and security concerns: the CSISSFRRA – while it allowed the President to consider prohibiting the Internet posting of the offsite consequence analysis information – also required the President to allow access by any member of the public to paper copies of that information. EPA eventually set up more than fifty public reading rooms across the United States in which members of the public could access OCA information.[112] A person visiting a federal reading room must present photo identification and sign in. Once in, the visitor is allowed to take handwritten notes regarding the information he or she views but he or she is not allowed to remove or mechanically reproduce information. After September 11, even the federal reading rooms were criticized as allowing too much information to be disseminated to the public. However, the public has and will continue to have the access to OCA information afforded by the regulations at 40 CFR part 1400.[113]

One post-September 11 change that has occurred is that in EPA's most recent rule revision, published on April 9, 2004.[114] EPA urged corporations to revise the information submitted to it by resubmitting the information with the executive summary of the OCA deleted.

Recent commentators urge that the withdrawal of information from the public does nothing to advance security, and instead only impedes the public's right to know. One author who ascribes to the theory that prohibiting EPA from posting information would simply force a "would-be terrorist to spend a few extra minutes on the computer researching available "target" data that would otherwise be conveniently assembled by EPA."[115] That author, avoiding any EPA-affiliated information, had little difficulty locating sufficient information to select a possible target for terrorist attack. The data found usually came from websites operated by regulated entities themselves. Ironically, the most helpful website he found was that established by the American Chemistry Council, which has ardently opposed public disclosure of sensitive information. That author suggests that, rather than seek to limit public access to data, the debate should focus on the means by which to best protect susceptible facilities from attack.[116]

As discussed above, Texas has passed its own Homeland Security Act, and exempts certain information from disclosure.

VII. Nonregulatory Uses of Data.

The data explosion has affected more than agency practices: the use of information on the Internet has been described as the "third industrial revolution," forcing companies to reinvent themselves and the way they do business.[117] "Green" investors and investment groups have in

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[112] *See* 65 Fed. Reg. 48,108 (Aug. 4, 2000).

[113] *See* 69 Fed. Reg 18819, 18824 (April 9, 2004); *see also* 40 C.F.R. Part 1400.

[114] *Id.*

[115] Jacobson, *supra* note 100, at 387-88.

[116] Jacobson, *supra* note 100, at 391. The author does not appear to be either dewey-eyed or uninformed: he is a judge advocate assigned to the Environmental Law and Litigation Division of the Air Force Legal Services Agency. Another recent commentator also reaching the conclusion that the benefits of disclosing information outweigh the risks is an attorney at EPA's Region 2 office. *See* Siegel, *supra* note 2 at fn. a1.

[117] Bradford L. Smith, *The Third Industrial Revolution: Policymaking for the Internet*, 3 COL. SCI. AND TECH. L. REV. (Nov. 4, 2001).

the past used environmental information garnered from SEC filings to attempt to influence corporate activities.[118] Also, stockholders have brought suit based on environmental data, when it appeared that the corporation had not adequately disclosed the environmental liabilities to which it may be subject.[119] Now, with the advent of continuous online environmental data, such data can presumably be used by investors to decide whether to buy or sell.

Stock analysts could monitor information available through the TCEQ web page for insight into a publicly traded company's future earnings potential. As an example, an analyst interested in a company's production rate or down time can view the company's emission events reports looking for events that may interfere with a company's ability to meet its production goals. The analyst could study the cause of the reported event to determine if it is associated with a key production unit or lasts for an extended period of time. If the event is significant from a monetary viewpoint, the analyst may question corporate executives on the effect of the event on the company's future earnings.

In sum, while the submittal of environmental information may assist the regulators in their oversight role, such information can be used for purposes unrelated to the protection of human health and the environment. For this reason among others, information collected by a regulatory agency must be verified for accuracy before posting for public viewing through the Internet.

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[118] John W. Bagby, Paul C. Murray, and Eric T. Andrews, *How Green was My Balance Sheet? Corporate Liability and Environmental Disclosure*, 14 VA. ENVTL. L. J. 225, 339 (1995)(hereinafter Babgy). *See also How are the Toxics Release Inventory Data Used?* EPA-260-R-002-004 at 15 (May 2003).

[119] *See* Bagby, *supra* note 114, 317-318.

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APPENDIX A:
OVERVIEW OF CURRENTLY SCHEDULED CONTINUOUS WATER MONITORING PROJECTS[1]

1. Project Name: Continuous Water Quality Monitoring above E.V. Spence

Project Overview: The Colorado River Municipal Water District ("CRMWD") (which provides water to the cities of Odessa, Big Spring, and Snyder) owns and operates three major west Texas surface water supplies on the Colorado River: Lake J.B. Thomas, E.V. Spence Reservoir, and O.H. Ivie Reservoir.

In 1997 E.V. Spence Reservoir was placed on the §303 (d) list and targeted for a TMDL due to high levels of total dissolved solids, chlorides, and sulfates. Natural mineral deposits and oilfield related activities have contributed to excessive loadings in the E.V. Spence watershed.

CRMWD operates a "diverted water" supply system which functions to prevent highly mineralized surface water occurring at low flow in the Colorado River and Beals Creek (a tributary to the Colorado River) from reaching E.V. Spence Reservoir. Poor quality "normal flow" surface water is captured and pumped to nearby storage reservoirs for evaporation. The better quality "flood flows" are allowed to bypass the pumping station and travel downstream to E. V. Spence Reservoir. These diversion works were placed in operation in December of 1969.

By employing a continuous monitoring system, the data generated will be used to monitor changes in salt concentrations (using specific conductance) during base flow and flood conditions to assist CRMWD in managing the diversions in a more timely manner.

2. Project Name: Possum Kingdom Reservoir and Lake Whitney Water Quality Monitoring for Harmful Algae Projects

Project Overview: Toxic Golden Algae (*Prymnesium parvum*) blooms have been identified by Texas Parks and Wildlife biologists as the cause of several fish kills on Possum Kingdom Reservoir and Lake Whitney in recent years. Continuous monitoring data is needed in order to characterize water quality conditions associated with algae blooms. Collected data from this project in conjunction with concurrent projects managed by Texas Parks & Wildlife (such as grab sample collection for algal determinations) are hoped to be used to construct a plan for the management of algae blooms in the water body.

During this project, staff will continuously monitor dissolved oxygen, pH, temperature, conductivity, and chlorophyll at one location on Possum Kingdom Reservoir as well as solar

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[1] This information was graciously provided by Dale Brymer, Office of Compliance and Enforcement, Monitoring & Operations, Lab & Mobile Monitoring

radiation. A water quality sonde outfitted to monitor these parameters will be suspended from a buoy with the capability to profile water quality through the water column. Data collected will be telemetered via radio and phone line to TCEQ and shared with co-partners.

3. Project Name: Continuous Water Quality Monitoring on the Upper Rio Grande

Project Overview: The lack of flows and the subsequent impact on water quality in the Rio Grande is of international, national, and regional concern. In addition, the upper Rio Grande has been affected by drastic hydrological modifications developed to divert water for irrigation and drinking water. In the recent past, little water remains after irrigation withdrawal in the upper part of the Rio Grande Basin. Long-term drought throughout northern Mexico, the desert southwest, and the southern Rockies in the U.S. has put pressure on an already over-appropriated basin. The end result is increasing dissolved solids and salinity.

The Rio Grande in the Big Bend area has increased and variable salinity (measured as specific conductance) and there are concerns about the accuracy of the current water quality criteria for total dissolved solids (TDS). The upper portion of 2306 is affected by high salinity from Segment 2307 and possibly the Rio Conchos. The lower half receives freshwater spring flow down to Amistad Reservoir. By averaging the chloride, sulfate, and TDS values across the entire segment, the problems in the upper portion are masked. Current water quality standards (TDS, chloride, sulfate) are not protective of the upper portion of Segment 2306 which flows through Big Bend National Park and the protected areas in Chihuahua and Coahuila, an important national resource for both the U.S. and Mexico.

This project would provide data to support revision of the segment boundary to be more protective of water quality and address severe water quantity issues within these protected areas.

4. Project Name: San Antonio Area Continuous Water Monitoring

Project Overview: A major vehicle manufacturer, Toyota, has purchased land and will be constructing a truck assembly plant in south Bexar County at a site bordered on the north by Leon Creek and on the south by the Medina River in South Bexar County. It is anticipated that the area surrounding the Toyota plant will undergo rapid development , with resultant changes in non-point runoff and stream water quality (WQ). The project is designed to establish baseline conditions of the receiving streams and then monitor for long term trends in water quality. Additionally, several large municipal wastewater treatment plants discharge to these same rivers and streams and loading impacts can be determined using the data that will be collected.

The project will also be able to monitor short term impacts on water quality from discrete events, such as storms and accidental spills. After the initial phase of the project is completed several of the partners have expressed an interest in adding precipitation data to the flow data for on-going modeling efforts.

5. Project Name: Continuous Water Quality Monitoring on the Upper Pecos River

Project Overview: Natural geologic deposits in the Pecos River watershed increase the concentration of chloride, sulfate, and dissolved solids to levels that are ten times higher compared to typical surface waters. In addition to these natural deposits, the salt cedar plant, (*Tamarisk* sp.), contributes to elevated salinity levels in the Pecos River. Salt cedar is a invasive, non-indigenous, salt tolerant species that increases salinity and evaporation of freshwater sources. The Pecos River Ecosystem Project (Texas A&M University) is completing the third year of aerial herbicide application to eradicate the salt cedar plant from the banks of the Pecos River. The Pecos River Ecosystem Project proposes to eliminate the plant and reintroduce native plants and grasses in it place. Preliminary estimates of water quality indicate that salt cedar removal will decrease the salinity and increase flow in the Pecos River.

The objective of this study is to employ existing technology capable of continuous monitoring and logging of conventional water quality parameters. The data generated will be used to monitor changes in salt concentrations (using specific conductance) and surface water flow (Doppler flow sensor) associated with salt cedar removal.

6. Project Name: Addition of Continuous Monitoring for Nutrients at Four Existing Sites in the Bosque and Leon River Watersheds

Project Overview: A number of sources, including concentrated animal feeding operations and wastewater discharges in these watersheds have resulted in problems with excessive nutrient and chlorophyll a concentrations. The Leon River has been closely monitored to identify trends already being observed in the Bosque. The real-time monitoring of nutrients may aid TCEQ in identifying trends in the Leon River and track the reduction of loading in the Bosque river as management plans, including TMDL implementation, are established in the Bosque watershed.

During this project auto-analyzers will be deployed to monitor nutrients at two existing locations in the Bosque River watershed and two existing locations in the Leon River watershed along with flow. These data can help identify periods of elevated in-stream nutrient concentrations in a timely manner to TCEQ regional staff as well as those entities who may have contributed to or be impacted by this condition.

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As a Director in Kelly, Hart & Hallman's Austin office, Ms. Clayton's practice centers on environmental and administrative law, oil, gas, and mineral law, and appellate law. Ms. Clayton's past professional experience includes employment as an oil and gas accountant, as a utility rate analyst, and as a staff attorney for the former Texas Natural Resource Conservation Commission and the Third Court of Appeals.

Education:

J.D. with honors, University of Texas Law School, May 1992.
B.A. in Economics with honors, University of Texas at Austin, 1980.

Current Practice:

Environmental and administrative law. Ms. Clayton's environmental and administrative law practice includes regulatory matters involving waste and water, such as those arising under the Resource Conservation and Recovery Act ("RCRA"), the Clean Water Act ("CWA"), the Texas Water Code, the Texas Solid Waste Disposal Act, the Texas Asbestos Health Protection Act, and other statutes; water rate, water utility, and water district matters; defending or prosecuting private environmental litigation such as private suits under the Comprehensive Environmental Response, Compensation and Liability Act and the Texas Solid Waste Disposal Act, citizen suits under RCRA and the CWA, and common law tort actions; and evaluating real estate transactions that involve possible environmental liability.

Ms. Clayton also represents private third parties before the Attorney General in actions in which the third party seeks to protect trade secret or other confidential information from disclosure by a state agency.

Oil, gas, and mineral law. Ms. Clayton's oil, gas and mineral law practice includes regulatory matters and litigation arising from the exploration and production of oil, gas and other minerals.

Appellate law. Ms. Clayton's appellate practice, which includes both suits for judicial review of agency decisions and appeals from trial court decisions, has involved such projects as serving as co-counsel in *In re Bass*, 113 S.W.3d 735 (Tex. 2003) (orig. proceeding), a mandamus action involving the discovery of trade secret information, in which the Texas Supreme Court adopted a new definition of a "trade secret," held for the first time that seismic data may be entitled to trade secret protection, and held for the first time that a plaintiff must plead a viable claim in order to obtain trade secret data from a defendant in the course of litigation.

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EXPERIENCE

Saitas and Arenson — *2002-Present*
PARTNER

Texas Commission on Environmental Quality — *Austin, Texas*
EXECUTIVE DIRECTOR — 1998- 2002

Managed operations of an agency with over 3,000 employees and a budget of $400 million; represented agency before Congress and the Texas Legislature on programmatic (air and water quality, waste management, water and wastewater utilities and water rights) and budget issues; acted as spokesman for the agency on major media issues; provided information and recommendations to commissioners and state leadership on budget and programmatic matters.

DEPUTY DIRECTOR, OFFICE OF AIR QUALITY — 1995-1998

Managed day to day operations of the Office; resolved policy questions relating to New Source Review and Title V permitting; represented agency on air quality issues before the Texas Legislature; provided media interviews on air quality matters.

DIRECTOR, NEW SOURCE REVIEW DIVISION — 1993-1995

Managed the processing and issuance of permits for new construction and changes at facilities in Texas; ensured consistency and timeliness of reviews in division.

MANAGER/PERMIT ENGINEER, CHEMICAL/RCRA HAZARDOUS WASTE SECTION — 1989- 1993

Reviewed permit applications for chemical facilities, including analysis of best available control technology for reducing the emission of air contaminants.

Exxon Company USA/Brighton Industries/RioTek, Inc. — *Houston, Texas*
DRILLING ENGINEERING AND OIL AND GAS OPERATIONS — 1982 - 1988

Designed and engineered oil and gas drilling and drilling fluid programs; managed oil extraction operations.

EDUCATION

MASTER OF SCIENCE, ELECTRICAL ENGINEERING — 1994
University of Texas — *Austin, Texas*

BACHELOR OF SCIENCE, MECHANICAL ENGINEERING — 1981
Georgia Institute of Technology — *Atlanta, Georgia*

VOLUNTEER ACTIVITIES

- Member, Bush-Cheney transition team on environmental matters
- Former Board Member, *Ex-Officio*, Texas Water Foundation

PAPER NOT SUBMITTED

- Larry Starfield -

Deputy Regional Administrator

Larry Starfield is the Deputy Regional Administrator for the U.S. Environmental Protection Agency, Region 6, in Dallas, Texas. In this position, he is responsible for the efficient management of the 900-person regional office, and for the effective implementation of EPA programs in the South-Central United States.

From 1997-2001, he served as the Regional Counsel for Region 6. As Regional Counsel, he managed an office of 60 lawyers that provided legal advice to the Regional Administrator and Region 6 program offices regarding the interpretation and implementation of federal environmental laws.

Before joining Region 6 in 1997, Mr. Starfield spent ten years with EPA's Office of General Counsel in Washington, D.C., where he served as an attorney-advisor, Assistant General Counsel for RCRA, and Acting Associate General Counsel for Solid Waste and Emergency Response.

Before coming to EPA, he worked in Paris, France, from 1985 to 1987 as the correspondent for the Bureau of National Affairs on French environmental law. From 1981 through 1985, he was an Associate with the law firm of Skadden Arps Slate Meagher & Flom, in Washington, D.C. He is a graduate of Wesleyan University and Yale Law School.

PAPER NOT SUBMITTED

Bio for Commissioner Larry R. Soward

Larry R. Soward of Austin was appointed by Gov. Rick Perry on October 17, 2003, to the Texas Commission on Environmental Quality. The Texas Senate confirmed his appointment on May 11, 2004.

Soward most recently served as executive assistant to the Texas lieutenant governor during the 78th Legislative Session and during two special legislative sessions held during 2003.

He has more than 26 years of experience leading state agencies, and served as the deputy land commissioner of the Texas General Land Office and Veterans' Land Board, the deputy commissioner of the Texas Department of Agriculture, and the deputy executive director of the Texas Public Utility Commission. In addition, Soward has been executive director of the Texas Water Commission, the culmination of a 12-year tenure at that agency. During his time at the Water Commission, he was also its general counsel and chief hearings examiner.

He graduated from the University of Texas (UT) with a law degree in 1974 and has practiced environmental law and water law as a solo practitioner and as partner of a small law firm. Soward also holds a bachelor's degree in mathematics from UT.

Soward's term will expire Aug. 31, 2009.

Trading Spaces:
How To Buy and Sell A Room By Vern Not Hildi

By Janet McQuaid
Fulbright & Jaworski L.L.P*

August 6, 2004

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Trading Spaces:
How To Buy and Sell A Room By Vern Not Hildi

By Janet McQuaid
Fulbright & Jaworski L.L.P
August 6, 2004

In TLC's reality television show, *Trading Spaces*, neighbors trade houses and redecorate a room in each others' homes over two days with $1,000 and a team of free, professional designers, carpenters and craftsmen. Homeowners turn over artistic control to the show's decorators, who have included over the years Laurie, Frank, Doug, Vern, Edward, Kia, Hildi, and others. Most players are happy with the results. Designer Vern, for example, beautifully "enlightens a blah bedroom with a Zen feeling." *See* Television Without Pity: Trading Spaces (www.televisionwithoutpity.com) (Santa Monica: Ocean Park). But not every participant is so pleased with his new room, and Designer Hildi, in particular, tends to push the limits of creative license, to the dismay of some homeowners, as in: "Hildi wreaks black, white, and Radioactive Canary Yellow havoc in an aggressively boring dining room." *See id.* (Pennsylvania: Bryant Court).

This paper discusses what the seller is selling and the buyer is buying in a transaction involving contaminated property. In the end, a happy, lawsuit-free transaction is one where the parties see the property in a happy, enlightened, Zen-like way, like a room by Vern, rather being surprised by a property in Radioactive Canary Yellow, like a room by Hildi . . . . Unless, of course, the buyer likes yellow, which is fine, as long as the buyer knows the color of the property she is buying.

Every Transaction Is Unique

Every transaction is unique. Buyers' and sellers' objectives, priorities, price drivers and risk tolerance differ from transaction to transaction. The parties' relative negotiating strength and leverage points differ. Financial factors and creditworthiness differ. Property location and use differs. Most importantly, environmental conditions and potential liability risk presented differs. Therefore, strategies or language that might be "reasonable" in one transaction, and make that transaction commercially viable, might be "unreasonable" in another transaction. Consequently, everything the author says the seller or buyer "should" or "may" do or not do in this paper has undoubtedly been done differently by sellers and buyers in the past and will be done differently by sellers and buyers in the future. Because, every transaction is unique.

In addition, all analysis and views expressed in this paper are those of the author, not Fulbright & Jaworski L.L.P. The analysis and conclusions are often very fact specific, and changes in the facts may change the legal analysis. In short, the author reserves the right to change her mind in the future.

No attorney-client relationship exists or is established between the author or Fulbright and the reader. Although the author has attempted to be accurate with respect to the information presented in this paper, you are encouraged to consult your own attorney regarding any situation relating to the matters covered in this paper.

Overview

This paper will address (I) the legal sources of liability under the common law and statutes; (II) how and when sellers are (or are not) held liable under these laws; (III) how and when buyers (or their corporate parents) are (or are not) held liable; (IV) contractual mechanisms for allocating potential liability for environmental risk; and (V) some financial mechanisms that can help bridge the gap between buyers and sellers.

I. Legal Sources of Liability

A. Common Law

1. Nuisance

A cause of action for nuisance is available against a person who causes substantial interference with the use and enjoyment of another's land. Substantial interference means "a condition which substantially interferes with the use and enjoyment of land by causing unreasonable discomfort or annoyance to persons of ordinary sensibilities attempting to use and enjoy it." *Hicks v. Humble Oil & Ref'g Co.*, 970 S.W.2d 90, 93 (Tex. App. Houston [14th Dist.], pet. denied). The substantial interference must arise from conduct that results in: (1) intentional invasion of *another's* interests; (2) negligent invasion of *another's* interests; or (3) other conduct, culpable because abnormal and out of place in its surroundings, that invades *another's* interests. *Id.*

2. Trespass

A trespass is an intentional or unintentional entry onto real property in another's possession. Restatement (Second) of Torts §§ 158, 165 (1965). In general, a defendant is liable for an unintentional trespass only if the plaintiff shows that the defendant was at least negligent. *See Turner v. Big Lake Oil Co.*, 128 Tex. 155, 96 S.W.2d 221, 223 (1936); Restatement (Second) of Torts § 165 (1965)). The rule in *Turner* does not, however, preclude a plaintiff from seeking damages under a theory of intentional trespass. *Jones v. Tarrant Util. Co.*, 638 S.W.2d 862, 867 (Tex. 1982).

Unlike nuisance, a trespass requires a physical invasion of a property right. Any physical invasion, no matter how small, is "entry" sufficient to establish a trespass, if the other elements are present. *See Shell Petroleum Corp. v. Liberty Gravel & Sand Co.*, 128 S.W.2d 471, 474 (Tex. Civ. App.—Beaumont 1939, no writ) (holding that it was an intentional trespass for Shell to move a sand pile to part of plaintiff's sand and gravel lease). Entry need not be in person, but can be made by causing or permitting a thing to cross the boundary of another's property. *Glade v. Dietert*, 295 S.W.2d 642, 645 (Tex. 1956).

Thus, the presence of contaminants might be enough to establish the "entry" element of trespass. The courts of some states other than Texas have apparently accepted this argument under some circumstances. *See, e.g., Mock v. Potlatch Corp.*, 786 F. Supp. 1545, 1549-51 (D. Idaho 1992) (discussing various precedents). For example, in *Maddy v. Vulcan Materials Co.*, 737 F. Supp. 1528 (D. Kan. 1990), a federal district court held that a plaintiff could recover in trespass for invasions of pollutants previously covered by nuisance law only where the plaintiff could show "1) an invasion affecting an interest in the exclusive possession of his property; 2) an intentional doing of the act which results in the invasion; 3) reasonable foreseeability that the act done could result in an invasion of plaintiff's possessory interest; and 4) substantial damages to the *res*." *Id.* at 1540 (quoting *Boraland v. Standard Lead Co.*, 369 S.2d 523, 529 (Ala. 1979)).

For the most part, the Texas cases have assumed without deciding that a trespass action would be available for entries by pollution, essentially treating trespass and nuisance actions identically. *See, e.g., Manchester Terminal Corp. v. Texas TX Marine Transp., Inc.*, 781 S.W.2d 646, 650 (Tex. App.—Houston [1st Dist.] 1989, writ ref'd) (air pollution); *Atlas Chemical Indus., Inc. v. Anderson*, 514 S.W.2d 309, 315, *aff'd on other grounds*, 524 S.W.2d 681 (Tex. 1975). In contrast, one Texas case held without explanation that "leaking of oil from appellant's pipe line, and its percolation underground to the land of appellees was, as a matter of law, insufficient to constitute a trespass." *Humble Pipe Line Co. v. Anderson*, 339 S.W.2d 259, 265 (Tex. Civ. App.—Waco 1960, writ ref'd n.r.e.). In that case, however, the plaintiffs had failed to prove either intent or negligence. *See id.* at 265. Thus, it is not clear whether the court denied the trespass claim because there was no intent or negligence shown or because the entry was insufficient to support a trespass claim. It is therefore not clear whether the invasion of pollutants is sufficient in Texas to establish the element of entry in a cause of action in trespass.

3. Negligence

To recover under a negligence theory, a plaintiff must establish that the defendant had a duty to the plaintiff to conduct its operations according to a standard of care, that defendant breached that standard of care, and that defendant's breach was the cause in fact and proximate case of harm to the plaintiff. *See Greater Houston Transp. Co. v. Phillips*, 801 S.W.2d 523, 525 (Tex. 1990).

The duty issue determines who is a proper plaintiff in a negligence action. Factors the court will consider in determining whether defendant had a duty to the plaintiff include the nature of the risk, its foreseeability, and the likelihood of injury weighed against the social utility of an actor's conduct and the burden of guarding against the injury. Of these factors, foreseeability of the risk is "the foremost and dominant consideration." *Id.*

Adjacent landowners are foreseeable plaintiffs within the meaning of this rule. But subsequent owners of adjacent, affected property are not persons to whom a defendant owes a duty with respect to injury to property (versus personal injury), absent an express conveyance of causes of action from its seller in the adjacent landowner's deed. *See infra* part II.A.3. Nor are subsequent owners of same property persons to whom a landowner owes a duty. *See infra* part II.A.1.

B. Federal Statutes

As discussed in the following sections, it is doubtful that there is a cause of action for cost recovery under the Resource Conservation and Recovery Act ("RCRA"). There is a cause of action for contribution under CERCLA section 113(f), but the question of whether the plaintiff must have a section 106 or 107(a) action pending against it in order to bring a contribution action is currently pending before the Supreme Court in *Aviall Services, Inc. v. Cooper Industries, Inc.*, 263 F.3d 134 (5th Cir. 2001), *reversed*, 312 F.3d 677 (5th Cir. 2002) (en banc), *writ granted*, 124 S. Ct. 981 (2004). The *Aviall* case is discussed in more detail in part I.B.3 of this paper.

1. RCRA § 7002

Section 7002 of RCRA, 33 U.S.C. § 6972, provides a cause of action against any person who "contributed or who is contributing to the past or present handling, storage, treatment, transportation, or disposal of any solid or hazardous waste which may present an imminent and substantial endangerment to health or the environment." *Id.* § 6972(a)(1)(B). However, under Supreme Court authority in *KFC Western Inc. v. Meghrig*, 516 U.S. 479 (1996), and cases

interpreting *KFC*, section 7002 has been held not to allow for recovery of cleanup costs, but only for injunction requiring abatement of "imminent and substantial endangerment."

In *KFC v. Meghrig*, KFC cleaned up petroleum contamination then sued the Meghrigs under RCRA 6972. The Supreme Court held there was no recovery under RCRA for past cleanup costs because of the timing of the claim (there was no longer any "imminent and substantial endangerment") and because of the remedy (the statute provides only for mandatory or prohibitory injunction):

> Two requirements of § 6972(a) defeat KFC's suit against the Meghrigs. The first concerns the necessary timing of a citizen suit brought under § 6972(a)(1)(B): That section permits a private party to bring suit against certain responsible persons, including former owners, "who ha[ve] contributed or who [are] contributing to the past or present handling, storage, treatment, transportation, or disposal of any solid or hazardous waste which *may present* an *imminent* and substantial endangerment to health or the environment." The second defines the remedies a district court can award in a suit brought under § 6972(a)(1)(B): Section 6972(a) authorizes district courts "*to restrain* any person who has contributed or who is contributing to the past or present handling, storage, treatment, transportation, or disposal of any solid or hazardous waste . . ., *to order such person to take such other action as may be necessary*, or both."

Id. at 484 (emphasis and modifications by the Court). Thus, the Court held that a private citizen suing under section 6972(a)(1)(B) could seek a mandatory injunction, which orders a responsible party to "take action" by attending to the cleanup and proper disposal of toxic waste, or a prohibitory injunction, which "restrains" a responsible party from further violating RCRA. But neither remedy provided by the statute contemplates the award of past cleanup costs. *Id.* at 484

The Court left open possibility of obtaining *future* response costs:

> *Without considering whether a private party could seek to obtain an injunction requiring another party to pay cleanup costs which arise after a RCRA citizen suit has been properly commenced, . . . or otherwise recover cleanup costs paid out after the invocation of RCRA's statutory process,* we agree with the Meghrigs that a private party cannot recover the cost of a past cleanup effort under *RCRA*, and that KFC's complaint is defective for the reasons stated by the District Court. Section 6972(a) does not contemplate the award of past cleanup costs, and § 6972(a)(1)(B) permits a private party to bring suit only upon an allegation that the contaminated site presently poses an "imminent and substantial endangerment to health or the environment," and not upon an allegation that it posed such an endangerment at some time in the past.

516 U.S. 479, 488 (1996) (citations omitted and emphasis added).

There is no court of appeals or district court decision in the Fifth Circuit interpreting the potential opening left by *KFC v. Meghrig*. The Seventh Circuit, however, has said that there is no private cause of action for cost recovery by a transferee (Avondale) who cleaned up after notice of citizen suit to transferor (Amoco Oil) and the government. *See Avondale Fed. Sav. v. Amoco Oil*, 170 F.3d 692 (7th Cir. 1999). Notwithstanding the question left open by the Supreme Court as to the possibility of an injunction requiring payment of future cleanup costs, therefore, it appears that

RCRA does not provide a private cost recovery action at least under the Seventh Circuit's interpretation of *KFC*. Only injunction is available.

2. CERCLA §§ 106, 107, 113(f)

Section 107 of CERCLA makes certain, identified categories of persons liable for releases of hazardous substances from "facilities, incineration vessels or sites . . . from which there is a release, or a threatened release which causes the incurrence of response costs, of a hazardous substance. These persons may be liable for costs incurred by the state or federal government "not inconsistent with" the national contingency plan ("NCP"), other necessary costs of response incurred by any other person "consistent with" the national contingency plan, natural resource damages, and health assessment study costs. *See* 42 U.S.C. § 9607(a)(4)(A).

The persons who may be held liable under section 107 are referred to as potentially responsible parties ("PRPs") and include the current owner and operator, a past owner and operator, an "arranger" (or "generator"), and a transporter, as follows:

> (1) the owner and operator of a vessel or a facility;
>
> (2) any person who at the time of disposal of any hazardous substance owned or operated any facility at which such hazardous substances were disposed of;
>
> (3) any person who by contract, agreement, or otherwise arranged for disposal or treatment, or arranged with a transporter for transport for disposal or treatment, of hazardous substances owned or possessed by such person, by any other party or entity, at any facility or incineration vessel owned or operated by another party or entity and containing such hazardous substances; and
>
> (4) any person who accepts or accepted any hazardous substances for transport to disposal or treatment facilities, incineration vessels or sites selected by such person . . . .

Id. § 9607(a).

CERCLA section 106 allows EPA, when it determines that there may be an imminent and substantial endangerment to the public health or welfare or the environment because of an actual or threatened release of a hazardous substance from a facility, to bring a civil action to "secure such relief as may be necessary to abate such danger or threat," and to "take other action under this section including, but not limited to, issuing such orders as may be necessary to protect public health and welfare and the environment." *Id.* § 9606(a).

CERCLA section 113(f)(1) provides a federal contribution action by private parties against other PRPs. An important issue pending before the U.S. Supreme Court, however, is whether section 113(f)(1) requires a plaintiff to have first been subject to a civil action by EPA under CERCLA sections 106 or 107, before seeking contribution under section 113. This issue arises because of two sentences in apparent tension in section 113(f). These two sentences are italicized below:

> Any person may seek contribution from any other person who is liable or potentially liable under section 9607(a) of this title, *during or following any civil action under section 9606 of this title or under section 9607(a) of this title.* Such claims shall be brought in accordance with this section and the Federal Rules of

> Civil Procedure, and shall be governed by Federal law. In resolving contribution claims, the court may allocate response costs among liable parties using such equitable factors as the court determines are appropriate. *Nothing in this subsection shall diminish the right of any person to bring an action for contribution in the absence of a civil action under section 9606 of this title or section 9607 of this title.*

42 U.S.C. § 9613(f)(1) (emphasis added).

3. Aviall Services v. Cooper Industries

The question of whether a government action must be instituted before there is a contribution right under section 113(f) of CERCLA is currently before the Supreme Court in *Aviall Servs., Inc. v. Cooper Indus., Inc.*, 263 F.3d 134 (5th Cir. 2001), *rev'd*, 312 F.3d 677 (5th Cir. 2002) (en banc), *writ granted*, 124 S. Ct. 981 (2004). Cooper was a prior owner of property near Dallas, Texas, where it ran an aircraft engine maintenance business. The rebuilding of aircraft engines required the use of petroleum and other hazardous substances, some of which seeped into the ground and groundwater through underground storage tanks and spills. In 1981, Cooper sold its aircraft engine maintenance business and facilities to Aviall. Several years later, Aviall began discovering some of the contamination that had occurred at the Facilities. *Aviall*, 263 F.3d at 136.

Aviall notified the then Texas Natural Resource Conservation Commission ("TNRCC") of the contamination at its facilities. The TNRCC sent several letters to Aviall informing the company that it was in violation of Texas state environmental laws. EPA, however, never contacted Aviall or designated the facilities as contaminated sites. In 1984, Aviall began a decade-long environmental cleanup, spending millions of dollars. In early 1995, Aviall for the first time contacted Cooper seeking reimbursement. Aviall eventually sold the facilities to another private party, but it contractually retained a continuing responsibility for the environmental cleanup. *Id.*

In 1997, Aviall sued Cooper Industries for contribution under section 113(f)(1) of CERCLA. The district court dismissed Aviall's CERCLA claim, holding that a plaintiff in a CERCLA action must be able to allege a prior to pending CERCLA enforcement action against it to state a claim for contribution under CERCLA section 113(f)(1). *See Aviall Servs., Inc. v. Cooper Indus., Inc.*, 2000 U.S. Dist Lexis 520, at *13 (N.D. Tex. 2000).

a. Panel Decision, 268 F.3d 134 (5th Cir. 2001)

In August 2001, a divided panel of the Fifth Circuit affirmed the decision of the district court, holding that no contribution action was available under section 113(f) unless EPA had commenced an action or obtained a judgment under section 106 or 107(a) of CERCLA, as follows:

> After examining CERCLA's text, legislative history and case law, we hold that a PRP seeking contribution from other PRPs under § 113(f)(1) must have a pending or adjudged § 106 administrative order or § 107(a) cost recovery action against it.

Id. at 145. Aviall had argued among other things that this holding would discourage voluntary cleanups, but the panel rejected this argument on the basis of available state law claims:

> We also doubt that our interpretation of § 113(f)(1) will necessarily discourage voluntary cleanups. Parties may be able to rely on state environmental laws to recover costs from other liable parties. Indeed, Aviall is alternatively seeking contribution from Cooper based on two Texas statutes. That option remains open despite our ruling today.

Id.; *see also infra* part I.C (discussing cost recovery under Texas statutes).

b. En Banc Decision, 312 F.3d 677 (5th Cir. 2002)

In November 2002, on reconsideration *en banc* the Court reversed (10-3) the 2001 panel decision. The en banc majority held that action under section 106 or 107(a) is not a prerequisite to a private contribution action under section 113(f). The en banc majority concluded that:

> [S]ection 113(f)(1) does not constrain a PRP for covered pollutant discharges from suing other PRPs for contribution only "during or following" litigation commenced under sections 106 or 107(a) of CERCLA. Instead, a PRP may sue at any time for contribution under federal law to recover costs it has incurred in remediating a CERCLA site.

Aviall, 312 F.3d at 681. The en banc majority reviewed the legislative history and the case law of other circuits and declined to "throw[] into uncertainty more than two decades of CERCLA practice." *Id.* at 691. *But see id.* at 696 & n.43 (stating that no case has reached the specific issue). The en banc majority disagreed with the dissent's suggestion that state law claims were adequate to encourage voluntary cleanups, because "not all states allow contribution before the party seeking contribution has been subjected to judgment," and "those that do follow quite different substantive and procedural rules." In addition, "some courts of appeals have held that CERCLA preempts state-law claims for contribution for environmental cleanup costs." *Id.* at 690-91. The Court therefore reversed the judgment of the district court (and the panel majority) and remanded the case for consideration of two fact issues previously not addressed by the district court; specifically:

> The first issue is whether Aviall failed to give timely notice to the EPA and the Attorney General of its action under CERCLA. The second is whether Aviall complied with the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), 40 C.F.R. Part 300, by failing to provide adequate opportunity for public participation.

Id. at 691 (citations omitted) (citing, *inter alia*, *OHM Remediation Servs. v. Evans Cooperage Co.*, 116 F.3d 1574, 1583 (5th Cir. 1997) (remanding for similar determination)).

c. Supreme Court Grants Review

On January 9, 2004, the Supreme Court granted Cooper Industries' petition for review of the court of appeals' decision on the question of:

> Whether a private party who has not been the subject of an underlying civil action pursuant to CERCLA Sections 106 or 107, 42 U.S.C. §§ 9606 or 9607, may bring an action seeking contribution pursuant to CERCLA Section 113(f)(1), 42 U.S.C. § 113(f)(1), to recover costs spent voluntarily to clean up properties contaminated by hazardous substances.

The Court invited the U.S. Solicitor General to participate in briefing the case and granted him leave to participate in oral argument. Numerous amicus curiae have filed briefs in the case, including Lockheed Martin, ConocoPhillips, ARCO, the Superfund Settlements Project, and several states. The last brief was filed May 13, 2004.

Whether there is a private right of action in federal court for necessary costs of voluntary parties who comply with the NCP, or whether contribution for voluntary costs is solely a state law claim, is obviously an important question. The Supreme Court decision in *Aviall* will, therefore, be a decision to watch for.

C. Texas Solid Waste Disposal Act

The Texas Solid Waste Disposal Act ("TSWDA") provides a private right of action for cost recovery as long as the cleanup is "necessary" and "approved by the commission." *See* Tex. Health & Safety Code § 361.344. The TSWDA, as amended in 1997, provides a private cause action for recovery of "reasonable and necessary" remediation costs by a party who performs a cleanup against a "person responsible for solid waste," as follows:

> A person who conducts a removal or remedial action *that is approved by the commission and is necessary to address a release or threatened release* may bring suit in a district court to recover the reasonable and necessary costs of that action and other costs as the court, in its discretion, considers reasonable. This right is in addition to the right to file an action for contribution, indemnity, or both in an appeal proceeding or in an action brought by the attorney general.

Tex. Health & Safety Code § 361.344(a) (emphasis added).

In order to recover the "reasonable and necessary costs" of a remedial action approved by the Texas Commission on Environmental Quality ("TCEQ"), the person seeking recovery must have followed the following procedure:

> To recover costs under this section in a proceeding that is not an appeal proceeding or an action brought by the attorney general under this subchapter, the person seeking cost recovery must have made reasonable attempts to notify the person against whom cost recovery is sought:
>
> (1) of the existence of the release or threatened release; and
>
> (2) that the person seeking cost recovery intended to take steps to eliminate the release or threatened release.

Tex. Health & Safety Code § 361.344(c).

The targets of lawsuits under section 361.344(a) are "persons responsible for solid waste" as defined under section 361.271 of the TSWDA. Section 361.272 defines PRPs under state law similarly to PRPs under federal law, to include current owners and operators, past owners and operators, "arrangers" (or "generators"), and transporters, as follows:

> [A] person is responsible for solid waste if the person:
>
> (1) is any owner or operator of a solid waste facility;

(2) owned or operated a solid waste facility at the time of processing, storage, or disposal of any solid waste;

(3) by contract, agreement, or otherwise, arranged to process, store, or dispose of, or arranged with a transporter for transport to process, store, or dispose of, solid waste owned or possessed by the person, by any other person or entity at:

(A) the solid waste facility owned or operated by another person or entity that contains the solid waste; or

(B) the site to which the solid waste was transported that contains the solid waste; or

(4) accepts or accepted any solid waste for transport to a solid waste facility or site selected by the person.

Id. § 361.271(a).

In addition to cost recovery by the state or private persons, it should be mentioned that the TSWDA allows TCEQ to issue administrative orders to persons responsible for solid waste "if it appears that there is an actual or threatened release of solid waste that presents an imminent and substantial endangerment to the public health and safety or the environment" from a current or past solid waste facility or site. *Id.* § 361.272.

It should also be noted that the term "solid waste" is broadly defined in the TSWDA. The term "solid waste" includes hazardous substances, for the purposes of all of the sections discussed in this part of the paper (and specifically, "for the purposes of sections 361.271 through 361.277, 361.280, and 361.343 through 361.345"). *Id.* § 361.003 (defining the term "solid waste"). The term "solid waste" does not include "waste materials that result from activities associated with the exploration, development, or production of oil or gas or geothermal resources and other substance or material regulated by the Railroad Commission of Texas under Section 91.101, Natural Resources Code." *Id.* A discussion of the petroleum exclusion under CERCLA and the potential environmental liabilities associated with oil and gas activities under Texas law is beyond the scope of this paper.

A few recent Texas cases address the scope of the contribution claim under section 361.344 of the TSWDA. For example, the Dallas court of appeals recently held that an "as is" clause does not preempt contribution claims under the TSWDA. *See Bonnie Blue v. Reichenstein*, 127 S.W.3d 366 (Tex. App.—Dallas 2004, no pet.) (stating same but expressly pretermitting question of whether indemnity clause is enforceable under TSWDA, as this issue was not presented in that case).

In addition, the Houston court of appeals recently considered the level of proof necessary to establish a right of contribution under section 361.344 as a matter of law in *R.R. Street & Co. v. Pilgrim Enters.*, 81 S.W.3d 276 (Tex. App.—Houston [1st Dist.] 2001, pet. granted). Pilgrim's dry cleaning sites were being cleaned up under the Texas Voluntary Cleanup Program ("VCP"). *Id.* at 299. TCEQ had reviewed and approved plaintiffs remedial action plans and had required Pilgrim to take further action than stated in the closure plans at several sites. *Id.* R.R. Street was a chemical supplier of tetrachloroethylene ("PCE"). Street's employee had rendered technical services and advise to Pilgrim on operation of the facilities, including disposal of PCE waste. The court affirmed the district court's granting of summary judgment that that the nature of the

technical service and advice rendered by the chemical supplier was sufficient to establish "arranger" liability under the TSWDA. *See id.* at 295-296. The court then went on to affirm the district court's summary judgment on the issue of whether Pilgrim's actions were "necessary to address a release" and whether its costs were "reasonable and necessary," as follows:

> As to the necessity of these activities, the evidence showed that the TNRCC not only approved the proposed remedial activities but also *required* activities at most sites *in addition to* those proposed by Pilgrim. Such evidence establishes necessity. Thus, Pilgrim established that its remedial costs were "reasonable and necessary."

Id. at 302 (emphasis by the court). The Supreme Court granted Street's petition for review of the court of appeals decision. Numerous issues were included in Street's petition and are being briefed by the parties and various amicus parties, including the appeals court's decision on "arranger" liability and its decision on "reasonable and necessary" costs, as well as other substantive and procedural issues not relevant to this paper.

II. How are Sellers Held Liable for Existing Environmental Conditions After Sale?

Under common law, the general rule is that a seller is relieved of liability for conditions on property after it is transferred, unless the deed conveying property expressly contains a conveyance of causes of action against the seller, except if the seller fails to disclose non-obvious conditions of which he was aware. CERCLA and the TSWDA change the common-law rule, making a cause of action for recovery of cleanup costs available against transferors of real property, subject to various conditions and procedures discussed previously in this paper.

A. Common Law

1. Claims by Buyer Against Seller of Source Property

There is no claim for nuisance or trespass by a buyer against a seller. That is because both of these causes of action require there to be interference with or invasion of *another's* property interest, and that element is not met with respect to contamination on land conveyed from buyer to seller (or to a subsequent purchaser):

> Appellants contend that Exxon created a nuisance on the land and are liable to appellants. One of the grounds for Exxon's summary judgment contended the nuisance theory did not apply to this situation because appellants owned the land upon which the nuisance was created, and *nuisance is a cause of action available for an invasion of the land of another.* We agree with Exxon.

Hicks v. Humble Oil & Ref'g Co., 970 S.W.2d 90, 93 (Tex. App. Houston [14th Dist.] 1998, pet. denied) (emphasis added) (holding "that strict liability claims are imposed on one engaging in an abnormally dangerous activity "for harm to the person, land, or chattels *of another*" in those jurisdictions that recognize the strict-liability doctrine. Thus, the doctrine of strict liability, like the nuisance doctrine, concerns damage by one landowner's activities *only* to the lands of another" (following *Jones v. Texaco, Inc.*, 945 F. Supp. 1037, 1051 (S.D. Tex. 1996) (emphasis original)).

Hicks dealt with nuisance and trespass claims. A seller is similarly not liable in negligence to a buyer or subsequent purchasers for dangerous conditions on property after conveyance. *Hicks*,

970 S.W.2d at 93. In *Hicks*, the plaintiff alleged negligence and negligence per se in addition to nuisance and strict liability claims against Exxon arising out of the oil storage in the 1920's. *Id.* at 93. Exxon argued in its motion for summary judgment that once it transferred the property to Hicks, its liability for any injuries on the property ceased. The Houston court of appeals agreed with Exxon, stating the following general rule and exceptions with respect to transferee liability:

> Generally, vendors of real property are not liable for injuries caused by dangerous conditions on real property after the conveyance. However, there is an exception to the rule: when a dangerous condition exists at the time the vendor transfers possession, the vendor is not subject to liability for injuries caused to others while upon the premises after vendee has taken possession, unless the vendor does not disclose or actively conceals the existence of the condition. This exception does not apply when the vendee discovers or should have discovered the dangerous condition and has a reasonable opportunity to take precautions, or when the vendee has *actual notice* of the condition. Appellants have failed to demonstrate by competent summary judgment evidence that Thomas H. Hicks did not have actual notice of the existence of the tanks on the premises when he bought the land.

Id.; see also First Fin. Dev. Corp. v. Hughston, 797 S.W.2d 286, 291 (Tex. App.—Corpus Christi 1990, writ denied) (citing § 353(2) of Restatement) (emphasis original).

Federal courts in the Fifth Circuit have reached the same result. In *Jones v. Texaco, Inc.*, the Court analyzed the issue as one of "duty," and concluded that a seller owed no duty to purchasers, irrespective of whether the cause of action was stated as regular negligence or gross negligence. *See Jones v. Texaco, Inc.*, 945 F. Supp. 1037, 1049-50 (S.D. Tex. 1996) (citing numerous Texas cases). The Fifth Circuit explained that this rule dates back to the adopted common-law rule of *caveat emptor*:

> The controlling law in Texas, as well as the applicable provisions of the RESTATEMENT are rooted in the common law doctrine of *caveat emptor*. It is the legacy of the common law that in contracts for the sale of land, the doctrine of *caveat emptor* has been applied. Two exceptions to the *caveat emptor* doctrine have evolved. The first concerns undisclosed dangerous conditions known to the vendor. The second concerns implied warranties imposed in some jurisdictions on a builder-vendor for a newly constructed home. Otherwise, the heritage of the *caveat emptor* doctrine has for the most part retained it [sic] influence and application in real estate transactions. Historically, the deed of conveyance in a real estate transaction has been representative of the complete agreement between the vendor and vendee, to the exclusion of additional terms or liabilities. The doctrine of *caveat emptor* is fundamentally based on the premise that the buyer and seller deal at arm's length and that the purchaser has means and opportunity to gain information concerning the subject matter of the sale which are equal to those of the seller.

Id. at 1046-47. The Court then went on to quote with approval from the Reporter's Note to the Restatement (Second) of Torts, section 352, which "sums up the prevailing view regarding the liability of a vendor of land and the continuing viability of the doctrine of *caveat emptor*":

> Under the ancient doctrine of caveat emptor, the original rule was that, in the absence of express agreement, the vendor of land was not liable to his vendee, or

> a fortiori to any other person, for the condition of the land existing at the time of transfer. As to sales of land this rule has retained much of its original force, and the implied warranties which have grown up around the sale of chattels never have developed. This is perhaps because great importance always has been attached to the deed of conveyance, which is taken to represent the full agreement of the parties, and to exclude all other terms and liabilities. The vendee is required to make his own inspection of the premises, and the vendor is not responsible to him for their defective condition, existing at the time of transfer. Still less is he liable to any third person who may come upon the land.

Id. (quoting Restatement (Second) of Torts § 352). *But see Lefmark Management Co. v. Old*, 936 SW2d 52, 54 (Tex. 1997) (stating in dicta that the Texas Supreme Court "had never adopted section 353, even though it has been cited by and relied upon by several courts of appeals" (citing numerous court of appeals cases), then finding that in any event a prior property management company would not be a "vendor" covered by section 353).

Under the cases discussed above, a seller is not liable for common-law causes of action to a buyer or subsequent owner for contamination existing as of the date of transfer, unless a cause of action against the seller is expressly conveyed or the exception to the rule of non-liability applies. Because the exceptions relate to failure to disclose non-obvious conditions to the buyer, the seller should disclose environmental conditions to a potential purchaser.

2. Claims by Third Parties Against Past Owner

Similarly, a seller is not liable under the common law to third parties for dangerous conditions on the land after transfer of possession, unless an exception applies making the seller liable. There are many non-contamination-related Texas cases so holding. *See, e.g., Roberts v. Friendswood Dev. Co.*, 886 S.W.2d 363, 367-68 (Tex. App.—Houston (1st Dist.] 1994, writ denied) (citing numerous Texas cases). An exception to the non-liability rule is that a seller will be held liable if the seller does not disclose or actively conceals the existence of the condition. *Id.* This non-disclosure exception does not apply when the buyer discovers or should have discovered the dangerous condition and has a reasonable opportunity to take precautions, or when the buyer has actual notice of the condition. *First Financial Devel. Corp. v. Hughston,* 797 S.W.2d 286, 291-92 (Tex. App.—Corpus Christi 1990, writ denied). These cases uniformly rely on Restatement sections 352 and 353, although the Texas Supreme Court has not yet adopted these sections of the Restatement. *See, e.g., Lefmark*, 936 SW2d at 54 (Tex. 1997) (stating same in dicta and citing numerous Texas courts of appeal opinions adopting the Restatement).

3. Claims by Buyers of Adjacent Property

The same result may apply with respect to claims for injury to property by a subsequent purchaser of adjacent affected property against a current owner of source property. It has been held that the subsequent purchaser of adjacent property cannot sue at common law for pre-conveyance injury to property absent an express conveyance of causes of action from its seller. *See Vann v. Bowie Sewage Co.*, 90 S.W.2d 561, 562 (Tex. 1936). A subsequent purchaser of adjacent property may be able to recover for personal injury even though it could not recover for injury to property. *See id.* at 563.

4. Standing to Sue Generally

Tort claims for injury to property are personal to the person who owns the property affected when the injury is committed. Exxon Corp. v. Pluff, 94 S.W.3d 22, 27 (Tex. App.—Tyler 2002, pet. denied). Buyers and subsequent purchasers of affected property do not have standing to sue prior owners on property damage claims unless there has been an express assignment of these causes of action from seller to buyer to subsequent purchaser in the deed (or, according to *Ceramic Tile*, in the purchase contract). *See Ceramic Tile International, Inc. v. Balusek*, 2004 Tex. App. LEXIS 3683 (Apr. 28, 2004) (unpublished) (citing *Exxon Corp.*, 94 S.W.3d at 27)).

To recover on an assigned cause of action, the party claiming the assigned right must prove a cause of action existed at the time of the assignment that was capable of assignment and that the cause was in fact assigned to the party seeking recovery. *Id.* (citing *Exxon Corp.*, 94 S.W.3d at 27, and numerous other Texas cases). In evaluating whether a cause of action existed at the time of the assignment, the rule is that a cause of action for injury to real property accrues when the actionable injury is committed. *Denman v. Citgo Pipeline Co.*, 123 S.W.3d 728, 732 (Tex. App.—Texarkana 2003, no pet.) (citing Bayouth Co., 671 S.W.2d at 868 (Tex. 1984)); *see also* Exxon *Corp.*, 94 S.W.3d at 27. The *Denman* court indicated in parenthetical dicta that a cause of action for permanent injury to land accrues on discovery of the first actionable injury, *id.* (citing *Bayouth*), and for temporary injury to land accrues on each actionable injury. *See id.* (citing *Yancy v. City of Tyler,* 836 S.W.2d 337, 341 (Tex. App.—Tyler 1992, writ denied). It has been held, however, that the discovery rule merely tolls the running of the statute of limitations, and does not apply to determine when the actionable injury is committed for purposes of standing. *See Senn v. Texas Inc.*, 55 S.W.3d 222 (Tex. App.—Eastland 2001, pet. denied). Any other rule would create too much uncertainty, as explained by the court in *Senn*:

> The discovery rule cannot work to transfer the ownership of a cause of action from one person to another simply because the second person claims to have discovered the injury. The rule stated in *Vann* and *Lay* is simple, straightforward, and easily applied. It lends certainty to transactions involving real property by producing clearly defined rights and liabilities. We see no reason to riddle it with an exception engrafted from an entirely unrelated area of law.

Senn v. Texas Inc., 55 S.W.3d at 226 (referring to *Vann v. Bowie Sewerage Co.*, 90 S.W.2d 561 (Tex. 1936) and *Lay v. Aetna Ins. Co.,* 599 S.W.2d 684, 686 (Tex. Civ. App.—Austin 1980, writ ref'd n.r.e.)).

B. Statutory Causes of Action (RCRA, CERCLA, TSDWA)

As discussed in more detail above in parts I.B.1 and I.B.2 of this paper, at least with respect to recovery of remediation costs (versus diminution in value), federal and state statutory causes of action change the common-law rule of seller non-liability by expressly allowing cost recovery against past owners or operators.

1. RCRA § 7002

RCRA section 7002, 42 U.S.C. § 6972(a), however, no longer provides a cause of action for cost recovery. RCRA provides a cause of action against "against any person . . . including any past or present generator, past or present transporter, or past or present owner or operator of a treatment, storage, or disposal facility, who has contributed or who is contributing to the past or present handling, storage, treatment, transportation, or disposal of any solid or hazardous waste which

may present an imminent and substantial endangerment to health or the environment." Under *KFC* and *Avondale Savings*, discussed in part I.B.1, above, remedies under RCRA are limited to injunctions and orders.

2. CERCLA §§ 106, 107(a), and 113(f)

As discussed in part I.B.2, above, persons potentially responsible under CERCLA include the current owner and operator, past owners and operators at the time of disposal of any hazardous substance, "arrangers" (or "generators"), and transporters who select the disposal site. As also discussed previously, however, the Supreme Court is currently considering the issue of whether voluntary parties may recover under CERCLA, or whether there must first be a section 107(a) or section 106 action brought by EPA against a person to give rise to a right of contribution. *See supra* part I.B.3.

3. Texas Solid Waste Disposal Act

As discussed in part I.C of this paper, the Texas Solid Waste Disposal Act provides a cause of action under state law against current and past owners and operators, "arrangers" (or generators), and transporters for recovery of "reasonable and necessary" costs incurred in implementing a TCEQ-approved remedial action plan.

III. How are Buyers Held Liable for Existing Contamination After the Sale?

A. Stock Purchase

In a stock purchase, the buyer acquires the stock of the target company, which survives the transaction. The issue in a stock acquisition is the extent to which the buyer/new parent may be held liable for its new subsidiary's liabilities. The general rule is that the new parent will not be held responsible for the acquired subsidiary's liabilities. There are, however, exceptions to this rule. These exceptions include direct operator liability and piercing the corporate veil, discussed below.

It should be noted that, in statutory mergers and consolidations, an entirely different rule governs. The surviving corporation becomes liable by operation of law for all the obligations of the constituent corporations, whether or not they are known, unknown, or contingent, at the closing of the transaction.

1. Direct Operator Liability of Parent

CERCLA imposes liability for cleanup of hazardous waste on any "person" who: (1) currently owns or operates a hazardous waste facility; (2) owned or operated any facility at the time when hazardous substances were disposed; (3) arranged for disposal, treatment, or transportation of hazardous substances (*i.e.,* generators); or (4) transported a hazardous substance to a facility selected by the transporter. *See* CERCLA, 42 U.S.C. § 9607(a)(1)-(4); *see also* RCRA, 42 U.S.C. § 42 U.S.C. § 6972(a). CERCLA, however, fundamentally departs from usual liability principles by imposing strict joint and several liability for hazardous waste cleanup costs directly upon a very broadly defined group of "persons." Thus, a shareholder—corporate or individual—who may have avoided liability in the past because of the corporate veil may find itself implicated by the statutory language and, thereby, may be held directly liable for the corporation's conduct without the need to pierce the corporate veil.

a. *Bestfoods:* Direct Involvement in Operations (U.S. S.Ct. 1998)

In *United States v. Bestfoods, Inc.*, 524 U.S. 51 (1998), the Supreme Court addressed the issue of when a shareholder (corporate or individual) may be directly liable under CERCLA, holding that a parent may be held directly liable under CERCLA if the parent corporation acts directly to control the operations of the facility at which the contamination is located. Such liability would not be imposed against a parent corporation engaged in normal supervision of a subsidiary. *Id.*

The *Bestfoods* case involved a chemical plant in Michigan, owned by different companies over a period of more than thirty years, which had caused substantial contamination. *Id.* at 56-58. The federal government sued several defendants to recover money the government had spent cleaning up the site, including the corporate parent of a defunct subsidiary that had once owned the site. The district court found the parent corporation liable under CERCLA as a former "owner or operator" of the subsidiary's plant because, in part, the parent had appointed its employees as officers and directors of the subsidiary. *Id.* at 59.

On appeal, the Sixth Circuit reversed in a 7-6 *en banc* decision, concluding that, where a parent corporation was not directly involved in the operations of a subsidiary's facility as a joint venturer or co-operator, it could not be held liable under CERCLA as an "owner or operator" simply because it exercised corporate oversight of a subsidiary's affairs, except when the requirements of piercing the corporate veil could be met under state law. *Id.* at 60. The Supreme Court granted certiorari because of the conflict between the Sixth Circuit decision and those of other appellate courts that had held that a parent company could be directly liable under CERCLA as an "operator" by exercising control over its subsidiaries. *Id.*

The Court began its analysis by emphasizing the general principle of corporate law that a parent corporation is not liable for the acts of its subsidiary simply by virtue of stock ownership or because it exercised supervision over its subsidiary. The Court then stated that CERCLA, despite its public purpose of furthering cleanups, did not alter this "bedrock principle." *Id.* at 62. Nevertheless, the Court went on to find that under certain circumstances a parent corporation may be held liable for contamination at a particular facility if the parent corporation exercises control over environmental activities at the contaminated facility. *Id.* at 66-67.

In evaluating the question of whether CERCLA's creation of "operator" liability expanded the circumstances under which parent corporations may be held liable, the Court began the analysis by focusing on the distinction between "operating" a facility or site and "operating" a subsidiary. *Id.* at 64-65, 70. In the Supreme Court's analysis, "operator" liability under CERCLA is predicated on the actions that a person or corporation performs directly to operate a facility, but is not predicated simply on its control of another company that owns the site. *Id.* Thus, the Court acknowledged that a parent corporation may be held directly liable under CERCLA where its own employees direct or control environmental activities at a facility, but not where it simply exercises control of the subsidiary that owns the site through the normal mechanisms of corporate governance. *Id.* at 66-67, 70.

In this respect, the Supreme Court was careful to make clear that a parent corporation does not become an "operator" of a subsidiary's facility through the routine practice of supervising the subsidiary's business. *Id.* at 72. A parent corporation's routine supervision of a subsidiary could include, according to the Court, appointing a subsidiary's officers and directors, monitoring its performance, supervising the subsidiary's finances, approving budgets and capital expenditures, and articulating general policies and procedures for the subsidiary. *Id.* All of these practices

could fall within the normal scope of the parent-subsidiary relationship, and without more would not give rise to operator liability under CERCLA.

Instead, to incur CERCLA liability, a parent or its representatives must engage in actions that "are eccentric under accepted norms of parental oversight of a subsidiary's facility." *Id.* In other words, a parent corporation must have acted directly to manage, direct, or conduct the *operations* of the *facility*, not to have merely supervised the business of its subsidiary. The Supreme Court identified four situations in which the parent company may be directly liable under CERCLA:

> (1) Where the parent company actually directed operations at a site owned by one of its subsidiaries, such as when a parent had leased property from its subsidiary to conduct its own operations, *id.* at 71;
>
> (2) Where a parent corporation participated in a joint venture with its subsidiary, *id.* at 67, 71;
>
> (3) Where an officer or director who holds positions in both the parent and the subsidiary abuses his or her position in the subsidiary by making decisions concerning hazardous waste or environmental compliance which, under the norms of corporate behavior, are not in the interest of the subsidiary and are to the advantage of the parent, *id.* at 70 & n.13; and
>
> (4) Where an employee of the parent, who holds no position in the subsidiary, directly controls those operations at the site which involve hazardous substances or environmental compliance, *id.* at 66-67, 71.

In *Bestfoods*, there was some evidence supporting the fourth scenario. *Id.* at 72. The record in the case included evidence that the parent company's environmental and public affairs manager—who had held no position in the subsidiary—was actually involved in making operational decisions at the subsidiary's site relating specifically to environmental matters. Accordingly, the Supreme Court sent the case back to the trial court to determine whether the parent corporation could be held liable as an operator based on its direct management of hazardous waste at the site, not on its governance of the subsidiary. *Id.* at 73.

A question not answered by *Bestfoods* is the degree to which a parent corporation may rely on its own environmental management staff to supervise its subsidiary's compliance without risking CERCLA liability. The *Bestfoods* decision therefore left open the possibility that a parent company may risk CERCLA liability if it assigns its own environmental manager to supervise its subsidiary's compliance, unless that manager also holds a position in the subsidiary. The district court that decided *Bestfoods* on remand emphasized the Supreme Court's direction that the parent must be involved in operation of the *facility*, not merely operation of the subsidiary, and that the degree of involvement must be "eccentric under accepted norms of parental oversight." *Bestfoods, f/k/a CPC International, Inc. v. Aeroject-General Corp. et al.*, 173 F. Supp. 2d 729 (W.D. Mich. 2001). The district court held that Bestfoods' (f/k/a CPC's) involvement was insufficient to impose direct operator or derivative (veil-piercing) liability, and entered judgment for CPC on all claims against it. *Id.* at 760.

b. *BP Amoco*: Eccentric Under Accepted Norms (D. Del. 2004)

A very recent federal district court decision also emphasized the "eccentric under accepted norms" standard, and decided the liability issue in favor of a defendant, Sun Oil Company, and

the parent of a subsidiary called AviSun. In *BP Amoco Chemical Co. v. Sun Oil Company*, 316 F. Supp. 2d 166, *12-13 (D. Del. 2004) (mem.), the Delaware district court examined the activities of three Sun employees, and concluded that BP Amoco had not produced evidence that these activities were "eccentric under accepted norms of parental oversight," and thus these activities were insufficient to impose direct "operator" liability under *Bestfoods*. *Id.* In addition, the activities of the employees in writing a memorandum and/or contracting for waste disposal activities were not sufficient to establish "arranger" liability, where there was no evidence that the parent "owned or possessed" the waste.

One of the two issues for decision in *BP Amoco* was whether defendant was liable as an "operator" under CERCLA or similar Delaware law. As to that issue, BP Amoco argued that one of Sun Oil Company's employees managed, controlled, and directed environmental issues at the relevant facility, such that operator liability should attach to defendant. A Sun employee had been made available to AviSun during the initial phases of the subsidiary's polypropylene plant's start-up and operation, to manage the plant's environmental compliance issues. The Sun employee was also involved in the initial design of the plant's sewer system, drainage system, and waste water treatment systems, and he advised, counseled, and guided plant personnel with respect to those systems. *See BP Amoco Chemical Company v. Sun Oil Company*, 200 F. Supp. 2d 429, 433 (D. Del. 2002). The Sun employee was the primary individual responsible for obtaining environmental compliance permits for the plant and was the primary liaison to the State of Delaware Water Pollution Commission and Board of Health. *Id.* It was also undisputed that, at all times relevant to the case, that the employee in question was Sun's employee and not the employee of the subsidiary—"with no hat but the parent's hat." *BP Amoco*, 316 F. Supp. 2d 166, at *13. That, however, was not the critical question to the court with respect to the "direct operator liability" issue. The critical issue to the court was that BP Amoco failed to present any evidence to prove, under *Bestfoods*, that the employee's activities were unusual, let alone "eccentric under accepted norms of parental oversight of a subsidiary's facility." *Id.* at *12-13. Since BP Amoco had not come forward with such evidence, the court denied BP Amoco's motion for summary judgment, and granted Sun Oil's motion that it was not liable under CERCLA by virtue of this employee's activities. *Id.* at *17.

The second issue in *BP Amoco* was whether defendant should be held directly liable as an "arranger" under CERCLA or similar Delaware law. One of Sun's employees had written a memorandum recommending how to dispose of waste from the facility, and another Sun employee had allegedly arranged with a third party to dispose of waste. *See BP Amoco*, 361 F. Supp. 2d 166, at *17. But the court held that BP Amoco had not come forward with evidence to prove that defendant "owned or possessed" the waste at issue, as required under Third Circuit law. *Id.* The court therefore granted Sun's motion for summary judgment.

The Delaware district court's decision suggests that using a parent company's employees to render assistance to a subsidiary may not be sufficient to justify parent liability as a "direct operator" under CERCLA unless there is evidence that "eccentric under accepted norms of parental oversight of a subsidiary's facility." The extent to which "arranger" liability depends on "ownership or possession" of the waste will likely vary among circuits. It remains to be seen whether and to what extent the standards applied by the district court in *BP Amoco* will be adopted by other courts.

2. Piercing Corporate Veil

Bestfoods identified four situations in which a parent corporation may be held directly liable under CERCLA. *Bestfoods* also indicates that liability may still be imposed by piercing the

corporate veil under traditional common law. *See Bestfoods*, 524 U.S. at 63-64 & nn.9-10.[1] Thus, the decisions of the Courts of Appeal for the Fifth and Sixth circuits in *Joslyn Manufacturing* and *Cordova Chemical*, respectively, are instructive, not necessarily on "operator" liability, but on the question of the circumstances that may warrant piercing the corporate veil to impose environmental liability on a parent corporation or other shareholder.

In *Joslyn Mfg. Corp. v. T.L. James & Co.*, 893 F.2d 80 (5th Cir. 1990), the Fifth Circuit took a narrow view on piercing the corporate veil, limiting it to "situations in which the corporate identity was used as a sham to perpetuate a fraud or avoid personal liability." Thus, at least within the Fifth Circuit, "control" in the parent-subsidiary context requires very significant control of the subsidiary. Because the facts did not suggest that the subsidiary was designed as a bogus shell for the parent corporation, the court refused to pierce the corporate veil. The facts warranting against piercing the corporate veil centered on the finding that the subsidiary had adhered to basic corporate formalities, including keeping its own books and records, holding frequent director and shareholder meetings, filing separate tax returns, paying its own bills, and making its own arrangements for employee benefits.

In *United States v. Cordova Chemical Co.*, 113 F.3d 572 (6th Cir. 1997), the Sixth Circuit found that state law (Michigan) provided adequate standards for piercing the corporate veil. *Cordova*, which was reversed by *Bestfoods*, still provides guidance for determining when it is appropriate under Michigan law to pierce the corporate veil. For the present parent at the site, Aerojet, the Sixth Circuit held that the lower court had erred in finding Aerojet liable under the Michigan law. The court held that the facts did not establish that Cordova was a mere instrumentality of Aerojet in the sense that the separate corporate personalities of the parent and subsidiary ceased to exist. Therefore, Aerojet's activities did not approach the level of culpable conduct contemplated by Michigan law as a predicate to disregarding the separate corporate form. *Id.* at 582.

3. Predictions and Suggestions

Under *Bestfoods*, normal corporate relations should no longer be sufficient to impose CERCLA liability on the parent, such as having the same individuals were officers or directors of both the parent and the subsidiary; establishing general policies and practices for the subsidiary to follow; or requiring the subsidiary to obtain the parent's approval before making substantial expenditures. To hold a parent company liable, the government or party seeking contribution will have to either meet the common law standards of piercing the corporate veil or show that the parent directly controlled environmental activities at the subsidiary's site. Future cases should clarify the type of proof regarding control required to impose liability, but the focus of the courts should be on the

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[1] *See also, e.g.*, *BP Amoco v. Sun Oil*, 166 F. Supp. 2d 984, 992 (D. Del. 2001) ("The Supreme Court's holding in *Bestfoods* makes clear that, unless the corporate veil can be pierced, a parent corporation that actively participated in, and exercised control over, the general operations of a subsidiary, without more, cannot be held liable under CERCLA as an operator of a polluting facility owned or operated by the subsidiary." (citing *Bestfoods*, 524 U.S. at 55, 66-67)), *reconsidered in part on other grounds,* 200 F. Supp. 2d 429, 439 (D. Del. 2002); *see also North* Shore Gas Co. v. Salomon, Inc., 152 F.3d 642, 648 (7th Cir. 1998) (under Bestfoods, parent corporation incurs direct liability only if it manages, directs, or conducts the operations of the subsidiary's facility that are specifically related to pollution); United States v. Township of Brighton, 153 F.3d 307, 314 (6th Cir. 1998) (same, quoting *Bestfoods*). The Supreme Court noted that "activities that involve the facility but which are consistent with the parent's investor status, such as monitoring of the subsidiary's performances supervision of the subsidiary's finance and capital budget decisions, and articulation of general policies and procedures, should not give rise to direct liability." *BP Amoco*, 166 F. Supp. 2d at 992 (citing *Bestfoods*, 524 U.S. at 72.)

relationship between the parent and the contaminated site, not the relationship between the parent and the subsidiary.

In the meantime, parent companies should not operate the subsidiary for a fraudulent purpose and should follow the corporate formalities necessary to maintain corporate separateness. In addition, parent corporations and individual shareholders, in general but particularly in closely held corporations, should take precautions to reduce the likelihood of a court finding the shareholder liable either under CERCLA or common law for contamination at a facility owned or operated by the subsidiary. For example, the parent and subsidiary should consider the following:

- When setting up a corporation, ensure that the corporation is capitalized adequately. If a new subsidiary will assume liabilities of the parent, provide sufficient capital to cover both past and probable future liabilities;
- Observe corporate formalities in the establishment and operation of each corporation;
- Hold regular meetings of the subsidiary's directors and shareholders;
- Maintain separate books and records for the subsidiary;
- Avoid having the directors and officers of the parent corporation direct, in theory or in practice, the activities of the subsidiary, particularly with respect to hazardous substances and environmental compliance;
- Hold the parent and subsidiary out as separate entities when dealing with third-parties;
- Do not control the day-to-day management of the subsidiary;
- Conduct any and all transactions between parent and subsidiary at arm's length;
- Use caution when sharing employees and providing managerial, technical, or other services to subsidiary, and avoid appointing a parent company employee, who does not hold a position with the subsidiary, to manage the operations of the subsidiary's site, particularly operations relating to environmental matters.

B. Asset Purchase

1. Purchaser Non-Liability

Under traditional doctrines of corporate law, the purchaser of assets is generally not responsible for the debts and liabilities of the selling entity except those that are expressly assumed. This is because the debts and liabilities generally do not attach to the assets, but to the corporate structure, except for liabilities arising against the buyer from the condition of the assets themselves. The contract for an asset transaction should however expressly provide for "retained" or "excluded" liabilities (which the seller keeps) and "assumed" liabilities (which the buyer takes) in order to avoid any ambiguity as to which liabilities are associated with the assets.

2. Direct Liability as Owners and Operators

In some circumstances, the environmental condition of the assets may be such as to give rise to common-law tort liabilities on the part of the buyer as a result of the condition of the assets

themselves. In addition, under CERCLA and similar state laws, asset purchasers can be held directly liable for conditions on properties they own or operate (or conditions emanating from onsite conditions) directly as owners and operators of a facility. CERCLA and similar state law makes current owners and operators and past owners and operators at the time of disposal potentially liable under CERCLA sections 107(a)(1) and (2), respectively. Thus, a buyer is liable while it owns the facility and may be liable after it subsequently sells the facility, if "disposal" of any hazardous substance occurred during its ownership. "Disposal" is broadly defined to mean "the discharge, deposit, injection, dumping, spilling, leaking, or placing . . . so that such" hazardous substance "may enter the environment or be emitted into the air or discharged into any waters, including ground waters" *See* 42 U.S.C. § 9601(29) (defining "disposal" by reference to RCRA, 42 U.S.C. § 6903(3)). Likewise, under RCRA, a buyer, even after it sells a facility, may be subject to an order requiring it to address conditions it created that create imminent and substantial endangerment (although apparently not for cost recovery). *See supra* part I.B.1.

Not all plaintiffs will be able to satisfy the conditions for contribution claims under CERCLA, and not all states will have their own contribution statutes. Plaintiffs may, therefore, try to bring common-law contribution claims against asset purchasers, and traditional principles of corporate law will continue to apply to these claims. Moreover, traditional doctrines of corporate law continue to have relevance with respect to claims that do not arise from the condition of the real property, such as whether the buyer of an asset will have liability for the seller's offsite "arranger" or "transporter" liabilities under CERCLA sections 107(a)(3) and (4).

3. Common-Law Exceptions to Non-Liability

Many states recognize several common-law exceptions to the general rule that the buyer is not liable for the selling entities debts and liabilities in an asset purchase and the "substantial contribution" doctrine. These include the de facto merger doctrine or "mere continuation" doctrine. The courts of some states are flexible in their analysis of these exceptions, and frequently allow recovery against predecessors to asset purchasers under these exceptions. As discussed below in part III.B.4, however, under the Texas Business Corporation Act, Texas "strongly embraces the non-liability rule. To impose liability for a predecessor's torts, the successor corporation must have expressly assumed liability." *See Shapolsky v. Brewton*, 56 S.W.3d 120, 137 & n.10 (Tex. App. Houston [14th Dist.] 2001, pet. denied); Lockheed Martin Corp. v. Gordon, 16 S.W.3d 127, 134-35 (Tex. App.—Houston [1st Dist.] 2000, pet. denied). *But see* Phippen v. Deere & Co., 965 S.W.2d 713, 726 (Tex. App.—Texarkana 1998, no pet.) (allowing "fraudulent transfer" and "substantial continuation" theories of successor liability against asset purchaser after enactment of TBCA article 5.10) (disagreed with in *Shapolsky*, 56 S.W.3d at 137).

a. De Facto Merger or "Mere Continuation" Doctrine

In determining whether an asset sale constitutes a *de facto* merger (also referred to as the "mere continuation" doctrine), most courts consider:

- Whether there is a continuity of shareholders because the purchaser paid for the assets with its own stock;

- Whether there is a continuation of the enterprise of the seller, so that there is a continuity of management, personnel, physical location, assets and general business operations;

- Whether there is a cessation by seller of its ordinary business operations, followed by liquidation and dissolution shortly thereafter; and

- Whether the purchaser assumes those obligations of seller ordinarily necessary for the uninterrupted continuation of seller's normal business operations.[2]

While most courts use language suggesting that all factors must be established in order to hold the successor liable, not every jurisdiction actually requires each factor to be present in order to impose liability.[3]

Most courts focus on either the purchase of assets without adequate consideration or the purchase of assets with the consideration consisting wholly of stock in the new corporation, which stock is distributed to the owners of the predecessor. In addition, most jurisdictions will not find a *de facto* merger if the purchaser did not use its own stock for consideration.[4]

b. Substantial Continuity

Decisions from jurisdictions other than Texas suggest that in some circumstances the courts will disregard the traditional rule and hold the purchaser of assets responsible for the hazardous substance liabilities of the predecessor corporation if the purchaser continues substantially the same business enterprise as the seller.[5] In fact, some U.S. Courts of Appeal called for the courts

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[2] *See, e.g.,* Bud Antle, Inc. v. Eastern Foods, Inc., 758 F.2d 1451, 1457-58 (11th Cir.), *reh'g denied,* 765 F.2d 154 (1985).

[3] Successor liability does not turn on the presence or absence of any one or more of these items. *See, e.g.,* United States v. Vertac Chem. Corp., 671 F. Supp. 595, 617 (E.D. Ark. 1987), *vacated on procedural grounds*, 855 F.2d 856 (8th Cir. 1988); Atlas Tool Co. v. Commissioner, 614 F.2d 860, 870 (3d Cir.), *cert. denied*, 449 U.S. 836, 101 S. Ct. 110, 66 L. Ed. 2d 43 (1980); Korzetz v. Amsted Indus., Inc., 472 F. Supp. 136, 143 (E.D. Mich. 1979).

[4] *See*, e.g., Leannais v. Cincinnati, Inc., 565 F.2d 437 (7th Cir. 1977); Bud Antle, Inc. v. Eastern Foods, Inc., 758 F.2d at 1451, 1458 (11th Cir.), *reh'g denied*, 765 F.2d 154 (1985) (de facto merger is impossible where there is not some sort of continuation of the stockholders' ownership interest because corporate liability adheres to corporate entity); Wessinger v. Vetter Corp., 685 F. Supp. 769, 773 (D. Kan. 1987) ("continuity of shareholders is likely the most important requirement for a de facto merger."); Bud Antle, Inc. v. Eastern Foods, Inc., 758 F.2d 1451, 1459 (11th Cir.), *reh'g denied*, 765 F.2d 154 (1985). See also United States v. Vertac Chem. Corp., 671 F. Supp. 595 (E.D. Ark. 1987) (holding successor liable as a mere continuation of predecessor due to continuity of shareholders, directors and officers and substantially all employees; successor took over predecessor's offices, marketed same product, used predecessor's name and customer list); Leannais v. Cincinnati, Inc., 565 F.2d 437 (7th Cir. 1977) (no continuation of enterprise because the management of the predecessor was not carried over to the successor and no overlap of officers, directors or shareholders).

[5] *See* United States v. Carolina Transformer Co., 978 F.2d 832, 837-841 (4th Cir. 1992) (imposing successor liability under continuity of enterprise theory when facts indicated that the purpose of the corporate reorganization was to split off environmental liabilities from remaining assets, accounts, customers, management and production methods which were then transferred to another corporation engaged in substantially the same business); Anspec Co., Inc. v. Johnson Controls, Inc., 922 F.2d 1240 (6th Cir. 1991); United States v. Mexico Feed & Seed Co., 764 F. Supp. 565 (E.D. Mo. 1991), *aff'd in part and rev'd on other grounds,* 980 F.2d 478, 487 (8th Cir. 1992) (reversing finding of successor liability under facts at hand but expressly finding that successor corporations are within the meaning of the term "person" for purposes of CERCLA liability, following similar decisions in the Third, Sixth and Ninth Circuits); Traverse Bay Area Intermediate School Dist. v. Hitco Inc., 762 F. Supp. 1298 (W.D. Mich. 1991).

to develop a "federal common law" of successor liability under CERCLA.[6] Other courts, however, have looked to state law for successor liability principles.[7]

A recent CERCLA case out of the Second Circuit described the distinction between the "mere continuation" test and the "substantial continuity" test, then rejected the "substantial continuity" test as too infrequently followed to be representative of federal common law. In *New York v. National Services Industries, Inc.*,[8] the Court held that the more stringent, "mere continuation" test required the existence of a single corporation after the transfer of assets with an identity of stock, stockholders, and directors between the successor and predecessor corporations." In contrast, the substantial continuity test (sometimes referred to as the "continuity of enterprise" approach), rather than considering ownership, focuses on the continuity of the business: Whether the "successor maintains the same business, with the same employees doing the same jobs, under the same supervisors, working conditions, and production processes, and produces the same products for the same customers."[9] As discussed in more detail below in section III.B.3.e of this paper, the Second Circuit questioned the continuing viability of the "substantial continuity" test under CERCLA after the Supreme Court's decision in *Bestfoods* and rejected the test as not representative of federal common law.

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[6] Smith Land & Improvement Corp. v. Celotex Corp., 851 F.2d 86, 92 (3d Cir. 1988), *cert. denied*, 488 U.S. 1029, 109 S. Ct. 837, 102 L. Ed. 2d 969 (1989).

[7] The Seventh Circuit, in a post-*Bestfoods* decision, explained the status of the decisions on state common law and federal common law, and then proceeded to interpret federal common law, reserving the choice-of-law question, as did the Supreme Court in *Bestfoods*, because the parties had not briefed the issue. *See* North Shore Gas Co. v. Salomen, Inc., 132 F.3d 642, 651 (7th Cir. 1998). The Seventh Circuit summarized the state versus federal common law issue below:

> Until recently, only the Sixth Circuit had concluded that state law provided the rule of decision for successor liability under CERCLA. *See* Anspec, 922 F.2d at 1248. The Ninth Circuit, however, recently overruled one of its prior decisions and held that it would look to the law of the relevant state to decide issues of successor liability. *See* Atchison, 132 F.3d at 1301-02, *overruling* Louisiana-Pacific Corp. v. Asarco, Inc., 909 F.2d 1260 (9th Cir. 1990). The Ninth Circuit explained that two recent Supreme Court decisions, O'Melveny & Myers v. FDIC, 512 U.S. 79, 129 L. Ed. 2d 67, 114 S. Ct. 2048 (1994) and Atherton v. FDIC, 519 U.S. 213, 136 L. Ed. 2d 656, 117 S. Ct. 666 (1997), "called into question the ease with which *Louisiana-Pacific* created a set of federal rules for successor liability under CERCLA." Atchison, 132 F.3d at 1299. Because CERCLA does not clearly indicate that Congress intended the judiciary to formulate federal common law, the three-part test established in United States v. Kimbell Foods, 440 U.S. 715, 59 L. Ed. 2d 711, 99 S. Ct. 1448 (1979), determines whether federal common law is appropriate. *Kimbell Foods* requires a court to decide (1) whether the issue requires "a nationally uniform body of law"; (2) "whether application of state law would frustrate specific objectives of the federal programs"; and (3) whether "application of a federal rule would disrupt commercial relationships predicated on state law." Kimbell Foods, 440 U.S. at 728-29. After the Ninth Circuit revisited these three factors with the benefit of O'Melveny and Atherton, it concluded that it had erred in fashioning federal common law to resolve CERCLA successor liability claims. *See* Atchison, 132 F.3d at 1300-01 (noting that state law is largely uniform and that there is no reason to think that a state will change its law to become a haven for liable companies)."

[8] 352 F.3d 682 (2d Cir. 2003).

[9] *Id.* at 685.

c. EPA's "Substantial Continuation of Business Enterprise"

The EPA and the Department of Justice ("DOJ") take the position that the doctrine of successor liability should be liberally applied in CERCLA cases.[10] EPA contends that in asset transactions, successor liability should not be limited to the four traditional exceptions. Rather, EPA advocates the adoption of the continuity of business enterprise exception in CERCLA cost recovery actions. Consequently, EPA asserts that the purchaser of assets is liable as a successor corporation under CERCLA if the purchaser continues substantially the same business enterprise as the seller. The basis for this theory appears to lie in the government's conclusion that given the choice between innocent taxpayers or a successor corporation that derives a benefit from the name and goodwill of its predecessor, the latter should pay for the CERCLA cleanup.[11]

d. Substantial Continuity Before *Bestfoods*

Based on the case law before *Bestfoods*, it was impossible to state clear rule that will determine whether a successor corporation will be held liable. The case law merely suggested some general factors. *Distler* and *Mexico Feed & Seed*[12] were the only cases to date to adopt the government's position that successor liability should be imposed if the purchaser continues substantially the same business enterprise as conducted by the seller, but cases like *Acushnet* suggested that courts may be willing to stretch the exceptions to the traditional rule of successor non-liability in CERCLA cases.[13]

Based upon the relevant case law, the following factors may be important in determining whether a successor corporation is liable:

- Whether the predecessor discontinued operations shortly after consummating the transaction;
- Whether the successor retains the same or close to the same management, supervisory personnel, and employees;
- Whether the successor retains the same production facilities at the same locations;
- Whether the successor retains the same or similar products;
- Whether the successor continues to use the predecessor's name;
- Whether the successor continues to serve the same or similar customers; and

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[10] EPA Memorandum "Liability of Corporate Shareholders and Successor Corporations for Abandoned Sites Under the Comprehensive Environmental Response, Compensation and Liability Act," Courtney M. Price, Assistant Administrator for Enforcement and Compliance Monitoring (June 13, 1984).

[11] Arguably, the Third Circuit approved this position in *Smith Land & Improvement Corp. v. Celotex Corp.*, 851 F.2d 86, 91 (3d Cir. 1988), *cert. denied,* 488 U.S. 1029 (1989) .

[12] *United States v. Distler,* 741 F. Supp. 637 (W.D. Ky. 1990); *United States v. Mexico Feed & Seed Co.,* 764 F. Supp. 565, 570 (E.D. Mo. 1991), *aff'd in part and rev'd on other grounds,* 980 F.2d 478 (8th Cir. 1992).

[13] *In re Acushnet River & New Bedford Harbor Proceeds,* 712 F. Supp. 1010, 1017 (D. Mass. 1989) (applying the traditional four-prong *de facto* merger test, finding continuity of enterprise even though the successor corporation did not manufacture PCB-filled capacitors as its predecessors had and finding continuity even though the seller received shares of the purchaser's parent, not the purchaser, and, finally, that even though the predecessor existed, the court found it to be dissolved because its revival was only for the purposes of defending the litigation).

- Whether the successor assumes those liabilities of the predecessor which are necessary to prevent the uninterrupted transfer of assets.

None of these factors was determinative in the case law before *Bestfoods*.

e. Substantial Continuity After *Bestfoods*

In the 1998 *Bestfoods* case, discussed above in part III.A.1.a of this paper, the Supreme Court reduced the scope of parent corporation liability for alleged CERCLA violations, thereby marking a significant development in environmental liability affected mergers and acquisitions. In *United States v. Bestfoods*, the Supreme Court looked at whether an officer of the successor corporation was individually liable for contamination at the sites of both corporations. The Court concluded that the officer was not liable.

The Second Circuit recently examined the application of a "substantial continuity" test under CERCLA in light of *Bestfoods*. In *New York v. National Services Industries, Inc.*,[14] the Second Circuit noted that the Supreme Court in *Bestfoods* had emphasized that participation in the activities of the polluting facility, not mere control of the subsidiary, is what results in direct CERCLA liability. In *Bestfoods*, the U.S. Supreme Court called on the lower courts to apply common law principles, and not to fashion a special rule for CERCLA:

> The Court held that "CERCLA is [] like many another congressional enactments in giving no indication that 'the entire corpus of state corporation law is to be replaced simply because a plaintiff's cause of action is based upon a federal statute.'" The "failure of [CERCLA] to speak to a matter as fundamental as the liability implications of corporate ownership demands application of the rule that 'in order to abrogate a common-law principle, the statute must speak directly to the question addressed by the common law.'" The Supreme Court rejected the district court's test for a parent corporation's derivative liability because that test "disregarded entirely . . . time-honored common law rule[s]."[15]

The Second Circuit noted that, in *Bestfoods*, the Supreme Court expressly declined to decide whether courts should apply state or federal common law under CERCLA.[16] The Second Circuit then went on to try to interpret the federal common law, finally holding that the substantial continuity doctrine does not apply under CERCLA:

> We thus find that the substantial continuity doctrine is not a part of general federal common law and, following Bestfoods, should not be used to determine whether a corporation takes on CERCLA liability as the result of an asset purchase. Our holding is consistent with dicta by the only other Court of Appeals that has considered whether the substantial continuity doctrine survives Bestfoods. See *United States v. Davis,* 261 F.3d 1, 54 (1st Cir. 2001) (noting that Bestfoods "left little room for the creation of a federal rule of liability under the statute").[17]

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[14] 352 F.3d 682 (2d Cir. 2003).
[15] *Id.* at 685 (citations omitted) (quoting *Bestfoods*).
[16] *See Bestfoods*, 524 U.S. at 64 n.9.
[17] *National Services Indus.*, 352 F.3d at 685.

Successor corporations have not always been completely protected from environmental liability, however, even after *Bestfoods*. In *North Shore Gas Co. v. Salomon, Inc.*,[18] for example, the Seventh Circuit combined the de facto merger and mere continuation theories of successor liability to determine that the successor corporation was liable for a superfund site based on the earlier sale of assets.[19] The court found that the successor corporation had not agreed to assume the acquiree's liabilities, nor was the sale a fraudulent one. But based on the de facto merger and mere continuation doctrines, the court found that defendant was liable. Because the defendant maintained control of the corporation whose assets it had purchased, the court held that this could lead to successor liability for the alleged environmental violations.

The Fifth Circuit has not expressly considered the "substantial continuity" rule under CERCLA, although it seems unlikely that it would adopt it in light of the language of the Supreme Court's recent decision in *Bestfoods*.[20] Only one reported district court decision from 1996, before *Bestfoods*, has mentioned the exceptions to successor non-liability in a CERCLA context. That court declined to find facts sufficient to establish "substantial continuity" on the facts of that case, without reference to the Texas rule or article 5.10(B)(2) of the Business and Commerce Code.[21]

4. Texas Business Corporation Act

If state law applies,[22] neither the de facto merger nor the mere continuation nor the substantial continuity theories would appear to be available in Texas to impute to an asset purchaser its seller's tort liability. The Texas Business Corporation Act, Article 5.10(B)(2), as amended in 1979, provides:

> A disposition of any, all, or substantially all, of the property and assets of a corporation, whether or not it requires the special authorization of the shareholders of the corporation, effected under Section A of this article or under Article 5.09 of this Act or otherwise:
>
> (1) is not considered to be a merger or conversion pursuant to this Act or otherwise; and
>
> (2) except as otherwise expressly provided by another statute, does not make the acquiring corporation, foreign corporation, or other entity responsible or liable for any liability or obligation of the selling corporation that the acquiring corporation, foreign corporation, or other entity did not expressly assume.

The purpose of the 1979 amendment was to "preclude the application of de facto merger in any sale, lease, exchange or other disposition of all or substantially all the property and assets of a

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[18] 152 F.3d 642 (7th Cir. 1998).

[19] *Id.* at 653-54.

[20] The "failure of [CERCLA] to speak to a matter as fundamental as the liability implications of corporate ownership demands application of the rule that 'in order to abrogate a common-law principle, the statute must speak directly to the question addressed by the common law.' " Bestfoods, 524 U.S. at 63 (quoting *United States v. Texas*, 507 U.S. 529 (1993)).

[21] *United States v. Wallace*, 961 F. Supp. 969, 908 (N.D. Tex. 1996).

[22] *See supra* notes 6-8 and accompanying text (discussing possibility that courts will apply federal common law).

corporation." [23] Several Texas courts of appeal have held that this statute makes the de facto merger and substantial continuity doctrines unavailable in Texas.[24] Under the Texas Business Corporation Act, Texas "strongly embraces the non-liability rule. To impose liability for a predecessor's torts, the successor corporation must expressly assume liability."[25]

IV. Contractual Risk Allocation Mechanisms

Numerous variables affect which risk allocation mechanisms ultimately will be incorporated into an agreement. Such variables might include the scope and results of due diligence investigations, the nature of the potential liabilities, and the structure of the transaction itself. The nature of the identified environmental problems will also influence which contract provisions are appropriate. The environmental due diligence investigation of the target property or company should be adequate to provide a "baseline" of conditions and outstanding compliance issues at facilities on which an estimate of potential costs (or ranges of costs) can be based. With such information, buyers and sellers can decide which type of contractual allocation mechanism should be incorporated into the agreement.

A. Structure of the Transaction

The structure of the transaction will affect the terms and conditions of environmental provisions. The structure may even be modified to accommodate certain environmental risks. For instance, a buyer of a company may press for an asset purchase agreement that excludes certain facilities if there are potentially large environmental liabilities at those locations.

1. Stock Acquisition

As discussed above, principles of general corporate law provide that liabilities, including environmental liabilities, continue to exist as liabilities of the acquired entity in a stock acquisition. The risk in this type of transaction, assuming that there is no potential for "direct operator" or derivative liability by the parent company, is that the target company will be worth much less than originally contemplated by the buyer due to environmental problems that require the expenditure of cleanup costs or create environmental liabilities.

If there is merger, the target company and all its assets and liabilities are absorbed into the acquiring company. The additional risk in this type of transaction is that the cleanup costs and environmental liabilities will exceed the value of the target company, leaving the acquiring company in a net negative position.

In cases where the seller (such as the former parent company of the acquired company) continues after the transaction as a viable entity, the buyer often seeks representations and warranties so as to establish a contractual basis for recourse against the seller. In addition, the buyer may seek to include indemnity provisions or affirmative covenants obligating the seller to address certain known or unknown problems after closing.

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[23] *See* Shapolsky v. Brewton, 56 S.W.3d 120, 137 & n.10 (Tex. App.—Houston [14th Dist.] 2001, pet. denied).
[24] *Id.* (citing various cases).
[25] *Id.*

2. Asset Transaction

As discussed above, as a general rule, when a buyer acquires the assets of a seller, the seller's liabilities are not automatically transferred to the buyer, unless such liabilities arise against the buyer from the condition of the assets (*e.g.*, real property) acquired. The contract for such a transaction therefore usually provides for "retained" or "excluded" liabilities and "assumed" liabilities in order to avoid ambiguity as to which liabilities are associated with the assets.

B. Objectives of the Parties

Each party to a transaction has a different set of concerns and perspectives that will influence the shape of the final agreement. This section provides a summary of the issues and concerns that may be raised by the parties.

1. Buyer

The buyer's main concern is to develop knowledge about the company or property that it is purchasing. To a certain extent, a buyer can gather considerable information by conducting a due diligence investigation prior to signing the contract, but timing, confidentiality, and cost considerations sometimes limit the scope of the investigation that is conducted. A buyer, therefore, will also want to incorporate provisions into the agreement to ensure that it is given all relevant reports and informed of any known environmental problems.

Sometimes the buyer relies on a seller's data, although this is not usually recommended. Reliance on a seller's data entails some risk to the buyer, who is not usually in a position to assess the accuracy and completeness of the data. Review of the report by the buyer's consultant can help assess the validity of a report. In the case of an old report supplied by the seller, a buyer may want an update of the report or, less desirable, include a contractual term in the form of a representation that nothing has changed that would require a change in the report or make its facts and conclusions misleading.

The buyer will also probably seek representations and warranties from the seller as to environmental compliance issues and environmental condition of the property. This protects the buyer against problems that might be overlooked in the context of a due diligence assessment conducted by consultants unfamiliar with the seller's operations, but known to the seller. In addition, representations and warranties provide a contractual recourse in the event the buyer finds herself with unanticipated environmental liabilities. The doctrine of *caveat emptor*, discussed above, may preclude a common-law remedy in the absence of representations. By including representations in the agreement, the buyer will have a cause of action for breach of contract, if the representation later proves false.

In addition to issues relating to knowledge of site conditions, the buyer may want to establish contractual responsibility for certain environmental liabilities. For example, the contract of sale might allocate responsibility for problems attributable to seller's actions prior to the closing to seller. This approach works well enough for environmental problems that create a one-time liability, such as fines for exceeding permit limitations or for failure to report unpermitted discharges. However, where the liability is for cleanup, the buyer may prefer to retain full control over all aspects of the cleanup. This would permit the buyer to conduct any necessary cleanup—giving the buyer control over communications and negotiations with regulators, the scope of the work required and approvals—while requiring the seller to pay the cost. As noted below, the buyer and seller may have opposite positions on this issue.

If contamination is evident at the time of contract or cleanup is already in progress, the buyer may want the seller to covenant that it will continue the cleanup until completion and final approval by governmental authorities. If the remedial work is being conducted on the buyer's new property, the buyer also may want a contractual right to review, comment on, and/or approve cleanup activity undertaken by the seller.

Finally, the buyer may want to exclude certain sites from an asset transaction or have the seller sell or transfer undesirable assets prior to a stock transaction or merger. The buyer may also want to obtain indemnification for any liabilities that may be incurred as successor in interest for events that occurred when the property was held by the seller.

2. Seller

The seller will usually want to transfer to the buyer all potential liabilities associated with the assets or business that are the subject of the transaction. A buyer may require a reduction in the purchase price to balance this transfer of risk.

The seller may want to sell the property or entity "as is," meaning without representations and warranties as to the condition of the property. In addition to removing the basis for a breach of contract claim, an "as is" clause removes the "causation" element from on theories of DTPA violation, fraud, negligence, and breach of duty of good faith and fair dealing due to failure to disclose something or false disclosure, except theory of fraud in inducement. *Prudential v. Jefferson Assocs.*, 896 S.W.2d 156 (Tex. 1995). As discussed previously, an "as is" clause does not preempt contribution claims under CERCLA or similar state statutes (*e.g.*, the Texas Solid Waste Disposal Act ("TSWDA")). *See Bonnie Blue v. Reichenstein*, 127 S.W.3d 366 (Tex. App.—Dallas 2004, no pet.) (stating same but expressly pretermitting question of whether indemnity clause is enforceable under TSWDA, as this issue was not presented in that case).

Where a property cannot be sold "as is," the seller should limit the number and scope of representations and warranties given to the buyer. Negotiated limitations may include restrictions on the representations and warranties to matters within the buyer's actual or constructive knowledge, or sometimes both, limitations as to "material" matters or matters that have a "material adverse effect," and limiting survival to the closing date. The seller may want to exclude or limit representations as to previously owned or operated properties from the representations due to the difficulty in gathering accurate data about environmental issues at these sites as of the closing date. Finally, the seller should list all known environmental problems in a disclosure schedule and specify that these matters are not within the scope of the representations and warranties. Scheduling a matter will remove the disclosed matter from the scope of a representation and thereby avoid a breach of the contract.

As discussed above, many environmental laws (*e.g.*, CERCLA and similar state statutes) create a cause of action against past owners, operators and generators. The buyer may, therefore, have a contribution claim against the seller regardless of the language of the contract. To remove this possibility, the seller should seek an exclusive remedy provision in the contract, by which the buyer waives its contribution rights in exchange for a limited indemnification agreement.

In many cases, the seller may seek to limit its indemnification obligation for remediation costs to performance rather than reimbursement of costs, in order to maintain control over the required cleanup work and to minimize costs. If the seller is doing the remediation, it should make the buyer's obligations relating to the remediation (for example, providing access, delivering buyer's insurance policies, if any, and delivering the agreed consideration) conditions precedent to

seller's obligations to perform the remediation. In addition, the seller should try to obtain a release of liability (in addition to the waiver of contribution claims mentioned previously) once the seller obtains the a no-further-action letter or the equivalent from the government.

However, in some situations, such as where the seller will not survive the transaction or is spinning of an entire area of business expertise, the seller may be incapable or unwilling to conduct cleanup operations after the transaction has closed. Consequently, the seller might prefer to reimburse buyer for cleanup costs at various sites up to a maximum dollar cap. With this approach, the seller can set aside reserves and be assured that its liability will not exceed a specific amount.

3. Lender

Often the lender's concerns mirror those of the buyer, although often for different reasons. As with a buyer, a lender should acquire knowledge about environmental issues affecting the property or business that is the subject of the contemplated loan, because these issues may be important for both the buyer's credit worthiness and the lender's assessment of potential collateral.

Representations and warranties can be used by a lender to create an event of default should the representation turn out to be false. An acceleration clause is tied to events of default, which are in turn tied to the representations and warranties or covenants. Representations and warranties can therefore be used to cut off a borrower's ability to make further draws under a revolving credit facility. Also, representations can be used to obtain information on the target company. As a loan covenant, the lender will often require the borrower to provide notice of certain events during the life of the loan (such as receipt of a notice of violation or an information request pertaining to off-site disposal of hazardous substances) so that the lender can evaluate its position with respect to the collateral and the borrower in light of new developments.

Also, the lender is likely to have the option of accelerating the loan in the event previously unknown environmental liabilities arise. A lender usually requires a broad and unconditional indemnity provision from the borrower in the event the lender is held liable for contamination caused by the borrower's activities.

4. Borrower

A borrower should provide full disclosure to the lender in order to minimize the potential for future default conditions if a representation turns out to be false. A borrower should also attempt to limit the scope of the representations it makes under the loan agreement in order to reduce the risk that a breach of contract or event of default might be established. Moreover, the borrower should seek to avoid representations, warranties and covenants that result in minor, inconsequential events of default by qualifying those contractual provisions to some defined standard of materiality (whether a dollar amount or a defined term, such as "deminimis PRP"). The borrower also may seek to limit its indemnification obligations in situations where the lender forecloses on the collateral by excluding from the scope of the indemnity obligation any matters arising from the negligence or willful misconduct of the lender after foreclosure.

A borrower attempting to finance an acquisition may have obtained only limited representations from the seller under the purchase agreement. A borrower must be careful, therefore, about making broader representations under the loan agreement. In other words, the borrower may have no recourse back to the seller in circumstances where the borrower has breached its broader

representation under the loan agreement. A borrower should try to represent on matters only to the extent seller has made representations under the purchase agreement.

C. Indemnities

Indemnities create a contractual duty of one party to assume another party's defense, payment, and/or performance, or at least to reimburse the other party for costs incurred. Contractual indemnities regarding CERCLA liability have been upheld as enforceable by the courts, although a Texas court recently expressly pretermitted the question of whether an indemnity clause would be enforceable under an analogous Texas statute, as the question was not presented in the case. *See Bonnie Blue v. Reichenstein*, 127 S.W.3d 366 (Tex. App. Dallas 2004, no pet.). The express negligence rule applies to strict liability under environmental statutes, and the indemnity must therefore expressly state that it covers the indemnified party's strict liability. *See Fina v. Arco,* 200 F.3d 266 (5th Cir. 2000). Survival (duration) and expiration of indemnity obligation should be clearly spelled out in the indemnity.

A seller will want to limit buyer's assignment rights. A buyer will want the indemnity to be freely assignable. The negotiated solution, if there is one, will depend on the nature of the problem and the objectives of the parties. "Reasonable" approval rights can sometimes be used to find a middle ground.

Thresholds (minimum amount per occurrence and/or in the aggregate), deductibles (amount to paid by buyer per occurrence and/or in the aggregate), caps (in amounts which may be the same or different for known conditions or unknown conditions, or both), and duration are all matters to be negotiated between the parties.

In addition, the indemnity "triggers" (events) that will give rise to the indemnity obligation need to be negotiated. A third-party claim by the government or a private party will usually trigger an indemnity obligation. In some agreements, cleanup activities prior to (or without) government demand or notification of potential liability by a governmental agency trigger indemnification obligations. Conversely, a more limited indemnification provision would be triggered only by a government demand or lawsuit seeking cleanup action.

Procedures for giving notice of and paying claims should be defined, as well as responsibility for defense and settlement of claims.

V. Financial Mechanisms

It is important to remember that an indemnity is only as good as the financial strength of the person or entity giving the indemnity. So, for example, if the indemnity is being given by a company that does not have significant assets, or which may not long survive closing, it may be of little or no value when the need for indemnification arises.

Further, many sellers balk at giving an environmental indemnity on the basis that they do not want to leave an open, long-term liability in place after the transaction is completed. Instead, many sellers want to provide an opportunity to perform due diligence, or perhaps give an indemnity of limited duration (*e.g.* three or five years). And often, the indemnity will have a trigger threshold, deductible, and a cap.

This section describes financial mechanisms that may be useful in bridging the gap between sellers and buyers on these issues.

A. Escrow Accounts

In some situations, such as where the party with the remediation obligation or the indemnity obligation is not financially strong enough to satisfy the other party or will not survive the transaction, the parties may establish an escrow account government by an escrow agreement. A bank or other financial institution acts as the escrow agent, and releases funds to the performing party based on identified milestones

It is important that the escrow agreement carefully define clear milestones at which funds can be released from the escrow and if so in what amount. For example, when TCEQ approves a Response Action Plan, some uncertainty regarding what remedy will be required (and therefore its cost) will be resolved, and some funds held in escrow to account for that uncertainty could be released.

B. Corporate Parent Guarantee

A corporate parent guarantee is another option for bolstering the creditworthiness behind performance and indemnity obligations of a seller or backing up the indemnities of a seller who will not survive the transaction.

C. Standby Letters of Credit

A standby letter of credit is a credit enhancement tool, which may be used to secure performance under a contract—for example, the performance of remediation by the seller. A standby letter of credit is an independent contract issued by a third-party bank to secure obligations of its account party—in this case, the seller. The advantage of a letter of credit is that courts have held that a drawing by the beneficiary/buyer under a letter of credit is not subject to an automatic stay under the U.S. Bankruptcy Code if the seller files for bankruptcy, because the debtor/seller is not a party to the letter-of-credit contract, and has no interest in the funds paid under the letter of credit. This principle is called the "independence principle."

A buyer can submit a draw under a letter of credit only if the terms of the purchase agreement and letter of credit permit such a draw. Letters of credit provide that the bank will pay the amount of the letter of credit if the buyer/beneficiary submits a sight draft together with a certification of the terms of the letter of credit have been satisfied. If that is not true, the bank can dishonor and refuse payment and/or the seller/debtor/account party can sue the buyer for an injunction to enjoin the draw and obtain damages. When a seller in bankruptcy can demonstrate that the buyer is attempting to draw under a letter of credit improperly and has not satisfied the terms of the letter of credit or purchase agreement, a bankruptcy court may then take jurisdiction over the matter and enjoin the buyer from drawing under the letter of credit.

In order to be covered by the independence principle, the letter of credit and purchase agreement must satisfy certain formal requirements. Problems arise when a seller requests changes to the purchase agreement or letter of credit that significantly affect the buyer's ability to draw. An example is given below.

> **Example**. The letter of credit and purchase agreement say that the buyer may draw under the letter of credit when a "breach" occurs under the Environmental Remediation Agreement. The seller changes the language to "Event of Breach," and defines that term to occur only after occurrence of a breach and delivery of notice by the buyer and failure by the seller to cure the breach with "*x*" days. The seller breaches the Environmental

Remediation Agreement and files for bankruptcy, in that order of vice versa. No notice was delivered to seller before the filing, and the automatic stay in bankruptcy may prohibit buyer from delivering notices after the filing.

Result: The buyer cannot certify to the bank that an "Event of Breach" has occurred, because no notice can be delivered, and cannot draw under the letter of credit without first obtaining relief from the automatic stay from the bankruptcy court, which defeats the purpose of obtaining the letter of credit in the first place.

This example demonstrates one important consideration if performance is being secured by a letter of credit. That is, the beneficiary (here, the buyer) should not be required to give notice to the account party (here, the seller) before the beneficiary has a right to draw on the letter of credit. There are other requirements that must be met for the letter of credit to be useful in a bankruptcy situation. As this example demonstrates, it is important, where the creditworthiness of the seller is an issue, that both the letter of credit and the purchase agreement be drafted so that the buyer's ability to draw on it are not affected by the seller's bankruptcy filing.

D. Environmental Insurance

In the last four or five years, environmental insurance has come into more frequent use for commercial property transactions. Today, there are a number of insurance companies involved in the market, including but not limited to AIG Environmental (Commerce & Industry Insurance Company and others), XL Capital Ltd. (through ECS Underwriting, Inc.), Chubb, and Zurich. New environmental insurers recently entering the market include Quanta, ACE and Arch Insurance. Kemper no longer offers environmental insurance, and Gulf's capacity is limited to $1,000,000.[26]

There are many types of environmental insurance coverage available. The main categories, nature of the coverage and exclusions, and general uses are described generally below.[27] There are also more complicated policies that combine the general types of coverage described below into one insurance package for commonly-occurring applications; for example, "property transfer insurance," which is a type of pollution legal liability insurance where known contamination is left in place with the government's permission, and "Brownfields Redevelopment" insurance, which combines property transfer and cleanup cap coverage. These combination coverages are not discussed in this paper.[28]

1. Pollution Legal Liability

A pollution legal liability ("PLL") policy covers claims arising from pollution conditions on, within or under covered locations specifically listed in the policy or emanating from them. It includes claims for cleanup costs, bodily injury, and property damage. Coverage also includes

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[26] The author gratefully acknowledges commercial and market information provided for this paper by Howard Tollin of Breitstone & Co. Ltd., 534 Willow Avenue, Cedarhurst, New Jersey 11516.

[27] This section summarizes information described in more detail by J. Fersko & A. M. Waeger of Farer Fersko, Westfield, NJ, in *Using Environmental Insurance in Commercial Real Estate Transactions*, Probate & Property (Jan./Feb. 2003) as well as in papers published in the proceedings of ALI-ABA, *Environmental Insurance: Past, Present, and Future* SFA 3 (June 2001), including A. M. Waeger, *Current Insurance Policies for Insuring Against Environmental Risks* (ALI-ABA June 2001) and R. Taylor, Breitstone & Co. Ltd., Cedarhurst, NY, *The Components of a Successful Brownfields Deal* (ALI-ABA June 2001).

[28] For more detailed discussion of combination types of insurance, see the sources cited in footnote 27, above.

legal defense costs, subject to the policy deductibles and policy limits. Coverage is available for preexisting and new unknown conditions on a site and may in some circumstances be available for known conditions, such as where the known contamination is left in place with the government's permission (for example, controlled with a cap such as a parking lot or building).

A PLL policy may include coverage for diminution in property value as well as business interruption, which reimburses the insured for actual loss or lost rental value and for extra expense incurred by the insured during the restoration period (sometimes limited to extra expense that reduces actual loss or lost rent, which should be negotiated out of the policy if possible).

Typical terms are 1-5 years, although longer terms (up to 10 years or, sometimes, 15-20 years or longer) are available if the insurers can obtain reinsurance coverage, although some reinsurers have reportedly started to balk at longer terms.[29]

Important exclusions include, among others, pre-existing, known conditions (other than discussed above), underground storage tanks (unless scheduled), and contractual liability (unless scheduled)—which means that claims under indemnity agreements in purchase and sale contracts, partnership agreements, joint venture agreements, leases, etc., may not be covered unless scheduled.

Cost of coverage varies widely depending on the nature of the risk being insured and the scope of coverage, but in general ranges from $6,000 to $12,000 per year, or higher for very impaired property ($25,000 per year). Deductibles vary depending on the type of pollution liability insurance (*e.g.*, general, commercial, commercial real estate, property owner's policy, property transfer or property owner's), insurer, nature of the risk, and negotiated terms. As a broad generalization, deductibles range from $5,000 to $100,000 per incident; for Brownfields sites, deductibles commonly range from $25,000 to $50,000. Coverage limits are available up to $100 million per occurrence and $200 million in the aggregate.

The application to obtain pollution legal liability insurance will often require at a minimum a Phase I site assessment and, if warranted, an additional (Phase II) site assessment.

2. Cleanup Cap

Cleanup cap insurance protects against an increase in cost for a known cleanup. The insurer therefore requires that there be a government-approved cleanup plan in place (or a plan approved by the insurance company), and a cost estimate from a reputable environmental consultant. Coverage triggers may be limited to discovery of unidentified pollution in the course of implementing the remedy, additional amounts of pollution, or a change in regulatory requirements. Cleanup cap insurance does not usually cover any other contamination, unless combined with a form of pollution legal liability insurance. Coverage ends when the remedy is

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[29] Reinsurance is a contractual arrangement under which the direct insurer transfers all or a portion of the risk it underwrites, as evidenced by a policy or group of policies, to another insurer, the reinsurer. The reinsurer agrees to indemnify the direct insurer against losses on the policy or policies in return for a portion of the premium received for the insurance ceded. The availability of reinsurance spreads the loss exposure, thereby allowing the insurance industry to underwrite more and larger risks. Reinsurers, however, greatly influence the insurance industry as a whole; for example, by requiring the adoption of exclusions or the limiting of coverage grants in exchange for the availability of reinsurance protection. *See generally Insurance Coverage for Environmental Claims* chs. 1, 10 (Matthew-Bender 2003) (available at www.lexis.com).

complete and the property receives a no-further-action letter, or similar documentation from the environmental authority.

Average premiums range from 8-1/2% to 9% of the estimated cleanup cost for larger cleanups, and 9% to 14% for smaller cleanups. For example, a cleanup of $2,000,000 would be a "smaller" cleanup, with a premium of $220,000 (11%). Most carriers do not want to insure individual cleanups of less than $2,000,000, although AIG will insure individual cleanups of $1,000,000. In some circumstances, such as where reputable environmental consulting firms are doing guaranteed-cost cleanups backed by cleanup cap policy, insurers will issue cleanup cap policies with minimums as low as $500,000.

3. Secured Creditor Impaired Property Insurance

Notwithstanding the protection from environmental liability afforded lenders under many state and federal laws, banks often obtain their own insurance policy. Secured credit impaired property coverage generally pays the lender the loan balance as of the date of default by the borrower. The lender is therefore paid out on its loan, and does not have to foreclose on property that has an environmental problem. Another type of secured creditor insurance is "lesser of" insurance. Under "lesser of" insurance, in the event of a default, the lender is paid the lesser of the outstanding loan balance (in which case the company will indemnify the insured) or the cost to clean up property (in which case the company will pay on behalf of the insured). If the outstanding loan balance is the lesser sum, the insured cannot have foreclosed on the property, and if the cleanup costs are the lesser sum, the insured must have foreclosed on the property. In either case, the borrower's default triggering coverage must be something other than the mere presence of pollutants on the property.

Coverage is available for state and federal CERCLA claims, third party claims for personal injury and property damage, and defense coverage for third-party claims. There is no coverage under the standard policy for known contamination, intentional acts or deliberate non-compliance with law, contractual liability, fines and penalties, and certain other excluded matters, subject to negotiation of more favorable exclusions.

Cost of secured creditor coverage varies widely, but averages approximately 1.25% of the loan amount.

4. Contractor's Pollution Liability and Errors & Omissions Insurance

It is important for an environmental contractor or consultant to have contractor's pollution liability coverage in place before performing the work on real property. This type of coverage is intended to cover bodily injury and property damage (including cleanup costs) arising out of the covered operations performed by the insured contractor or consultant on the real property. The term of these policies is usually for one year, so a property owner should make sure that the consulting contract requires maintenance of the policy at appropriate limits (and deductibles) through the work. In addition, these policies are generally written on a claims-made basis (although occurrence-based coverage is becoming available and should be obtained if possible). If the policy is on a claims made basis, the consulting agreement should require the policy to be maintained for an agreed number of years after completion of the work. In some cases, for large or complicated projects, it may be advisable for a property owner to require the consultant to obtain project-specific coverage with dedicated limits for a specific project, rather than sharing the policy limits with the consultant's or contractor's other clients.

In addition to contractor's pollution liability coverage, the consultant should maintain errors and omissions coverage to cover events such as failure of the consultant to detect contamination or design of a remedial system not in accordance with the standards of the profession.

5. General Considerations

a. Payment of Premium

The premium for most environmental insurance policies is paid up front. Thus, although when amortized over the life of the policy the cost of coverage may be relatively low, there is an up-front, capital outlay associated with obtaining most types of environmental insurance coverage.

b. "Claims Made" versus "Occurrence"

Most environmental insurance policies, other than contractor liability policies, are "claims made" policies, meaning that notice of a claim must be made to the insurance within the coverage term (or extended reporting period). Contractor liability policies may be "occurrence" policies, meaning that the occurrence that gives rise to the claim must occur during the coverage period. The definition of what constitutes a "claim" may need to be negotiated to be broad enough to include not only a demand by a third party for money but such things as administrative orders, consent decrees, lawsuits, petitions, and "voluntary" cleanup before such governmental actions.

c. Definitions, Exclusions, Conditions of Coverage, etc.

An environmental insurance policy generally consists of an insuring agreement, a definitions section, an exclusions section, a section setting the conditions of coverage, a limits of coverage section, and an extended reporting section. The insured should carefully review each of these sections to make sure that it is getting the insurance coverage it needs and thinks it is purchasing. Many of the provisions of the policy may require negotiation to customize them to the facts of a particular transaction.

d. Named Insured

Each person to be covered should be a named insured, rather than an additional insured, as the additional insureds' rights are merely derivative of the named insureds and they cannot enforce the policy in their own right.

e. Assignment

Many policies prohibit assignment. An insured should negotiate to allow assignment to an affiliate or by operation of law, as in a merger context.

f. Time Frame

Insurance can be very useful in closing the gap between a buyer and a seller. It is, however, unfortunately often looked to at the last minute to try to salvage a transaction. To be competitive, insurers know that they need to be able to evaluate a site and determine whether they will be able to insure the risk quickly, and they have done a lot to streamline the application process. However, even assuming that the technical data on site conditions is complete, a site with any

degree of technical complexity or requiring even modest customization of policy terms will often require at least two and often four to six weeks to negotiate and bind coverage on an acceptable insurance policy.

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Contested Permits
Enforcement Defense
Environmental Litigation
Property Damage Litigation
Business Transactions
Water Law/Utilities

Experience

Janet McQuaid, a partner, joined Fulbright & Jaworski L.L.P.'s Austin office in 1992. Her practice includes environmental law and regulation, including matters relating to solid and hazardous waste management, wastewater and storm water management, chemical regulation, contaminated property remediation, property development, and water rights. She has represented clients in permitting and enforcement proceedings before the U.S. Environmental Protection Agency, the U.S. Fish and Wildlife Service, the U.S. Army Corps of Engineers, the Texas Commission on Environmental Quality, the Texas Railroad Commission, the Edwards Aquifer Authority, and the City of Austin. She has been involved numerous transactions involving industrial and commercial facilities, including refineries, oil and gas properties, pipelines, mines, quarries, paper mills, vinyl chloride manufacturing facilities, dry cleaners, newspaper publishers, printers, waste facilities, and many others. She also has experience in administrative proceedings, environmental litigation, compliance auditing, and environmental assessment. Prior to attending law school, she worked for eleven years for a major oil company, where her responsibilities included designing, building, and operating oil and gas production and oil refining facilities.

Admissions

Texas; Western District of Texas; U.S. Courts of Appeals for the Fifth and Seventh Circuits

Education

Ms. McQuaid received a B.S in chemical engineering in 1978 from the University of Pittsburgh, an M.B.A. in 1989 from Houston Baptist University and a J.D. in 1992 from The University of Texas, where she Chief Manuscript Editor of the *Texas Law Review* and a member of the Order of the Coif.

Professional Activities and Memberships

Ms. McQuaid is a member of the environmental, real estate, construction, and administrative law sections of the State Bar of Texas and the Travis County Bar Association. She is a member of the Section of Environment, Energy, and Resources (SEER), the construction law forum, and the administrative law section of the American Bar Association. She is a member of the Texas Water Conservation Association. She is listed in the *National Registry of Who's Who* (2001 ed.).

Publications

Ms. McQuaid is a frequent speaker and author on environmental law topics. A partial list of her publications and speeches is provided below.

Author, Chapter 8, Generator Standards, *The RCRA Manual* (ABA SEER 2004)

Co-Author and Co-Editor; *The Texas Envt'l L. Handbook* (Gov't Insts. 4th & 5th eds. 1996 & 2000 &6th ed. forthcoming 2005)

Author, Chapter 22, Used Oil, *Environmental Law*, Texas Practice Series Vol. 45, (West forthcoming 2004).

Author, *Compliance Strategies for EPA's Construction General Permit*, Environmental Permitting and Regulation Journal (Wiley & Sons. Spring 2000)

Speaker, *Environmental Issues in Oil and Gas Exploration and Production*, 55th Annual Oil and Gas Law Conference (February 2004)

Speaker, *Water Quality Update for Oil and Gas Producers*, Texas Independent Producers and Royalty Owners Association Annual Meeting, San Antonio, TX (June 2003); Independent Oil and Gas Association of Pennsylvania (May 2004); Oklahoma Independent Petroleum Association (June 2004)

Co-Chair and Speaker, Various Topics, Texas Water Law Conference (CLE Int'l 1998 through 2003 and forthcoming 2004) and Houston Water Law Conference (CLE Int'l 1999 through 2001).

Speaker, The Wetlands Conference (CLE Int'l February 2003)

Speaker, *Men In Black: Compliance Strategies for the EPA's General Permit for Storm Water Discharges from Construction Activities*, State Bar Constr. L. Section (Feb. 1999)

Speaker, *No More Muddy Waters: The EPA's New General Permit for Storm Water Discharges from Construction Activities*, State Bar Constr. L. Section (Feb. 1998)

Speaker, Fulbright & Jaworski L.L.P. Annual Envt'l L. Update Seminar (1994 to present) (various topics)

CASE STUDY PANEL: CONTAMINATED PROPERTIES - REGULATORY PROGRAMS TO LIMIT EXPOSURE AND ENHANCE THE BOTTOM LINE

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CASE STUDY PANEL: CONTAMINATED PROPERTIES - REGULATORY PROGRAMS TO LIMIT EXPOSURE AND ENHANCE THE BOTTOM LINE

by Patrick J. Larkin
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I. Introduction and Scope of Paper

The purpose of this paper is to discuss legal mechanisms which may enhance the viability of transactions involving environmentally impaired properties. The tools discussed have the potential to provide either legal protection to prospective buyers of environmentally impaired properties or to help mitigate the cost of cleanup, thus allowing responsible parties (RPs) to treat environmental remediation as an acceptable post-closing cost rather than as an open-ended "black hole" of liability.

The premise of this paper is that limiting buyer exposure to a known risk and reducing seller/RP costs will allow "impaired" deals to proceed. The use of these mechanisms, however, presupposes that buyers will fully implement contractual protections, such as reps., warranties and indemnities, will perform meaningful due diligence, and ensure the financial viability of the RP to perform. Although a Seller's demonstrated ability to complete remedial requirements is a necessary prerequisite in such cases, Buyer's counsel must also take advantage of all feasible mechanisms to insulate itself from Seller's residual liability. At the same time, Sellers will be more willing to contractually limit Buyer's liability where the financial burden of disposing of impaired property does not outweigh the transaction value. The following sections outline the various statutory and regulatory mechanisms which may insulate Buyers and other parties from RP liability, and also provides a survey of mechanisms that RPs may use to mitigate or eliminate long-term cleanup costs.

II. Statutory and Regulatory Programs to Insulate Buyers from Environmental Liability

A. Immunity from Liability

1. Lender and Trustee Liability

Most real property and industrial facility transactions are financed in part by non-affiliated lenders. Lenders have several areas of concern when providing financing of environmentally impaired properties: (1) accurate calculation of the property's collateral value; (2) protection of collateral value; (3) impairment of Borrower cash-flow due to environmental obligations; and (4) the lender's direct liability as an "owner" due to mortgage title to or foreclosure on collateral, and liability as an "operator" because of

actions to protect or foreclose on collateral. Concerns (1) – (3) place a lender in the Buyer's shoes, i.e., these concerns can only be addressed by case-specific and careful due diligence to assess the financial condition of the subject property and the Buyer/Borrower. Concern (4) has been thoroughly addressed by federal and state legislation.

The federal "Lender Liability Act"[5] protects lenders including banks, individuals who make loans to nonaffiliated persons, and loan guarantors, from CERCLA liability so as long as they do not "participate in management" of the facility on which they hold a loan. Lenders which foreclose and then make prompt, commercially reasonable efforts to sell, re-lease or otherwise divest also are exempt from liability if they did not "participate in management" of the facility. The mere capacity to influence, or the unexercised right to control, operations of a facility does not trigger liability for the lender. In either the pre- or post-foreclosure context, to be liable, the lender must actually exercise direct decision making control over the facility's environmental operations or otherwise exercise substantial control over all of the facility's operations. Similarly, non-lender fiduciaries, including most trustees, executors and administrators,[6] are protected from CERCLA liability unless they commit negligence or directly contribute to site contamination. Texas law essentially duplicates the federal provisions which limit lender and fiduciary liability.[7]

B. Defenses to Federal Superfund Liability

1. CERCLA Owner and Operator Liability

CERCLA imposes strict, joint and several liability upon four categories of persons:

(1) The current owners or operators of a facility where there is a release or threatened release of hazardous substances;
(2) the owner or operators of such a facility at the time the hazardous substance was disposed of;
(3) any person who "arranged for" the treatment or disposal of a hazardous substance at the facility; and
(4) any person who transported hazardous substances to the facility.[8]

As enacted, CERCLA provides only four affirmative defenses to liability:

- Act of God;
- Act of War;
- Third Party Acts Defense;
- Innocent Land Owner Defense .[9]

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[5] *See* 42 U.S.C. 9601(20), The Asset Conservation, Lender Liability, and Deposit Insurance Protection Act of 1996.
[6] *Id.* at §9607(n).
[7] TEX. HEALTH & SAFETY CODE, Chapter 361, Subchapters T and U.
[8] 42 U.S.C. § 9607(a).
[9] 42 U.S.C. § 9607(b), as amended in 1986.

In practice, these few defenses have been so narrowly interpreted by EPA and the courts as to provide little or no practical protection to buyers of contaminated property. To establish the innocent landowner defense, a buyer has had to demonstrate that after appropriate due diligence, he did not know, nor had reason to know that the property was contaminated. Industrial sites by definition provide reason to know of potential contamination. Failure to detect onsite or contiguous property contamination, and subsequent discovery of onsite contamination merely negated the legal adequacy of the buyer's due diligence. Accordingly, this defense was of little practical use to a prospective purchaser of suspect or actually impaired property.

EPA efforts to encourage redevelopment (e.g., by offering enforcement protection to prospective purchasers and affected offsite landowners) have been largely offset by the cost and delay of negotiating implementing agreements. Since 1989, EPA has offered Prospective Purchaser Agreements ("PPAs") that provide a covenant from the EPA not to sue certain prospective purchasers of contaminated property for contamination that occurred prior to their acquisition of the property. The PPA contained a covenant not sue under CERCLA in favor of the prospective purchaser, and provided protection against third party contribution actions, if certain conditions were met. [10] These PPAs were subject to public comment, were heavily negotiated by the EPA and resulted in significant costs, delays, and other deterrents to prospective purchasers.

In 1995 EPA published the Contaminated Aquifers Policy (the "Aquifers Policy"),[11] which provided that EPA would not pursue cost-recovery against property owners for contamination resulting from offsite migration. The Aquifers Policy set out eligibility requirements generally based on the third-party acts defense. Notably, the Aquifers Policy established no affirmative obligations on the part of the property owner to qualify for this "defense." As evidenced by the several ongoing and affirmative obligations imposed on contiguous owners, discussed below, the 2002 Brownfield Amendments may have inadvertently "increased the burden" of "decreased liability" for offsite owners.

2. CERCLA Liability Relief Under the 2002 Brownfield Amendments

On January 11, 2002, President Bush signed the Small Business Liability Relief and Brownfields Revitalization Act (2002 Brownfields Amendments). The 2002 Brownfield Amendments attempt to address the liability of three categories of property owners: innocent purchasers, contiguous property owners and bona fide prospective purchasers.

a) Innocent Purchaser Defense

The 1986 amendments to CERCLA attempted to provide protection for "innocent landowners" through the addition of CERCLA Section 101(35). This liability exclusion applies to: defendants which acquire real property after the disposal of hazardous substances and which did not know, and had no reason to know about the hazardous

[10] *See* "Guidance on Settlements with Prospective Purchasers of Contaminated Property." 60 Fed. Reg. 34,732 July 3, 1995.
[11] Policy Towards Owners of Property Containing Contaminated Aquifers, 60 Fed. Reg. 34, July 3, 1995.

substances on, in, or at the facility when it was acquired; defendant government entities, which acquire a facility through tax foreclosure or other seizure; and defendants which acquire a facility by inheritance or bequest. As noted above, these defenses were not frequently used as parties often had problems establishing the defense.[12]

The 2002 Brownfields Amendments attempted to expand and clarify the innocent landowner exemption by providing that an innocent landowner is a person who has:

> (i) provided "full cooperation assistance and facility access" to the person authorized to conduct response actions at the facility;
>
> (ii) complied with land use restrictions and not impede the effectiveness or integrity of institutional controls;
>
> (iii) made all appropriate inquiries to establish that he had no reason to know of the hazardous substances; and,
>
> (iv) taken reasonable steps to stop any continuing releases, prevent threatened future releases and prevent or limit human, environmental or natural resources exposure.[13]

b) Contiguous Property Owner Defense

The 2002 Brownfields Amendments also attempt to protect contiguous property owners where passive migration would impose liability. The federal circuit courts are split on the issue, with some courts holding that liability can attach due to passive migration, while others have declined to find liability due to passive migration.[14] The 2002 Brownfields Amendments provide that a release of a hazardous substance from an unrelated offsite, "contiguous . . . or otherwise similarly situated"[15] property, will not trigger owner or operator liability under CERCLA if certain criteria are met. These criteria will be evaluated by EPA on a case-specific basis, and include:

> (i) the person did not cause, contribute or consent to the release;
>
> (ii) the person or entity is not affiliated with any person who is liable for the release or is not the result of a reorganization of a potentially liable entity;
>
> (iii) the person takes reasonable steps to stop any continuing release, prevent future releases and prevent or limit human, environmental, or natural resources harm;

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[12] *See e.g., Sherwin Williams Co. v. Artra Group, Inc.*, 125 F. Supp.2d 739 (D. Md. 2001), (to meet the innocent purchaser defense a party had to be "truly innocent of any pollution.").

[13] See 42 U.S.C. § 9601 (35).

[14] Compare *Carson Harbor Village, Ltd. v. UNOCAL Corp.*, 227 F.3d 1196 (9th Cir. 2000) (passive migration is within the CERCLA definition of "disposal.") with United States v. 150 Acres of Land, 204 F.3d 698 (6th Cir. 2000) ("disposal" limited to spills occurring by human intervention).

[15] 42 U.S.C. § 9607(q).

(iv) the person provides full cooperation with persons authorized to conduct response actions;

(v) the person is in compliance with any land use restrictions and does not impede any institutional controls;

(vi) the person is in compliance with any request for information or administrative subpoena issued by the USEPA;

(vii) the person provides all legally required notices with respect to the discovery of hazardous substances; and,

(viii) at the time the person acquired the property he/she conducted all appropriate inquiry and did not have reason to know the property was or could be contaminated.[16]

In order to establish this defense the landowner must have conducted an appropriate inquiry at the time it acquired the property and must not have reason to know of the contamination. EPA guidance states that "contiguous property" may include more than immediately adjacent facilities. EPA will use the same defense eligibility criteria where the property has been impacted by a release from a distant contaminated property. [17] Note that where due diligence provides the purchaser with reason to believe that there is contamination, the purchaser could not qualify for the contiguous landowner defense, but may otherwise establish the bona fide prospective purchaser defense.

c) Bona Fide Prospective Purchaser Defense

The Innocent Owner and Contiguous Property Owner exemptions require that a buyer have no knowledge of the contamination at the time of acquisition. In most transactions involving industrial facilities, a buyer can be deemed to be aware of some level of contamination. The bona fide prospective purchaser ("BFPP") provisions provide a defense to owner or operator liability where the purchaser is aware of the contamination but cooperates with the performance of EPA or responsible response actions.[18]

The Amendments define a "bona fide prospective purchaser" as a person, or tenant of that person, who acquires ownership of a facility after January 11, 2002, and who, by a preponderance of the evidence establishes that:

(i) disposal at the facility occurred prior to acquisition;

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[16] *Id.*

[17] See Jan. 13, 2004 *EPA Memo on Interim Enforcement Discretion Guidance Regarding Contiguous Property Owners,* from Susan Bromm to EPA Office Directors and Regional Counsel available at www.epa.gov/brownfields/liab.htm. ("*Contiguous Property Owners Guidance*".)

[18] 42 U.S.C. § 9607(r).

(ii) before acquiring the property the person made all appropriate inquiry into previous ownership and use of the facility, all in accordance with generally accepted practices and in accordance with additional the standards established in the Amendments, discussed below;

(iii) the person provides all legally required notices with respect to hazardous substances found at the facility;

(iv) the person exercises "appropriate care" with respect to the hazardous substances found at the facility by taking "reasonable steps" to (a) stop continuing releases (b) prevent future releases (c) prevent or limit human, environmental or natural resource exposure to previous releases;

(v) the person provides full cooperation and access to the facility to those authorized to conduct response;

(vi) the person is in compliance with any land use restrictions and does not impede the effectiveness or integrity of any institutional control;

(vii) the person complies with any information request or administrative subpoena under CERCLA; and;

(viii) the person is not potentially liable for response costs at the facility or "affiliated" with any such person through (a) direct or indirect familial relationship or (b) any contractual, corporate or financial relationship (excluding relationships created by instruments conveying or financing title or by contracts for sale of goods or services).[19]

d) Defense Prerequisites - "All Appropriate Inquiry"

The 2002 Brownfield Amendments impose fact-specific criteria in order to qualify for each of the three CERCLA liability exemptions. EPA guidance on these criteria indicates that EPA will require thorough documentation of compliance.[20] Because the 2002 Brownfield Amendments will replace the EPA Prospective Purchaser Agreements with a "retrospective" analysis of compliance, Buyer's must carefully ensure that each criteria is met and documented during due diligence. Perhaps more importantly, Buyer must prepare to maintain and supplement this information during the life of the Buyers ownership of the property.

"All appropriate inquiry" into site conditions and operations must be made in order to establish each of the three potential exemptions. A key point to remember is that the

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[19] 40 U.S.C. 9601(40).

[20] See Mar. 6 2003 *EPA Memorandum on Interim Guidance Regarding Criteria Landowners Must Meet in Order to Qualify for Bona Fide Prospective Purchaser, Contiguous Property Owner or Innocent Landowner Limitations on CERCLA Liability ("Common Elements")* from Susan Bromm to various Directors and Regional Counsels available at www.epa.gov/brownfields/liab.htm. [hereinafter *Common Elements Guidance*].

Buyer's inquiry must be completed prior to taking title to the property. Thus, where the parties agree to conduct investigations post-closing, liability relief would not be available.

The 2002 Brownfield Amendments direct EPA to promulgate regulations defining the appropriate inquiry to be made by prospective purchasers. The new EPA regulations must address several factors, including:

> (i) results of the inquiry of an environmental professional;
>
> (ii) interview with past and present owners, operators, and occupants regarding the potential for contamination;
>
> (iii) review of historical sources;
>
> (iv) searches for recorded environmental clean up liens;
>
> (v) reviews of federal, state and local records;
>
> (vi) visual inspections for the facility and adjoining properties;
>
> (vii) specialized knowledge or experience on the part of the defendant;
>
> (viii) relationship of the purchase price to the value of the property, if the property was not contaminated;
>
> (ix) commonly known or reasonably ascertainable information about the property; and,
>
> (x) the degree of obviousness of the presence or likely presence of contamination and the ability to detect contamination by appropriate investigation.

Draft proposed "all appropriate inquiry regulations" were developed through an EPA-directed negotiated rulemaking. EPA is expected to issue the "reg-neg" committee's proposed regulations for formal notice and comment.[21] The regulations will be applicable to transactions which close after the effective date of the regulations. Several important issues must be addressed in the rulemaking and future use of the standard, including the qualifications of environmental professionals, the scope of on-site inspections and interviews of neighboring property owners. Even outside the context of establishing defenses to CERCLA liability, these regulations will redefine industry standards for conducting site assessments.

Prior to final promulgation of the "appropriate inquiry" regulations, the 2002 Brownfields Amendments establish interim standards of inquiry based on when the property was

[21] The consensus draft is available at www.epa.gov/brownfield/regneg.htm.

purchased. For property purchased on or after May 31, 1997,[22] the American Society of Testing and Materials (ASTM) Standard EIS27-97 "Standard Practice for Environmental Site Assessment; Phase I Environmental Site Assessment Process" is listed in the statute as satisfying the "all appropriate inquiry" standard.

Although numerous questions are presented by the promulgation of this industry standard, a key issue for Buyers is whether the statutory defense is lost by relying on a Phase I that includes site-specific modifications of the ASTM standard. Moreover, the promulgation of final regulatory standards of inquiry will not moot such issues. Rather, prospective buyers may need to both ensure the adequacy of their own due diligence, but also evaluate whether their Seller successfully established the defense for properties purchased during the interim time period.

e) Full Cooperation

This criterion is applicable to all three defenses and requires a property owner to cooperate with and assist persons authorized to conduct response actions or natural resources restoration. Full cooperation includes providing access necessary for the installation, operation and maintenance of any response action. Obviously, such access can disrupt on-site operations. If known at the time the transaction, the responsible party should be included as a party to a standard access agreement requiring best efforts to not interfere with site operations, prior notice of entry onto property and the right to participate in site specific remedial design and negotiations with agency personnel regarding issues affecting the operation of the property.

f) Compliance with Land Use Restrictions and Institutional Controls

The requirement to comply with land use restrictions and institutional controls is applicable to all three defenses. A buyer must carefully identify and evaluate these restrictions and make provisions for their future implementation. If these restrictions and controls are not identified in advance, Buyer loses the opportunity to plan for, design and implement redevelopment around the controls. Buyers must ensure that its planned redevelopment does not interfere with the effectiveness of the control. These are ongoing obligation that must be implemented during the ownership of the property. Ideally, Buyer would require the Seller to implement or finance affirmative obligations imposed on the property, such as maintenance of a cap. If appropriate, Buyer should reassess property value due to restricted site use or loss of other property rights. EPA guidance indicates that buyers will be required to affirmatively seek out applicable land use restrictions and controls imposed as part of a remedial plan, and that review of deed records will not be a safe harbor where the responsible party has failed to properly deed record[23]

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[22] Purchasers before May 31, 1997 must have evaluated commonly known information about the property, the price of clean properties in relation to the purchase price, the ability of the purchaser to detect the contamination, etc. 42 U.S.C. § 9601(35)(B)(iv)(I).

[23] *Common Elements Guidance* at page 7.

g) Did Not Cause, Contribute or Consent to a Release Prior to Acquisition

To establish the contiguous landowner defense, a person must not "cause, contribute or consent to a release." Similarly, the BFPP defense requires that the prospective BFPP demonstrate that "disposal occurred prior to acquisition." These criteria become particularly problematic where one or more mixed plumes exist on a property. EPA guidance indicates that the existence of onsite releases on a property may disqualify an owner from coverage under the contiguous property owner exemption.[24] Although EPA may forego enforcement with respect to releases which migrated from offsite,[25] EPA's position could be used by offsite private litigants to challenge the exemption claimed by a contiguous property owner.

The BFPP statutory language exempts a BFPP from liability for disposal that occurred prior to acquisition of the property. However,[26] pre-existing case decisions split on whether passive migration constitutes "disposal."[27] Thus, in passive migration jurisdictions, the obligation to "stop any future releases" could require a bona fide prospective purchaser to remove contaminated soil or extract groundwater. EPA's position in guidance is that Congress did not intend for BFPPs to undertake such a burden.[28] However, until a definitive resolution is reached on passive migration issues, BFPPs and Contiguous property owners face significant uncertainty.

h) Compliance with All Information Requests

Both contiguous property owners and bona fide prospective purchasers must comply with all requests for information issued by the President under CERCLA. The statutory language does not limit the response requirement to information requests related to the specific property at issue. EPA has stated that the statute requires compliance with any request for information under CERCLA[29] The EPA guidance also asserts that this language imposes a continuing obligation on the BFPP or offsite owner.[30] The question remains whether a failure to affirmatively supplement a past response constitutes non-compliance with a request for information.

i) All Legally Required Notices

The "all legally required notices" criterion applies to both the Contiguous Landowner and to the Bona Fide Prospective Purchaser and requires ongoing compliance with reporting

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[24] *Contiguous Property Owners Guidance* at 5.
[25] Id.
[26] 42 U.S.C. § 9601 citing to 42 U.S.C. § 6903(3).
[27] Compare *Carson Harbor Village, Ltd. v. UNOCAL Corp.*, 227 F.3d 1196 (9th Cir. 2000) (passive migration is within the CERCLA definition of "disposal.") *with United States v. 150 Acres of Land*, 204 F.3d 698 (6th Cir. 2000) ("disposal" limited to spills occurring by human intervention).
[28] *Common Elements Guidance* at 10.
[29] Id. at 13.
[30] *Common Elements Guidance*.

and notice provisions under federal, state and local laws. Accordingly, an otherwise sound liability defense could be lost by failure to provide notices wholly unrelated to the response action or contamination. EPA has suggested that it may require certification from property owners regarding compliance with these notification provisions.[31] EPA also views this as a continuing obligation and the buyer and new facility operators must carefully document overall regulatory compliance in order to qualify for and maintain the defense.

j) No Affiliation with a Potential Liable Party

The "no affiliation with a potential liable party" provisions appear in both the contiguous property and BFPP defense criteria. The term "affiliated with" has not been defined in the statute or other EPA regulations might encompass a variety of relationships. EPA guidance states that it "intends to be guided by Congress' intent of preventing transactions structured to avoid liability."[32]

k) Reasonable Steps to Stop/Prevent Releases

This criterion requires the parties to take "reasonable steps" to stop releases, prevent future releases and prevent human, environmental or natural resource exposure to existing hazardous substances. For example, a BFPP may be required to identify and address onsite conditions that pose a risk of a future release, such as an abandoned waste UST, or leaking containers. As discussed above, in jurisdictions which treat passive migration as a release, a buyer could be forced to take affirmative remedial action to stop an ongoing "passive" release in order to preserve its BFPP status. In all jurisdictions, a buyer must evaluate known contamination and the adequacy of existing controls in order to understand whether these controls will limit property development or require the buyer to actively participate in existing remedial measures and controls.

l) 2002 Brownfields Act – Mixed Burdens and Benefits

Under the 2002 Brownfields Act, Buyers must conduct implement due diligence under the specific criteria established under the Brownfields Act and implementing regulations.[33] The 2002 Brownfields Act also imposes significant post-closing obligations on the BFPP and Contiguous property owner in order to preserve the respective liability exemptions. The continuing obligations require Buyers to:

- Cooperate and grant access for response actions;
- Comply with engineered and contractual Institutional Controls
- Cooperate and grant access for operation and maintenance of institutional controls.

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[31] *Common Elements Guidance*, at p. 13.
[32] See *Common Elements Guidance* at p. 5.
[33] 42 U.S.C. 9601(35)(B)(ii) and (iv).

- Take affirmative steps to prevent exposures to past/future releases. [34]

Thus, a Buyer may qualify for these defenses up-front, but must also carefully plan for and continue to take steps *after* closing to maintain coverage under each defense. [35]

The 2002 Brownfield Amendments provide a measure of relief to innocent parties connected to CERCLA sites. However, these benefits may be outweighed by the cost of post-acquisition duties imposed on BFPPs, and the uncertain scope of response obligations imposed on contiguous property owners. Several state programs are available or are being developed that more fully insulate innocent parties and reduce actual remedial costs. In most cases, the benefits of these state programs will be recognized or at least tolerated by EPA. Buyers and sellers should certainly design due diligence and post-acquisition development so as to qualify for the benefits of the CERCLA reforms. However these state programs will provide an additional measure of certainty to allow parties to proceed with transactions involving contaminated properties.

C. State Programs Limiting Environmental Liability

1. State Voluntary Cleanup Program (VCP)

In 1995, the 74th Texas legislature created the Voluntary Cleanup Program ("VCP").[36] The VCP offers incentives to encourage both responsible persons and "innocent" redevelopers to voluntarily conduct investigation and remediation activities on contaminated properties. For responsible parties, the VCP offers immunity from cleanup-related enforcement by the Texas Commission on Environmental Quality ("TCEQ")[37]so long as the person remains in the VCP, and is making progress toward closure. By insulating lenders and prospective purchasers from cleanup liability, the VCP enhances the site's marketability and provides the responsible party, as well as non-responsible redevelopers, with financial incentives to perform cleanup.[38]

To enter the program, a person submits an application, pays an initial $1000 deposit toward TCEQ oversight costs and enters into a VCP Agreement with the TCEQ. In order to be eligible for the VCP, a site must not be under current enforcement or subject to a RCRA permit or post-closure obligation.[39] Sites are accepted into the VCP without extensive documentation of site conditions. After acceptance into the VCP, the TCEQ will provide guidance on the scope of necessary site investigation. Upon completion of

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[34] 42 U.S.C. 9601(35) (B).

[35] And note that the BFPP's post-closing obligations may include a duty to compensate the US Treasury for its share of appreciation in your property value. The Brownfields Act creates a windfall lien in favor of the EPA for property owned by the BFPP. 42 U.S.C. 9607(r). The lien becomes effective when EPA incurs response costs or when it notifies the owner of its potential liability, whichever is later. The lien is subject to previously perfected security interests. *Id.* at 9607(l)(2) and (3).

[36] TEX. HEALTH & SAFETY CODE 361.601 *et seq.* Regulations promulgated pursuant to this statute are contained in 30 TEX. ADMIN. CODE Chapter 333, Subchapter A.

[37] The TCEQ and the US EPA have executed a Memorandum of Understanding (MOU) generally providing that EPA will not pursue enforcement related to a site while in good standing in the VCP.

[38] *Id.* at 361.602.

[39] *Id.* at 361.603.

the remedial response and issuance of a Certificate of Completion (COC), VCP applicants who did not cause the original contamination will receive a release of liability from the State for areas covered by the VCP agreement and COC.

It is important to note that in order to be eligible for the release of liability, a purchaser should either obtain the Certificate of Completion (COC) before closing or should be added to the VCP application prior to taking title to the property. A person who takes title prior to entry into the VCP would incur liability as the current owner of contaminated property. Upon completion of the response action, the TCEQ will essentially back-date its release of liability to be effective from the date of the VCP application.

Because the VCP response results in a complete release of liability for the area covered by the COC, the TCEQ requires that site sampling and response address all foreseeable constituents. However, the scope of the VCP cleanup and resulting COC can be tailored to minimize investigative costs or to meet limited development needs. Applicants may submit only a part of a property for VCP coverage, thus excluding investigation and response costs for other parts of the property and resulting in a COC and release covering only the completed sub-parcel. The "partial response area" approach can also be used to close sub-parcels at different times and under different remedial standards.

2. State Innocent Owner Program (IOP)

The Innocent Owner/Operator Program ("IOP") was created in 1997, two years after the VCP was enacted.[40] The IOP provides offsite property owners with agency confirmation of statutory immunity from cleanup cost liability. Although the statutory Innocent Owner defense is self-executing, obtaining the TCEQ's formal concurrence can reduce buyer perception of risks and facilitate transactions. For responsible parties, an agreement to provide an offsite owner with an IOP certificate is an extremely valuable tool, either as consideration for access and remedial cooperation or as a cost-effective means to limit cost recovery damage claims.

The IOP provides a release of liability to the owner of contaminated property where it can be shown that the contamination did not originate on the innocent owner's site. The IOP certificate covers a particular contaminant or set of contaminants that are specified by the applicant, i.e., the IOP certificate does not provide an area-wide general "sign-off' as with the VCP certificate. If the site is impacted by contaminants from an offsite source but the same chemical has been used on both properties, an applicant would need to convince the TCEQ that no release occurred on the applicant site. If an onsite release has occurred, an IOP certificate is still possible, but is significantly more difficult to obtain. The IOP applicant would be required to delineate both areas of contamination and demonstrate that the two releases are physically separate and will remain so.

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[40] TEX. HEALTH & SAFETY CODE §361.751 *et seq.*; *See also* 30 TEX. ADMIN. CODE Chapter 333, Subchapter B.

The IOP certificate is not transferable, thus requiring future owners to submit updated information to the TCEQ to gain a certificate. As discussed above, the CERCLA Contiguous Property Owner defense is not available to persons who purchase property with knowledge of contamination. In contrast, a purchaser with knowledge of contamination may receive a TCEQ IOP certificate. However, if a property has been subdivided from the source property, the site is generally not eligible for an IOP certificate. An exception is that if such property is purchased after September 1, 1997 (effective date of IOP law), an IOP certificate may be granted if the applicant demonstrates that he did not know or have reason to know of the contamination at the time the property was acquired.

D. Brownfields Funding Programs

The following is a summary of several types of government funding, tax incentives and technical assistance grants that can help to defray investigation and remedial costs associated with a contaminated site. Although most grant programs are nominally directed to fund investigations and site assessment by government entities, advance planning and coordination with these entities can result in significant cost savings for private developers.

1. Federal Brownfields Grants

The Brownfield Revitalization and Environmental Restoration Act authorizes funding of $200 million per year through fiscal year 2006[41] for grants to eligible entities. This money is to be used for (1) Brownfield Grants; (2) Revolving Loan Fund Grants; (3) Brownfields Assessment Grants; and (4) Training Grants.

- EPA Brownfield Grants are direct grants to fund cleanup of hazardous-substance contaminated sites.[42] These grants award up to $200,000 per site. Cleanup grants require a 20 percent match (although this may be waived upon a showing of hardship). Brownfield Grants are awarded based on a EPA Headquarters review of all proposals submitted to the EPA.[43] Submissions are evaluated according to the extent to which the grant will protect human health and the environment; encourage redevelopment, create jobs, preserve open space and parks, represent a fair distribution between urban and rural areas, and involve the local community. Grant recipients may use a portion of cleanup grants to pay insurance premiums that provide coverage (such as for cleanup cost overruns) for these sites.

- Revolving Loan Fund Grants provide funding for a grant recipient to capitalize a revolving loan fund and to provide subgrants to others to carry out cleanup

[41] 42 U.S.C. 9604(k)(12).
[42] The Brownfields Act sets aside a portion of this funding for sites with CERCLA-exempt petroleum contamination.
[43] Proposals are usually due at the end of the calendar year for all three grants. The 2004 grant application due date was December 4, 2003. The due date for 2005 grants has not been announced. Prospective applicants should consult the EPA Regional office to prepare proposals for 2005 grants.

activities at Brownfield sites. Thus, funding under this grant is available to not only the statutory eligible entities, but also to private entities by providing subgrants. Funding up to $1 million is available per applicant.

- Brownfields Assessment grants must be used to inventory, characterize, assess and conduct planning and community involvement related to Brownfield sites. These grants may be awarded up to $200,000 per site, but EPA has discretion to increase this amount to $350,000 under certain circumstances.

- CERCLA authorizes EPA to provide grants for training, research, and technical assistance to individuals and organizations, in order to facilitate assessment, remediation, or preparation of Brownfield sites. Up to $200,000 per job training grant is available through this program.

2. State Assessment Funds – TCEQ Brownfields Site Assessments

EPA provides annual assessment grants that are then administered by state agencies such as the TCEQ. The TCEQ received approximately $350,000 in federal funds in fiscal year 2003 for conducting Brownfields Site Assessments (BSAs). BSA grants are available to fund Phase I and Phase II Environmental Site Assessments. These funds are primarily available to governmental entities and notably, non-profit organizations. The TCEQ VCP staff administers the BSA funds, oversees contractor assessment activity and reporting and provides post-assessment guidance on cleanup levels, remedial options, and other regulatory requirements. These grants typically range from $20 - 30,000 and include standard Phase I and II record reviews, site investigation, interviews, and sampling performed under TCEQ contract.

3. State and Federal Tax Incentives

A number of tax incentives are available under State and Federal law that can help reduce the financial impact of environmental investigation and remedial response.

(a) Federal Tax Incentives

The Taxpayer Relief Act, which included the Brownfields Tax Incentives was signed into law in August 1997,[44] and later amended on December 21, 2000.[45] The Act allows eligible taxpayers to deduct certain environmental cleanup costs at eligible properties, as operating expenses for the year they were incurred, rather than a capital costs to be amortized over time. These incentives apply to properties held by the taxpayer for use in a trade or business or for the production of income; or the property must be included in the taxpayer's inventory. The taxpayer must document a release, threat of release, or disposal of a hazardous substance at the property.

[44] Pub.L. No. 105-34.
[45] Pub.L. No. 106-54.

(b) State Property Tax Incentives for Brownfields Sites

The Texas Tax Code allows local taxing authorities to grant property tax abatement for the redevelopment of contaminated properties that meet the following criteria:

- the real property must be located in a reinvestment zone created under the Texas Tax Code;
- not be in an improvement project financed by tax increment bonds;
- received a Voluntary Cleanup Certificate of Completion from the TCEQ; and
- the site property value is adversely affected by the release of a hazardous substance or contaminants according to appraisals by the appraisal office.

The eligible Brownfield property owner must enter into a tax abatement agreement with the taxing authority. The taxing authority can grant exemption from taxation according to the following:

- no more than 100 percent of the value of the property in the first year covered by the agreement;
- no more than 75 percent of the value of the property in the second year covered by the agreement;
- no more than 50 percent of the value of the property in the third year covered by the agreement; and
- no more than 25 percent of the value of the property in the fourth year covered by the agreement.[46]

E. Dry Cleaner Remediation Program

The Texas Legislature, in H.B. 1366, effective September 1, 2003, established a dry cleaning site remediation program to be implemented by TCEQ.[47] The bill requires the TCEQ to implement cleanup of dry cleaner sites, and to adopt rules setting priorities for ranking these cleanup sites. The site cleanups will be funded from the newly established Dry Cleaning Facility Release Fund (the "Fund"). The Fund is generated from annual dry cleaner registration fees and a per-gallon tax on the sale of dry cleaning solvents. The Fund is an account in the State's General Revenue Fund, which according to H.B. 1366, may not be used for remediation of non-dry cleaner remediation sites. The Bill also directs TCEQ to establish performance standards for dry cleaning facilities, including release prevention, secondary containment, waste storage and air emission standards.

Regulations to be developed under H.B. 1366 will require dry cleaning facilities operating on or before January 1, 2004 to implement the referenced new performance standards by January 1, 2006. In addition, owners of an operating dry cleaning facility must register with the TCEQ on an annual basis and pay an annual registration fee.

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[46] *See* Texas Tax Code, Title 3.

[47] Act of May 22, 2003, 78th Leg., R.S., ch. 540, 2003 Tex. Sess. Law. Serv. 1829 (Vernon) (codified at TEX HEALTH & SAFETY CODE ANN. § 374.001 – 374.253 and TEX. WATER CODE § 7.0525).

To be eligible for TCEQ – financed corrective action, a dry cleaning site must be submitted to TCEQ for ranking either by the owner of the dry cleaning facility or by a person who has been an owner of real estate on which the dry cleaning facility is located *for not less than five (5) years* as of the date the site ranking application is submitted. The 5-year ownership criteria is apparently intended to discourage transfer of contaminated dry cleaner property to persons that would gain a windfall appreciation of property value from the state-funded cleanup. Given the difficulty of marketing any dry cleaner related site, many persons, including this author, have questioned whether the benefit from the holding period proviso is outweighed by the resulting chill on property transfer and redevelopment.

A person who establishes cleanup fund eligibility also gains a qualified immunity from state law administrative or judicial claims to compel corrective action or to seek recovery of the costs of corrective action. This exemption, which protects eligible owners and property owners, applies only to a cause of action that "accrues" on or after January 1, 2004 and before September 1, 2021. An otherwise eligible person can lose the statutory immunity if, *inter alia*, they commit a violation of the new performance standards which results in a release of dry cleaning solvents.

F. Municipal Setting Designations

H.B. 3152, the Municipal Setting Designations ("MSD") Bill, was signed by Governor Perry on June 20, 2003, and is effective from September 1, 2003.[48] The stated purpose of this law is to reduce or eliminate groundwater investigations and response actions for certain properties with contaminated groundwater.[49]

The MSD Bill authorizes the TCEQ to create Municipal Setting Designations for geographic areas containing or affected by contaminated groundwater. As a result of local controls implemented as part of the MSD designation, TCEQ is allowed to assume that ground water within the MSD will not be available for use as potable water. Accordingly, response actions within the MSD would no longer delineate potable and non-potable levels of contamination, or perform cleanup to restore ground water to potable use standards.

To be eligible for a municipal setting designation the applicant must demonstrate the following criteria are met:

- the proposed MSD is located within a city of at least 20,000 residents,
- an alternative public drinking water supply is available, and
- the MSD is covered by a municipal ordinance that restricts use of groundwater from beneath the MSD property (or a municipal resolution enforced by individual restrictive covenants).

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[48] TEX. HEALTH & SAFETY CODE, Chapter 361, Subchapter W.
[49] TEX. HEALTH & SAFETY CODE §361.802.

The TCEQ is the entity which is legally authorized to create the MSD. However, In practice, successful creation of an MSD will turn on the MSD proponent's ability to gain the support of local governments and local water utilities for the MSD. Because each such entity must provide a resolution in support of the MSD, the local governments and water utilities within and adjacent to the proposed MSD will exercise effective veto power over the MSD application. For example, the MSD proponent may have to convince local governments and water utilities that contamination left in place within the MSD will not interfere with the utility's water resources or more practically, that the MSD will not impair the operation of city and utility-owned infrastructure, such as subsurface utility lines and trenches.

The MSD bill provides these entities with significant leverage over the MSD applicant, creating uncertainty as to the real cost and terms of an MSD. Equally important to prospective MSD applicants, the TCEQ is now drafting regulations to administer the MSD process. Pre-proposal stakeholder discussions with TCEQ indicate that these regulations are likely to create additional hurdles to formation of MSDs. Notwithstanding these challenges, the ability to exclude ground water investigation, remediation or long term monitoring costs from a cleanup creates a powerful financial incentive for responsible parties and redevelopers to pursue creation of an MSD.

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PAPER NOT SUBMITTED

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2003 Tort Reform: Changes and Impact on Environmental Litigation©

By Stan Perry and Marty Thompson

The authors wish to thank Aaron Pickell, a law student at the University of Texas School of Law, without whose research and assistance this paper would not have been possible.

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On June 11, 2003, Governor Rick Perry signed The Texas Omnibus Civil Justice Reform Act of 2003 (CJRA), a tort reform bill that changed many areas of general civil law, including provisions specific to environmental litigation. CJRA is comprised of 23 different articles codified in a variety of statutes. In the approximate year since those statutes were enacted, the changes that will occur have yet to be seen. The principal reason for this delay is that, because most legal actions were filed before the enactment of CJRA and the statutes are presumed to be prospective unless expressly made retroactive, the statutes do not yet apply. Nevertheless, the impact of these changes is imminent.

This paper discusses the changes brought by CJRA and how these changes will impact environmental litigation. The changes brought by CJRA that are discussed in this paper can be divided into two groups. The first group consists of statutory amendments that are directed at environmental claims, such as the provisions relating to joint and several liability in toxic torts and trespass by air contaminant. The second group consists of changes that will impact environmental litigation but are not unique to environmental practice, such as the provisions relating to multidistrict litigation, venue, and settlement procedure.

A. Articles that Directly Impact Environmental Litigation

Among the CJRA changes to the Texas Civil Practices and Remedies Code that were focused upon environmental litigation are proportionate responsibility (Chapter 33), migration of air contaminant (Chapter 75), and limits of liability due to certain mergers or consolidations (Chapter 149).

1. Proportionate Responsibility and Potentially Responsible Third Parties - TEX. CIV. PRAC. & REM. CODE Chapter 33 and TEX. R. CIV. P. 194.2

The CJRA makes the proportionate responsibility scheme set forth in Chapter 33 of the Texas Civil Practice and Remedies Code applicable to causes of action based in tort,[1] sets forth a new standard for determining motions for leave to designate responsible third parties,[2] expressly permits the use of unknown "Jane Doe" or "John Doe" designations for responsible third parties whose identities are not known,[3] and, in non-health care liability claims, eliminates the dollar-for-dollar credit in settlements in favor of reduction of damages by the settling person's percentage of liability.[4] Perhaps the most significant change in Chapter 33 is the elimination of the dollar-for-dollar credit for settling parties in non-health care liability claims.[5]

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[1] TEX. CIV. PRAC. & REM. CODE § 33.002(a).
[2] TEX. CIV. PRAC. & REM. CODE § 33.004(g), (h).
[3] TEX. CIV. PRAC. & REM. CODE § 33.004(k); *see also* amendment to TEX. R. CIV. P. 194.2, adding Texas Supreme Court section (l) under Misc. Docket No. 40-9041.
[4] Scott Rothenberg, *2003 Legislative Update: House Bill 4: A User-Friendly Guide*, 66 TEX. B. J. 702.
[5] *Id.*

Under Texas's proportionate responsibility statute, a party's award is reduced by the amount of responsibility apportioned to that party.[6] Additionally, if a party is liable over 50%, then the party is barred from recovering any amount.[7] In the past, a jury could only apportion responsibility among parties named in the case.[8]

CJRA allows the jury to assess liability on all potentially responsible parties, even if they are not parties in the case.[9] Responsible third parties include anyone who allegedly contributed in any way to harm due to conduct that violates an applicable legal standard.[10] Thus, fault may be allocated to a bankrupt, a criminal, a person beyond the court's jurisdiction, or an employer with worker's compensation immunity.

The statute requires defendants to designate responsible third parties at least 60 days prior to trial; thus, defendants are no longer required to join the party.[11] After an adequate time for discovery, a plaintiff may move to strike a designation on no evidence grounds.[12] If plaintiff objects to a responsible third party, the defendant has the burden of producing sufficient evidence to raise a genuine issue of fact.[13] This statute does not alter an employer's immunity in workers' compensation cases and only applies to plaintiffs suing defendants for tort causes of action.[14]

As a practical point, a named party may seek discovery from a third party in order to prove the responsibility of that third party. For example, in a workers' compensation case, an employer cannot be named as a party in a lawsuit and would typically be immune from discovery. Under the new scheme, however, a named party can seek discovery from the employer in an effort to demonstrate that, while the employer is immune from the lawsuit, they are, nonetheless, a responsible third party.

Another practical point is that settlement may not end a defendant's involvement in the lawsuit. With non-settling defendants trying to prove the potential liability of responsible parties, including settled defendants, discovery will likely continue even after settlement with plaintiffs.

In addition to adding a provision for submitting responsible third parties, the toxic tort exception to joint and several liability is repealed. This exception had subjected defendants to joint and several liability if they were 15 percent or more negligent.[15] Now, a defendant is jointly and severally liable if his percentage of fault is greater than 50 percent, or the defendant acted with specific intent to violate certain provisions of the Texas Penal Code.[16] Accordingly,

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[6] HOUSE RESEARCH ORGANIZATION, H.B. 4 BILL ANALYSIS at 29.
[7] *Id.*
[8] *Id.*
[9] TEX. CIV. PRAC. & REM. CODE § 33.003.
[10] *Id.* at §§ 33.003, 33.011.
[11] TEX. CIV. PRAC. & REM. CODE § 33.004.
[12] *Id.*
[13] *Id.*
[14] *Id.* at § 33.017.
[15] Texas Omnibus Civil Justice Reform Act of 2003 at § 4.10(3), (5).
[16] TEX. CIV. PRAC. & REM. CODE § 33.013(b)(1).

for purposes of joint and several liability, toxic tort claims are treated exactly like all other claims involving multiple defendants. These new proportionate responsibility provisions apply to actions filed on or after July 1, 2003.[17]

2. Migration of Air Contamination – *Stevenson v. DuPont* --TEX. CIV. PRAC. & REM. CODE § 75.002

In 2003, the Fifth Circuit Court of Appeals held in *Stevenson v. DuPont* that, under Texas law, contamination of property by emission of airborne particulates constituted a trespass.[18] CJRA narrowed this holding in *Stevenson* by requiring plaintiffs to prove "actual and substantial damages", in addition to the other elements of trespass in order to prevail on a trespass claim where the trespass is caused by "migration or transport of any air contaminant."[19]

In *Stevenson*, landowners brought suit against DuPont, alleging the company's Victoria, Texas plant emitted heavy metal particulates that contaminated plaintiffs' properties and "affected their health as well as the health of their animals."[20] Plaintiffs lost their negligence and nuisance claims, but prevailed on their trespass claim. Plaintiffs also lost their physical pain and mental anguish claims, but were awarded damages for the diminished value of their property.[21] On appeal, DuPont argued that, as a matter of law, plaintiffs could not recover for the trespass of airborne particulates, there was insufficient evidence to prove causation, and there was insufficient evidence to support plaintiffs' claimed diminution in property value.[22]

DuPont argued that, consistent with Michigan law, a trespass could not occur without a "significant physical intrusion."[23] As an alternative to the "significant physical intrusion" argument, DuPont also cited case law from other jurisdictions requiring proof of substantial damages for recovery.[24] The Fifth Circuit rejected these arguments, holding that Texas law only required "some physical entry upon the land by some 'thing'" to support a trespass claim.[25]

While the Fifth Circuit affirmed plaintiffs' trespass claim, it reversed the jury's award of damages and remanded the case for a new trial on damages.[26] Plaintiffs had only one expert testify as to the value of the land and the record indicated that it was unclear as to whether he was appraising the land before or after the trespass.[27] Plaintiffs argued their expert was referring to the property before the trespass and based the alleged property diminution on their own

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[17] Texas Omnibus Civil Justice Reform Act of 2003 at § 23.02(c).
[18] *Stevenson v. DuPont,* 327 F.3d 400, 406 (5th Cir. 2003).
[19] Texas Omnibus Civil Justice Reform Act of 2003 § 21. Limitations on Liability; TEX. CIV. PRAC. & REM. CODE § 75.002(h).
[20] *Stevenson,* 327 F.3d at 403.
[21] *Id.*
[22] *Id.*
[23] *Id.* at 405, citing *Adams v. Cleveland Cliff's Iron,* 602 N.W.2d 215 (Mich. Ct. App. 1999)
[24] *Stevenson,* 327 F.3d *at* 405, referencing *J.H. Bowland v. Sanders Lead Co.*, 369 So. 2d 523 (Ala. 1979) and *Bradley v. American Smelting & Refining Co.*, 104 Wn. 2d 677, 709 P.2d 782, 791 (Wash. 1985).
[25] *Stevenson,* 327 F.3d at 406, quoting *Railroad Comm'n of Texas v. Mananiel*, 361 S.W.2d 560 (Tex. 1962).
[26] *Stevenson*, 327 F3d at 409.
[27] *Id.* at 409.

testimony that the property was now worthless.[28] The Fifth Circuit found plaintiffs' evidence insufficient and remanded the case for a new trial on damages.[29]

After CJRA, a plaintiff must show "actual and substantial damages" in order to prevail on a trespass claim based on migration of particulate pollution.[30] The plaintiffs in *Stevenson,* according to the Fifth Circuit's view of Texas law, had only to meet a de minimus evidentiary standard to prove a trespass. The CJRA changed the legal standard for trespass, as plaintiffs must now prove "actual and substantial" damages to recover on a trespass claim due to migration of an air contaminant.

3. Limitations in Civil Actions of Liabilities Relating to Certain Mergers or Consolidations—TEX. CIV. PRAC. & REM. CODE Chapter 149

CJRA's new Chapter 149 of the Texas Civil Practices and Remedies Code limits a successor corporation's liability in asbestos-related litigation to the amount of the assets of the acquired company, if the acquisition that generated the asbestos related liability took place before May 13, 1968. The legislation addressing successor liability in asbestos lawsuits extinguishes future liability of asbestos defendants who have paid out their liability limits in previous cases. Even after the defendant reaches the limit, that defendant will be included on the jury charge as a responsible third party and reduce the liability of the party defendants without itself incurring any further monetary losses.[31]

As a general rule, the cumulative successor asbestos-related liabilities of a corporation are limited to the fair market value of the transferor entity's total gross assets.[32] The fair market value is determined at the time that the corporation merged or consolidated and entails a complicated calculation involving annual adjustments.[33] Once this limit is reached, the corporation will have no further responsibility to pay out damages in asbestos cases.[34]

These provisions are designed to cover the chain of successor entities, starting with the initial company. The liability limit applies to a foreign or domestic company that: (a) had a certificate of authority to do business or that has done business in Texas; (b) mined or sold asbestos-containing products; and (c) became a successor to asbestos liabilities through an acquisition or merger that occurred before May 13, 1968.[35] There are, however, some exceptions; the liability limit does not apply to: (1) successors that continued the predecessor's asbestos-related business after the merger or consolidation; (2) prior settlements or arrangements made with asbestos claimants or potential claimants; (3) any claim against a debtor to a bankruptcy proceeding filed before April 1, 2003; or (4) a successor asbestos-related liability

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[28] *Id.*
[29] *Id.*
[30] TEX. CIV. PRAC. & REM. CODE § 75.002.
[31] *See* notes 1-19, *supra.*
[32] TEX. CIV. PRAC. & REM. CODE § 149.003(a).
[33] *Id. at* §§ 149.003(b), 149.004, 149.005.
[34] *Id. at* § 149.003(a).
[35] *Id. at* § 149.002(a).

arising from a premises liability claim, if the successor owned or controlled the premises after the merger or consolidation.[36]

These new provisions apply to actions filed on or after June 11, 2003.[37] They also apply to any pending action whose trial begins on or after June 11, 2003.[38]

B. Articles With Potential Impact on Environmental Litigation

Many of the CJRA changes were not directed at environmental litigation, but will, nevertheless, impact this litigation. For example, the changes in offers of settlement, venue, complex litigation, products liability, class actions, and damages will impact environmental lawsuits.

1. Settlement—TEX. CIV. PRAC. & REM. CODE Chapter 42 and TEX. R. CIV. P. 167

Before CJRA, Texas practice lacked an offer-of-settlement rule similar to that found in the Deceptive Trade Practices Act (DTPA) and Federal Rule of Civil Procedure 58. Article 2 of CJRA added Chapter 42 of the Texas Civil Practice and Remedies Code that applies to all civil litigation except class actions, shareholder derivative actions, actions by or against governmental units, actions under the Family Code, workers' compensation claims, and cases in justice courts.[39]

Beginning with cases filed after January 1, 2004, defendants can take advantage of a new settlement procedure and possibly recover certain litigation costs.[40] Under the new procedure, only a defendant may invoke the procedure with a written settlement offer.[41] Once a defendant invokes the procedure, a plaintiff may also take advantage of this provision by offering a settlement in her favor.[42]

If a defendant invokes this procedure and offers to settle with a plaintiff, a plaintiff must evaluate her risk of continuing with litigation. If a plaintiff continues to trial and a judge or jury awards the plaintiff a sum of less than 80% of the defendant's offered settlement, then the plaintiff must pay the defendant's litigation costs incurred from the date of the offer of settlement through the duration of trial.[43] In contrast, if a plaintiff offers to settle and the defendant refuses the settlement offer, a defendant may be liable for the plaintiff's litigation costs if the judge or jury awards the plaintiff more than 120% of the offer she made to the defendant.[44] For example, if a defendant offers a plaintiff $100,000 to settle a case and the plaintiff declines to settle, the

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[36] *Id. at* § 149.002(b)(5) – (8).
[37] Texas Omnibus Civil Justice Reform Act of 2003 at §§ 17.02(a), 23.02(b).
[38] Texas Omnibus Civil Justice Reform Act of 2003 at § 17.02(b).
[39] TEX. CIV. PRAC. & REM. CODE § 42.002.
[40] Tex. Civ. Prac. & Rem. Code at § 42.005, *see* also TEX. R. CIV. P., 167; Texas Supreme Court Order, P1(b), Misc. Docket No. 03-9160, Oct. 3, 2003.
[41] *Id.*
[42] *Id.*
[43] TEX. CIV. PRAC. & REM CODE at § 42.004.
[44] *Id.*

plaintiff will be responsible for defendant's litigation costs if a judge or jury awards a plaintiff $0 - $80,000. If a judge or jury awards a plaintiff $80,000.01 and higher, the plaintiff is not responsible for defendant's litigation costs. Similarly, if a plaintiff offers a defendant $100,000 to settle and the defendant declines to accept, a defendant may be responsible for the plaintiff's litigation costs if a judge or jury awards the plaintiff $120,000 or more.

Further, the maximum recovery permitted as "litigation costs" may not exceed the *sum of* (1) 50% of economic damages *plus*; (2) 100% of the noneconomic damages *plus*; (3) 100% of the punitive damages *minus*; (4) the total of any liens connected with the underlying claim.[45] Parties may not recover any litigation costs if they have already recovered litigation costs under any other law.[46] The purpose of these limitations is to ensure plaintiff first pays off any liens and still recovers at least half of her economic damages. The Texas Legislature has defined "litigation costs" as money actually spent and debts actually incurred that are directly related to the case.[47] These "litigation costs" include court costs, the reasonable fees for two or fewer testifying experts, and reasonable attorneys' fees incurred after the date on which the offer is rejected.[48]

In cases where there are multiple parties on each side, each party on each side must opt for the settlement offer.[49] If there are multiple defendants in a case, only the defendants that opt for the settlement provision and make a settlement offer may recover attorneys' fees at trial.[50]

The new settlement procedures in CJRA do not change a party's ability to make an offer to settle a claim outside of these new procedures.[51] Thus, a defendant does not need to invoke the procedures in CJRA in order to settle a case.[52] A defendant, however, must invoke the settlement procedures under CJRA if he hopes to recover any of his litigation costs.[53] As explained previously, a plaintiff cannot opt for the procedures. The plaintiff must wait for the defendant to invoke the procedures if she wishes to offer a settlement with the hopes of recovering litigation costs. To invoke the procedures under CJRA, a defendant must make a settlement offer: (1) in writing; (2) stating that he is making his settlement offer under Subtitle C, Title 2, Chapter 42 of the Civil Practice and Remedies Code; (3) defining the terms by which the claims may be settled; (4) setting a deadline by which a plaintiff must accept the settlement offer; and (5) serving the settlement offer on all parties to whom the offer is made.[54]

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[45] *Id.* at § 42.004.
[46] *Id.*
[47] *Id.* at § 42.001.
[48] *Id.* at § 42.002.
[49] *Id.*
[50] *Id.*
[51] *Id.*
[52] *Id.*
[53] *Id.*
[54] *Id.* at § 42.003.

2. Venue and Forum Non Conveniens--TEX. CIV. PRAC. & REM. CODE §§ 15.003, 15.007, 71.051-71.052

The venue and forum non conveniens changes to CJRA may have significant impacts on litigations strategies and may intensify discovery on venue issues, such as plaintiff's residence, the place of the alleged harm, or a defendant's principal place of business. Before CJRA, a trial court had discretion to proceed with an action that should have been brought in another jurisdiction. Under the new law, a trial court must now decline to exercise jurisdiction or stay or dismiss an action if it determines that there is a more appropriate or convenient forum for a suit based on such factors as the interests of justice and the convenience of the parties.[55] Further, under certain circumstances, venue decisions in Texas courts are now subject to interlocutory appeal.

The new rules on venue, forum non conveniens, and multi-district litigation generally apply to all civil litigation in Texas courts. They are aimed at eliminating those cases that arrive in Texas merely because a plaintiff believes she can recover more money in Texas.[56]

Similar to the federal rule governing venue, the new Texas rule requires *every* plaintiff to independently establish venue in multi-plaintiff actions.[57] Venue is proper in the county where the plaintiff's injury occurred or where one or more of the parties reside.[58] If a plaintiff is unable to establish proper venue, then a judge must either transfer the lawsuit or dismiss the lawsuit unless plaintiff can establish that: (a) her presence is otherwise procedurally proper; (b) there is no unfair prejudice to any other party; (c) there is an essential need to have that plaintiff's claim tried in the county where the suit is pending; and (d) the county is a fair and convenient venue for that plaintiff and all defendants.[59] The rule that venue is proper for all defendants once venue is proper as to a defendant remains intact.[60]

Unlike prior Texas practice, venue decisions in Texas courts are now subject to interlocutory appeal.[61] This change was designed to prevent the scenario where a lawsuit was tried before an improper venue and then subsequently overturned for that reason.[62] Thus, a defendant can request and receive appellate review immediately after a trial court rules on venue, rather than wait until the costs of trial are incurred.[63] The end result is that discovery, motion practice, and appeals on venue issues will take on a greater urgency in toxic tort lawsuits.

In addition to the venue changes, the CJRA requires the Chief Justice of the Texas Supreme Court to create a five-member Judicial Panel on Multi-District Litigation (MDL), which may transfer actions that have common questions of fact for consolidated or coordinated

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[55] TEX. CIV. PRAC. & REM. CODE at § 3.04.
[56] HOUSE RESEARCH ORGANIZATION at 44.
[57] Texas Omnibus Civil Justice Reform Act at § 15.003.
[58] *Id.*
[59] *Id.*
[60] HOUSE RESEARCH ORGANIZATION at 28.
[61] TEX. CIV. PRAC. & REM. CODE at § 15.003.
[62] HOUSE RESEARCH ORGANIZATION at 44.
[63] *Id.*

pre-trial proceedings to any district court.[64] This includes motions for summary judgment and other dispositive motions.[65] The MDL Panel will have the power to transfer a case for the convenience of the parties and witnesses and for the effective resolution of the case.[66] After all pretrial matters are resolved; the lawsuits go back to the originating court for trial. Lawsuits consolidated in a MDL proceeding may, therefore, have a consolidated discovery process, a consolidated effort on pretrial motions, and reduced attorney participation.[67]

3. Article 5: Product Liability—TEX. CIV. PRAC. & REM. CODE §§ 16.012, 82.008 and TEX. R. CIV. EVID. 407

CJRA revised many of the core issues addressed in product liability lawsuits, including affirmative defenses and evidentiary burdens. These new provisions apply to actions filed on or after July 1, 2003.[68]

a. Statute of Repose

The new products liability provisions create a 15-year statute of repose that applies to claims against manufacturers and sellers. It specifically excludes latent exposure claims involving personal injury or wrongful death in which the plaintiff alleges that: (a) he was exposed to the product within 15 years of the date that the product was first sold; (b) his exposure to the product caused the disease made the basis of the suit; and (c) the 15-year period elapsed before the plaintiff's symptoms manifested sufficiently to put him on notice of injury.[69] Like the former statute, this repose period does not alter applicable statutes of limitation and does not apply to leased products.[70]

b. Innocent Retailer Defense

In addition, as a new general rule, non-manufacturing sellers are not liable for the harm caused by a product they sell.[71] This general rule has numerous exceptions; in particular, a seller may be liable if it did one of the following acts causing the alleged harm: (a) participated in the product's design; (b) installed or assembled the product; (c) exercised substantial control over the product's inadequate warning; (d) made an express fact representation that was incorrect and relied on by the plaintiff, and that would have avoided or mitigated the harm if the representation were true; or (e) actually knew about the defect at time of sale and the defect caused the plaintiff's harm. The seller may also be liable if the manufacturer is insolvent or not subject to the trial court's jurisdiction.[72] This new law largely codifies existing law, but emphasizes that the alleged action or inaction by the seller must be causally related to the specific defect that caused the harm.

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[64] TEX. GOV'T. CODE at §§ 74.161, 74.162.
[65] *Id.* at § 74.162.
[66] *Id.*
[67] *Id.*
[68] Texas Omnibus Civil Justice Reform Act of 2003 at § 23.02(c).
[69] TEX. CIV. PRAC. & REM. CODE *at* § 16.012(d).
[70] *Id. at* § 16.012(d-1).
[71] *Id. at* § 82.003(a).
[72] *Id. at* § 82.003(a)(1) – (7).

c. Government Standards Defense

CJRA also adds a government standards defense, providing two rebuttable presumptions of non-liability for manufacturers and sellers. First, a manufacturer or seller is not liable for the formulation, labeling, or design of a product if the manufacturer or seller establishes that the product's formula, label, or design complied with mandatory federal safety standards or regulations applicable to the product at the time of manufacture and that governed the risk that allegedly caused the plaintiff's harm.[73] A plaintiff may rebut this presumption by establishing that the mandatory federal safety standards or regulations were inadequate to protect the public from unreasonable risks of injury or damage.[74] Alternatively, a plaintiff may rebut the presumption by establishing that, before or after marketing the product, the manufacture withheld or misrepresented information that was material and relevant to the government's or agency's determination of the adequacy of the safety standards or regulations at issue.[75]

The second rebuttable presumption requires three elements of proof. Essentially, a manufacturer or seller is not liable for the formulation, labeling, or design of a product if the manufacturer or seller establishes that: (a) the product was subject to pre-market licensing or approval by the federal government or an agency; (b) the manufacturer complied with all of the pre-market licensing or approval procedures and requirements; and (c) the product was approved or licensed for sale.[76] A plaintiff may rebut this presumption by establishing that the pre-market approval or licensing process was inadequate to protect the public from unreasonable risk of injury or damage.[77] Plaintiff may rebut this presumption by establishing that, before or after pre-market approval or licensing, the manufacturer withheld or misrepresented information that was material and relevant to the performance of the product and causally related to the plaintiff's injury.[78] These presumptions do not apply to manufacturing flaws or defects, even if a manufacturer complied with all federal quality control and manufacturing processes.[79] These presumptions do not apply to pharmaceutical products governed by new section 82.007.[80]

d. Subsequent Remedial Measures

Article 5 of CJRA requires the Texas Supreme Court to revise the Texas Rules of Evidence to conform them to the Federal Rules of Evidence regarding the admissibility of "subsequent remedial measures" in a products liability action. Federal Rule of Evidence 407 does not allow the admission of evidence of subsequent remedial measures to prove negligence, culpable conduct, a defect in product, a defect in a product's design, or a need for a warning or

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[73] *Id. at* § 82.008(a).
[74] *Id. at* § 82.002(b)(1).
[75] *Id. at* § 82.002(b)(2).
[76] *Id. at* § 82.002(c).
[77] *Id. at* § 82.002(c)(1).
[78] *Id. at* § 82.002(c)(2).
[79] *Id. at* § 82.002(d).
[80] *Id. at* § 82.002(e).

instruction.[81] The rule does not require the exclusion of evidence of subsequent measures when offered for another purpose, such as proving ownership or control.[82]

4. Class Actions – TEX. CIV. & REM. CODE §§ 23, 26, 51 and TEX. GOV'T CODE § 22

CJRA revised Texas law governing class actions, with a particular focus upon fee awards, jurisdiction, and appellate procedure.[83] The fee award provisions state that when attorney's fees are available in a class action, the trial court must use the lodestar method[84] to calculate fees.[85] The trial court may then adjust the fees in either direction by a factor of four in consideration of the factors listed in Rule 1.04(b) of the Texas Disciplinary Rules of Professional Conduct.[86] This allows for a wide variance in the fee award, left to the discretion of the trial judge.

The amendments relevant to jurisdiction and class certification require that the trial court, before certifying a class, hear and rule (in a written order) on all pending pleas asserting that a state agency has primary or exclusive jurisdiction.[87] Denial of the plea may be grounds for appeal.[88] The bill also extends jurisdiction to hear an appeal from an order granting certification or refusing to grant certification to the Texas Supreme Court.[89]

5. Damages – TEX. CIV. PRAC. & REM. CODE Chapter 41

CJRA broadens the Texas Civil Practice and Remedies Code section on exemplary damages.[90] Now, exemplary damages are defined as "damages awarded as a penalty or by way of punishment but not for compensatory purposes. Exemplary damages are neither economic or non-economic damages."[91] The new definition differs from the old in that defines it defines exemplary damages as neither economic nor non-economic.[92] Non-economic damages are generally defined as damages for non-pecuniary losses (pain and suffering, loss of consortium, etc...).[93] Capping punitive damages is a centerpiece of CJRA, and is thought to be a large step in cutting down on excessive jury verdicts.

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[81] FED. R. EVID. 407 (2003).

[82] *Id.*

[83] Texas Omnibus Civil Justice Reform Act of 2003 at § 1.

[84] The lodestar method is a method to calculate a reasonable amount of attorney's fees by multiplying the number of hours worked by the prevailing hourly rate in the community for similar work. *Black's Law Dictionary* (Bryan A. Garner ed., 2nd Pocket ed., West 2001).

[85] C. Joseph Miles, Texas Jurisprudence § 62, Third Edition (2004).

[86] TEX. R. CIV. P. 42(i).

[87] TEX. CIV. PRAC. & REM. CODE § 26.051.

[88] *Id.*

[89] Mike Klatt, CLE Presentation, *Torts: Medical Malpractice, Negligence and Products Liability; Law Practice After Texas Omnibus Civil Justice Reform Act of 2003* (Austin, TX., Aug. 22, 2003).

[90] Texas Omnibus Civil Justice Reform Act of 2003 at § 13.01.

[91] *Id.*

[92] TEX. CIV. PRAC. & REM. CODE § 41.001(5).

[93] *Id.* at § 41.001(12).

Exemplary damages are restricted under the new law because they may only be awarded if the jury's verdict is unanimous for both liability and amount of damages.[94] Exemplary damages are also limited to cases where "the claimant proves by clear and convincing evidence" that the harm relating to the damages was a result of fraud, malice, or gross negligence.[95] The prior rule required fraud, malice, or a willful act or omission or gross neglect.[96] The new rule clarifies the definitions of these terms by lumping willful acts or omissions together with gross negligence, defining gross negligence as the prior definition for malice, and redefining malice as specific intent to cause substantial injury or harm to the claimant.[97]

6. Interest—TEX. FIN. CODE § 304

CJRA also changes the statutes governing pre- and post-judgment interest.[98] These changes set the post-judgment interest rate at the prime rate established by the Federal Reserve, with an upper and lower bound.[99] The amendment lowers the upper bound for the interest rate applied to damage awards to from 20 percent to 15 percent, and the lower bound from ten percent to five percent.[100]

With respect to prejudgment interest, the prior rule from the Texas Finance Code provided for assessment of interest in an action for wrongful death, personal injury, or property damage, based on accrual of prejudgment interest during periods of trial delay.[101] As applied in asbestos litigation, the prior rule was that "prejudgment interest in personal injury and wrongful death cases involving an asbestos-related injury or disease... accrues from a date six months after the date the defendant received notice of the claim or the lawsuit was filed, whichever occurs first."[102] Prejudgment interest assessed on future damages is disallowed after CJRA.[103]

7. Appeal Bonds— TEX. CIV. PRAC. & REM. CODE § 52.006

As a result of CJRA, appeal bonds must be reasonable and not function to foreclose the option of appeal.[104] The concern is that if a defendant is hit with an unaffordable judgment, they should at least be able to afford the appeal rather than be forced into bankruptcy.[105] CJRA speaks to this concern. The new law provides that the loser no longer has to post a bond for punitive damages, and the bond amount can be no more than the lesser of 50 percent of the

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[94] *Id.* at § 41.003(d).

[95] *Id.* at § 41.003(a).

[96] TEX. CIV. PRAC. & REM. CODE § 41.003.

[97] *Id.* at § 41.001.

[98] Texas Omnibus Civil Justice Reform Act of 2003 at § 6.

[99] TEX. FIN. CODE §304.003(c), the prior rule was to set post judgment interest based on 52 week treasury bills.

[100] *Id.*

[101] TEX. FIN. CODE § 304.108.

[102] *Owens-Illinois, Inc. v. Estate of Burt*, 897 S.W.2d 765, 766 (Tex. 1995).

[103] TEX. FIN. CODE § 304.1045.

[104] Patrice Puzol and Marty Thompson, *Texas Legislature Hammers Out Massive Tort Reform Bill,* THE HOUSTON LAWYER, July – August 2003 at 16.

[105] *Steve Forbes on the Dollar, the Dinar, and Texas Tort Reform, Forbes*, September 1, 2003, Columnists, at 25.

loser's net worth or $25 million.[106] If the loser at the trial court will suffer "substantial economic harm" by posting the required amount of security, Chapter 52 requires the trial court to lower the appeal bond "to post a an for amount that will not cause substantial economic harm."[107]

There are some ambiguities within this portion of the bill. A method for determining net worth has not been defined, but there is a process for contesting it.[108] Also, some types of assets may provide a basis for a disputable computation of net worth. These assets are land, insurance, homesteads, and various savings accounts.[109] There is some concern that the meaning of net worth may itself have to be litigated.[110]

C. Conclusion

In the short term, it is obvious that CJRA changed numerous aspects of civil litigation from where the lawsuit can be filed to the amount of appeal bonds. These changes have impacted and will continue to impact environmental litigation. The full impact from these changes is not yet realized and may not be realized until Texas appellate courts clarify the uncertainties and ambiguities in CJRA.

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[106] Mary Alice Robbins, *H.B. 4 Rules on Supersedeas Bonds, MDL Take Effect,* TEXAS LAWYER, Vol. 19, No. 26 (Sept. 1, 2003) at 1.

[107] *Id.*

[108] *Id.*

[109] *Id.*

[110] *Id.*

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MANAGING AND CHALLENGING THE SCIENTIFIC EXPERT

SIXTEENTH ANNUAL ENVIRONMENTAL SUPERCONFERENCE

J. Beverly
and
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August 6, 2004

I. *DAUBERT* AND THE STANDARD FOR ADMISSIBILITY OF SCIENTIFIC EVIDENCE

A. INTRODUCTION

Any challenge to a scientific expert necessarily begins with an analysis of the proffered testimony in light of the standards set forth in *Daubert v. Merrell Dow Pharmaceuticals, Inc.*[1] Every aspect of an expert challenge, with the exception of a strictly qualification-based challenge, must be guided by an analysis of the factors for admissibility set forth in *Daubert*. Since appellate review of the trial court's decision to admit or exclude scientific testimony is under the abuse of discretion standard, the expert challenge will likely fail or succeed only at the trial court level. The same considerations apply in managing your scientific expert and preparing to defend a challenge under *Daubert*. This paper focuses on the legal standards for admissibility of expert testimony and managing the scientific expert from selection through trial.

B. THE JUDICIAL GATEKEEPER

Under the Federal Rules of Evidence and many similar state rules of evidence, the trial judge is empowered to determine preliminary questions concerning the qualifications of witnesses and the admissibility of evidence.[2] The Federal Rules of Civil Procedure allow trial judges to take appropriate pretrial action with respect to "limitations or restrictions on the use" of expert testimony.[3] Since the early 1990's, Federal courts and many state courts have paid particularly close attention to the problem of scientific evidence and the problems associated with the admission of such evidence for use by a jury. The United States Supreme Court and the Texas Supreme Court were particularly concerned by the lack of reliability of scientific evidence in use at trial. These concerns mixed with the appropriate cases coming up for review forever altered the use and acceptance of scientific evidence in the courtroom.

C. THE BIG THREE SUPREME COURT DECISIONS

In a series of three decisions, the United States Supreme Court revolutionized the standards

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1 113 S.Ct. 2786 (1993).

2 "Preliminary questions concerning the qualification of a person to be a witness, . . . or the admissibility of evidence shall be determined by the court[.] In making its determination it is not bound by the rules of evidence except those with respect to privileges." FED. R. EVID. 104(a); TEX. R. CIV. E. 104(a).

3 FED. R. CIV. P. 16 (c)(4) establishes the pre-trial conference as the appropriate method to control the issues at trial by resolving evidentiary disputes in advance of trial, thus narrowing the issues and expediting the trial. *In re Maurice*, 21 F.3d 767, 773 (7th Cir. 1994).

for admissibility of scientific evidence in the courtroom. Beginning with the oft-cited decision in *Daubert v. Merrell Dow Pharmaceuticals, Inc.*,[4] the United States Supreme Court recognized that the Federal Rules of Evidence not only authorize but also obligate trial judges to limit the use of "junk science" in the courtroom.[5] In *Daubert,* the Court decided that the time-worn (and apparently worn-out) test established in *Frye v. United States*[6] was no longer valid after the adoption of the Federal Rules of Evidence. The Court rejected the *Frye* test of general acceptance in the scientific community as the sole test of admissibility for scientific evidence. The Court adopted a new test based primarily on relevance and reliability. Perhaps most important, however, was the Supreme Court's affirmation of the trial court's duty "under the Rules . . . [to] ensure that any and all scientific testimony admitted is not only relevant, but reliable."[7] As noted above, this has been termed the "Gatekeeping"[8] responsibility of the trial court.[9]

The *Frye* test conditioned the admissibility of scientific evidence on whether the general scientific principles and methodology underlying the proposed evidence were "sufficiently established to have gained general acceptance in the particular field in which it belongs."[10] The

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4 113 Ct. 2786 (1993).

5 Junk science has been described as "the mirror image of real science, with much of the same form but none of the same substance. . . . Junk science cuts across chemistry and pharmacology, medicine and engineering. It is a hodgepodge of biased data, spurious inferences, and logical legerdemain, patched together by researchers whose enthusiasm for discovery and diagnosis far outstrips their skill. It is a catalog of every conceivable kind of error, data dredging, wishful thinking, truculent dogmatism, and now and again, outright fraud." *Peter W. Huber, Galileo's Revenge: Junk Science in the Courtroom* 2-3 (BasicBooks 1991).

6 293 F. 1013 (D.C. Cir. 1923).

7 *Daubert*, 113 S.Ct. at 2795.

8 The term judicial gatekeeper arises from Chief Justice Rehnquist's concurring and dissenting opinion. "I do not doubt that Rule 702 confides to the judge some gatekeeping responsibility in deciding question of he admissibility of proffered expert testimony." *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 529, 600, 113 S.Ct. 2786, 2799 (1993) (Rehnquist, C.J. concurring and dissenting).

9 *Id.* at 2795, n.7; *see also Standards and Procedures for Determining the Admissibility of Expert Evidence After Daubert*, 157 F.R.D. 571, 581 (1994) (hereafter "*Expert Evidence*").

10 293 F. at 1014. The complete test is stated as follows:

> Just when a scientific principle or discovery crosses the line between the experimental and demonstrable stages is difficult to define. Somewhere in this twilight zone, the evidential force of the principle must be recognized, and while courts will go a long way in admitting expert

decision in *Frye* languished for almost 30 years before courts began to apply the test. Once applied, various commentators began to criticize the rule and suggest alternatives.[11] While much criticized, the *Frye* test did assure "that those most qualified to assess the general validity of a scientific method [had] the determinative voice."[12] Other arguments were advanced in favor of *Frye*, such as insuring uniform decisions, promoting judicial efficiency and guaranteeing a minimal reserve of potential experts.[13] However, the primary argument against *Frye* was that the general acceptance test sometimes worked to exclude otherwise relevant and reliable evidence.[14]

The Supreme Court's decision in *Daubert* ended the vigorous debate about the propriety of the *Frye* test. In *Daubert*, the Supreme Court rejected *Frye*'s general acceptance test as the sole test of admissibility. Moreover, in *Daubert*, the Court recognized that trial judges must evaluate scientific testimony "at the outset."[15] *Daubert* requires trial judges to undertake "a preliminary assessment of whether the reasoning or methodology underlying the testimony is scientifically valid and of whether that reasoning or methodology properly can be applied to the facts and issue [.]" [16]

Jason Daubert and Eric Schuller were minor children born with serious birth defects. They and their parents sued Merrell Dow, alleging that the birth defects were caused by the mother's use of Bendectin, a prescription anti-nausea drug. After extensive discovery, Merrell Dow moved for summary judgment, contending that Bendectin did not cause birth defects and that the Dauberts would not be able to present evidence to the contrary. Merrell Dow's motion was supported by the affidavit of a physician and epidemiologist who was a well-credentialed expert on the risk from exposure to various chemical substances. Merrell Dow's expert concluded that use of Bendectin during pregnancy had not been shown to be a risk factor for human birth defects. His opinion was

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> testimony from a deduced from a well-recognized scientific principle for discovery, the thing from which the deduction is made must be sufficiently established to have gained general acceptance in the particular field in which it belongs.

11 *See, e.g., Daubert*, 113 S.Ct. at 2793 ("The merits of the *Frye* test have been much debated, and scholarship on its proper scope and application is legion."); P. GIANELLI & E. IMWINKELRIED, SCIENTIFIC EVIDENCE Section 1-5 (1986) & Supp. (1991) (Cataloging the many cases on either side of the *Frye* controversy).

12 *United States v. Addison*, 498 F.2d 741, 744 (D.C. Cir. 1974).

13 *See discussion in* B. Black, F.J. Ayala & C.Saffran-Brinks, *Science and the Law in the Wake of Daubert: A New Search for Scientific Knowledge*, 72 TEX. L.R. 715, 726 (1994).

14 *United States v. Downing*, 753 F.2d 1224, 1236-37 (3rd Cir. 1985) (Citing cases and articles critiquing the *Frye* test for excluding relevant evidence).

15 113 S.Ct. at 2796.

16 *Id.*

based on his review of all of the literature on Bendectin and human birth defects which consisted of more than 30 published studies involving over 130,000 patients.[17]

The Dauberts' response was supported by the testimony of eight well-credentialed experts who concluded that Bendectin can cause birth defects. The experts' conclusions were based upon test tube and live animal studies that found a link between Bendectin and malformations; chemical studies which purported to show similarities between the structure of Bendectin and other substances known to cause birth defects; and a re-analysis of published epidemiological studies.

The trial court granted Merrell Dow's motion for summary judgment, applying the *Frye* test and holding that given the vast body of epidemiological data concerning Bendectin, expert opinion which was not based on epidemiological evidence was not admissible to establish causation. In addition, the Dauberts' experts' "recalculations of data in previously published studies" were inadmissible because they had not been published or subjected to peer review.[18]

The Ninth Circuit Court of Appeals affirmed the trial court's ruling, again applying the *Frye* test. The Court held that expert opinion based on a methodology that diverges "significantly from the procedures accepted by recognized authorities in the field ... cannot be shown to be "generally accepted as a reliable technique"[19]

The Supreme Court held that the *Frye* test did not survive the enactment of the Federal Rules of Evidence. Looking directly to Rule 702, governing expert testimony, the Court concluded that nothing in the text of the rule establishes general acceptance as an absolute prerequisite to admissibility.[20] The Court found that *Frye*'s restrictive general acceptance test was at odds with the liberal approach of the Federal Rules of Evidence. Rule 702 only requires the proper testimony to be (1) scientific knowledge, (2) which will assist the trier of fact to understand evidence or determine a fact in issue. The basic standard for admissibility of scientific evidence set forth in *Daubert* is whether the evidence is "reliable and relevant."

Relevancy, that is whether the evidence will assist the trier of fact to understand or determine an issue, is key precondition to admissibility. Testimony is relevant under Rule 702 when there is a valid scientific connection to the pertinent inquiry. In *Daubert*, the Supreme Court concluded that

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[17] *Id.* at 2791.

[18] *Id.* at 2791-92.

[19] *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 951 F.2d 1128, 1130 (1991), quoting *United States v. Solomon*, 753 F.2d 1522, 1526 (9th Cir. 1985).

[20] Fed. R. Evid. 702 provides:

> If scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified by knowledge, skill, experience, training or education, may testify thereto in the form of an opinion or otherwise.

"the basic standard of relevance is a liberal one."[21]

The "scientific knowledge" or "reliability" requirement of Rule 702 requires the trial court to determine whether the reasoning or methodology underlying the testimony is scientifically valid. This reliability factor focuses on the methodology employed in generating the basis for the proposed scientific testimony and opinions. As the Court explained "'scientific' implies a grounding in the methods and procedures of science. similarly the word 'knowledge' connotes more than subjective belief or unsupported speculation. ... [I]n order to qualify as a 'scientific knowledge', an inference or assertion must be derived by the scientific method."[22] The court observed that scientific methodology is based on generating hypothesis and testing them to see if they can be falsified.[23]

The Supreme Court expressed its confidence in the ability of federal judges to undertake a review of scientific evidence. While declining to "set out a definitive checklist or test," the Court listed four non-exclusive factors for courts to consider in determining whether scientific testimony is admissible.

1. Whether the theory or technique can be and has been tested;

2. Whether the theory or technique has been subjected to peer review and publication;

3. The technique's known or potential rate of error and the existence and maintenance of standards controlling the technique's operation; and

4. The general acceptance of the theory or technique by the relevant scientific community.

In short, the Supreme Court held that Rule 702 requires the trial judge to insure that an expert's testimony "both rests on a reliable foundation and is relevant to the task at hand."[24] The Court stressed that the "inquiry envisioned by Rule 702 is ... a flexible one. Its over-arching subject is the scientific validity -- and thus the evidentiary relevance and reliability -- of the principles that underlie a proposed submission. The focus, of course, must be solely on principles and methodology, not on the conclusions that they generate."[25]

On remand the Ninth Circuit found that Dauberts' expert's scientific testimony was not based

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21 113 S.Ct. at 2794; "Relevant evidence" is defined as that which has "any tendency to make the existence of any fact that is of consequence to the determination of the action more probable or less probable than it would be without the evidence." FED.R.EVID. 401.

22 113 S.Ct. at 2795.

23 *Id.* at 2796.

24 *Id.* at 2799.

25 *Id.* at 2797.

on reliable methodology. The Court of Appeals cited two factors. First, the experts conducted the research that formed the basis of their testimony for the sole purpose of testifying. Second, there was a significant lack of peer review and publication.[26]

The next major Supreme Court decision was in *General Electric Co. v. Joiner*.[27] The primary issue in *Joiner* was the appropriate standard of appellate review for trial court decisions under *Daubert*. In, *Joiner,* the plaintiff claimed that exposure to PCBs and their derivatives had caused his small-cell lung cancer. The trial court applied *Daubert* and excluded plaintiff's expert scientific testimony.[28] The Eleventh Circuit Court of Appeals reversed applying a "particularly stringent standard of review to the trial judge's exclusion of expert testimony."[29]

The Supreme Court granted review and carefully examined the record (something they had not done in *Daubert).* The Court first determined that an abuse of discretion standard of review applied to all trial court decisions either admitting or excluding scientific evidence under the *Daubert* test.[30] The Supreme Court concluded that it was within the trial court's discretion to conclude that the plaintiff's scientific expert testimony amounted to little more than speculation as to causation. Of primary interest was whether plaintiff's expert could rely on four epidemiological studies in support of his theory. The plaintiff's expert claimed that the studies established a link between PCBs and cancer if all the studies were considered together. The debate centered around the conclusion vs. methodology conundrum. The plaintiff argued that the district court had violated *Daubert* by rejecting the expert's conclusions rather than his methodology. The Supreme Court rejected this argument finding that while an expert may rely on or extrapolate from the analytical data of other experts, the expert must provide a viable methodology for his or her use of the existing data. The Court concluded that plaintiff's expert had not properly connected his opinion testimony to the epidemiological studies on which he relied.[31]

The major remaining question after *Daubert* and *Joiner* was the breadth of application of the gatekeeping function that is, whether the *Daubert* test applied only to scientific testimony or if the test extended to other fields of technical or specialized knowledge. In the final of the big three cases, *Kumho Tire Co. v. Carmichael,*[32] the Supreme Court expanded the application of the *Daubert* test to technical analyses.

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26 43 F.3d 1311 (9th Cir. 1995), cert. denied, 516 U.S. 869, 116 S. Ct. 189. The decision on remard in *Daubert* may provide the best and most clearly-reasoned explanation of the test for the test for relevancy and reliability.

27 522 U.S. 136, 118 S.Ct. 512 (1997).

28 864 F.Supp. 1310 (N.D.Ga. 1994).

29 78 F.3d 524, 529 (11th Cir. 1996).

30 118 S. Ct. at 516-517.

31 *Id.* at 518-519.

32 526 U.S. 137, 119 S.Ct. 1167 (1999).

Kumho Tire was a products liability case against tire manufacturer and tire distributor for injuries sustained when right rear tire on the plaintiff's vehicle failed. The plaintiffs claimed the tire was defective and relied primarily on the testimony of a tire-failure expert. The expert testified that he could determine that the blowout was caused by a manufacturing or design defect based on a visual inspection of the damaged tire. The district court rejected the expert's visual inspection methodology based on the four factor analysis of *Daubert* concluding that none of the factors was satisfied and granted summary judgment for defendants.[33] The Eleventh Circuit Court of Appeals reversed and remanded holding that *Daubert* applied only to scientific testimony. The court of appeals took particular note of the fact that the plaintiff's expert did not claim to use any scientific methodology or technique in his analysis. Rather, his conclusions were based on his years of experience in analyzing blown-out tires.[34] The United States Supreme Court reversed, holding that *Daubert*'s gatekeeping function applies not just to "scientific" expert testimony, but to all expert testimony including testimony based on the skill or experience of the witness.[35] In essence, a trial court may consider *Daubert* factors, to the extent they are relevant, in assessing the reliability of a technical expert's testimony. As the Supreme Court noted, the rules of evidence make "no distinction between 'scientific' knowledge and 'technical' or 'other specialized.'"[36] In some sense, the *Kumho Tire* decision opened the door to a broad range of expert testimony based on technical knowledge and practical experience. Specifically, the Supreme Court found that all of the four factors in the *Daubert* test do not always apply. A trial court must make a case by case determination as to which of the four factors apply.

Finally, the Supreme Court rejected the Eleventh Circuit's use of a de novo standard of review and applied the abuse of discretion standard of *Joiner*. Examining the expert's testimony in detail revealed that, among other things, he could not tell how many miles were on the tire with any degree of certainty, he conceded the tire should have been replaced because it had been repaired and was worn bald in some places, he concluded that the tire was defective after looking only at photographs and before performing a visual and tactile inspection, and the tire showed some of the marks that he identified as indicating abuse of the tire. In addition, there was no evidence that the expert's methodology or techniques were supported by other experts or literature in the field of failed tire analysis.[37] Thus, the Supreme Court concluded that the trial court did not abuse its discretion in excluding this expert testimony.

D. PROCEDURAL MECHANISMS FOR EVALUATING SCIENTIFIC TESTIMONY

While the *Daubert* opinion provided little guidance with respect to the exact courtroom

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33 *Carmichael v. Samyang Tires, Inc.*, 923 F.Supp. 1514 (S.D. Ala. 1996).

34 *Carmichael v. Samyang Tires, Inc.*, 131 F.3d 1433 (11th Cir. 1997).

35 119 S.Ct. at 1174-1176.

36 *Id.* at 1174; see FED. R. EVID. 702.

37 119 S.Ct. at 1177-1179.

mechanics for limiting the use of scientific testimony, the Court cited the Federal Rules of Evidence for support in reaching its conclusion. The Court primarily looked to Rule 104(a) regarding preliminary questions of admissibility. The Court also referred to Rule 706 which permits a trial judge to select an expert of the judge's choice, and Rule 703 which permits an expert to base his or her opinion on facts or data that would not be admissible if they are "of a type reasonably relied upon by experts in the particular field in forming opinions or inferences upon the subject . . . ". Finally, the Court noted that Rule 403 provides a basis for excluding expert testimony if the probative value is "substantially outweighed by the danger of unfair prejudice, confusion of the issues, or misleading the jury." [38] In practice, various procedural methods are available for preparing and making a challenge to the admissibility of scientific testimony.

1. INITIAL DISCLOSURES

In jurisdictions which have adopted the initial disclosure requirements of Rule 26(a)(2) or similar local rules, parties must now make a disclosure of expert information including "a complete statement of all opinions to be expressed and the basis and the reasons therefor."[39] A party should be required to disclose "the factors which the expert (and the proponent of the testimony) claim support the validity of the methodology employed."[40] In jurisdictions or states without initial disclosure rules comparable to Rule 26(a), information concerning the reliability of the scientific methodology involved will have to be sought through standard discovery methods.

2. PRE-TRIAL HEARINGS

A Rule 104(a) hearing is the preferred method for resolving questions concerning the admissibility of expert testimony under Rule 702.[41] Depending on the jurisdiction and the practice of the particular court, a request for a Rule 104(a) hearing or a pre-trial conference should be used to object to questionable scientific testimony. After a party makes an appropriate objection to the expert's testimony, the burden of proof shifts to the proponent of the testimony to demonstrate the

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38 *Daubert*, 113 S.Ct. at 2796-98.

39 FED. R. CIV. P. 26(a)(2); *Robinson v. Missouri Pac. R.R.*, 16 F.3d 1083, 1089 n.6 (10th Cir. 1994) ("[A]ll parties and the court should possess full information well in advance of trial on any proposed expert testimony".)

40 *Expert Evidence*, 157 F.R.D. at 581.

41 FED R. EVID. 702" does require . . . the trial judge [to] make initial determinations under Rule 104(a) that the proffered evidence possesses sufficient evidentiary reliability to be admissible as 'scientific, technical, or other specialized knowledge' and that the proffered evidence is relevant in the sense that it will 'assist the trier of fact to understand the evidence or to determine a fact in issue.'" *U. S. v. Posado*, 57 F.3d 428, 432 (5th Cir. 1995).

relevance and reliability of the expert's proposed testimony.[42] The proponent of the expert's testimony must show by a preponderance of the evidence that the expert opinion is reliable.[43] One advantage to a Rule 104(a) procedure is that the trial court "in making its determination . . . is not bound by the rules of evidence except those with respect to privileges."[44] Thus, in a Rule 104(a) hearing, a party may attack or support scientific evidence using hearsay and opinion testimony that is not ordinarily admissible under the Federal Rules of Evidence.

3. COURT APPOINTED EXPERTS

Trial judges have the power to appoint independent experts in an appropriate case.[45] The use of a court-appointed expert may assist the court in evaluating complex scientific methodologies. An independent court-appointed expert should be limited to evaluating the validity of the challenged expert's techniques and appropriateness of the expert's reasoning and methodology. A court-appointed expert should not be called upon to substitute his or her opinion for that of the parties' experts or opine on the validity of the expert's ultimate conclusions.

4. JUDICIAL NOTICE

Another procedural mechanism for challenging or supporting admissibility of scientific evidence is a request for judicial notice. A trial court can take judicial notice of another court's rulings.[46] In *United States v. Martinez*,[47] the Eighth Circuit upheld the admission of DNA profiling evidence in a criminal case involving sexual assault. The Eighth Circuit noted that the Second Circuit had approved the theory behind DNA fingerprinting as well as the specific techniques used by the FBI in conducting its tests. The Eighth Circuit concluded that the Second Circuit had followed the essential dictates of *Daubert* and thus, took judicial notice of the Second Circuit's prior ruling that the general theory and techniques of DNA profiling were valid.[48] Of course, particular questions concerning whether an approved technique was properly applied or the skill and expertise

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42 *Bourjaily v. U.S.*, 107 S.Ct. 2775, 2778 (1987).

43 *In re Paoli R.R. Yard PCB Litigation*, 35 F.3d 717, 744 (3d Cir. 1994); *Bourjaily*, 107 S.Ct. at 2778 ("The preponderance standard ensures that before admitting evidence, the court will have found it more likely than not that the technical issues and policy concerns addressed by the Federal Rules of Evidence have been afforded due consideration.")

44 FED. R. EVID. 104(a).

45 FED. R. EVID. 706.

46 FED. R. CIV. P. 44(1); FED. R. EVID. 201.

47 3 F.3d 1191, 1197 (8th Cir. 1993), *cert denied,* 114 S.Ct. 734 (1994).

48 *Id.* citing *United States v. Jakobetz*, 955 F.2d 786, 799-800 (2d Cir.), *cert. denied*, 113 S.Ct. 104 (1992).

of the person who conducted the test will still need to be resolved in each individual case as such issues arise.

5. SUMMARY JUDGMENT

Challenges to the admissibility of scientific evidence can also be resolved by directed judgment or summary judgment. As the Supreme Court noted in *Daubert*, if the trial court concludes that "the scintilla of evidence presented supporting a position is insufficient to allow a reasonable juror to conclude that the position more likely than not is true, the court remains free to direct a judgment . . . and, likewise to grant summary judgment.[49] If a summary judgment is based on the grounds that an essential element of a cause of action depends entirely on inadmissible expert testimony, then a Rule 104(a) hearing should first be conducted to make a determination on admissibility. If, however, the challenge is not to the admissibility of the evidence, but whether such evidence is sufficient to raise a genuine issue of material fact, then a preliminary evidentiary hearing should not be required. Of course, a Rule 104(a) hearing has other benefits, not the least of which is exposing the court to potentially complex issues concerning scientific evidence.[50]

E. THE TEXAS COURTS WEIGH IN

1. KELLY V. STATE

The first Texas court to evaluate scientific evidence along the lines of *Daubert* was the Texas Court of Criminal Appeals in *Kelly v. State*.[51] The *Kelly* decision concerned the admissibility of DNA testimony in a criminal trial. *Kelly* identified the following factors to be used in determining the reliability of scientific evidence:

1. General acceptance in the scientific community;
2. The expert's qualifications;
3. The existence of literature supporting or rejecting the theory;
4. The techniques potential rate of error;
5. The availability of other experts to test and evaluate the technique used;
6. The clarity with which the theory or technique can be explained to the trial

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[49] 113 S.Ct. at 2798. *Daubert* itself was a summary judgment case.

[50] *Expert Evidence*, 157 F.R.D. at 584.

[51] 824 S.W.2d 568 (Tex.Crim.App. 1992).

court; and

7. The experience and skill of the person who applied the technique.[52]

B) E.I. DuPont de Nemours & Co., Inc. v. Robinson

In *E. I. Dupont de Nemours & Co., Inc. v. Robinson*[53], the Texas Supreme Court adopted standards for the admissibility of expert testimony under the Texas Rules of Evidence which were largely derived from *Daubert*.

Dupont manufactured a fungicide called Benlate 50 DF. The Robinsons sued Dupont alleging that their pecan orchard was damaged by their use of contaminated Benlate. In support, the Robinsons presented one seemingly well-qualified expert witness, Dr. Carl Whitcomb. Dr. Whitcomb's opinion was that Dupont had contaminated Benlate during the manufacturing process with many things including sulfonylurea ("SU") herbicides and that the application of the contaminated Benlate damaged the Robinsons' pecan trees. Dr. Whitcomb's opinion was based on a 2-1/4 hour inspection of the orchard. During this time, he made a visual inspection of the orchard including a close look at 25% of the trees, inspected the roots of the trees and took photographs of certain trees. Dr. Whitcomb did not perform a soil tissue test and did not test for contaminants in an open bag of Benlate that had apparently been used by the Robinsons. The basis for Dr. Whitcomb's opinion included the following:

1. Comparative symptomology;[54]

2. A 1992 experiment in which Dr. Whitcomb had applied Benlate to control groups;

3. A lab analysis of Benlate;

4. Review of other reports regarding Benlate;

5. Documents from Dupont concerning other claims against the company for

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52 *Id.* at 573.

53 923 S.W.2d 549 (Tex. 1995).

54 Comparative symptomology was a technique used by Dr. Whitcomb in which he compared the symptoms exhibited by the Robinsons' pecan trees with symptoms common to other plants treated with allegedly contaminated Benlate. The other plants were grown under "dissimilar growing conditions" and Benlate was the only common factor among the plants. Accordingly to Dr. Whitcomb, this method supported his conclusion that Benlate caused the damage.

Benlate damages and product recalls for herbicide contamination.[55]

The trial court excluded Dr. Whitcomb's testimony and ultimately granted Dupont's motion for directed verdict. In ruling on Dupont's motion to exclude Dr. Whitcomb's testimony, the Court found that Dr. Whitcomb was not shown to have a reliable basis in knowledge in his discipline (horticulture) and that his proposed testimony was:

1. Not grounded upon careful scientific methods;

2. Not shown to be derived by scientific methods or supported by appropriate validation;

3. Not shown to be based upon scientifically valid reasoning and methodology;

4. Not based on theories and techniques subject to peer review and publication;

5. Essentially subjective belief and unsupported speculation;

6. Not based on theories and techniques that the relevant scientific community had generally accepted; and

7. Not based on the procedure reasonably relied upon by experts in the field.[56]

The Texas Supreme Court affirmed the trial court's ruling, holding that trial judges have a heightened responsibility to ensure that expert testimony shows some indicia of reliability. Trial judges must scrutinize proffered testimony for scientific reliability when it is based on novel scientific theories sometimes referred to as "junk science". The ultimate goal is rooting out bogus expert witness from Texas courts.[57] The Supreme Court looked to the Texas Rules of Evidence for guidance. Under Rule 104(a), the trial court is authorized to decide preliminary questions concerning the admissibility of evidence.[58] Scientific testimony must meet the threshold requirements of Rule 702.[59]

In reaching its conclusions, the Texas Court looked to the United States Supreme Court's opinion in *Daubert*. The Texas Court found that reliability rather than the *Frye* test of general acceptance in the scientific community is the appropriate standard for evaluating the admissibility

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55 *Id.* at 551-552.

56 *Id.* at 552.

57 *Id.* at 553-554.

58 TEX. R. CIV. E. 104(a).

59 TEX. R. CIV. E. 702.

of relevant scientific evidence. In order to satisfy the *Daubert* relevance standard, the scientific testimony must be sufficiently tied to the facts of the case such that it will aid the jury in resolving a factual dispute.[60] In order to meet the reliability standard, the testimony must be grounded in the methods and procedures of science and be more than "subjective belief or unsupported speculation".[61]

To assist trial courts in properly evaluating reliability of scientific evidence, the Texas Court identified the following factors:

1. The extent to which the theory has been or can be tested;

2. The extent to which the technique relies on the subjective interpretation of the expert;

3. Whether the theory has been subject to peer review and/or publication;

4. The techniques potential rate of error;

5. Whether the underlying theory or technique has been generally accepted as valid by the relevant scientific community; and

6. The non-judicial uses which have been made of the theory or technique.

The Texas Court held that Rule 702 envisions a flexible inquiry focusing solely on the underlying principles and methodology, not on the conclusions which they generate.[62] If the methodology is well-founded, the nature of the expert's conclusion is generally irrelevant to its admissibility, even if it is controversial or unique.

The Texas court utilized an abuse of discretion analysis to determine whether Dr. Whitcomb's particular testimony was based on a reliable foundation. In concluding that his testimony was not based on a reliable foundation, the Supreme Court identified the following factors:

1. There was no testing to exclude other causes of damage to the orchard, even though other factors could have caused the damage;

2. The expert should have carefully considered alternative causes;

3. There was a failure to rule out other causes which made the expert's opinion

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60 923 S.W.2d at 556, *citing U. S. v. Downing*, 753 F.2d. 1224, 1242 (3rd Cir. 1985).

61 923 S.W.2d at 557.

62 *Id.* at 557, *citing Christophersen v. Allied-Signal Corp.*, 939 F.2d 1106, 1111 (5th Cir. 1991).

little more than speculation.

The Court held that coming to a conclusion first and then doing research to support it is the antithesis of the scientific method.[63] The Court found that there was no proof that the Robinson's Benlate was contaminated by SU herbicides. Without ruling out other causes, Dr. Whitcomb determined that because Benlate was applied to trees which later showed damage, the Benlate must have been contaminated. Dr. Whitcomb also demonstrated no knowledge of what amount or concentration of SU herbicides would damage pecan trees. The Court also noted that Dr. Whitcomb's opinions were formed solely for the purposes of litigation.[64]

Finally, the Court attacked the methodology of the comparative symptomology. The Court held that there was no evidence to support the claim that comparative symptomology is an appropriate and reliable method to determine chemical contamination. The Court also found that there was no general acceptance of comparative symptomology as a correct method by the members of the relevant scientific community. The Court noted that Dr. Whitcomb had made only self-serving statements about the acceptance of comparative symptomology as a valid methodology.

A careful reading of *Robinson* suggests that two main factors were at work. First, the expert failed to rule out other causes and did not test the Benlate apparently used by the Robinsons for actual contamination. Second, the technique of comparative symptomology was viewed as suspect.

F. CONCLUSION

When challenging scientific evidence, the first line of attack is relevance. The proposed testimony must be sufficiently tied to the facts of the case and must aid the fact-finder in resolving an actual dispute. If relevance is established, then the reliability of the methodology and techniques underlying the proposed testimony can be challenged. If the expert's techniques lack peer review or have poor controls, high rates of error, or lack of precision in application, then a reliability challenge should be considered. An even stronger challenge can be made when the underlying methodology, such as comparative symptomology used in *Robinson*, is questionable and lacks significant peer review. This analysis reverts largely to the *Frye* test of general acceptance in the relevant scientific community. When the expert is relying on studies of other experts, there is a tremendous opportunity to establish that such reliance is unjustified or that an appropriate link between studies and the specific facts of the case has not been established. Most important of all, if you can establish that the methodology and techniques employed by the expert are litigation-driven and not generally used in the scientific community, then the chance of excluding the expert testimony rises dramatically. Finally, do not overlook potential challenges to the expert's exact qualifications in the field for which he or she is seeking to give opinions.

II. SCIENCE AND

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[63] 923 S.W. 2d at 559, citing *Claar v. Burlington Northern Railroad*, 29 F.3d 499, 502-03 (9th Cir. 1994).

[64] 923 S.W. 2d at 559.

THE SCIENTIFIC METHOD

A. AN INTRODUCTION TO THE SCIENTIFIC METHOD

Typically most people believe that the scientific method is incomprehensible. Nothing could be further from the truth. It is used, to a certain extent, everyday by people in virtually all walks of life. In order to understand scientific evidence, one must understand the method utilized by the scientist in the development of this evidence. The power of this method, as utilized by a credible scientist, lies in the rigor of its application. T. H. Huxley while comparing the scientific method with the same procedures used in a less rigorous fashion noted that "[s]cience is . . . nothing but trained and organized common sense, differing from the latter only as a veteran may differ from a raw recruit; and its methods differ from those of common sense only so far as the guardsman's cut and thrust differ from the manner in which a savage wields his club".

Science is primarily concerned with the discovery of facts and the development of conceptual schemes designed to explain the material universe. The scientific inquiry therefore begins with observations of objects or phenomena.

1. INDUCTIVE AND DEDUCTIVE REASONING

There are two approaches used in developing generalizations based on observational data. The inductive method, which infers generalities from specific facts, is useful for investigating correlations or associations between classes of evidence. While the inductive approach may be time intensive, fail to adequately address functional relationships and lead to extrapolation beyond the available data range, it usually yields valuable information upon which experimental studies may be developed. Typically, a good scientist will use the inductive method to formulate a generalization which can be tested through experimentation.

In the deductive, or hypothetical-deductive method, the scientist develops a generalized statement and then gathers evidence, through experimentation, to support or refute the statement. When a discrepancy is found between the general statement and the evidence, the generalization must be abandoned. A good scientist must always be prepared to alter or abandon his generalizations in light of the evidence. Scientific generalizations are dependant on the evidence and not vice versa.

2. HYPOTHESIS FORMULATION

After making careful observations, the scientist develops a general statement concerning causal processes. In other words, the scientist formulates a testable hypothesis. It is important at this juncture to be able to differentiate between a theory and a hypothesis.

To many people, a theory is a statement of causation that cannot be confirmed or disproved through experimentation. It is a highly tentative statement. Scientists do not use the word "theory" in the same context as the general public. To a scientist a "theory" is a hypothesis that has been rigorously tested and withstood all attempts at falsification. A hypothesis is therefore a statement

of causation that can be tested experimentally.

3. HYPOTHESIS TESTING

Hypothesis testing generally involves four steps. Initially, the hypothesis must be examined for internal consistency. Second, the hypothesis must be evaluated in order to determine if it has any explanatory value. The next is to examine the relationship between the hypothesis and commonly accepted theories in the relevant field of science (external consistency) to determine if the hypothesis represents any advancement with respect to established alternatives (i.e. greater caution is required where the hypothesis deviates significantly from established alternatives). After the hypothesis has been evaluated for internal consistency, explanatory value and external consistency, it must be tested empirically.[65]

Empirical testing involves data collection through direct observation and/or experimentation.

Direct observation and comparison type studies (i.e. present observations of systems and comparison to observations of the systems as they existed, or the reconstruction of changes following some sort of disturbance) may yield correlations but provide no evidence of causation. These studies only provide evidence of association.[66]

An experimental study usually involves the manipulation of one or more variables while attempting to hold all other variables constant. Experimental studies may be conducted in the field or laboratory.

4. FALSIFICATION

A testable hypothesis must be falsifiable.[67] The scientist can never prove that the hypothesis is correct, but through experimentation or investigation, may either reject or fail to reject it with known risks. In order to be accepted, the hypothesis must survive attempts at falsification. The most severe attempt at falsification is the "critical test". A critical test is an experiment or investigation where alternative hypotheses predict mutually exclusive outcomes. The result of a critical test will be the falsification of one of the competing alternative hypotheses.

B. THE PEER REVIEW PROCESS

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[65] Ayala, Francisco J., and Bert Black, Science and the Courts, 81 American Scientist 230 (1993).

[66] Diamond, J. 1986. Overview: Laboratory Experiments, Field Experiments, and Natural Experiments. In J. Diamond and T. Case (eds.), *Community Ecology*. Harper & Row, New York, pp. 3-22.

[67] For a more detailed discussion of hypothesis testing and falsification, *see*, Ayala, Francisco J., and Bert Black, The Nature of Science: A primer for the Legal Consumer of Scientific Information, 1 Science and Courts 1 (1993); Ayala, Francisco J., and Bert Black, Science and the Courts, 81 American Scientist 230 (1993).

The peer review process is the method by which the scientific community screens and disseminates information. The process is designed to ensure the widest possible distribution of information and ideas while providing a forum for subjecting that information to rigorous review. The peer review process may be formal or informal.

The informal process can occur at any level of interaction from social conversations at a cocktail party to exchanges at seminars, symposiums and other scientific meetings. In short, the informal process occurs anywhere information and ideas are exchanged.

Formal peer review is generally associated with the publication process. It should be noted however that formal peer review also occurs in the grant application and funding processes. Written materials are submitted for publication or in support of a grant application.

Scientific journals and societies typically require authors to submit manuscripts in accordance with specific format requirements. These requirements not only specify details associated with spacing, margins, fonts, equations, footnotes, citations, tables, illustrations and acknowledgments, but also include specific instruction regarding the body of the article.

The body of the article is typically broken into sections (e.g. Introduction, Methods, Results, Discussion, Conclusions, etc.). Scientific journals provide authors with guidance concerning the content of each section.

Some journals will specify specific writing styles.[68] Additionally, most journals specify standardized units.[69] It is also important to note that some societies require authors to adhere to certain ethical codes in addition to other legal requirements. These codes concern authorship, plagiarism, fraud, copyrights, confidentiality, intellectual property, attribution, conflicts of interest, and authorized use of data.[70]

Formatting, style and ethical considerations represent the first phase of the peer review process. Failure to adhere to these considerations will, at a minimum, cause the manuscript to be rejected.

Once the manuscript passes the first phase, it is scrutinized by the journal's editorial staff. Usually, a designated subject-matter editor will make an initial appraisal of the manuscript. If the subject-matter editor considers the manuscript potentially appropriate for the journal, it will be provided to a set of reviewers (i.e. peers) with specific subject-matter expertise.

This part of the review process is essentially a screening process. The reviewers are scrutinizing the quality of the materials submitted for their review. The comments received actually benefit the proponent of the information by suggesting areas where research could be improved and interpretations clarified. Only after the manuscript successfully passes through this screening process is it accepted for publication and distribution.

The peer review process usually takes 3-6 months to complete. Rejected manuscripts are not

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68 *See generally*, CBE Style Manual, Fifth Edition.

69 *See generally*, Standard Practice for Use of the International System of Units, ASTM Standard E-380-93.

70 *See generally*, The Ecological Society of America, Code of Ethics, ESA Handbook 1995-1996, a supplement to the Bulletin of the Ecological Society of America, Volume 77(1), 1996.

eligible for resubmission unless a revision was specifically requested.

Scientists are skeptical of information and ideas which have not been subjected to the peer review process. The preferable forum for peer review is submission of the information to a reputable scientific journal and the subsequent acceptance of the information for publication by that journal.

C. EXAMPLES OF APPLICATION OF THE SCIENTIFIC METHOD

1. *EVALUATION OF A SCIENTIFIC PUBLICATION*

Perhaps the best way to visualize the application of the scientific method is through an example. Suppose that a proposed new publication calls into question certain long-held and widely accepted scientific ideas. A critical scientist (i.e. the reviewer) would first disregard the interpretations and claims made by the proponent (i.e. the author) of the controversial position and examine the data and the methods utilized by the proponent in obtaining that data. Only after completing a critical analysis of the proponents methodology and data, and being satisfied that the data justifies further consideration, would the reviewer consider the claims and interpretations of the author.

In evaluating the claims and interpretations of the author, the reviewer generally considers: (1) whether the author's claims are supported by the data presented in the publication; (2) the existence of alternative interpretations; (3) the basis upon which the author rejected these alternative explanations; (4) the explanatory value of alternative explanations which were not considered by the author; and (5) what sort of additional data might be necessary in order to facilitate a choice between several competing interpretations. The author's conceptual framework may be analyzed for logical consistency only after the reviewer is satisfied that the basic interpretations are reasonable.

If the paper successfully withstands this sort of scrutiny, it may be accepted for publication. Publication is only the beginning. Once published, members of the scientific community will attempt to duplicate the results of the author's work utilizing the same procedures. Furthermore, new test procedures will be devised and the interpretations will be subject to attempts at falsification. After surviving repeated attempts at falsification, the "new idea" may become generally accepted in the scientific community.

Attempts at falsification, even for generally accepted ideas, never really end. Even generally accepted ideas are subjected to attempts at falsification whenever new techniques or procedures are developed. Science is truly an interactive process. No scientific theory is ever considered to be conclusively established and proven.

2. *ANALYTICAL METHOD VALIDATION*

Consider, as an example, a new analytical method. The proponent of the method should be prepared to provide sufficient information to allow the court to evaluate the merit of the proposed procedure. As a practical matter, the proponent of the new method must be prepared to provide documentation that the method has been appropriately validated.

Validation of an analytical method is the process that establishes that the performance

characteristics meet the criteria for the intended analytical application.[71] Performance characteristics are established through laboratory testing. Performance characteristics include: (1) precision; (2) accuracy; (3) limit of detection; (4) limit of quantitation; (5) selectivity; (6) linearity; (7) range; and (8) robustness.

Precision is a measure of the reproducibility of results under the anticipated operating conditions. The precision of an analytical method is established by repeatedly sampling and analyzing a single homogeneous sample. The procedure should be sufficient to allow for calculation of statistically valid estimates of the standard deviation or relative standard deviation (coefficient of variation).

Accuracy is the measure of how well the proposed analytical method yields results which approximate the true value. Accuracy is determined through the analysis of standards containing known concentrations of analytes.

The limit of detection is simply the lowest concentration of analyte which can be detected in any given sample. The limit of detection is based on a signal-to-noise ratio where the detection limit is the minimum level at which the analyte can be reliably detected. Interestingly, this limit must be subsequently validated by the analysis of a number of prepared standards known to be at or near the detection limit.

The quantitation limit is the lowest concentration of analyte that can be determined with acceptable accuracy and precision. This limit must also be validated by the analysis of a number of prepared standards known to be at or near the quantitation limit.

Selectivity of an analytical method simply refers to the methods ability to accurately measure an analyte in the presence of expected sample matrix impurities.

Linearity describes the ability of the analytical method to provide results which are proportional to the concentration of the analyte contained in the sample within a given range. Proportionately may be established directly or through mathematical transformations.

Range is related to precision, accuracy and linearity. The range of an analytical method is the interval including the upper and lower concentrations of analyte that have been demonstrated to be determined with precision, accuracy and linearity.

An analytical method should not be influenced by operational and environmental variables (i.e. different laboratories, analysts, instruments, reagents, etc.). Robustness refers to the reproducibility of test results under a variety of normal operating criteria. The degree of reproducibility is compared to the precision in order to obtain a measure of robustness.

III. Trial Preparation Materials: The Work Product Doctrine

A. Definition and Purpose

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[71] For a more detailed discussion of validation methodology *see*, International Conference on Harmonization; Draft Guideline on the Validation of Analytical Procedures, 61 Fed. Reg. 9315 (March 7, 1996).

The work-product doctrine is set forth in FED. R. CIV. P. Rule 26(b)(3)[72]. Rule 26(b)(3) imposes two levels of protection. The first level of protection addresses ordinary work-product and the second level of protection is concerned with opinion work-product.

The doctrine of work-product immunity will protect documents and other tangible things if they were prepared in anticipation of litigation, unless the party seeking discovery has a substantial need for the documents and will experience undue hardship if forced to obtain the same information through other means. The requirement for a special showing of a substantial need reflects the notion that each sides informal evaluations of its case should be protected. Each party should be encouraged to prepare independently, and neither party should automatically be permitted to gain the benefit of the detailed preparatory work of his or her opponent. This level of protection is referred to as ordinary work-product immunity.

A second level of protection is accorded documents, or portions of documents, which, in addition to having been prepared in anticipation of litigation, also reflect the "mental impressions, conclusions, opinions, or legal theories of an attorney or other representative of a party concerning the litigation".[73] Courts agree that a substantially stronger showing of necessity and unavailability is required where a party seeks disclosure of opinion work-product.[74]

In the context of complex environmental and toxic tort litigation, materials prepared by consultants will be protected under ordinary work-product rules if: (1) they are prepared in anticipation of litigation; (2) by or for the client or the client's attorneys; and (3) the party seeking disclosure is unable to show a substantial need for the materials and undue hardship in obtaining the substantial equivalent of the material by other means. The materials will be accorded special protection if they reflect the mental impressions, conclusions, opinions or legal theories of an

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72 FED. R. CIV. P. Rule 26(b)(3):

> "Trial Preparation: Materials. Subject to the provisions of subdivision (b)(4) of this rule, a party may obtain discovery of documents and tangible things otherwise discoverable under subdivision (b)(1) of this rule and prepared in anticipation of litigation or for trial by or for another party or by or for that other party's representative (including the other party's attorney, consultant, surety, indemnitor, insurer, or agent) only upon a showing that the party seeking discovery has substantial need of the materials in the preparation of the party's case and that the party is unable without undue hardship to obtain the substantial equivalent of the materials by other means. In ordering discovery of such materials when the required showing has been made, the court shall protect against disclosure of the mental impressions, conclusions, opinions, or legal theories of an attorney or other representative of a party concerning the litigation . . . ."

73 FED. R. CIV. P. Rule 26(b)(3).

74 *UpJohn Co. v. United States*, 449 U.S. 383, 401-02 (1981); *In re Grand Jury Investigation*, 599 F.2d 1224, 1231 (3rd Cir. 1979); *In re Chrysler Motors Corp. Overnight Evaluation Program Litigation*, 860 F.2d 844 (8th Cir. 1988); *Mission Nat. Ins. Co. v. Lilly*, 112 F.R.D. 160 (D. Minn. 1986).

attorney or other representative of the client concerning the litigation.

B. DOCUMENTS PREPARED IN ANTICIPATION OF LITIGATION

The Federal Rules of Civil Procedure do not define the phrase "in anticipation of litigation". Courts have had to determine the meaning of this phrase on a case-by-case basis. It is generally agreed that a lawsuit need not be filed at the time the document is created in order to ensure protection from disclosure[75]. Courts have upheld work-product immunity claims even though no litigation was threatened.[76] It should be noted that the mere fact that litigation ensues is not, in and of itself, sufficient to ensure protection.[77] An industrial accident, resulting in some level of environmental or human health impact, will most assuredly give rise to a justifiable anticipation of litigation.

C. DOCUMENTS CREATED BY OR FOR THE CLIENT OR FOR AN ATTORNEY OF THE CLIENT

Rule 26(b)(3) clearly contemplates that documents generated by non-lawyers can be protected under the work-product doctrine.[78] The document must have been created for the purpose of aiding

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[75] *United States v. American Telephone & Telegraph Co.*, 642 F.2d 1285 (D.C. Cir. 1980) (anticipation begins on the date when a potential defendant or respondent received a demand or warning of charges or information from an outside source, that a claim, demand or charge was in prospect); *Burlington Industries v. Exxon Corp.*, 65 F.R.D. 26, 42 (D. Md. 1974) (the work-product immunity doctrine was applicable when litigation was a contingency); *Duplan Corp. v. Deering Milliken, Inc.*, 61 F.R.D. 127, 130 (D.S.C. 1973) (where the probability of litigation is substantial and its commencement is imminent); *Herbert v. Lando*, 73 F.R.D. 387, 402 (S.D. N.Y. 1977), *rev'd on other grounds*, 441 U.S. 153 (1979) (where there is a prospect of litigation); *Hickman v. Taylor*, 329 U.S. 495, 67 S.Ct. 385 (1947) (when documents were prepared with an eye toward litigation).

[76] *See UpJohn Co., 449 U.S. at 401,402* (materials prepared as part of an internal investigation conducted to ascertain wrong doing were protected); *National Tank Co. v. The 30th Judicial District*, 851 S.W. 2d 193 (Stating that "in anticipation of litigation" applies if a reasonable person would conclude from a totality of circumstances that there was a substantial chance that litigation would ensue.)

[77] *See Binks Mfg. Co. v. Nat'l Presto Indus., Inc.*, 709 F.2d 1109, 1118-19 (7th Cir. 1983).

[78] *See* FED. R. CIV. P. 26(b)(3); *United States v. Nobles*, 422 U.S. 225, 238-39 (1975) (the work- product of investigators or other agents of the attorney are protected); *Sterling Drug Inc. v. Harris*, 488 F. Supp. 1019, 1026 (S.D. N.Y. 1980) (Documents prepared by an FDA staffer under attorney supervision were protected.); *Spaulding v. Denton*, 68 F.R.D. 342, 345 (D. Del. 1975) (Marine surveyors investigations concerning the sinking of a yacht were protected under the work-product doctrine.); *Werner v. Miller*, 579 S.W. 2d 455, 22 Tex. Sup. J. 278 (Tex. 1979).

the litigation effort.[79] Rule 26(b)(3) also indicates that documents prepared by consultants, in the absence of attorney involvement, in anticipation of litigation, are subject to work-product protection.[80] The client should not take solace in this position because, as a practical matter, in the absence of supervision or involvement of counsel, a court may find that the materials were prepared in the ordinary course of business rather than in anticipation of litigation.[81] Even though materials prepared by environmental consultants in the absence of attorney supervision may arguably be protected under Rule 26(b)(3) if they were prepared in anticipation of litigation, the documents are much more likely to fall within the scope of the work-product doctrine if they were prepared at the request of counsel.

D. THE SUBSTANTIAL NEED AND UNDUE HARDSHIP REQUIREMENTS

The protection offered by the work-product immunity doctrine is limited. The protection can be overcome by a showing that a substantial need for the materials exists and that the materials or their substantial equivalent cannot be obtained by other means without undue hardship.[82] The substantial need and undue hardship requirements for disclosure of materials otherwise protected may be met if alternative means of obtaining the information do not exist.[83]

If an alternative method is available for obtaining the materials, discovery of the work-product protected materials will be denied. The cost and inconvenience of obtaining the materials through some alternative means is usually not sufficient to overcome work-product protection.[84]

E. WAIVER

Work-product protection may be waived where disclosure of the material substantially

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79 *See Janicker v. George Washington University*, 94 F.R.D. 648, 650 (D.D.C. 1982) (A document is prepared in anticipation of litigation if the primary motivating purpose behind its creation is to aid in possible future litigation.) *See also, Hercules Inc. v. Exxon Corp.*, 434 F. Supp. 136, 151 (D. Del. 1977), and *Binks Mfg. Co.*, 709 F.2d at 1118-19.

80 *See Westhemeo Ltd. v. New Hampshire Ins. Co.*, 82 F.R.D. 702, 708 (S.D. N.Y. 1979).

81 *See Sterling Drug Inc.*, 488 F. Supp. at 1026; *Spaulding*, 68 F.R.D. at 346; *Thomas Organ Co. v. Jadranska Solbodna Plovidba*, 54 F.R.D. 367, 373-74 (N.D. Ill. 1972); *Miles v. Bell Helicopter Co.*, 385 F. Supp. 1029, 1033 (N.D. Ga. 1974).

82 *See Santiago v. Miles*, 121 F.R.D. 636 (W.D. N.Y. 1988); *Clute v. Davenport Co.*, 118 F.R.D. 312 (D. Conn. 1988); *National Tank v. The 30th Judicial District Court*, 851 S.W.2d 193 (Tex. 1993).

83 *See Xerox Corp. v. International Business Machines Corp.*, 64 F.R.D. 367, 389 (S.D. N.Y. 1974); *Copperweld Steel Co. v. Demag-Mannesmann-Bohlewr*, 578 F.2d 953, 963 n. 14 (3rd. Cir. 1978); *McDougall v. Dunn*, 468 F.2d 468 (4th Cir. 1972).

84 *See In re LTV Securities Litigation*, 89 F.R.D. 595, 613 (N.D. Tex. 1981).

increases the opportunity for potential adversaries to view the information[85] or where the documents are disclosed with the intent that an opposing party may obtain the information.[86] Disclosure results in a waiver of ordinary work-product protection for the subject matter disclosed. For purposes of opinion work- product, waiver is limited to the disclosed document.[87]

IV. TRIAL PREPARATION: EXPERTS

A. CATEGORIES OF EXPERTS

Rule 26(b)(4) limits discovery of trial experts.[88] An analysis of the rule indicates that experts can be classified into the following five categories.

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85 *See* Charles Alan Wright and Arthur R. Miller, Federal Practice and Procedures § 2024 (2d ed. 1986).

86 *See American Standard, Inc. v. Bendix Corp.*, 7164 F.R.D. 443 (W.D. Mo. 1976).

87 *See In re Martin Marietta Corp.*, 856 F.2d 619, 625-26 (4th Cir. 1988), *cert. denied*, 109 S.Ct. 1655 (1989).

88 *See* FED. R. CIV. P. 26(b)(4) (stating that in relation to trial preparation and discovery of experts, that "discovery of facts known and opinions held by experts, otherwise discoverable under the provisions of subdivision (b)(1) of this rule and acquired or developed in anticipation of litigation or for trial may be obtained only as follows:

> (A)(i) A party may through interrogatories require any other party to identify each person whom the other party expects to call as an expert witness at trial, to state the subject matter on which the expert is expected to testify, and to state the substance of the facts and opinions to which the expert is expected to testify and a summary of the grounds for each opinion. (ii) Upon motion, the court may order further discovery by other means, subject to such restrictions as to scope and such provisions, pursuant to subdivision (b)(4)(C) of this rule, concerning fees and expenses as the court may deem appropriate.
>
> (B) A party may discover facts known or opinions held by an expert who has been retained or specially employed by another party in anticipation of litigation or preparation for trial and who is not expected to be called as a witness at trial, only as provided in Rule 35(b) or upon a showing of exceptional circumstances under which it is impracticable for the party seeking discovery to obtain facts or opinions on the same subject by other means. . . . ."

1. TRIAL WITNESSES

Rule 26(b)(4)(A)(ii) limits discovery of facts known and opinions held by experts, otherwise discoverable, to interrogatories. The interrogatories may require a party to: (1) identify each expert that party expects to call as a witness; (2) state the subject matter of the expert's expected testimony; (3) state the substance of the facts and opinions to which the expert is expected to testify; and (4) provide a summary of the grounds for each opinion.

The court may, upon motion, order additional discovery. As a practical matter, a court will grant full discovery of experts where a failure to grant additional discovery would prolong or complicate the trial. In complex and technical actions, opinions of experts often control the ultimate disposition of the case. The purpose behind the requirement of a court order under Rule 26(b)(4)(A)(ii) is to ensure that the movant's only interest is in obtaining information for cross-examination. The trial court's task in ruling on the motion is to ensure that the procedure is not being abused.[89] Full discovery could include depositions and discovery of the expert's reports.[90]

2. EXPERTS RETAINED OR SPECIALLY EMPLOYED IN ANTICIPATION OF LITIGATION OR TRIAL PREPARATION BUT NOT EXPECTED TO BE CALLED AS WITNESSES

Rule 26(b)(4)(B) expressly provides for discovery, under exceptional circumstances,[91] of facts known and opinions held by experts who are not expected to be called as witnesses at trial, but who have been retained or specially employed in anticipation of litigation or in preparation for trial.[92] Some courts have held that a showing of exceptional circumstances is required in order for a party to obtain the identity of these experts.[93]

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89 *See In re IBM Peripheral EDP Devices Antitrust Litigation*, 77 F.R.D. 39 (N.D. Ca. 1977).

90 *See Quadrini v. Sikorsky Aircraft Div., United Aircraft Corp.*, 74 F.R.D. 594 (D. Conn. 1977). (Discovery of expert's reports, including reports embodying preliminary conclusions were permitted under Rule 26(b)(4)(A)(ii) where expert testimony was determined to be crucial to the resolution of complex technical and factual issues.); *Fauteck v. Montgomery Ward & Co.*, 91 F.R.D. 393 (N.D. Ill. 1980) (Employer must disclose the computer database which will serve as the foundation of its expert's testimony.); *See* e.g., *Shu-Tao Lin v. McDonnell Douglas Corp.*, 742 F.2d 45, 48 N.3 (2d Cir. 1984).

91 For a discussion of the meaning of "exceptional circumstances" under Rule 26(b)(4)(B) *see Hoover v. U.S. Dept. of the Interior*, 611 F.2d 1132 (5th Cir. 1980); *Pearl Brewing Co. v. Jos. Schlitz Brewing Co.*, 415 F. Supp. 1122 (S.D. Texas 1976); and *Kozar v. Chesapeake & Ohio Railway Co.*, 320 F. Supp. 335 (W.D. Mich. 1970).

92 *See Ager v. Jane C. Stormont Hospital & Training School for Nurses*, 622 F.2d 496 (10th Cir. 1980); *U.S. v. Hooker Chemicals & Plastics Corp.*, 112 F.R.D. 333 (W.D. N.Y. 1986); and *In re Folding Carton Antitrust Litigation*, 83 F.R.D. 256 (N.D. Ill. 1979); *Essex Crane Rental Corp. v. Kitzman*, 723 SW 2d 241 (Tex. App. -- Houston 1986, *no writ*).

93 *See Kaufman v. Edelstein*, 539 F.2d 811 (2d Cir. 1976).

3. EXPERTS INFORMALLY CONSULTED BUT NOT RETAINED

Discovery is not permitted where the expert is contacted on an informal basis and not specially retained.[94] Rule 26(b)(4) contains no provision for this type of expert.

4. EXPERTS WHOSE INFORMATION WAS NOT ACQUIRED IN PREPARATION FOR TRIAL: EMPLOYEES

This type of expert is not protected from discovery. An expert who is a general employee of the party, not specially employed on the case, does not fall within the restrictive provisions of Rule 26(b)(4)(B).[95] Typically, the in-house law department is not staffed with sufficient personnel to manage protracted environmental or toxic tort litigation. In-house counsel could formally request the assignment of employees with expertise in specific areas (i.e. engineering, biology, chemistry, economics) to the corporate law department for the purpose of assisting counsel in preparation for litigation.

5. EXPERTS WHOSE INFORMATION WAS NOT ACQUIRED IN PREPARATION FOR TRIAL: ACTORS OR VIEWERS

Discovery of information from this type of expert is not restricted because such information was not acquired or developed in anticipation of litigation.[96] This expert will be treated as an ordinary witness.[97]

Under Rule 26(b)(4)(A), a witness sought to be discovered may be an expert as to some maters and an actor/viewer as to other matters. Facts and opinions acquired or developed by this expert in anticipation of litigation or for trial would not be discoverable.[98]

6. GENERAL CONSIDERATIONS

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94 *See USM Corp. v. American Aerosols, Inc.*, 631 F.2d 420 (6th Cir. 1980).

95 *See Dunn v. Sears, Roebuck & Co.*, 639 F.2d 1171, 1174 (5th Cir. 1981); FED. R. CIV. P. 26(b)(4)(B) advisory committee's note.

96 See *Quarantillo v. Consolidated Rail Corp.*, 106 F.R.D. 435 (W.D. N.Y. 1985); and *Keith v. Van Dorn Plastic Machinery Corp.*, 86 F.R.D. 458 (E.D. Pa. 1980) (As examples of cases in which the court allowed discovery of an actor/viewer expert.); *See also Kansas-Nebraska Nat. Gas Co., Inc. v. Marathon Oil Co.*, 109 F.R.D. 12 (D. Neb. 1985) and *Barkwell v. Sturm, Ruger & Co.*, 79 F.R.D. 444 (D. Alaska 1978) (As examples of cases in which the court allowed discovery because the expert did not form his/her opinion in anticipation of litigation.)

97 *See* FED. R. CIV. P. 26(b)(4) advisory committee's note.

98 *See Nelco Corp. v. Slater Electric, Inc.*, 80 F.R.D. 411 (E.D. N.Y. 1978).

Counsel and client should meet as soon as possible to discuss the sensitivities associated with each scientific endeavor. Inquiries which are litigation sensitive and/or controversial should be undertaken at the request of counsel.

Counsel should also recognize that certain endeavors, although litigation sensitive, are so important that they should be initiated without litigation protection. Consider, as an example, public health issues. If a release of a hazardous substance threatens the local community, the responsible party will be inclined to conduct some sort of immediate investigation. If the results of this investigation reveal contamination which poses a health concern, then the party in possession of this information should make a full disclosure. If the results do not reveal any contamination, disclosure of the information may be important in the context of mitigation. Public health issues represent an area where the benefits of disclosure may outweigh the risk associated with discovery.

Sensitive and controversial activities should be conducted under the direction of counsel. This does not mean that the information developed as a result of these activities cannot be provided to the client. The information can be provided, in confidence, to the client by counsel for the purpose of seeking, obtaining or evaluating legal advice. Under the Texas Disciplinary Rules of Professional Conduct, a lawyer is required to abide by the client's decisions concerning the objectives and general methods of representation.[99] Under these rules, the lawyer is required to keep the client informed and reply promptly to requests for information.[100] In order for a client to make informed decisions concerning the objectives and general methods of representation appropriate to the case, the client must be informed of all relevant facts and circumstances.[101] The client, in consultation with counsel, can then determine if information obtained through a particular scientific inquiry should be divulged. Proper expert organization will restrict work-product waiver and expert exposure. It is important for the client to be given the ability to decide to expose a particular inquiry without exposing other inquiries or experts.

V. SELECTION OF EXPERTS

A. QUALIFICATION UNDER RULE 702

The first step in the selection process is to determine if the individual under consideration would qualify as an expert within the meaning of Federal Rules of Evidence Rule 702.[102] The standard for qualification as an expert under Rule 702 is extremely broad. In the context of environmental and toxic tort litigation, the trier of fact will almost certainly require scientific,

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99 *See* TEX. DISCIPLINARY R. PROF. CONDUCT 1.02(a)(1) (1989), reprinted in TEX. GOV'T CODE ANN., tit. 2, subtit. G. app. (Vernon Supp. 1992) (State Bar Rules art. X, § 9).

100 *See* TEX. DISCIPLINARY R. PROF. CONDUCT 1.03(a) (1989).

101 *See* TEX. DISCIPLINARY R. PROF. CONDUCT 1.03(b) (1989).

102 *See* FED. R. EVID. (Stating the requirements to qualify as an expert are that the witness be "qualified as an expert by knowledge, skill, experience, training or education", and that such a witness may testify "in the form of an opinion or otherwise".)

technical, or specialized knowledge to understand the evidence and make determinations about the facts in issue. The manner in which the experts are selected should assure their qualification under Rule 702. A list of potential experts should be developed on the basis of their subject matter familiarity, knowledge or published literature in the area(s) of concern, publication history, research interests, technical ability and educational background.

B. SPECIAL QUALIFICATIONS

The next step in the selection process is to narrow the field of potential experts that are going to be interviewed. This can be accomplished by carefully defining subject matter issues and reviewing the published literature to determine which experts fit particular litigation needs. This process enables the attorney to narrow an extremely broad field of experts to four or five individuals within each subject matter category.

In addition to the broad qualifications of Rule 702, the expert must have some important additional qualifications. The need and importance of these additional qualifications may vary with the intended role of the expert. An expert who will not be called as a witness does not necessarily require the same qualifications as a testifying expert. In selecting experts, the following ten general characteristics should be considered:

1. An ability to master the subject matter at issue;
2. Time and availability;
3. An ability to explain complex technical issues in a clear, concise and comprehensive manner;
4. An ability to deal with facts and uncertainty;
5. Familiarity with the literature within a particular field of expertise;
6. Publications in reputable peer reviewed journals;
7. Geographical notoriety (local, national or international) and peer recognition;
8. Level of public sector and private sector experience;
9. Experience with, or a willingness to accept, the litigation process; and
10. Demeanor.

At some point the lawyer needs to review the expert's past publications, presentations and testimony. Prior statements require a thorough review in order to assess the potential for impeachment. If possible, this review should be completed during the selection process.

An expert's credibility can be questioned if an attorney is able to show a bias. Bias can be shown if the expert only appears for a particular class of clients and generally provides the same line of testimony. Bias can also be shown if the expert has an economic interest in preserving the well-being of his employer. The expert should not be viewed as a surrogate advocate. In order to be effective, the expert must be objective and impartial.

C. THE INTERVIEW

Prior to scheduling an interview with a potential expert, the attorney should request a resume

and/or a curriculum vitae ("C.V".). This step permits a thorough review of the expert's educational background, public and private sector experience and publication history. The C.V. also provides some indication of the individual's litigation experience, geographical notoriety and technical ability. After completion of the screening process, the remaining experts should be interviewed and rated in each of the ten special qualification categories.

1. CONFIDENTIAL INFORMATION

As a general rule, confidential information should not be passed to the expert during the interview process. When it becomes apparent that information which is arguably confidential will be discussed during the interview, a separate confidentiality agreement should be executed with the interviewee.

2. GENERAL CONSIDERATIONS

Aside from general questions concerning the material contained in the C.V., hypothetical questions should be posed to the expert. Hypothetical questions can be used to determine the expert's ability to explain complex issues, deal with varying factual scenarios and uncertainty, and respond to questions under pressure.

During the interview process, the expert should be informed that, if selected, he would be retained by counsel in preparation for litigation. In addition, the expert should be informed that: (1) all work performed under the contract will be in response to specific questions presented by counsel; (2) all information received must be maintained in separate confidential files and not intermingled with ordinary business files; and (3) all materials generated must be sent directly to counsel and appropriately marked (e.g. "Litigation Work Product. Prepared for Counsel. Do Not Reproduce or Circulate. Do Not Place in Unprotected Files").

VI. THE LITIGATION CONTRACT

A. GENERAL CONSIDERATIONS

Once selected, the expert should be provided with a standardized litigation contract. The contract should clearly state that the expert is being retained by counsel in preparation for litigation. The contract should also state that the work to be performed by the expert will be in response to specific questions presented by counsel or the designated representative(s) of counsel.

It is important to issue one standard form litigation contract to all experts. Uniformity is extremely important when dealing with large numbers of experts in complex litigation. All contracts should be issued through counsel. The expert should be instructed not to begin work until a fully executed contract has been received by counsel.

Litigation contracts can range from simple letter agreements to complex service contracts. Particular attention should be paid to those provisions which experience has indicated, will undoubtedly present unique problems, especially where experts are obtained from the academic community. Contractual provisions which cause some concern among experts are: (1) the

confidentiality provisions; (2) the copyright provisions; and (3) the conflict of interest provisions.

B. THE CONFIDENTIALITY PROVISION

The confidentiality provision, with some limited exceptions, prevents disclosure of confidential information during the pendency of litigation. Academics are, by their very nature, driven to publish. The more experienced experts, usually those who have already established their reputations in the academic community, are generally more willing to yield to restrictions on the dissemination of information. Those who are still establishing a reputation are less yielding. A good scientist will have trouble with this provision because it is contrary to the scientific communities desire to disseminate information. The expert should be informed that the confidentiality provisions are non-negotiable.

C. THE COPYRIGHT PROVISION

Closely related to the problems associated with the confidentiality provisions are those associated with copyright provisions. In order to publish in any reputable journal, the author must assign the copyright to the publisher. The client should retain ownership of all copyrights. If the expert is willing to accept the confidentiality provisions, the copyright provisions become mere surplusage. The attorney should be willing to negotiate joint ownership of copyrights where the expert desires some assurance that he will be permitted to publish after the restrictions have been lifted.

The confidentiality and copyright provisions do not present an overwhelming concern with respect to consulting firms. Although these firms also express a desire to release information, their motives are more related to business development initiatives than the scientific method. Consulting firms may be permitted to state that they are involved in major environmental or toxic tort litigation activities. The client's name, specific nature of the work and the names of the employees involved in the project should remain confidential.

D. THE CONFLICTS PROVISION

The conflicts provision has rarely been a cause for concern. Experts typically divulge potential conflicts during the interview phase. Experts should be sensitized to these issues and instructed to continue to inform counsel of all potential conflicts. If, after a review of all pertinent facts, the attorney determines that a conflict may result from the proposed activity, the expert should be instructed to decline to respond to a request for services.

VII. THE EXPERT ORGANIZATION (LITIGATION)

A. GENERAL INSTRUCTIONS

Once retained, the expert should meet with counsel to discuss the scope of work. The

following points should be emphasized:

1. The expert has been retained, specifically in preparation for litigation;
2. All work should be done in response to specific questions presented by counsel;
3. All information received by the expert should be maintained in separate, confidential files (these files should be separate from the expert's ordinary business files);
4. Proposals and reports should not be generated unless specifically requested by counsel;
5. Reports generated by the expert should be sent directly to counsel;
6. All reports should indicate the specific questions in response to which they were prepared; and
7. All reports should indicate what sources of information were reviewed and consulted in their preparation.

B. TESTIFYING EXPERTS WHO WILL ENGAGE IN THE COLLECTION OF EMPIRICAL DATA

Environmental inquiries can be extremely complex. The role of the expert is to develop information which will assist counsel in preparation for litigation. The expert in environmental litigation will, invariably, find it necessary to conduct field investigations in order to adequately address the specific questions presented by counsel.

Experts who will, through experimentation, data collection and data analysis, develop opinion testimony, may be refined to as a "defensive" testifying expert.

1. FIRST-HAND KNOWLEDGE

The expert, in order to be an effective witness at trial, must have first-hand knowledge of the situation giving rise to his testimony. The expert must design and direct all studies and field investigations within his given area of expertise.

An academic expert's ability to conduct field investigations may be somewhat limited, especially where the investigations need to be conducted in some remote location. Environmental consulting firms typically maintain a staff of well-qualified professionals capable of conducting field research. An advantage of the consulting firm is that administrative and logistical support are included within their organizational structure. The consulting firm could be retained to set up a support organization for the academic expert's endeavors.

Within such a structure, the expert and the consulting firm employees must be made to understand that it is the academic expert who will design and direct the study, and that the role of the consulting firm will be to obtain information in accordance with that expert's direction. This eliminates the need for the expert to personally conduct each inquiry. The expert must, however, supervise the consultant to ensure that the investigation is proceeding according to its design.

A) EPHEMERAL DATA

Ephemeral or fleeting data simply refers to information which will be lost as a result of the passage of time. Where the potential for information loss exists, the potential testifying expert should conduct the investigation. Any other organizational strategy may result in a lack of first-hand knowledge. This organizational strategy works well for natural science investigations (e.g. biology, chemistry, physics). These sort of investigations are predominantly objective.

B) NON-FLEETING DATA

An alternative organizational strategy is available where the data are of a type that will not be lost. With this sort of data, the risk of developing detrimental information can be managed. The testifying expert need not be exposed to the data as early as would be expected under the fleeting data scenario. Counsel may elect to retain consulting experts (experts retained or specially employed in anticipation of litigation or trial preparation but not expected to be called as witnesses). Data could be provided to these experts for analysis and criticism. Information developed by these experts could be provided to counsel in confidence. Counsel, and the client, would know the results of the inquiry prior to approving the testifying expert's endeavors. The testifying expert would never be informed of this confidential study. The testifying expert would independently develop the same information in preparation for trial.

2. STUDY DESIGN: ADMISSIBILITY AND NOVEL SCIENTIFIC EVIDENCE

In designing a study, the expert should consider problems of admissibility. The resolution of questions of admissibility falls within the discretionary power of the trial court. The trial court may strike expert opinions if it determines that those opinions were based upon facts and data not reasonably relied upon by experts in that particular field. Furthermore, questionable scientific validity may result in a determination that the evidence in question is not relevant.

Courts differ in their approach to the admission of scientific evidence. Under the most liberal view of admissibility, the expert will be permitted to base his opinion on data of the type reasonably relied upon by experts in the field. Other courts, recognizing that theories of causation in complex cases depend almost entirely on expert testimony, determine not only whether the data is of a type reasonably relied upon by experts in the field, but also determine whether the data is trustworthy.[103] Under the more restrictive approach, it is the scientific community's opinion that determines whether the basis of the expert's opinions are sufficiently reliable.[104]

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[103] See *In re Agent Orange Product Liability Litigation*, 611 F. Supp. 1223, 1244 (E.D. N.Y. 1985). (The trial court's examination of reasonable reliance by experts in the field requires at least that the expert base an opinion on sufficient factual data, not rely on hearsay deemed unreliable by other experts in the field, and assert conclusions with sufficient certainty to be useful given applicable burdens of proof.)

[104] *See Indian Coffee Corp. v. Proctor & Gamble Co.*, 752 F.2d 891 (3d Cir. 1985). (The court must make a factual inquiry and finding as to what experts in the field find reliable and cannot substitute its own judgment for that of the expert.); *Trimboli v. State*, 817 S.W. 2d 785 (Civ. App. -- Waco 1991, *no writ*) (Discussing application of the "*Frye* standard" as

The expert should also be warned about the use of novel scientific techniques. A novel scientific technique for the purpose of FED. R. EVID. Rule 702 is one whose reliability is not so well established as to warrant recognition by judicial notice.[105] If there is any doubt that the technique suggested by the expert may run afoul of Rule 702, the expert and the attorney should consider: (1) the soundness and reliability of the technique; (2) the possibility that admitting this evidence would confuse or mislead the jury; and (3) the connection between the scientific inquiries and the disputed factual issues in the case.[106]

The expert should also consider the foundational requirements for the data derived from the investigation. The study must incorporate solid quality control and quality assurance procedures (including chain of custody procedures) if the data are to be used at trial.

3. PERIODIC FILE REVIEW

The expert will almost certainly introduce factual evidence in support of his opinion. It is important to periodically conduct a thorough review of the expert's files in an effort to uncover potential errors and inconsistencies. Field notes, tests, data files, chain of custody reports, quality control procedures, and other authenticating documents must be reviewed.

4. CROSS-CONTAMINATION OF EXPERTS

The ultimate goal of the expert witness is to place a clear and convincing interpretation of complex scientific and technical issues before the trier of fact. It will become increasingly difficult for the expert to achieve this goal if he has engaged in uncontrolled communications with other experts. Uncontrolled communications with other experts will be used to attack the foundation of the opinion testimony and the credibility of the expert.

Once an expert has been designated as a trial witness, the court may order additional discovery. Communications with other experts can lead to discovery of those experts and their associated work.

Counsel should realize that environmental investigations are interdisciplinary. Scientific inquiries seldom fall within the domain of a single academic discipline or professional field. The principle investigator (lead expert) may require additional input from experts outside of his field.

It is impossible to make a prior determination of the sort of expertise that may be required

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scientific community acceptance.)

105 *See United States v. Downing*, 753 F.2d 1224, 1234 (3d Cir. 1985); *See also DeLuca v. Merrell Dow Pharmaceuticals, Inc.*, 911 F.2d 941 (3d Cir. 1990) (Stating that when the scientific methodology is being attacked, the court must analyze the reliability of the methodology under FED. R. EVID 701.); *In re Paoli R..R.. Yard PCB Litigation*, 916 F.2d 829 (3d Cir. 1990) (Stating that if the dispute is concerned with whether the facts or data are of a type reasonably relied upon by experts in a particular field, the analysis should be conducted under FED. R. EVID. 703.)

106 *See United States v. Downing*, 753 F.2d at 1237.

by the principle investigator. Counsel should consider arrangements to provide expert statistical advice to each investigator especially where the alleged impacts are to be determined spatially. Furthermore, statistical expertise is essential when dealing with toxicological and/or epidemiological issues. Statistical expertise will be extremely important during the study design phase of the investigation and in the development of the analytical framework. Statistical experts will deal directly with the issue of reliability. The statisticians will provide the foundation for the data upon which the principle investigator's opinion will be based.

If the need for additional support is sufficiently linked to the specific subject matter inquiry, counsel should consider the organization of expert teams. Each member of the team should be selected in the same manner as the original expert. Once a team has been established, it should be viewed as a single expert entity. Expert teams should be isolated from other experts and confined to their specific subject matter inquiry. Interdisciplinary teams require more supervision than that required by a single expert.

The principle investigator should be considered as the potential trial witness. The principle investigator must know all the facts that are relevant to his testimony. The witness must understand any weakness associated with his presentation and should not be afraid to limit the area of his expertise. The second tier experts (i.e. those which occupy support roles within the team) may be required to give testimony if the principle investigator defers to their area of expertise. The second tier experts would testify within their given field of expertise. Their testimony would therefore provide the foundation for the principle investigator's opinion.

5. REPORTS

A complete and comprehensive compilation of data, results and analysis will almost certainly be necessary to understand the basis for the expert's opinion. Indeed, in the context of complex environmental litigation, it could be argued that in the absence of a report, the expert would be hard pressed to formulate credible opinions. The need for a detailed report will become evident as the scientific and technical issues increase in complexity. Properly developed scientific reports can be extremely effective in supporting expert opinions and placing tremendous amounts of persuasive data before the trier of fact.[107]

The expert should be instructed to stop all written communications until an explicit understanding has been reached with respect to the format and content of the report. If a report is to be written, a decision must be reached as to how drafts will be handled.

Drafts and preliminary reports present unique problems. Facts and data contained in these materials can be scrutinized and attacked. Drafts may expose abandoned theories, calculations and ill-conceived ideas. Even very small differences between the testimony given by the expert and the reports may form the basis of an impeachment strategy. The lawyer should request the expert to orally outline particular lines of proof. Drafts and their associated risks can be minimized, but probably not eliminated, through detailed oral communications. Counsel must not attempt to change

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[107] This assumes that the report does not run afoul of FED. R. EVID. Rule 403. (Stating that relevant evidence may still be excluded on grounds of undue prejudice, confusion of the jury, or waste of time.)

the expert's technical work or opinion, but should request clarification through editorial comment. It may be appropriate to develop a phased-approach to report preparation. A phased-approach may be developed in accordance with the following conceptual framework:

A) THE LITERATURE REVIEW

The first report in the series would be a comprehensive literature review of the subject matter in issue. This report should not contain any opinions of the author unless they are present in the available literature.

B) THE DATA REPORT

The second report would represent a compilation of facts. This report would contain the raw data obtained from field investigations and a description of the methodology employed in the investigation. A description of all quality control and quality assurance methods should also be contained in this volume.

C) THE ANALYTICAL REPORT

The third report in the series would represent the analytical report. This report would be generated only after the expert has had sufficient time to scrutinize the raw data and settle upon the appropriate analytical scheme. The analytical report should contain statistical analyses, graphs and summary tables.

D) THE FINAL REPORT

The final report would contain a discussion of the data and results. This report would integrate all prior reports. Its contents would include the expert's opinions. The necessity for this final report should be based upon a careful analysis of the volume of data upon which the expert intends to rely and the complexity of the subject matter.

C. CONSULTING EXPERTS

Consulting experts are those experts who will not conduct field investigations or develop opinion testimony. Consulting experts fall into the category of experts retained or specially employed in anticipation of litigation or trial preparation but not expected to be called as a witness.

Consulting experts should be retained to assist counsel during discovery and at trial. Consulting experts will not have sufficient time to conduct field investigations. Experts retained in this capacity will essentially function as educators and may assist counsel in the preparation of interrogatories and production requests as well as in the formulation of a litigation strategy. These experts may also review and evaluate the adversary's position as information is discovered and provide assistance to counsel in the formulation of inquiries for use during depositions. These experts will fill an educational role. These consultants must be maintained in a protected status

because they will be exposed to the overall litigation strategy. The same general instructions applicable to testifying experts should also apply to consulting experts.

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Attorney. Trial and appellate practice including contract, environmental contamination, administrative law, whistleblower, real estate, commercial note and collection cases. Represented oil and gas industry associations in amicus curiae briefs regarding environmental issues.

Dow, Cogburn & Friedman, P.C. - October 1991 to January 2001
Attorney. Trial and appellate practice in telecommunications, environmental contamination, construction, real estate, contract, partnership and takings cases.
Trial Practice - First and second chair experience in ten trials in federal and state court.
Appellate Practice - Primary responsibility for briefing numerous federal and state appeals in a wide range of cases. Argued six appeals in the First, Third, Ninth and Fourteenth Texas Courts of Appeals.

Texas Court of Criminal Appeals - September 1990 to August 1991
Briefing Attorney for Judge Charles F. Campbell. Conducted extensive research on complex issues of criminal and constitutional law. Drafted 20 opinions for the Court including death penalty, search and seizure, and white collar criminal cases.

PUBLICATIONS AND PAPERS

Recent Developments in the Primary Jurisdiction Doctrine, with Michael B. Smith, State Bar of Texas Oil Gas, and Energy Resources Law, Section Report, Vol. 26, No. 2 (December 2001).

New York Federal Court Rules That the Federal Telecommunications Act Does Not Limit Franchise Fees to Cost; Local Governments Can Charge Rental Value for Rights-of-Way, Contracts, Franchises & Technology (International Municipal Lawyers Association) Vol 3., No. 4 (September 1999).

The Primary Jurisdiction Doctrine in Texas, CLE Presentation, Houston, TX, October 16, 1998.

Developing Scientific Evidence In Environmental and Toxic Tort Cases: How to Select and Manage Experts, with David J. Owens, Environmental Litigation in the Oil and Gas Industry, New Orleans, LA, March 26, 1997.

Recent Developments in the Takings Doctrine, CLE Presentation, Houston, TX, March 24, 1995.

Widening the Net: Murder for Remuneration in Texas, American Journal of Criminal Law 17:3.

EDUCATION

The University of Texas School of Law - J.D. with Honors 1990.
American Journal of Criminal Law - Executive (Managing) Editor and Book Review Editor; Moot Court and Mock Trial Competitions; Dean's Achievement Award in Oil and Gas; Judge Raymond L. Murray and J.C. Hutcheson, Jr. Scholarships; University of Guanajuato Exchange Program; Argued before the Texas Third Court of Appeals in a Criminal Defense Clinic case.

The University of Texas at Austin - B.A. in Economics 1977.
Honors Program in Economics; Omicron Epsilon Delta; Texas Union employee and committee member.

The University of Maryland at College Park - 1973-1975.
Phi Eta Sigma; University of Maryland Academic Scholarship; National Merit Scholarship; Kappa Alpha Order - Secretary.

Cost Recovery Under the Texas Solid Waste Disposal Act

SIXTEENTH ANNUAL TEXAS ENVIRONMENTAL SUPER CONFERENCE

Austin, Texas

August 5-6 2004

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Cost Recovery Under the Texas Solid Waste Disposal Act

A. INTRODUCTION TO SWDA

Section 113 of the federal Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) has long served as the primary vehicle to obtain contribution for costs incurred in investigating and remediating contaminated property. However, with the increasing delegation of environmental enforcement to state governments – and the issue of whether a potentially responsible party (PRP) can bring a cost recovery action under CERCLA without first being subject to a federal environmental enforcement action pending before the United States Supreme Court in *Aviall Serv., Inc. v. Cooper Indus. Inc.*[1] – parties should be evaluating the available state law remedies to recover response costs. The foremost Texas statute available for the recovery of response costs associated with the investigation and cleanup of contaminated property is contained in Chapter 361 of the Texas Health & Safety Code and is known as the Texas Solid Waste Disposal Act (SWDA). SWDA is intended to control the management of solid waste and facilitate the cleanup of solid waste and hazardous substances. *See* TEX. HEALTH & SAFETY CODE ANN. § 361.002 (Vernon 2001); *Bonnie Blue, Inc. v. Reichenstien*, 127 S.W.3d 366, 369 (Tex. App.—Dallas 2004, no pet.). Solid waste is broadly defined to include most pollution, and specifically includes all hazardous substances for the purposes of cost recovery actions and state enforcement. *See* TEX. HEALTH & SAFETY CODE ANN. § 361.003(34-35). However, solid waste does not include certain waste materials resulting from activities associated with the exploration, development or production of oil or gas. *See id.*

Section 361.344 of SWDA allows for the recovery of certain response costs associated with the cleanup of solid waste and hazardous substances, but the act does not provide for the recovery of damages to real property outside contribution for response costs. SWDA and its cost recovery provisions are largely modeled after the federal superfund statute, CERCLA,[2] but SWDA also contains many aspects of the federal Resource Conservation and Recovery Act (RCRA).[3] There are only a few Texas state court cases that address SWDA and its cost recovery provision, and the most comprehensive, *R.R. Street v. Pilgrim Enterprises*, is currently being reviewed by the Texas Supreme Court. 81 S.W.3d 276 (Tex. App.—Houston [1st Dist.] 2001, rev. granted).[4] Because SWDA and its cost recovery provisions are modeled after CERCLA,

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[1] 312 F.3d 677, (5th Cir. 2002), *cert. granted*, 124 S. Ct. 981, 157 L. Ed.2d 811, 71 U.S.L.W. 3552, 72 U.S.L.W. 3433, 72 U.S.L.W. 3446 (U.S. Jan 09, 2004) (NO. 02-1192). In *Aviall*, the Fifth Circuit United States Court of Appeals sitting *en banc* held that a PRP can bring a contribution action to recoup environmental cleanup costs under section 113(f)(1) of CERCLA, even in the absence of a civil action brought against the PRP under CERCLA sections 106 or 107. *See id.* The *en banc* Court reversed a panel opinion that limited CERCLA contribution actions under section 113 to PRPs that were first subject to a federal enforcement action. *See id.* The United States Supreme Court has granted certiorari.

[2] 42 U.S.C. §§ 9601-9675 (1997).

[3] 42 U.S.C. §§ 6901-6922k (1999).

[4] Issues before the Texas Supreme Court in *R.R. Street* include arranger liability under SDWA, SWDA's domestic sewage exclusion, and what factual issues must be submitted to a jury and the consequence for failing to submit factual issues to a jury.

Texas courts will look to federal cases and interpretations as guidance when applying and interpreting the SWDA. *See R.R. Street*, 81 S.W.3d at 286. For these reasons, interpretations of SWDA will largely be through statutory construction and federal CERCLA case law.

B. ELEMENTS OF SWDA COST RECOVERY CLAIMS

Section 361.344 of SWDA affords a plaintiff options similar to those provided by section 113 of CERCLA. Section 361.344 provides that a person who conducts removal and remedial actions that are necessary to address a release or threatened release and approved by the TCEQ may recover the reasonable and necessary costs of such actions and other costs that the court, in its discretion, considers reasonable. *See* TEX. HEALTH & SAFETY CODE ANN. § 361.344. Under SWDA, a "person" is defined to include individuals, corporations, organizations, government and governmental subdivisions and agencies, trust, partnerships and other legal entities. *See id.* at § 361.003(23). Both "removal action" and "remedial action" are defined terms under SWDA and have definitions similar to those found in CERCLA. *See id.* at § 361.003 *and* 42 U.S.C. § 9601. The terms include most activities taken to investigate and remediate hazardous waste. A detailed discussion of removal action and remedial action definitions is contained in Section C of this article.

To succeed on a cause of action under section 361.344 of SWDA, a plaintiff must show that:

1. the defendant is a person responsible for solid waste;

2. the removal or remedial action is or was approved by the TCEQ;

3. the removal or remedial action was "necessary to address a release or threatened release" of solid waste;

4. the costs of the removal and remedial action are or were "reasonable and necessary"; and

5. the plaintiff made reasonable attempts to notify the defendant(s) of the "existence of the release or threaten release" and that the plaintiff "intended to take steps to eliminate the release or threaten release," unless the claim is in an appeal proceeding of an administrative order or a suit by the State of Texas under the SWDA.

TEX. HEALTH & SAFETY CODE ANN. § 361.344; *R.R. Street*, 81 S.W.3d at 288. Once the liability elements are proven, the court must determine the amount of costs that qualify for recovery and allocate the recoverable costs among the liable parties. *See id.*

1. Proper Defendants and Persons Responsible for Solid Waste

Section 361.344 states that a person who conducts removal and remedial actions can bring suit to recover the costs of those actions. *See* TEX. HEALTH & SAFETY CODE ANN. § 361.344. Section 361.344 indicates that any cost recovery should be allocated using the criteria

listed in section 361.343, which applies to "person responsible for solid waste." *See id.* at 361.344(d). Other provisions of SWDA limit its enforcement to a "person responsible for solid waste" or "solid waste facility."

a. Person Responsible for Solid Waste

A "person responsible for solid waste" is defined broadly, encompassing not only an owner or operator of a solid waste facility, but also the transporter of the waste, as well as the person who arranged for the disposal of the waste. *See id.* at § 361.271(a). Specifically, SWDA defines a "person responsible for solid waste" as a person that:

- is any owner or operator of a solid waste facility (an owner or operator);
- owned or operated a solid waste facility at the time of processing, storage, or disposal of any solid waste (a former owner or operator);
- by contract, agreement, or otherwise, arranged to process, store, or dispose of, or arranged with a transporter for transport to process, store, or dispose of, solid waste owned or possessed by the person, by any other person or entity at:
  - the solid waste facility owned or operated by another person or entity that contains the solid waste; or
  - the site to which the solid waste was transported that contains the solid waste (an arranger); or
- accepts or accepted any solid waste for transport to a solid waste facility or site selected by the person (a transporter).

Id. A solid waste disposal facility generally includes land and improvements used to process, store or dispose of solid waste. *See id.* at 361.003(36).

Two Texas courts of appeals have interpreted who is a "person responsible for solid waste" for the purposes of SWDA. *See R.R. Street*, 81 S.W.3d at 288 *and Bonnie Blue, Inc.*, 127 S.W.3d at 369. Both used the statutory language and federal CERCLA case law as guidance. The *R.R. Street* case also contains an in-depth discussion of the extent of arranger liability under SWDA and the issue is currently on appeal to the Texas Supreme Court. *R.R. Street v. Pilgrim Enterprises, Inc.*, 81 S.W.3d 276 (Tex. App.—Houston [1st Dist.] 2001, rev. granted).

b. Causation

The issue of causation does not appear to be a factor in determining whether a party is a "person responsible for solid waste" and subject to liability under SWDA. Section 361.344 does not contain any requirement that a defendant actually cause the contamination subject to the removal or remedial action. In *R.R. Street*, the First Texas Court of Appeals indicated the issue

of causation was to be considered in proportioning liability among responsible parties under section 361.343 but not in determining initial liability. *R.R. Street*, 81 S.W.3d at 298.

c. Removal and Remedial Actions Limited to Hazardous Waste

It also should be noted that removal actions and remedial actions are limited to only those actions taken to address *hazardous waste*, which is a subset of solid waste, and not solid waste as a whole.[5] *See id.* at § 361.003(29-30). This is not a distinction that was identified by the First Court of Appeals in *R.R. Street* or any of the other Texas cases interpreting SWDA. Because removal and remedial actions are limited to actions involving hazardous waste and not just solid waste, liability under section 361.344 may be limited to only those persons responsible for solid waste, which is also hazardous waste.

2. Approval by the TCEQ

Section 361.344 requires that the TCEQ approve the removal or remedial action, although what constitutes approval is not defined. *See* TEX. HEALTH & SAFETY CODE ANN. § 361.344(a); *R.R. Street*, 81 S.W.3d at 299. Nor does section 361.344 indicate whether the approval must be obtained before or after the removal or remedial action is conducted. The First Court of Appeals in *R.R. Street* unequivocally determined that the TCEQ's approval of a party's "closure plan" met the TCEQ approval requirement. *See R.R. Street,* 81 S.W.3d at 299. Also, under most circumstances, a person conducting removal or remedial actions in Texas will be doing so under the Texas Voluntary Cleanup Program (VCP), or otherwise under TCEQ direction or enforcement using the Texas Risk Reduction Rules program (TRRP). Under these scenarios, the TCEQ will be required to review and approve certain aspects of the cleanup and approve the remedy or the ultimate cleanup, thus likely satisfying the approval requirement of section 361.344. However, the possibility still remains that a person may conduct initial removal actions before TCEQ involvement and without TCEQ express approval.

The requirement of approval by the TCEQ is considerably less stringent than CERCLA's requirement that a person seeking recovery of response costs show that the response action (removal and remedial actions) was consistent with the EPA's National Contingency Plan (NCP). *See* 42 U.S.C. § 9607(a)(4)(B). The NCP is a very detailed regulatory scheme that establishes procedures and standards for cleanups, including reporting, documenting, worker health and safety issues and public notification and comment. If a party fails to substantially comply with the NCP requirements, it will not be able to recover response costs under CERCLA. *See Wash. State Dep't of Transp. v. Natural Gas Co.*, 59 F.3d 793, 799-800 (9th Cir. 1995). Also, if the United States Supreme Court overturns *Aviall,* parties seeking recovery of response costs under CERCLA may first need to be subject to a federal enforcement action. In short,

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[5] "Hazardous waste" is defined as solid waste identified or listed as hazardous waste by the United State EPA under RCRA. *See* TEX. HEALTH & SAFETY CODE ANN. § 361.003(12). Hazardous waste is further defined by RCRA as solid waste or a combination of solid waste which because of its quantity, concentration, or physical, chemical, or infectious characteristics may pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, otherwise managed or that may cause, or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible illness. 42 U.S.C. § 6903.

SWDA's requirement of TCEQ approval will be far easier for parties to obtain and much less onerous than a CERCLA enforcement action.

3. Necessary to Address a Release or Threatened Release

To recover response costs under SWDA, the removal or remedial action must be "necessary to address a release or threatened release." *See* TEX. HEALTH & SAFETY CODE ANN. § 361.344(a); *R.R. Street*, 81 S.W.3d at 299. A "release" is defined as "any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment." *Id.* at § 361.003(28). A "release" does not encompass engine exhaust, the normal application of fertilizer or certain nuclear materials. *See id.* Because of the broad definition of "release," almost all property contamination otherwise subject to SWDA will be subject to a cost recovery action.

The determination of whether a removal or remedial action was necessary to address a release or threatened release is a more complex issue and will likely be a fact question decided on a case by case basis. Neither SWDA nor any Texas cases directly address when a removal or remedial action is "necessary," however, TRRP, CERCLA and the enforcement provisions of SWDA provide some guidance as to when a removal or remedial action will qualify as "necessary."

a. Necessary for Enforcement Purposes--Imminent and Substantial Endangerment

Under SWDA, the state's or TCEQ's ability to force a responsible party to conduct a cleanup, either through an administrative order or civil suit for injunction, is limited to situations in which it appears that an "actual or threatened release of solid waste presents an imminent and substantial endangerment to the public health and safety or the environment."[6] *See, e.g.* TEX. HEALTH & SAFETY CODE ANN. §§ 361.188, 361.272. In such cases, the TCEQ or a court can require a responsible party to take such actions as are necessary to provide and implement a cost effective and environmentally sound remediation plan designed to eliminate the release or threatened release. *See id.* Thus, if the state or TCEQ can require a responsible party to eliminate an actual or threatened release that appears to present an imminent and substantial endangerment to the public health and safety or the environment, then a removal or remedial action that is taken to eliminate--or even reduce--such release or threatened release should be considered necessary.

SWDA does not define what constitutes an "imminent and substantial endangerment to the public health and safety or the environment," however, a definition is provided in the Texas Administrative Code. Section 335.342 of Title 30 of the Texas Administrative Code defines an imminent and substantial endangerment by providing that a "danger is imminent if, given the entire circumstances surrounding each case, exposure of persons or the environment to hazardous substances is more likely than not to occur in the absence of preventive action" and that a "danger is substantial if, given the current state of scientific knowledge, the harm to the

[6] The state and TCEQ have other enforcement mechanisms under Chapter 7 of the Water Code that could provide for additional enforcement.

public health and safety or the environment which would result from exposure could cause adverse environmental or health effects." 30 TEX. ADMIN. CODE 335.342(9). Federal courts also define imminent and substantial endangerment under RCRA to generally include the presence of real or threatened risk of harm from a release or threatened release to a person or the environment if remedial actions are not taken. *See generally California Department of Toxic Substances Control v. Interstate Non-Ferrous Corp.*, 298 F. Supp.2d 930, 980 (E.D. Cal. 2003). Thus, generally speaking a release of hazardous waste could be considered to present an imminent and substantial endangerment if, without remedial action, its presence is more likely than not to cause adverse environmental or human health effects.

b. Necessity under CERCLA

CERCLA also provides some guidance as to whether a removal or remedial action is necessary to address a release or threatened release. Under CERCLA, for response costs to be considered necessary, a party must prove that (1) the costs were incurred in response to a threat to human health or the environment that existed prior to the initiation of the response action, and (2) that the costs were necessary to address the threat. *See Foster v. U.S.*, 922 F. Supp. 642, 652 (D.D.C. 1996); *Yellow Freight Sys., Inc. v. ACF Indus., Inc.*, 909 F. Supp. 1290, 1299 (E.D. Mo. 1995); *R.R. Street*, 81 S.W.3d at 301. A threat to human health or the environment can be found when a level of hazardous waste exceeds the federal or state standards for human health and the environment. *See Amoco Oil v. Borden, Inc.*, 889 F.2d 664, 671 (5th Cir. 1989); *R.R. Street*, 81 S.W.3d at 303. Federal courts have also rejected claims for costs incurred in improving one's own property when no actual threat to human health or the environment exists. *See Southfund Partners III v. Sears, Roebuck & Co.*, 57 F. Supp.2d 1369, 1378-1379 (N.D. Ga. 1999). Thus, it can be reasoned that for a removal or remedial action to be necessary, the action must be taken to address and reduce a threat to human health or the environment. This would also be consistent with the general purpose of SWDA in protecting public health, welfare and the environment from solid waste, and would also be consistent with TRRP and other TCEQ regulations. *See* TEX. HEALTH & SAFETY CODE ANN. § 361.002.

c. Necessary under TRRP

The necessity of a removal or remedial action may also be established if the action is required by the Texas Risk Reduction Program. TRRP applies to virtually all environmental cleanups in Texas and is intended to establish investigation and remediation procedures directed towards protecting human health and the environment balanced with the economic welfare of the citizenry. *See* 30 TEX. ADMIN CODE §§ 350.1 *and* 350.03. In doing so, TRRP sets up risk based approaches and cleanup levels that are intended to be protective of human health and the environment. *See id.* Thus, if removal or remedial actions are performed in accordance with TRRP, they will most likely be deemed necessary. Plus, a party will almost always need to meet the requirements of TRRP to obtain TCEQ approval of its removal or remedial actions.

4. Reasonable and Necessary Costs

In addition to requiring that the removal and remedial action be necessary, a plaintiff must also demonstrate that the costs incurred were "reasonable and necessary." This requirement is different from the requirement of necessity to address a release or threatened

release in that the focus is on the necessity and reasonableness of the costs as opposed to the actions themselves. There will, however, be some unavoidable overlap between the two requirements.

SWDA does not define what costs are considered "reasonable and necessary" for purposes of section 361.344. Whether the costs of a removal or remedial action were reasonable will largely depend on whether the removal or remedial action itself was necessary. If the removal or remedial action was necessary, the costs incurred in conducting the same should be considered necessary. Also, as discussed above, under CERCLA costs are considered necessary if incurred in response to a threat to human health or the environment and were necessary to address the threat. The Texas First Court of Appeals in *R.R. Street* used this interpretation of CERCLA's requirements to provide that a plaintiff may demonstrate that its costs are reasonable and necessary by showing that the costs were (1) incurred in response to a threat to human health or the environment, and (2) necessary to address that threat. 81 S.W.3d at 301. The *R.R. Street* court also placed heavy emphasis on the fact the TCEQ (then the TNRCC) approved of the cleanup activities, and even required more remediation than was proposed by the remediating party. *See id.*

The standard set forth in *R.R. Street* certainly addresses the issue of whether response costs were necessary or required, but it does little to address whether particular operations or activities conducted as part of the removal or remedial action were cost effective. Some provisions of SWDA do address cost effectiveness. The governmental enforcement provisions of the SWDA restrict the state's or TCEQ's ability to force a responsible party to conduct a cleanup to actions necessary to provide and implement a cost effective and environmentally sound remedial action plan designed to eliminate the release or threatened release. *See* TEX. HEALTH & SAFETY CODE ANN. §§ 361.271, 361.272. Because the state and TCEQ are limited to imposing only cost effective and environmentally sound cleanups, a court may similarly restrict what responsible parties may recover through contribution. Also, particular removal and remedial actions may be necessary to address a release or threatened release; however, the costs incurred by the remediating party may not have been reasonable. This may be especially true when the remediating party conducts the removal or remedial action itself and attempts to attribute inflated costs to the activity. The issue may also arise when a remediating party seeks to allocate the costs of a larger remediation project to those activities that would be subject to contribution. In such circumstances, the issue of the cost effectiveness and the reasonableness of the particular action will be particularly important.

5. Notification Requirements

Unless the claim under section 361.344 is brought in an appeal proceeding from an administrative order or a suit by the State of Texas under the SWDA, the plaintiff must make reasonable attempts to notify the potential defendants of the "existence of the release or threatened release" and that the plaintiff "intended to take steps to eliminate the release or threatened release." *See* TEX. HEALTH & SAFETY CODE ANN. § 361.344(c). The SWDA does not establish what constitutes reasonable attempts to notify and when such notice must be attempted. Under TRRP, a remediating party must notify the owners, interest holders and users of certain contaminated lands, but the notice does not require an indication of the intent to eliminate the

contamination. *See* 30 TEX. ADMIN. CODE ANN. 350.55. TRRP also does not require that other potentially responsible parties be notified.

It is clear that personal notification of a release and the intention to address it prior to remediation is sufficient. *See R.R. Street*, 81 S.W.3d at 303. It also seems clear that, because the existence of a release and the person responsible for the release may not be known until after an investigation of the source and extent of the hazardous material is completed, notification would not be required during the initial investigation. It remains unanswered whether a defendant's actual notice of a release and the plaintiff's intent to address that release will alleviate the need to provide notice or excuse late notice, or whether late notice would otherwise prevent or limit the recovery of costs. Regardless, potential plaintiffs who desire to recover their response costs should provide notice as soon as possible, and may want to consider notice by publication if all PRPs have not been identified or located.

C. COSTS RECOVERABLE UNDER SWDA

SWDA provides that a plaintiff may recover the reasonable and necessary costs of removal and remedial actions that are necessary to address the release or threatened release of hazardous waste, plus other costs that the court, in its discretion, considers reasonable. *See* TEX. HEALTH & SAFETY CODE ANN. § 361.344. The SWDA provides little guidance as to the categories and extent of costs that can be recovered.

1. Removal and Remedial Action Costs

As discussed in detail in section B, a plaintiff is required to demonstrate that its costs were reasonable and necessary. A plaintiff will also be required to demonstrate that its costs were actually attributable to the removal or remedial action. This will likely be a very fact intensive inquiry and require a detailed review of each action and its costs. Potential plaintiffs should consider having the costs of its cleanup itemized from the beginning of the operation in order to avoid having recoverable costs excluded. Moreover, expert testimony on the extent and necessity of the costs is almost required.

To determine what costs and expenses can be attributed to a removal or remedial action requires an in-depth review of what activities constitute removal actions and remedial actions. The terms have distinctively different meanings, although some activities could properly be classified as both. The distinction between removal actions and remedial actions is, however, largely immaterial because SWDA does not treat removal actions and remedial actions differently for purposes of cost recovery.

One important aspect of the definition of both a removal action and a remedial action is that they are limited to actions addressing *hazardous waste* and not just solid waste. *See id.* at § 361.003(29-30). Thus, although a cleanup operation or activity may be conducted to address "solid waste," it may not necessarily be considered a removal action or remedial action.

a. Removal Actions

Removal actions are normally the initial actions taken to address a release or threatened release, and are taken to prevent, minimize or mitigate the effect of hazardous waste on human health or the environment. Removal actions may also constitute the final cleanup actions, but are usually only considered interim measures. Removal actions include not only the actual removal and disposal of the hazardous waste, but also the actions to assess, monitor and evaluate the release or threatened release. Specifically, removal actions are defined as:

- cleaning up or removing released hazardous waste from the environment;
- taking necessary action in the event of the threat of release of hazardous waste into the environment;
- taking necessary action to monitor, assess, and evaluate the release or threat of release of hazardous waste;
- disposing of removed material;
- erecting a security fence or other measure to limit access;
- providing alternate water supplies, temporary evacuation, and housing for threatened individuals not otherwise provided for;
- acting under Section 104(b) of the environmental response law (CERCLA);
- providing emergency assistance under the federal Disaster Relief Act of 1974 (42 U.S.C. Section 5121 et seq.); or
- taking any other necessary action to prevent, minimize, or mitigate damage to the public health and welfare or the environment that may otherwise result from a release or threat of release.

Id. at § 361.003(30). The definition of removal action under SWDA is almost identical to the terms definition in CERCLA. *Compare id. with* 42 U.S.C. § 9601(23). Federal cases interpreting what constitutes a removal action under CERCLA will likely be relied upon heavily by Texas courts. *See R.R. Street*, 81 S.W3d at 286.

Under CERCLA, removal actions generally are immediate or interim responses and of a short-term duration. *Geraghty & Miller v. Conoco Inc.*, 234 F.3d 917, 926 (5th Cir. 2000); *United States v. Lowe*, 118 F.3d 399, 402 (5th Cir. 1997). The term removal is also aimed at containing and cleaning up hazardous waste and preventing hazardous waste releases from affecting human health and the environment. *See id.* In short, removal actions are generally those taken to initially address a release or threatened release and assess, monitor and evaluate the release and its impact on human health and the environment. Under such programs as TRRP,

removal actions should encompass much of the activities up until the actual cleanup or the TCEQ's approval of a response action plan.

b. Remedial Actions

Remedial Actions, on the other hand, are those activities associated with a longer-term and permanent remedy to the release or threatened release. *See* TEX. HEALTH & SAFETY CODE ANN. § 361.003(29). Remedial Action is defined as:

> [a]n action consistent with a permanent remedy taken instead of or in addition to a removal action in the event of a release or threatened release of a hazardous waste into the environment to prevent or minimize the release of hazardous waste so that the hazardous waste does not migrate to cause an imminent and substantial danger to present or future public health and safety or the environment.
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> The term includes:
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> - actions at the location of the release, including storage, confinement, perimeter protection using dikes, trenches, or ditches, clay cover, neutralization, cleanup of released hazardous waste or contaminated materials, recycling or reuse, diversion, destruction, segregation of reactive waste, dredging or excavations, repair or replacement of leaking containers, collection of leachate and runoff, on-site treatment or incineration, provision of alternate water supplies, and any monitoring reasonably required to assure that those actions protect the public health and safety or the environment; and
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> - the costs of permanent relocation of residents, businesses, and community facilities if the administrator of the United States Environmental Protection Agency or the executive director determines that, alone or in combination with other measures, the relocation:
>
>   - is more cost-effective than and environmentally preferable to the transportation, storage, treatment, destruction, or secure disposition off-site of hazardous waste; or
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>   - may otherwise be necessary to protect the public health or safety.

Id. Like the definition of a removal action, the definition of remedial action in SWDA is nearly identical to the same definition under CERCLA. *Compare id. with* 42 U.S.C. § 9601(24). Remedial actions may include not only the permanent removal of the hazardous waste, but also capping, treatment, monitoring and other actions taken to minimize the effect of the hazardous waste on human health and the environment.

Federal courts have interpreted the terms removal action and remedial action broadly under CERCLA. Federal courts have nevertheless found that certain costs are not recoverable as

the costs of a removal or remedial action. These unrecoverable costs include: (1) attorneys' fees in prosecuting an action and dealing with the governmental authorities; (2) medical monitoring of exposed persons; (3) economic losses caused by the cleanup activities; (4) personal injury damages, and (5) other compensatory or punitive damages. *See, e.g., Key Tronic Corp. v. United States*, 511 U.S. 809 (1994); *Wehner v. Syntex Corp.*, 681 F. Supp. 651 (N.D. Cal. 1987). These costs would likely not be recoverable under SWDA as removal or remedial action costs, but could potentially be recoverable as "other costs."

2. Other Costs

As mentioned above, in addition to the reasonable and necessary costs of removal and remedial actions, the court under section 361.344 can, in its discretion, award other costs it considers reasonable. "Other costs" are not defined in section 361.344 and there is no CERCLA counterpart to consult for guidance.

The term "other costs" when used in section 361.344 clearly applies to costs (expenses) other than those for removal and remedial actions. Thus, the term "other costs" could include the costs of other environmental actions that may not be classified as removal or remedial or necessary to address the hazardous waste. "Other costs" might also include the costs to address solid waste that is not technically hazardous waste but was required to be remediated in any event, medical monitoring of exposed persons, court costs, attorney's fees and expert's fees.

The SWDA allows the state and certain other parties to recover costs over and above those attributable to a removal or remedial action. Those additional costs include: attorney's fees, *see id.* at § 361.341(a); reasonable costs to prepare and provide witnesses, *see id.*; reasonable costs of investigation and assessment of the hazardous waste site or facility, *see id.*; reasonable costs of studies, analyses, engineering reports, tests, or other projects the court finds were necessary for the preparation of a party's case, *see id.* at § 361.341(d); costs of remedial investigation and feasibility study, *see id.* at § 361.197(b); the costs of the remedial design, *see id.*; and costs of necessary studies and oversight, *see id.* To the extent these additional costs are not costs associated with a removal or remedial action, they could arguably be considered "other costs" awardable by the court.

D. ALLOCATION OF COSTS UNDER SWDA

SWDA's contribution actions are based upon principles of equity, and courts are to make an equitable allocation of the recoverable response costs. *R.R. Street*, 81 S.W.3d at 286. Once the court determines which costs are recoverable, the court must allocate those costs among the persons responsible for solid waste. *See id. and* TEX. HEALTH & SAFETY CODE ANN. § 361.343. SWDA provides four factors that the court must use to determine the allocation of recoverable response costs. The factors are listed in section 361.343 and are a modified version of the "Gore factors" sometimes used in CERCLA allocation.

1. Allocation Criteria

The factors the court must consider are:

- the relationship between the parties' actions in storing, processing, and disposing of solid waste and the remedy required to eliminate the release or threatened release;

- the volume of solid waste each party is responsible for at the solid waste facility or site to the extent that the costs of the remedy are based on the volume of solid waste present;

- consideration of toxicity or other waste characteristics if those characteristics affect the costs to eliminate the release or threatened release; and

- a party's cooperation with state agencies, its cooperation or non-cooperation with the pending efforts to eliminate the release or threatened release, or a party's actions concerning storing, processing, or disposing of solid waste, as well as the degree of care that the party exercised.

TEX. HEALTH & SAFETY CODE ANN. § 361.343(a). The court must also credit against a responsible party's share of the costs the party's expenditures related to the cleanup at issue. *See id.* at § 361.343(b). The court should use the four criteria and credits to allocate a proportionate percentage or amount of the response costs and other costs to the persons responsible for solid waste.

Another factor, not part of the four allocation criteria in section 361.343, is the issue of divisibility of the hazardous waste remediated. Under section 361.276, if the release or threatened release caused by a person's acts or omissions is proven to be divisible, that person is only liable for the elimination of the release or threatened release attributable to the person's acts or omissions. *Id.* at 361.276. A release or waste is divisible if it has been and is capable of being managed separately under the remedial action plan, the cleanup plan approved by the TCEQ. *See id.* Thus, if a party could prove that waste attributable to it was divisible and was remediated under a separate cleanup plan, then its allocation of response costs could be limited to the costs incurred in remediating the divisible waste or release.

Allocation of settlements among the liable parties is another issue that must be considered. In actions brought by the state, settlements with responsible persons reduce the liability of the non-settling parties by the amount of the settlement. *See id.* § at 361.277. SWDA does not contain a comparable provision for settlements between private parties, and the Texas proportionate responsibility statute, Chapter 33 of the Texas Civil Practice & Remedies Code, is not be applicable to SWDA cost recovery actions.[7] The issue of settlement credit allocation will have to be decided by the courts.

[7] Chapter 33 of the Civil Practice and Remedies Code is only applicable to tort actions and actions brought under the Texas Deceptive Trade Practices Act. *See* TEX. CIV. PRAC. & REM. CODE ANN. § 33.002.

2. Factual and Jury Issues

Although the court allocates the recoverable costs among the parties, at least according to the First Court of Appeals in *R.R. Street,* the jury must determine all factual issues used to make the allocation. *See R.R. Street*, 81 S.W.3d at 304. The court in *R.R. Street* found that the "ultimate decision regarding the amount of cleanup costs to be apportioned to each responsible party must be made by the trial judge, not the jury." *Id.* However, the court also found that because of Texas Constitutional requirements "any factual disputes relating to the equitable criteria listed in subsection 361.343(a)(1)-(4) should be determined by the jury." *Id.* What the *R.R. Street* court did not address was how a jury should go about determining the factual issues and what form its findings should take. A jury finding could be applied to initial liability issues, such as whether a person was a person responsible for solid waste or whether the response costs were reasonable and necessary. However, other issues relating to the four allocation criteria are more difficult, if not impossible, to quantify. The four criteria do not lend themselves to simple yes or no answers. Criteria such as the volume of waste each party is responsible for can be answered with a numerical figure or percentage, but the other criteria are much more complex. The *R.R. Street* court did not provide any guidance on how the jury should be instructed or what factual issues are even appropriate for jury determination. Federal law also does not provide any guidance because under CERCLA the trial judge is the arbiter of all issues, even factual disputes. It will be interesting to see how courts manage the complications of a jury determining allocation issues. *R.R. Street* is currently on appeal to the Texas Supreme Court and the jury requirement is an integral part to one of the points of error presented in the appeal. Issues revolving around the jury requirement will likely be resolved by the Texas Supreme Court.

E. DEFENSES TO A SWDA COST RECOVERY CLAIM

SWDA contains a number of defenses to a cost recovery action. They include settlements with the state or TCEQ, act of God, war, or third person. *See* TEX. HEALTH & SAFETY CODE ANN. §§ 361.275, 361.277. SWDA also provides immunity to persons considered to be innocent owners or operators. *See id.* at § 361.752. Other defenses and limitations of liability are provided for engineers and contractors conducting a cleanup for the state or a political subdivision, and lenders and security interest holders. *See id.* at §§ 361.278, 361.752. Additional statutory and common law defenses may also be applicable, including limitation, laches, release as well as others. A few of the potential defenses and limitations are discussed below.

1. Settlement with the State

A person that enters into a settlement agreement with the state is released from any liability for contribution under section 361.344. *See id.* at 361.277; *see also Compton v. Texaco, Inc.*, 42 S.W.3d 354 (Tex. App.—Houston [14th Dist.] 2001, pet denied). A settlement with the state is only effective as a release if it resolves all the liability of the settling person to the state for the particular site. *See id.* The settlement with the state is effective even if it is contingent upon the settling party conducting a remediation activity in the future. *See Compton*, 42 S.W.3d at 360. The settlement is also effective notwithstanding a provision that allows the state to seek further action against the settling party on the occurrence of conditions subsequent. *See id.*

In *Compton*, Texaco entered a settlement agreement with the TNRCC (now the TCEQ) in which it agreed to conduct removal and remedial actions of a particular site in exchange for a release and covenant not to sue from the TNRCC. *See id.* at 358. The settlement agreement also provided that the release and covenant not to sue would be void upon certain conditions, including the discovery of new facts about Texaco's involvement with the site or a change in the scientific information. *See id.* The Fourteenth Court of Appeals found that the settlement was effective under section 361.277, despite the settlement's conditional nature. *See id.* at 360.

2. Limitations

SWDA does not contain an express statute of limitations period for private parties bringing a cost recovery action under section 361.344. CERCLA's cost recovery provision contains specific limitations periods, but those provisions were not duplicated in the SWDA. Section 361.197 provides for a one year limitation period for cost recovery actions brought by the TCEQ, but does not contain similar provisions for actions brought by a private party under section 361.344. To the extent a statute of limitations is applicable, it will come from other sources. The limitation issue also contains many complexities that Texas courts will have to struggle with unless the statute is amended.

There are two possible limitation periods that could apply. The first is the two year period applicable to injuries to land or personal injuries. *See* TEX. CIV. PRAC. & REM. CODE ANN. § 16.003. Causes of action for injuries to land, whether for negligence, nuisance or trespass, are governed by the two year limitations period contained in Civil Practice and Remedies Code section 16.003(a). *See Hues v. Warren Petro. Co.*, 814 S.W.2d 526, 529 (Tex. App.—Houston [14th Dist.] 1991, writ denied). Causes of action for personal injury are also governed by the two year limitation period contained in section 16.003 of the Civil Practice & Remedies Code. Although a SWDA cost recovery action involves land, it does not involve injury to land in the normal meaning of the term. The removal and remedial action are intended to prevent or minimize potential injury to human health or the environment, not to compensate, correct or rectify a personal injury or property damage. *See* TEX. HEALTH & SAFETY CODE ANN. § 361.003(29-30).

The second possible limitation period is the four year residual limitation period contained in Civil Practice and Remedies Code section 16.051. Section 16.051 applies to all actions for which no express limitation period is provided. *See* CIV. PRAC. & REM. CODE ANN. § 16.051. Section 16.051 is the default limitation period and could be applicable to cost recovery actions because there is no express period provided in the statute. A four year period would also be more in harmony with the limitations periods provided by CERCLA, which is three years from the completion of a removal action or 6 years from the on-site construction of a remedial action. *See* 42 U.S.C. § 9613(g)(2).

Another factor complicating the issue of limitations for SWDA cost recovery action is accrual. Claims for contribution do not accrue for limitation purposes until payment is made or a judgment is rendered against the party seeking contribution. *See, e.g. Conroe Truck & Tractor, Inc. v. Childs Truck Equip.*, 723 S.W.2d 207, 208-09 (Tex. App.—Beaumont 1986, writ ref'd

n.r.e.). This would imply that in the SWDA context, a cost recovery action may not accrue until the plaintiff actually conducts the removal or remedial action.[8]

Finally, it could be argued that the legislature's failure to provide an express statute of limitations was intentional. Many of the underpinnings of cost recovery under CERCLA and SWDA are equitable in nature, in effect codifying the equitable claims of unjust enrichment and equitable subrogation in the environmental context. Accordingly, one could certainly argue that the doctrine of laches provides the only appropriate time bar to a contribution claim.

3. Act of God, War or Third Party

Section 361.275 of SWDA provides several defenses to liability for injunctive relief to address a release or threatened release. *See* TEX. HEALTH & SAFETY CODE ANN. § 361.275. The section provides defenses to persons responsible for solid waste that can prove, by a preponderance of the evidence, that the release or threatened release was caused by an act of God, an act of war or an act or omission of a third person. The defense is similar to the defenses contained in section 107(b) of CERCLA. *Compare id. with* 42 U.S.C. 9607(b). These defenses should be applicable to persons subject to a section 361.344 cost recovery action, although not expressly provided.

Releases or threatened releases caused by an act of God or war are fairly straightforward. To avoid liability based on the action or omission of a third person is more complicated. To take advantage of the third person defense, a defendant must prove that it exercised due care concerning the solid waste released or threatened to be released and took precaution against foreseeable acts or omissions of the third person and the consequences that could foreseeably result from those acts or omissions. *See id.* In addition, the defense does not apply if the third person is an employee or agent of the defendant, or had a direct or indirect contractual relationship with the defendant and the act or omission of the third person occurred in connection with the contractual relationship. *See id.* A "contractual relationship" includes land contracts, deeds, or other instruments transferring title or possession of real property. *See id.* However, the contractual relationship does not impose liability if the defendant can prove it acquired the property through inheritance or bequest, or that it did not know and had no reason to know after an appropriate inquiry that a hazardous substance released or threatened to be released, or the contractual relationship was for rail carriage by a common carrier under published tariffs. *See id.* There are also additional provisions that limit the availability of the third person defense.

4. Innocent Owner

Another defense similar to the third person defense contained in section 361.275 is the "innocent owner or operator" defense. *See id.* § 361.752. An innocent owner or operator is a person that owns or operates land that became contaminated as a result of a release or migration from neighboring land or a source outside the land. *See id.* § 361.751. In order to take advantage of the innocent owner or operator defense the person must allow reasonable access to

[8] A cause of action for cost recovery under SWDA would not likely accrue upon the entry of an order or judgment because § 361.344 provides a claim to a person who conducts removal or remedial actions and not persons subject to an order or judgment to conduct removal or remedial actions. *See* TEX. HEALTH & SAFETY CODE ANN. § 361.344.

the property for investigation and remediation. *See id.* § 361.752. An innocent owner or operator may also apply to the TCEQ for a certificate confirming the person's status as an innocent owner or operator, and the certificate evidences immunity from liability to the state or private parties. *See id.* § 361.753.

5. Governmental Immunity

Governmental Immunity may be a defense to SWDA cost recovery actions brought by private parties under section 361.344. The SWDA unquestionably applies to counties, political subdivisions and other governmental entities. Governmental entities are included in the definition of a "person" under SWDA and are even included as a "person responsible for solid waste." *See* TEX. HEALTH & SAFETY CODE ANN. §§ 361.003(23), 361.271. Notwithstanding, whether SWDA contains clear and unambiguous language waiving governmental immunity is subject to debate. Some prior cases have held that governmental immunity is waived by the legislature if the term "person" includes governmental entities. However, the legislature recently amended the code of statutory construction to provide that "a statute shall not be construed as a waiver of sovereign immunity unless the waiver is effected by clear and unambiguous language" and that the use of the term "person" to include governmental entities, "does not indicate legislative intent to waive sovereign immunity unless the context of the statute indicates no other reasonable construction." TEX. GOV. CODE § 311.034. Reading the SWDA as a whole, strong arguments exist on both sides as to whether governmental immunity may apply to private contribution claims. However, it is clear that counties, political subdivisions and other governmental entities remain liable under SWDA to the state and TCEQ. *See Texas Workers' Comp. Comm'n v. City of Eagle Pass/Texas Municipal League Workers' Compensation Joint Ins. Fund*, 14 S.W.3d 801, 803 (Tex. App. – Austin 2000, review denied).

F. ADVANTAGES AND DISADVANTAGES OF A SWDA COST RECOVERY CLAIM

There are several advantages to bringing a cost recovery claim under SWDA as opposed to CERCLA. There are also several disadvantages. The particular circumstances surrounding each case will determine whether, and to what extent, a SWDA cost recovery claim is preferable. Plaintiffs may also choose to bring both claims when in federal court.

One big advantage of a SWDA claim is that a plaintiff is only required to show that the TCEQ approved of the removal or remedial action. CERCLA requires substantial compliance with the NCP, which can be much more difficult to achieve than approval by the TCEQ. The requirement of TCEQ approval is also a potentially enormous advantage if the United States Supreme Court overturns the Fifth Circuit's *en banc* decision in *Aviall*. If a plaintiff must first be subject to a federal enforcement action before bringing a CERCLA cost recovery claim under Section 113, the SWDA may become the preferred claim for environmental cost recovery in Texas.

Another possibly notable advantage of a SWDA claim is the ability to recover "other costs." CERCLA limits a party's recovery to costs incurred for the removal or remedial action, while SWDA allows those costs plus "other costs" the court considers reasonable. The "other costs" could include attorney's fees, expert fees, investigation costs and other costs that could

amount to a large sum depending on the circumstances. The possibility of recovering other costs could be a deciding factor in whether to bring a SWDA or a CERCLA claim, and should almost always dictate that a SWDA claim be joined with a CERCLA claim in federal court.

Another consideration when making a cost recovery claim is that while a CERCLA cost recovery claim must be brought in federal court, a SWDA may be brought in Texas state court. Depending on the venue and other circumstances of the case, a state court may be preferable to a federal court. Also, the ability to have a jury decide factual issues under SWDA may be preferable to having a federal judge decide factual issues. At the same time, a plaintiff should consider whether a jury could accurately decide the surrounding factual issues.

Conversely, a potential disadvantage with bringing a cost recovery claim in state court is that few state court judges will be familiar with SWDA, while most federal judges are familiar with CERCLA. Moreover, as discussed above, the SWDA itself leaves many important issues unanswered and untested. Many parties and practitioners prefer to bring a SWDA claim together with a CERCLA claim in Federal Court, accordingly.

The SWDA notification requirement may also prove problematic in certain circumstances. CERCLA does not contain a notification prerequisite before a claim can be brought, although it does require public disclosure through compliance with the NCP. Moreover, the inability to bring a claim under the SWDA against the United States government may prove fatal to certain claims. CERCLA contains a waiver of United State sovereign immunity for claims brought under CERCLA. *See Burette v. Carothers*, 192 F.3d 52, 58-59 (2nd Cir. 1999). The waiver is not applicable to SWDA claims. If the United States government is a potential party, a CERCLA claim is clearly preferable.

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Bill Jackson is a founding partner of the law firm of Connelly · Baker · Wotring · Jackson LLP in Houston, Texas. Mr. Jackson is a trial lawyer licensed to practice in Texas, the United States District Courts for the Southern, Northern and Eastern Districts of Texas, and the United States Court of Appeals for the Fifth Circuit. He has served as lead counsel in various litigation matters in Texas state and federal courts and in commercial arbitration matters across the country. Mr. Jackson is a native Houstonian and is actively involved in many professional, community and civic organizations. He is currently serving on the National Board of Directors of Justice for Children, as Vice President for Programming of the University of Houston Law Alumni Association, and was recently selected to be a member of Class XXIII of Leadership Houston.

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Environmental Litigation: Mr. Jackson has represented plaintiffs and defendants in matters involving a broad range of environmental issues, including claims asserted under CERCLA, RCRA, Oil Pollution Act, Texas Solid Waste Disposal Act, Clean Water Act and various common law theories of recovery. Likewise, he has represented clients before the Texas Commission on Environmental Quality and other state and federal environmental agencies, coordinating litigation, contested cases and related administrative proceedings. Mr. Jackson has substantial experience with property damage, remediation, cost recovery and natural resource damages matters. Mr. Jackson was a member of the litigation team representing the Port of Houston Authority in its recent litigation against a pesticides plant on Greens Bayou, achieving a settlement for the Port valued at $100 million that the National Law Journal named as one of the ten most significant settlements in Texas for 2003. He is currently serving as co-national counsel for a Fortune 200 company in its system-wide environmental litigation and cost recovery dockets.

Commercial Litigation: Mr. Jackson has extensive experience in representing plaintiffs and defendants in a variety of commercial litigation matters, including suits involving partnership and corporate formation issues, alter ego and de facto merger issues, civil-RICO, breach of fiduciary duty, fraud and negligent misrepresentation, tortious interference, and breach of contract and indemnity matters.

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UNIVERSITY OF HOUSTON LAW CENTER Doctor of Jurisprudence, May 1992.

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RECENT PRESENTATIONS AND PAPERS

- Ports 2004 Conference/Marine Environmental Task Force. Speech on ecological risk assessment and sediment remediation issues in litigation. (June 2004).
- Port Harbors, Navigation & Environment Seminar. American Association of Port Authorities. Speech delivered to the AAPA on Strategies for Assessing, Remediating, and Reusing Contaminated Properties and Waterways (May 2004).
- Proactively Limiting Environmental and Financial Liability on Port-Owned Aquatic Lands. Speech delivered at Anchor/CBWJ Seminar, New Orleans, Louisiana (May 2004).
- Advanced Civil Litigation, University of Houston Continuing Legal Education. Paper and speech regarding Rule 167 Settlements under Texas Tort Reform (April 2004).
- Litigation and Trial Tactics Seminar, University of Houston Continuing Legal Education. Paper and speech regarding the New Offer of Settlement Rules post-House Bill 4 (December 2003).
- Port Administration and Legal Issues Seminar, American Association of Port Authorities. Speech delivered to the AAPA on Managing the Risks Associated with Environmental Issues and Litigation (November 2003).
- "Contribution for Environmental Cleanup Costs under Aviall Services, Inc. v. Cooper Industries, Inc., 312 F.3d 677 (5th Cir. 2002)," THE HOUSTON LAWYER (May/June 2003).

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- State Bar of Texas (Fellow; Member: Environmental and Litigation Sections)
- American Bar Association (Member: Environmental and Litigation Sections)
- Houston Bar Association (Board of Directors, Environmental Section (2004-2006); Member: Litigation Section)
- Environmental and Energy Law Policy Journal, University of Houston Law Center, Advisory Board (2004-present)
- Texas Association of Defense Counsel
- Defense Research Institute
- American Law Institute
- College of the State Bar of Texas
- Texas Young Lawyers Association (past Director)
- Houston Young Lawyers Association (past President, Vice-President, Treasurer and Director)
- Houston Young Lawyers Foundation (past Chair, Treasurer and Trustee)
- National Association of Railroad Trial Counsel
- American Association of Port Authorities (Law Review and Harbors, Navigation & Environment Committees)
- Gulf Ports of the Americas Association

Toxicology and Risk Assessment Issues in Environmental Toxic Tort Litigation

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1.0 Introduction

Litigation involving actual or alleged environmental contamination will likely center around the risks of current and future disease posed by the chemicals that are present in the air, soil, or groundwater. Both sides will retain experts in toxicology, risk assessment, and various medical disciplines to explain their perspectives on the risks posed by the chemicals at issue. This paper discusses the likely claims of plaintiff experts in these types of cases and potential (depending on the actual facts of the case) defense strategies to counter these claims. In the hypothetical case considered at this conference, landowners adjacent to a petrochemical facility allege personal injury and property damage due to exposure to chlorinated hydrocarbons (used as cleaning solvents) in groundwater purported to emanate from the Oil Park refinery. In some instances, the chemicals were detected in their groundwater at concentrations in excess of the USEPA maximum contaminant levels (MCL). The plaintiffs claim that as a result of chemical releases from the Refinery facility, their drinking water has been contaminated. Groundwater modeling has predicted that the groundwater was contaminated several years prior to discovery. As a result of this contamination, they allege that they have "suffered great emotional distress" for several reasons, including "the past, present and future potential and actual health risk posed by the contamination at the facility and the contamination of certain of plaintiffs' drinking water." They also allege that they "have suffered personal injury as the result of their exposure to hazardous substances released from the facility."

The plaintiffs' also claim fear of future disease, primarily cancer, as a result of their exposure to chemicals in their drinking water.

2.0 Plaintiff's Experts' Allegation

Plaintiff's experts will likely focus on the following issues:

1. Chemical are present in groundwater in excess of "allowable" levels. They have ingested the chemicals, showered with them, watered their gardens with them, and used the contaminated water in the normal course of life.

2. Each of the chemicals have various known toxic effects, including effects on the immune system, liver, kidney, nervous system, reproductive organs, and developing fetus. These effects of exposure have been known for decades.

3. Several of the chemicals have been extensively studied by the USEPA and other organizations, with the conclusion that they are "probable" human carcinogens or "reasonably anticipated" to be human carcinogens. One of the chemicals detected in the groundwater, vinyl chloride, is a breakdown product of the chemicals discharged by the defendant. This chemical has been identified by the USEPA and several other organizations as a "known" human carcinogen. As a general rule, as more information becomes available on chemicals, the "allowable" levels of exposure decrease, i.e., they are more toxic than previously thought.

4. As a result of exposure to these toxic chemicals, they have suffered various diseases and are more likely to suffer disease in the future.

5. As a result of exposure to these toxic chemicals, they are at an increased risk of developing various types of cancer. Any level of exposure to cancer-causing chemicals results in an increased risk. There is no "safe" level of exposure to carcinogens.

6. They have suffered emotional distress from their knowledge regarding current and future disease, and their fear of future cancer has a scientific basis.

The plaintiff's experts will likely <u>not</u> focus on the following:

1. The difference between the science and rationale behind environmental regulation of chemicals, particularly carcinogens, and the scientific methodology required to establish the cause of disease in a particular individual.

2. The actual exposures (and dose) received by the plaintiffs as they compare to levels known to cause effects in humans or experimental animals.

3. The degree or level of theoretical risk of disease experienced by the plaintiffs as a result of their exposures to the chemicals at issue.

3.0 Potential Defense Strategies – Example Defense Expert Report

Following are some potential strategies to address at least some of the plaintiffs' experts' allegations outlined above. They are presented in the form of statements of opinions that might be included in a report of an expert in the fields of toxicology and risk assessment.

3.1 Area of Expertise

I am testifying as an expert in toxicology. Toxicology is the science of poisons. Whether a substance is a poison depends on two inseparable criteria: the intrinsic nature of the substance, and the dose, or how much of a substance an individual actually takes into his or her body. In toxicology, we study the dose-response of chemicals on biological systems, with emphasis on understanding the mechanisms of harmful effects.

It is a fundamental principle of toxicology that all substances have the ability to cause harm if exposure to a sufficient quantity occurs. Conversely, at sufficiently low levels of exposure, chemical substances will not exert harmful effects. The level below which harmful effects are not observed is referred to as the "toxicologic threshold."

3.2 USEPA Methodology for Evaluating Cancer Risk from Chemical Exposure

The risk assessment process has been developed over the years as a public policy tool to be used in making risk management, public health, and environmental policy decisions (Presidential/Congressional Commission on Risk Assessment and Risk Management, 1997). It is a highly conservative process that provides multiple margins of safety and overestimates risk, with the "precautionary principle of being protective when uncertain." (ibid.) This inherent conservatism is readily apparent in the procedures followed for the estimation of cancer risk from chemicals considered to be "carcinogens." One of the primary assumptions in this process is that a chemical that causes cancer in an animal study is considered potentially carcinogenic in humans. This is current United States Environmental Protection Agency (USEPA) policy, regardless of the concentration or dose of chemical administered, or the conditions under which it was administered. Thus, a chemical that causes cancer in animals administered doses that are hundreds or even thousands of times higher than experienced by humans is still considered to be a potential cause of cancer in humans, even at very low environmental exposure levels. In fact, the USEPA identifies a chemical as a "probable human carcinogen" if it causes cancer in one or more animal studies.

An additional fundamental assumption in USEPA cancer risk assessment procedures is that any exposure to a "carcinogenic" chemical, even one molecule, is associated with a calculable increased risk of cancer. Therefore, once a chemical has been shown to cause cancer in animals, these data are then used to "extrapolate" downward from the high doses given to animals to the lower doses possibly experienced by humans. A mathematical value is calculated, and is referred to as a "cancer slope factor" (SF). The SF is calculated in such a way as to purposefully overestimate risk. Once the SF is determined, chemical concentrations (in air, water, or soil) are measured or predicted and used with a number of conservative assumptions to calculate the dose of that chemical potentially received by an individual. This dose is then multiplied by the SF to arrive at an estimate of risk of cancer that could be observed in an exposed population of humans. The numerical value of risk is generally expressed as the number of additional cases of cancer that would occur in a given number of exposed individuals. Thus, a cancer risk of one in 100,000 (noted as 1×10^{-5}) indicates that one additional case of cancer could occur

in a population of 100,000 individuals exposed throughout their lifetime. It is important to note that this is an additional case that might occur above the general background incidence of cancer, generally regarded to be approximately 30% (Garfinkel, 1991). Thus, in a population of 100,000 individuals exposed to a chemical at a level resulting in a 1×10^{-5} cancer risk, 30,000 would develop cancer regardless of the exposure and one additional individual would develop cancer as a result of the exposure, resulting in 30,001 cases of cancer in that population. For any one individual in this hypothetical population, his or her risk of developing cancer as result of exposure to the chemical in question would be one in 100,000, or 0.001%. As noted above, this risk assessment process (in this case estimating one additional cancer in 100,000 exposed individuals) is specifically designed to overestimate risk, resulting in highly protective public policy decisions that are based on these estimates. Following is USEPA's explanation of the meaning of cancer risk estimates calculated using this conventional methodology:

> *These values are upper-bound estimates of excess cancer risk potentially arising from lifetime exposure to the chemical in question. A number of assumptions have been made in the derivation of these values, many of which are likely to overestimate exposure and toxicity. The actual incidence of cancer is likely to be lower than these estimates and may be zero.* (NRC, 1989)

The USEPA notes that the calculated risk is "likely to be lower" than that estimated using this methodology. In fact, the standard mathematical estimations of risk are used to calculate a 95% upper confidence limit on the risk (USEPA, 1989), indicating that there is a 95% chance that the actual risk will be lower, perhaps, as noted above, even zero. Thus, in the remainder of this report, any calculated theoretical cancer risk has a 95% probability of overestimating the actual risk, if any, from exposure to the chemical(s) evaluated.

In his expert report, Dr. Plaintiff's Expert noted,

> *"What the data suggests, however, is these people are facing some increased cancer risk as a result of their exposure to Oil Park Refinery contaminants. The defendant's own environmental consultant admits as much in its Human Health Risk Assessment. For this reason, fear of cancer as a result of the exposure has a scientific basis."*

It is important to note, however, that an "increased cancer risk" can be calculated using this methodology (as employed by defendant's environmental consultant) for <u>any</u> exposure, regardless how small, to <u>any</u> chemical that is considered to be a carcinogen by the USEPA. As will be discussed in more detail below, a finite cancer risk can be calculated using this methodology for common, everyday carcinogenic chemicals we are exposed to in the air we breathe and the food we eat. It is inappropriate to assume that a cancer risk calculated using USEPA methodology provides a "scientific basis" for fear of cancer. If that is the case, there is a "scientific basis" for all inhabitants of the United States to live in fear of cancer, because we are routinely and unavoidably exposed to

"carcinogens" in our everyday lives, and each of these exposures results in a theoretical cancer risk that can be mathematically calculated using USEPA methodology.

3.3 USEPA Drinking Water Regulations

The USEPA has developed regulatory standards regarding allowable levels of chemicals in water supplied to the general public. The health-based standards developed by the USEPA are referred to as Maximum Contaminant Levels, or MCLs. MCLs for drinking water are calculated (for "carcinogens") using the risk assessment methodology discussed above, together with technology considerations such as the ability to detect the chemical at low concentrations. The "acceptable risk range" for carcinogens in drinking water is 1 x 10^{-4} to 1 x 10^{-7} (52 FR 32499), i.e., 1 in 10,000 to 1 in 10,000,000 additional cases of cancer. Thus, the fact that a chemical is present in water at a concentration in excess of the MCL does not necessarily mean that toxic effects have or will occur in individuals drinking or using that water. It only means that the chemical was present in a concentration that exceeded the "allowable" level as calculated by the highly conservative risk assessment process described above. For example, if a MCL is developed based on a 1 x 10^{-5} (1 in 100,000) cancer risk level, water containing a concentration 10 times higher than this level would result in a theoretical calculated cancer risk of 10 in 100,000 excess cases of cancer. It does not mean that consumption of that water would cause toxic effects in the exposed individual. As noted above, for all chemicals, regardless of the source of their exposure (air, water, food, etc.) it is the dose of that chemical, or the amount taken into the body, that determines whether toxicity will occur in an exposed individual.

3.4 Evaluation of Available Data Regarding Plaintiffs' Drinking Water

I have evaluated data from chemical analyses of drinking water samples obtained from the plaintiffs' residences. Since these were obtained immediately prior to installation of city water and, since plaintiffs' expert hydrogeologist has opined that groundwater concentrations are increasing, I have assumed that these data are representative of all water consumed by the plaintiffs for the 10 years estimated by the plaintiffs' expert prior to discovery of the contamination. Several different volatile organic chemicals (VOCs) were detected in the plaintiffs' drinking water. Three VOCs were present in one or more samples in excess of the USEPA MCLs. Results for these three chemicals are summarized in the following table.

Chemicals Detected in One or More Samples in Excess of the USEPA MCL
Mean (range) µg/l

Chemical	Jones	Smith	Adam	MCL
Tetrachloroethylene	na	na	1.0 (0.8 – 9.1)	5
Trichloroethylene	10 (1 – 22)	8 (1.6 – 15)	11 (2 – 17)	5
Vinyl Chloride	1.0 (1.3 – 7)	na	2.9 (1.8 – 12)	2

na- Not applicable. Chemical not detected in excess of MCL.

For the purposes of my report, I have evaluated potential risks for only those chemicals listed in the above table, i.e., those present in one or more samples in excess of the MCL. This is appropriate since, as noted by the USEPA, "MCLs are fully protective of human health and (for carcinogens) fall within the acceptable risk range of 10^{-4} to 10^{-7}." USEPA has also noted that "these standards [MCLs] assure that even sensitive populations will experience no adverse health effects," and "MCLs provide a sufficient level of protectiveness even for carcinogens." (52 FR 32499) Thus, although several chemicals have been detected in the plaintiffs' water, those present at concentrations below applicable MCLs are not present in sufficient concentrations to result in adverse human health effects.

3.5 Discussion of Chemicals Present in Plaintiffs' Drinking Water in Excess of USEPA MCLs

3.5.1 Trichloroethylene

The chemical most commonly detected in the plaintiffs' drinking water, and that detected in the highest concentrations, was trichloroethylene (TCE). This chemical was also the focus of Dr. Plaintiff's Expert report. TCE has been studied in a number of human epidemiological studies of exposed workers. These studies have failed to demonstrate an increase in cancer incidence in the studied populations. This substantial human evidence led the American Conference of Governmental Industrial Hygienists (ACGIH), the independent body that develops the widely recognized worker exposure guidelines referred to as Threshold Limit Values (TLVs), to in 1993 designate a carcinogenicity classification for TCE of *A5-Not Suspected as a Human Carcinogen.* The criteria for an A5 designation by the ACGIH are noteworthy. These criteria are as follows:

> *Based on well-controlled epidemiological studies that did not associate TCE with any increased risk of cancer in exposed workers, an A5, Not Suspected as a Human Carcinogen, notation is assigned to TCE.* (ACGIH, 2001)

However, the 2001 draft USEPA toxicity assessment for TCE proposes that TCE should be considered a more potent potential carcinogen than was previously thought by the USEPA. Unlike its previous policy regarding the calculation of TCE cancer risk, the USEPA draft report does not propose a single value for assessing TCE cancer risk, but provides a range of values that varies over 20-fold. Each value is based on endpoints derived from a different human or animal study. The draft report recommends that a slope factor from this range be selected that is appropriate for the risk assessment and exposure scenario under consideration, but does not provide specific guidance on choosing an appropriate factor. Publication of the EPA's draft assessment has generated substantial controversy and criticism. In fact, the EPA's own Scientific Advisory Board (SAB) has suggested that risk assessors wait for resolution of controversial issues before putting the new recommendations into effect. The EPA plans to submit the TCE draft assessment to the National Academy of Sciences for a special expert-panel review. That review is scheduled to be completed in 2006.

In spite of these uncertainties, I have used the most conservative newly-proposed cancer risk value to perform the calculations in my report.

3.5.2 Vinyl Chloride

Vinyl chloride has been shown in occupational exposure studies to cause a very low incidence of a rare liver tumor (angiosarcoma) in workers exposed to high concentrations during the manufacture of polyvinyl chloride (PVC) plastics. The appearance of this rare tumor in association with vinyl chloride exposure has only been reported in occupationally exposed individuals, and it is thought that high exposure levels, sufficient to cause overt toxic effects in the liver, are required for this tumor to occur (ACGIH, 2001). As noted by the ACGIH, "It is apparently the progression of vinyl chloride-induced hepatic fibrosis [fibrous changes in the liver that can occur after toxic exposures] with chronic high-dose exposure that forms the basis of these cancers in human beings." (ACGIH, 2001) The U.S. Occupational Safety and Health Administration (OSHA) and the ACGIH have developed allowable vinyl chloride worker exposure levels in air of 1 ppm. As discussed in more detail below, the dose of vinyl chloride, i.e., the amount actually taken into the body, potentially received by the plaintiffs is a thousands times lower than that received by a worker breathing vinyl chloride at this 1 ppm level in air.

3.5.3 Tetrachloroethylene

As shown above, tetrachloroethylene was only detected in the Adam residence. The ACGIH has classified tetrachloroethylene as an "A3" – Confirmed Animal Carcinogen with Unknown Relevance to Humans. The definition of an A3 carcinogen is as follows:

> *Agent is carcinogenic in experimental animals at relatively high dose, by route(s) of administration, at site(s), of histologic types(s), or by mechanism(s) that may not be relevant to worker exposure. Available epidemiologic studies do not confirm an increased risk of cancer in exposed humans. Available evidence does not suggest that the agent is likely to cause cancer in humans except under uncommon or unlikely routes or levels of exposure.* (ACGIH, 2004)

3.6 Comparison of Doses of Chemicals Potentially Received from the Plaintiffs' Water With Doses Received from Allowable Occupational Exposures

As previously noted, it is the dose, or amount of chemical taken into the body, that determines the nature and extent of toxic effects, if any, that occur following exposure to a chemical. For the purposes of my evaluation, I have calculated the dose of each of the four chemicals discussed above that could potentially have been received by the plaintiffs as a result of use or consumption of their water prior to initiation of treatment. I have calculated the total average daily doses from 1) ingestion, 2) inhalation exposure from chemicals that volatilize from water during use, and 3) dermal exposure during showering. These are the same exposure scenarios considered in the defendant's environmental consultant's risk assessment. I have then tried to place these dose levels in

perspective by comparing them with doses that could be received by workers exposed to allowable levels of these chemicals in their workplace air.

The occupational exposure levels used in this comparison include the ACGIH Threshold Limit Values (TLVs), the OSHA Permissible Exposure Limits (PELs), and the National Institute of Occupational Safety and Health (NIOSH) Recommended Exposure Limits (RELs). Each of these guidelines/regulations are designed to be protective of human health, and avoid toxicity in workers exposed during their working lifetime to these levels of chemicals. For each of the chemicals I have evaluated, the dose comparisons are made for the highest calculated average daily dose potentially received at any of the three plaintiffs' residences. These comparisons are as follows:

Comparison of Highest Potential Plaintiff Dose with Doses Received at Allowable Occupational Exposure Levels

Chemical	Highest Plaintiff Dose (mg/kg)	ACGIH Dose (mg/kg)	ACGIH/ Plaintiff Dose	PEL Dose (mg/kg)	PEL/ Plaintiff Dose	REL Dose (mg/kg)	REL/ Plaintiff Dose
Tetrachloroethylene	0.000155	24.3	156,774	96.9	625,161	-	-
Trichloroethylene	0.00103	38.4	37,282	76.7	74,466	23.9	23,204
Vinyl chloride	0.000381	0.4	1,050	0.4	1,050	-	-

These comparisons show that the highest potential average daily dose of these chemicals received by any of the plaintiffs was from 1,050 to over 600,000 times lower than doses received by workers exposed to allowable air concentrations of these same chemicals. Thus, the chemical exposures received by the plaintiffs from their drinking water were not sufficient to have caused toxic effects.

3.7 Evaluation of the Jones Medical Records

Further evidence that the plaintiffs have not been exposed to toxic levels of chemicals from their drinking water comes from a review of the medical records for Mr. and Mrs. Jones. A common target organ for chlorinated VOCs, including those present in the Jones's water in excess of MCLs, is the liver. At sufficient levels of exposure, liver toxicity can occur from exposure to these chemicals. The Jones's medical records contain the results of clinical laboratory testing that includes liver enzyme tests. Records for this type of testing are during 1995 - 2002, a period of time prior to replacement of the Jones's well water. None of the liver function tests conducted prior to 2002 indicated that there were any liver abnormalities in these individuals.

3.8 Cancer Risks Calculated Using USEPA Risk Assessment Methodology

The plaintiffs' toxicologist, Dr. Plaintiff's Expert has opined that the environmental consulting report, which provides theoretical calculated cancer risks from exposure to off-site drinking water provides a "scientific basis" for fear of cancer. I have used standard USEPA methodology, together with all available data regarding chemical concentrations in the plaintiffs' water and plaintiff-specific information such as

residential history, to calculate the theoretical cancer risks for each plaintiff residence. Differences between the risks I have calculated and those reported by the environmental consultant are due to 1) availability of additional water testing data, and 2) use of plaintiff-specific information (e.g., residence time) not available to the consultant at the time they prepared their report.

It should be noted again that these are theoretical risks, and that there is a 95% probability that true risks, if any, are lower than those calculated, and may be zero. As discussed above, the most commonly detected chemical, and that present at the highest concentration (trichloroethylene) has been extensively studied in exposed worker populations, and has not been shown to cause human cancer. The theoretical calculated risks are as follows:

Theoretical Cancer Risks Calculated for Each Plaintiff Residence

Plaintiff	Theoretical Risk
Jones	**9×10^{-5} 9 in 100,000 0.009%**
Smith	**7×10^{-5} 7 in 100,000 0.007%**
Adam	**1×10^{-4} 1 in 10,000 0.01%**

These calculations show that there is a 95% probability that the cancer risks, if any, experienced by the plaintiffs as a result of exposure to contaminants in their residential water range from 1 in 10,000 to 9 in 100,000. These risks are within the range of risks considered acceptable by the USEPA.

3.8 Comparative Risks

All of us experience "risk" of injury, death or disease during the course of our every day lives. Every time we drive or ride in an automobile, walk outside during a thunder storm, ride a bicycle, or engage in virtually any other human activity, we experience some finite level of theoretical risk. Our diet contains many chemicals that have been shown to cause cancer in man or experimental animals. For example, benzene, a known human carcinogen, is naturally found in cheddar cheese, eggs, beans, cocoa, cooked rice and potatoes, soy beans, peas, olive oil, lentils, and butter (Waddell, 1993). Nitrosamines, which are potent animal carcinogens, are present in cooked bacon (Ames et al., 1987), and carcinogenic polycyclic aromatic hydrocarbons (PAHs) are produced every time we charbroil meat. Doll and Peto (1981) estimate that 35% of all cancer deaths in the United

States occur as result of the diet. In an unpublished report, Dr. Robert Scheuplein of the United States Food and Drug Administration (FDA) used the Doll and Peto estimate of proportion of cancer deaths from the diet, together with the Surgeon General's 1988 calculation that 22% of all deaths in the U.S. are from cancer, to calculate that the risk of cancer death from dietary exposure to carcinogens is approximately 8×10^{-2}, or 8 in 100. This risk is hundreds of times higher than the theoretical risks I calculated for the plaintiffs in this litigation.

The focus of my expert report has been to address and place in perspective the theoretical risks experienced by the plaintiffs as a result of exposure to chemicals contained in their residential water. I have utilized the highly conservative USEPA risk assessment methodology to calculate these theoretical risks. That same methodology can be used to calculate and compare cancer risks from exposure to naturally occurring carcinogens. In addition, the theoretical risks for the plaintiffs can be compared with risks of death from various lifestyle activities (Wilson, 1980). These risk comparisons are presented in the following table, and show that the theoretical cancer risks for the plaintiffs' residences are much lower than risks of death and/or cancer from a number of common activities or sources of exposure.

Comparison of Risk of Cancer or Death from Various Activities or Sources of Exposure With Cancer Risks Calculated for Plaintiffs' Residences

Cause of Death or Cancer	Lifetime Risk[1]	Risk/Plaintiff Ratio[2]		
		Jones (9×10^{-5})	Smith (7×10^{-5})	Adam (3×10^{-5})
Motor vehicle	2×10^{-2}	222	286	200
Falls	5×10^{-3}	56	71	50
Home accidents	8×10^{-4}	9	11	8
Fishing - Drowning	7×10^{-4}	8	10	7
Bicycling	7×10^{-4}	8	10	7
Average U.S. diagnostic medical X rays	7×10^{-4}	8	10	7
Accidental solid or liquid poisoning	4×10^{-4}	4	6	4
Electrocution	4×10^{-4}	4	6	4

1 – Calculated from Wilson, 1980.
2 – Lifetime Risk/theoretical cancer risk for plaintiff residences

Conclusions

1. EPA risk assessment methodology is a highly conservative process that by design overestimates potential human health risks. It is predicated on the principle that a chemical that causes cancer in animals at high doses should be considered a potential cause of cancer in humans. Animal cancer studies are used to provide mathematical estimates of human cancer risk that have a 95% probability of overestimating actual risks, if any, that could occur from low level environmental exposure. USEPA drinking water standards (MCLs) have been developed using this conservative methodology. Some finite "risk" can be calculated for any exposure to any "carcinogenic" chemical, regardless of how small or large the exposure. It is inappropriate to conclude that a "risk" calculated using this methodology provides a "scientific basis" for fear of cancer.

2. Of the various volatile organic chemicals (VOCs) measured in the plaintiffs residential water, only three were present in concentrations in excess of USEPA primary drinking water standards. Two of these three chemicals are not known human carcinogens.

3. Although these three chemicals have been detected in one or more samples from the plaintiffs' residential water at concentrations in excess of USEPA MCLs, the doses of chemical potentially received by the plaintiffs from the ingestion or use of their water are hundreds to thousands of times lower than doses received by workers exposed to these same chemicals at concentrations considered safe and acceptable by the U.S. government and other public health organizations. These chemicals have not been present in the plaintiffs' residential water at concentrations sufficient to cause any noncancer health effects.

4. Risk calculations performed using the conservative USEPA risk assessment methodology indicates that there is a 95% probability that the risk of cancer, if any, experienced by the plaintiffs as a result of chemical exposures from their residential water is within the range of carcinogenic risks considered acceptable by the USEPA for regulation of chemicals present in various environmental media.

5. The theoretical cancer risks calculated for the plaintiffs are lower, in some cases hundreds of times lower, than risks of death that result from a number of common everyday activities or sources of chemical exposure.

Phillip T. Goad, Ph.D.
Toxicologist

Tetrachloroethylene Effects

- Cancer
- Dizziness
- Headache
- Skin irritation
- Eye irritation
- Liver damage
- Kidney damage
- Changes in chromosomes
- Lung damage
- Presence in breast milk has caused infants to have
  - Liver Damage
  - Jaundice

Trichloroethylene Effects

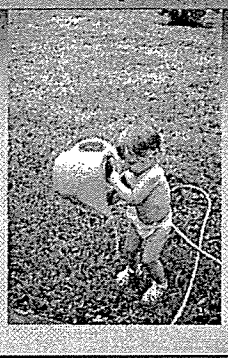
- Cancer
- Dizziness
- Headache
- Skin irritation
- Eye irritation
- Liver damage
- Kidney damage
- Changes in chromosomes
- Cardiac arrhythmias
- Nerve damage
- Numbness and paralysis of extremities

Vinyl Chloride Effects

- Cancer
- Drowsiness
- Skin irritation
- Eye irritation
- Liver damage
- Brain damage
- Birth defects
- Lung damage
- Changes in chromosomes
- Nerve damage
- Numbness and paralysis of extremities

Toxic Exposures

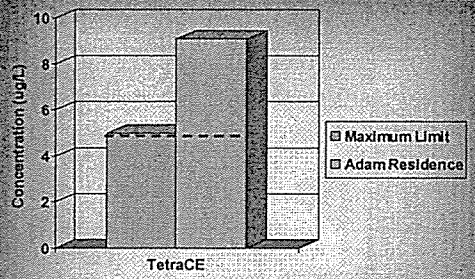
Toxic Exposures

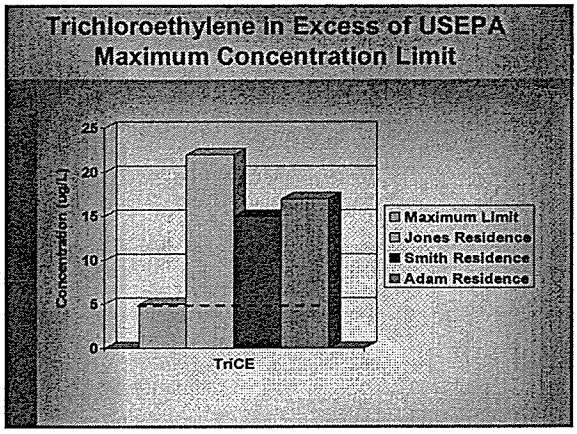


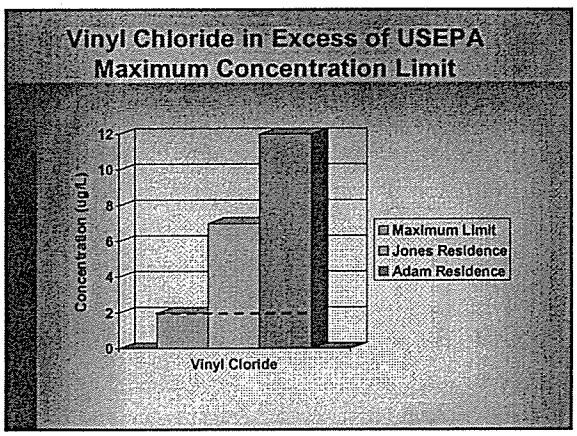
Toxic Exposures

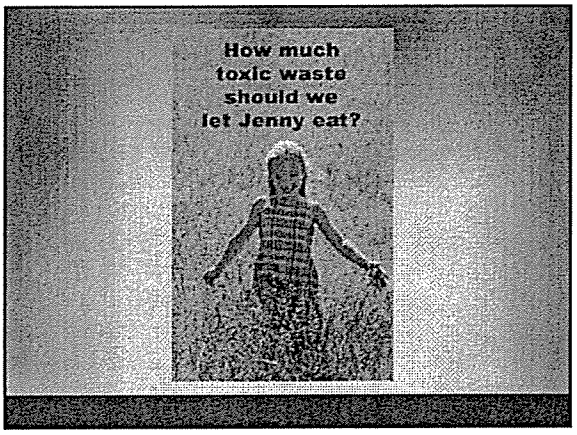
Toxic Exposures

Tetrachloroethylene in Excess of USEPA Maximum Concentration Limit




Trichloroethylene in Excess of USEPA Maximum Concentration Limit
Concentration (ug/L)
25
20
15
10
5
0
TrICE
Maximum Limit
Jones Residence
Smith Residence
Adam Residence


Vinyl Chloride in Excess of USEPA Maximum Concentration Limit
Concentration (ug/L)
12
10
8
6
4
2
0
Vinyl Cloride
Maximum Limit
Jones Residence
Adam Residence


How much toxic waste should we let Jenny eat?

Summary

- Community is at risk for:
  - Cancer
  - Brain damage
  - Liver and kidney damage
  - Birth defects
  - Nerve damage
  - Chromosome damage

Conclusion

- Levels of tetrachloroethylene, trichloroethylene and vinyl chloride in water are above acceptable standards.
- Community is at risk for severe health effects from using contaminated water for drinking, bathing, washing food.

Biographical Sketch of Dr. Phillip Goad
July 14, 2004

Dr. Goad is an owner and Senior Toxicologist at the Center for Toxicology and Environmental Health (CTEH), L.L.C. an environmental consulting firm that is an associate of the University of Arkansas for Medical Sciences Bioventures Program. He is an adjunct assistant professor in the College of Medicine, Division of Interdisciplinary Toxicology, and the Department of Environmental and Occupational Health, College of Public Health, University of Arkansas for Medical Sciences. CTEH is an environmental consulting firm that has several specialties including toxicology and risk assessment.

He holds a Bachelor of Science degree in Chemistry from Harding College in Searcy, Arkansas (1977) and a Ph.D. degree in Interdisciplinary Toxicology from the University of Arkansas for Medical Sciences (1982).

Dr. Goad conducts toxicological evaluations, human health and ecological risk assessments, community and worker health evaluations, and regulatory compliance consultations. His consultation work includes cancer, birth defects, and target organ disease arising from occupational and environmental chemical releases. Dr. Goad provides on-site support in emergency settings such as train derailments and provides consultation and coordination services to clients regarding the specific standards described for OSHA, Worker Right-to-Know, RCRA and SARA Title III compliance. Dr. Goad evaluates the results of employee health monitoring and training programs, and prepares, reviews, and summarizes corporate Material Safety Data Sheets. In addition, Dr. Goad provides testimony in State and Federal Courts in matters related to toxicology, risk assessment, environmental health and regulatory compliance.

Dr. Goad is a member of the Society of Toxicology, the Teratology Society, and the Air and Waste Management Association.

He has written numerous articles on toxicological and risk assessment subjects.

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B. CATS Managers Contact Information (6/04)

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D. Pipeline Safety Administration Establishment Act (HR-4277) (1/30/04)

E. Draft Interagency Agreement on Coordination of Environmental Reviews for Pipeline Repair Projects (1/04)

F. Public Education Programs Notice of Proposed Rulemaking (6/24/04)

G. Summary of RP 1162 Program Recommendations (8/27/03)

H. Passage of Internal Inspection Devices Final Rule (6/28/04)

I. Class Location Change Waiver Criteria Notice (6/29/04)

J. DIGIT Team members (undated)

K. Web Sites (undated)

OFFICE OF PIPELINE SAFETY - HEADQUARTERS and OTHER RSPA OFFICES

Room 2103	Prefix: 202-366-
MAIN NUMBER	4595
North Conf. Room - A	9852
South Conf. Room - B	6820
HQ Fax 1	4566
Alt. Fax # OPS	202-493-2311
Gerard, Stacey (DPS-1)	**4595**
O'Steen, Jim (DPS-2)	**4595**
Anova, Felipe P.	3751
Asfari, Husan	3174
Barber, Melanie	4560
Bonifer, Melissa	9334
Brown, Anitra	0403
Bryant, Jack	498-7472
Callsen, Beth	4572
Chernosky, Ed	8829
Coleman, Darline	8074
Cruz, Ana	5018
Donohue, Jenny	4046
Dow, Angela	4595
Fell, Marvin	6205
Fortner, Tom (DPS-20)	4564
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Garrison, Veronica	4996
Gibson, Dave	0389
Graham, LaChaundra	5431
Grinston, Cheryl	4202
Hall, Robert	8860
Hall, Sam	493-0591
Herrick, L. E.	5523
Hess, John	4576
Hill, Gwen	4395
Hornsby, John	3845
Huriaux, Richard (DPS-1	4565
Israni, Mike	4571
Johnson, Shawn	4113
Joseph, Anne-Marie	2410
Kadnar, Joy	0568
Kastanas, Stanley T.	3844
Key, Becky	6570
Little, Roger (DPS-13)	4569
Marbley, Carolyn	4585
Martinez, Juan Carlos	1933
Meehan, Daniel	3747
Milam, Jean	493-0967
Minor, Sandra	8861
Morgan, Janice	2392
Reynolds, James	2786
Silva, Michelle	4578
Smith, Robert	3814
Sperry, Jerod W.	366-0667
Tancil, Jeff	8075
Turnbull, Shauna	3731
Vinjamuri, Gopala	4503
Vivas, Pablo	6043
Whetsel, Cheryl	4431
Wiese, Jeff (DPS-11)	2036
Williams, Bernadyne	2416
Varma, Soolata	1878
Wright, Sheila	4554

Prefix: 202-366-	
Administrator Room 8410	
DRP - 1	
Bonasso, Sam	**4433**
Hughes, Kimberly	9885
Jackson, Tina	4433
Parsons, Ola	4002
Wallace, Nicky	4461
Program & Policy - DPP- Rm. 8404	
Ashwell, Ariel	4831
Bonkowski, John	493-0310
Delcambre, Joe (Press)	493-0730
Fax	67431
Fludd, Sabrina	4090
Frazier, Deborah	0225
Hill, Damon (Press)	4424
Klinger, Patricia (Cong.)	6374
Leeds, Terry	4358
Lumpkins, Tyrone	1073
Stieger, Paul	6818
Taylor, James	6648
Whitney, George	6373
Wiggins, Jim	4978
Chief Counsel - DCC- Rm. 7128	
Betsock, Barbara	4400
Bivins, Renita	5947
Fred, Benjamin	4346
Lopez-Goldberg, Astrid	6318
Pappas, Sherri	4363
Raiford, Regina	4401
Sanchez, Paul	8099
Tryon, Ahren	9085
White, Larry	9093
Civil Rights - DCR	69638
Mgmt. & Admin. - DMA- Rm. 7424	
Brigham, Ed	4347
Dobbs, Jesse	0894
Eichenlaub, Carl	6673
Kleiner, Lisa	5618
Malloy, Rhonda	5608
Martin, Ron	0461
Mulcahy, Barbara	0776
Ortiz, Aurea	4347
Rhoads, Linda	4428
Savoy, Marie	4347
Scott, Tom	5180
Williams, Jon	4349
Emergency Trans. - DET	**65270**
Hazardous Materials - DHM	**60656**

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National Transportation Safety Board
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Fax: 202-314-6482

FAA Travel Accounting Office
Oklahoma City Ph: 405-954-3189
Christeen Banks Ph: 405-954-5378

National Response Center
Phone: 800-424-8802
202-426-2675

Safety Related Condition Reports (SRCR)
Fax: 202-366-7128

OPS Web Page
http://ops.dot.gov

Other Frequently Called Numbers:

Conference Rooms	60135
Computer Help Desk	64435
Conference Calls	493-2663
Copier Code	560050
SATO	62700
Security	62816
Parking	60064
Building Maintenance	62458
Health Unit Room 6227	60892
Motor Pool	61364

OFFICE OF PIPELINE SAFETY - REGION/TSI OFFICES

OPS WESTERN REGION, DPS - 28

Main Number	720-963-3160
Hoidal, Chris	**720-963-3171**
Allen, Claude	720-963-3190
Bonnett, Kristi	702-963-3160
Brown, Brent	720-963-3189
Davis, Kimbra	720-963-3176
Finch, Tom	720-963-3175
Gilliam, Jeffery	720-963-3173
Haddow, John	720-963-3184
Katchmar, Peter	720-963-3172
Kenerson, Jerry	720-963-3191
Nguyen, Huy (Wade)	720-963-3174
Reineke, Ross	720-963-3182
Rieger, Steve	720-963-3188
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OPS EASTERN REGION, DPS - 24

Main Number	202-260-8500
Gute, Bill	**202-260-8501**
Horvath, Stephen	202-260-8506
Dankanich, Alex	202-260-8518
Johnson, Sheila (PA)	202-260-8526
Myers, Clyde	202-260-8516
Rathod, Dino	202-260-8505
Shere, Syed	202-260-8509
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OPS CENTRAL REGION, DPS 26

Main Number	816-329-3800
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Archuletta, Phillip	816-329-3807
Barrett, David	816-329-3817
Beshore, Allan C.	816-329-3811
Butler, Karen	816-329-3835
Cline, Sandy (PA)	816-329-3801
Dushane, Benson	816-329-3815
Johnson, Joshua	816-329-3825
Johnson, Judy	816-329-3809
McMaster, Tom	816-329-3819
Miller, Warren	816-329-3823
Moore, Don	816-329-3821
Ochs, Greg	816-329-3814
Rickey, Stewart	816-329-3803
Shieh, Hans	816-329-3805
Steiner, Leonard	816-329-3813
Winne, Harold	816-329-3836
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OPS SOUTHERN REGION, DPS - 25

Main Number	404-832-1147
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Andrews, Bennie	404-832-1151
Chai, Nancy (PA)	404-832-1147
Crawford, Christine	404-832-1163
Hindman, Greg	404-832-1154
Joyner, Fred	404-832-1166
Khayata, Mike	404-832-1155
Lemoi, Wayne	404-832-1160
Mataich, Joseph	404-832-1159
Rea, Dallas	404-832-1157
Shoaib, Mohammed	404-832-1153
Schwarzkopf, Mike	404-832-1158
Tessner, Lynn	404-832-1162
Turner, Derick	404-832-1156

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OPS SOUTHWEST REGION, DPS-27

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From: **Secretary Norman Y. Mineta**
Date: **December 16, 2003**

Reorganization Broadcast Message

As many of you now have heard from your Administrator or Departmental Director, for the past year I have been taking stock of our Department and the services we provide. I have determined a need for certain organizational changes to help our Department generate greater operational efficiency and to increase the effectiveness of our budgetary, human capital, and managerial resources. There are two primary areas within the Department that I believe we need to restructure.

First, we need to create a more focused research organization within the Department that emphasizes and promotes innovative technology.

Second, we need to perform a systematic review of our maritime assets within the Department that will result in a more focused maritime policy.

Before I go into details about this plan, please let me assure you of a couple of things. This proposal is intended to be budget neutral; we will not be adding or subtracting jobs or money in any of the affected areas. We are in the initial phases of rolling out this proposal - some of what I am proposing will require legislation, and some we can do administratively. This is just the beginning of a process that still requires many details to be worked out. I am eager for your input, and for input from our external stakeholders, both on the Hill and in industry. I will be establishing a reorganization working group that will consist of members of each of the affected modes and operating areas of the Department. This group's specific task will be to identify and work through the many, many details associated with a reorganization such as this. The working group will be an available and appropriate forum to raise any concerns or additional thoughts that may arise as we proceed down this path.

I believe this reorganization will greatly benefit the Department and I look forward to working with you to implement these changes. Here are the specifics:

RSPA to RITA

As you know, the Research and Special Programs Administration (RSPA) currently houses several functions that relate to operations, and bear little relation to the basic research functions of that Administration. Similarly, several of the important research and analytical capabilities that could better support RSPA's research programs are fragmented in other parts of the Department. What I intend to do is to transform the existing RSPA into a new organization within the Department, to be designated as the **Research and Innovative Technology Administration (RITA)**.

The focus of this new approach will be to promote research driving innovative technology. I envision this new organization to be part "Silicon Valley entrepreneurial company" and part "university research lab." I want to do more than just change the name of RSPA to RITA; it should be a mission change for this Administration.

This new Administration would be responsible for the research and development functions currently performed by RSPA. In addition, it would integrate into its operations the Intelligent Transportation Systems Joint Program Office, currently located within the FHWA and all of the functions, statistical and research, currently assigned by statute to the Bureau of Transportation Statistics.

Finally, it would serve a strong coordination and review function for all of the Department's research facilities and provide the Secretary with a regular review and analysis of the Department's research and development progress and products.

Transfer of Operational Aspects from RSPA

Office of Emergency Transportation
The operation of RSPA's Crisis Management Center and Office of Emergency Transportation would be moved from RSPA to the Office of Intelligence and Security (OIS). With the creation of DHS, and the subsequent transfer of the Coast Guard and TSA from DOT -- including the transfer of the security and intelligence functions within those agencies - OIS has evolved into the Department's primary resource to provide and perform those functions. By transferring the operation of the CMC and the Office of Emergency Transportation to OIS, the department will consolidate all of the appropriate resources in a single, more robust office dedicated to meet all of DOT's security, intelligence and emergency response needs.

Office of Pipeline Safety
Regulating the safety of pipelines would become the responsibility of the Federal Railroad Administration (FRA), which would be renamed the Federal Railroad and Pipeline Administration (FRPA). There are three main reasons for this new alignment: First, rail and pipelines are fixed transportation structures, and in some cases, they share the same rights of way. Second, the pipeline system looks and operates more like the rail system than any other mode of transportation. Finally, FRA and the Office of Pipeline Safety focus on safety regulation, enforcement and penalty collection issues. The ability of the Office of Pipeline Safety to perform those functions will be improved by placing its program within an Administration with long experience in those areas.

Office of Hazardous Materials
The intermodal regulation of transportation of hazardous materials would be moved from RSPA to the Office of the Secretary as part of the Office of the Assistant Secretary for Transportation Policy. The Office of Hazardous Materials serves as the

HazMat standard setting agency for all modes within the Department. The intermodal mission of the HazMat office will be emphasized and its authority will be upgraded by moving it to this new location within the Department, enabling it to serve as the intermodal HazMat policy and regulation development umbrella it was intended to be.

Maritime Interests

Prior to the Coast Guard's departure from the Department, the three individual Maritime agencies served unique, yet complementary purposes. The transfer this year of the Coast Guard to the Department of Homeland Security requires that we begin a new, systematic review of our Department's maritime assets. We must strengthen our Department's maritime interests and produce a more focused Departmental maritime policy. We will be looking at what MARAD and St. Lawrence Seaway Corporation can do to upgrade our international maritime role as well as strengthen our role in improving maritime infrastructure, particularly our ports and waterways systems.

Again, I would like to reiterate, I believe this reorganization will greatly benefit the Department by providing a more focused approach to research and the maritime interests of the Department. In addition, the operating pieces of RSPA that will be moved to other areas of the Department will be better aligned, fostering a more productive environment in which they will thrive.

The working group that I will establish will be critical to facilitating the implementation of this reorganization initiative. I look forward to your input and involvement in making the Department of Transportation stronger and more productive through this reorganization.

108TH CONGRESS
2D SESSION

H. R. _____

To amend title 49, United States Code, to establish the Pipeline Safety Administration in the Department of Transportation.

IN THE HOUSE OF REPRESENTATIVES

Mr. YOUNG of Alaska introduced the following bill; which was referred to the Committee on _____

A BILL

To amend title 49, United States Code, to establish the Pipeline Safety Administration in the Department of Transportation.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the "Pipeline Safety Administration Establishment Act".

SEC. 2. PIPELINE SAFETY ADMINISTRATION.

(a) IN GENERAL.—Chapter 1 of title 49, United States Code, is amended by adding at the end the following:

"§ 116. Pipeline Safety Administration

"(a) IN GENERAL.—The Pipeline Safety Administration shall be an administration in the Department of Transportation.

"(b) ADMINISTRATOR.—The head of the Administration shall be the Administrator who shall be appointed by the President, by and with the advice and consent of the Senate. The Administrator shall report directly to the Secretary of Transportation.

"(c) DEPUTY ADMINISTRATOR.—The Administration shall have a Deputy Administrator who shall be appointed by the Secretary of Transportation. The Deputy Administrator shall carry out duties and powers prescribed by the Administrator.

"(d) RESPONSIBILITIES OF ADMINISTRATOR.—The Administrator shall carry out the duties and powers vested in the Secretary under chapter 601 and additional duties and powers related to pipeline safety prescribed by the Secretary.

"(e) LIMITATION ON STATUTORY CONSTRUCTION.—Nothing in this section shall affect any delegation of authority, regulation, order, approval, exemption, waiver, contract, or other administrative act of the Secretary with respect to laws administered through the Research and Special Programs Administration as of the day before the date of enactment of this section.".

(b) CONFORMING AMENDMENT.—The analysis for chapter 1 of title 49, United States Code, is amended by adding at the end the following:

"116. Pipeline Safety Administration.".

(c) DUTIES OF RESEARCH AND SPECIAL PROGRAMS ADMINISTRATION.—Section 112(d) of title 49, United States Code, is amended by striking paragraph (2) and redesignating paragraphs (3) and (4) as paragraphs (2) and (3), respectively.

(d) EXECUTIVE SCHEDULE.—Section 5313 of title 5, United States Code, is amended by adding at the end the following:

" Administrator, Pipeline Safety Administration.".

(e) TRANSITION.—The Secretary of Transportation shall provide for the transfer of duties and powers under the amendments made by this Act.

DRAFT

INTERAGENCY AGREEMENT ON COORDINATION OF ENVIRONMENTAL REVIEWS FOR PIPELINE REPAIR PROJECTS

January 2004

The Council on Environmental Quality
The Department of Transportation
The Environmental Protection Agency
The Department of the Interior
The Department of Commerce
The Department of the Army
The Federal Energy Regulatory Commission
The Department of Agriculture
The Department of Energy
The Advisory Council on Historic Preservation

I. PURPOSE

The Pipeline Safety Improvement Act of 2002 (PSIA) (P.L. 107-355) directed Federal agencies and departments having jurisdiction over the permitting of work needed for pipeline repairs to establish a coordinated and expedited pipeline repair permit review process. The process must be designed to enable pipeline operators to commence and complete all activities necessary to carry out pipeline repairs within the time periods to be established and specified by the Secretary of Transportation (via the Office of Pipeline Safety), pursuant to the PSIA, and in accordance with the statutory and regulatory requirements of the Participating Agencies.

Consistent with the PSIA, and in recognition of the fact that the timely repair of both natural gas and hazardous liquid pipelines is essential to facilitate the nation's ability to meet the goal of sufficient availability and use of natural gas and liquid fuels, the Participating Agencies enter into this Agreement.

II. BACKGROUND

Through Executive Order 13212 issued on May 18, 2001, (the "Executive Order") the President declared that it is the policy of his Administration that executive departments and agencies shall take appropriate actions, to the extent consistent with applicable law, to expedite projects that will increase the production, transmission, or conservation of energy. In the Executive Order, the President directed Federal agencies to expedite their reviews of authorizations for energy-related projects and to take other action necessary to accelerate the completion of such projects, while maintaining safety, public health and environmental protections.

The reliability and capacity of the Nation's pipeline system are key determinants of energy supply and price, particularly in certain regional markets. The nearly two million miles of oil pipelines in the United States are the principal mode for transporting oil and petroleum products such as gasoline, accounting for about 66% of all domestic product movements. In addition, virtually all natural gas in the United States is moved via pipeline. Insufficient domestic pipeline capacity has caused peak-load problems in moving oil and petroleum products such as gasoline from one region of the country to another.

The Nation's existing pipeline infrastructure, much of which is over 50 years old, requires regular safety and environmental reviews to ensure its reliability. Following pipeline ruptures in Bellingham, Washington in June 1999 and Carlsbad, New Mexico in August 2000 which caused significant property damage and tragic loss of life, Congress enacted the Pipeline Safety Improvement Act of 2002 (PSIA) (P.L. 107-355), which was signed into law by President Bush on December 17, 2002. The PSIA established State "one-call" notification programs, expanded State oversight of pipeline safety, improved enforcement authority of the Department of Transportation with respect to pipeline safety, and increased enforcement penalties for violation of pipeline safety regulations.

As directed by Section 14 of the PSIA, the U.S. Department of Transportation, through the Research and Special Programs Administration (RSPA), recently amended its safety regulations and standards for the transportation of natural gas and hazardous liquids in or affecting interstate or foreign commerce. The amended safety regulations at 49 CFR Parts 192 and 195 require operators of certain pipelines to adopt Integrity Management Programs (IMP). Under the IMP regulations, operators of transmission pipelines transporting natural gas and hazardous liquids are required to assess, evaluate, repair, and validate through comprehensive analysis the integrity of pipeline segments that, in the event of a leak or rupture, could impact High Consequence Areas (HCA). The regulations define HCAs to include populated areas, areas unusually sensitive to environmental damage, and commercially navigable waterways.

The regulations also identify repair criteria or types of failures that must be repaired within specified time limits, the length of which reflects the probability of failure. For natural or other gas pipelines, two categories of repair characterization (immediate, 1 year) are defined by the type, magnitude, or orientation of the anomaly, or combination thereof. Similarly, for hazardous liquid pipelines, three categories of repair are defined (immediate, 60 days, or 180 days). For example, for hazardous liquid pipelines, a top dent with any indication of metal loss or cracking requires an immediate response and action, whereas a bottom dent with any indication of metal loss or cracking requires a response and action within 60 days. Given these criteria, pipeline operators must characterize the type of repair required (as described in the regulations), evaluate the risk of failure, and make the repair within defined time limits. These consensus criteria were developed following extensive consultation with experts in other government agencies, environmental organizations, industry, and academia, as well as with the public, through a series of public notices, workshops, and technical meetings.

In addition, recognizing the need for timely repairs of pipelines to maintain energy security, Section 16 of the PSIA directed the President to establish an Interagency Committee to implement a coordinated environmental review and permitting process to aid pipeline repairs. Committee activities were to include evaluation of Federal permitting requirements, identification of best practices to be used by industry, and the development of an Interagency Agreement to provide for a coordinated and expedited pipeline permit review process to enable pipeline repairs that would result in no more than minimal adverse effects on the environment. To implement Section 16 of the PSIA, the President amended the Executive Order to add these pipeline safety functions to the charge given the Task Force authorized under that Executive Order.

The Agreement attempts to enhance coordination of the processes through which agencies with environmental and historic preservation review responsibilities under the National Environmental Policy Act of 1969, as amended, ("NEPA") and other related statutes meet those responsibilities in connection with the authorizations required to repair natural gas and hazardous liquid pipelines that have been identified by pipeline operators as in need of repair on a timely basis to protect life, health or physical property. The Agreement recognizes that early planning, notice, and consultation among the pipeline operator and agencies can result in a structured process that facilitates timely decisions that can enable critical repair actions to go forward, within the context of resource conservation.

The Agreement supports the development of a comprehensive, "one-stop" information system to allow pipeline operators and agencies alike access to the best available information on pipeline testing and repair schedules, agency official contact information, natural resource conservation needs, and recommendations on management practices for testing and repair. Further, the Agreement recognizes that the identification and use of "Best Management Practices" to avoid, reduce, or mitigate impacts to resources of concern can be one means of implementing specific measures to protect affected resources and encourage increased environmental stewardship.

III. EXISTING AUTHORITIES AND RESPONSIBILITIES

The Council on Environmental Quality ("CEQ") was established within the Executive Office of the President in 1969 by act of Congress as part of the National Environmental Policy Act ("NEPA"). Its purpose is to formulate and recommend national policies to promote the improvement of the quality of the environment. CEQ has issued regulations applicable to Federal agencies implementing NEPA (40 C.F.R. Parts 1500 through 1508).

The Department of Transportation ("DOT"), through its Research and Special Programs Administration ("RSPA"), is responsible for establishing safety standards for the nation's pipeline transportation system. RSPA carries out this responsibility through its Office of Pipeline Safety ("OPS"). OPS establishes and enforces minimum safety

standards for the design, construction, operation and maintenance of pipeline facilities pursuant to 49 U.S.C. 60101 et seq.

The Environmental Protection Agency ("EPA") is responsible for administering a wide variety of environmental laws. The responsibilities of EPA relevant to the pipeline permitting process include commenting on Environmental Impact Statements (EISs) under section 309 of the Clean Air Act, participating in the Clean Water Act section 404 permit process, and issuing or reviewing authorized States' issuance of National Pollutant Discharge Elimination System permits for point source discharges of storm water from construction activities that disturb areas in excess of one acre, pursuant to section 402 of the Clean Water Act.

The Fish and Wildlife Service ("FWS"), within the Department of the Interior, is responsible for assisting other Federal agencies and the public in the conservation, protection, and enhancement of fish, wildlife, plants, and their habitats, pursuant to the Fish and Wildlife Coordination Act (16 U.S.C. 661 et seq.). The FWS has principal trust responsibility to protect and conserve migratory birds, threatened and endangered species, certain marine mammals, and inter-jurisdictional fishes. In particular, Section 7 of the Endangered Species Act of 1973 (ESA), as amended, 16 U.S.C. 1531 et seq., requires that Federal agencies insure that the actions they authorize, fund, or carry out are not likely to jeopardize the continued existence of listed species or adversely modify their designated critical habitat. Further, the Migratory Bird Treaty Act (16 U.S.C. 703-712; MBTA), prohibits the taking, killing, possession, and transportation of migratory birds, their eggs, parts and nests, except when specifically authorized by the Secretary of the Interior. Federal regulatory agencies and their applicants for pipeline repair projects are required to consult with the FWS on projects potentially affecting any of these resources. The FWS also consults on projects potentially affecting fresh water or marine resources and water quality. In addition, the FWS manages the National Wildlife Refuge System ("NWRS"), and may authorize use by permit for areas within the NWRS.

The Bureau of Land Management ("BLM"), within the Department of the Interior, is responsible for the management of Federal lands. The BLM is responsible for issuing right-of-way grants and permits authorizing the transportation of oil, natural gas, synthetic liquid or gaseous fuels, or any refined products produced there from, by pipelines using federal lands. Section 28 of the Mineral Leasing Act of 1920, as amended, gives BLM the authority to issue right-of-way grants and permits for oil and gas pipelines through all lands owned by the United States, except lands in the National Park System, lands held in trust for an Indian or Indian tribe, and lands on the Outer Continental Shelf.

The National Park Service ("NPS"), within the Department of the Interior may issue right-of-way permits only for those uses or activities specifically authorized by Congress and only if there is no practicable alternative to such use of NPS lands. There are no general authorities for issuance of right-of-way permits for gas or other petroleum product pipelines across units of the National Park System. However, in individual instances, park-specific legislation provides for such authorization, and some NPS lands

have been acquired subject to gas or other petroleum product pipelines easements. The Organic Act (16 U.S.C. 1) and subsequent amendments (16 U.S.C. 1a) direct the NPS to manage all park lands to protect and preserve natural and cultural resources.

The Minerals Management Service ("MMS"), within the Department of the Interior, is responsible for issuing and enforcing regulations to promote safe operations, environmental protection, and resource conservation on the Outer Continental Shelf ("OCS"). The MMS is responsible for granting rights-of-way through submerged lands of the OCS. In addition, the MMS regulates pipelines under the jurisdiction of the Department of the Interior in accordance with MMS policies, practices, and requirements issued under 30 CFR Part 250, Subpart J. MMS and DOT coordinate OCS pipeline inspection and repair activities in accordance with the 1996 MMS/DOT national Memorandum of Understanding and/or other regional agreements (e.g.. the "Offshore California Pipeline Inspection Survey Plan" and its implementing Memorandum of Agreement) as applicable.

The Bureau of Indian Affairs ("BIA"), within the Department of the Interior, is charged with responsibility to administer Federal Indian policy and to discharge the Federal trust for American Indian Tribes, Alaska Native villages and tribal organizations. BIA is responsible for, among other things, approving rights-of-way across lands held in trust for an Indian or Indian Tribe. In addition, regarding natural gas and all rights-of-way for energy resource transport, BIA must consult and coordinate through Government-to-Government relations with any affected Tribe.

The National Marine Fisheries Service ("NMFS"), an office of the National Oceanic and Atmospheric Administration ("NOAA") within the Department of Commerce, is responsible for a variety of activities in marine and coastal ecosystems as mandated by several statutes and authorities. These activities include conserving threatened and endangered species, protecting marine mammals, managing commercial and recreational fisheries, and protecting marine and coastal habitats. These activities are conducted pursuant to the Endangered Species Act (ESA), Marine Mammal Protection Act (MMPA), Magnuson-Stevens Fishery Conservation and Management Act (MSA), and the Fish and Wildlife Coordination Act. Federal agencies involved in pipeline repairs that have potential effects on threatened and endangered species or essential fish habitat must consult with NMFS pursuant to the ESA and MSA. For any pipeline repair that would incidentally take a marine mammal, an authorization pursuant to the MMPA must be obtained.

The National Ocean Service ("NOS"), an office of the National Oceanic and Atmospheric Administration ("NOAA") within the Department of Commerce, administers the Coastal Zone Management Act (CZMA) and approves and works with states to implement comprehensive Coastal Management Programs and National Estuarine Research Reserves and mediates disputes regarding CZMA issues. Under CZMA section 307(c)(3)(A), applicable states must concur with consistency certifications submitted with permit applications for activities affecting any land or water use or natural resource of the coastal zone before Federal agencies can issue their

approvals. NOS also manages designated National Marine Sanctuaries (NMS) and coastal protection and restoration activities. Pipeline repairs within a designated NMS will likely require a permit (pursuant to NMS regulations at 15 CFR Part 922), and pursuant to Section 304(d) of the National Marine Sanctuaries Act, Federal actions near NMS may require consultation with the Secretary of Commerce.

The Army Corps of Engineers ("COE"), within the Department of Defense ("DOD"), is responsible for the administration of laws for the protection of waters of the United States, pursuant to section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403), section 404 of the Clean Water Act of 1972 (33 U.S.C. 1344), and section 103 of the Marine Protection, Research, and Sanctuaries Act of 1972 (33 U.S.C. 1413). The RHA authorizes all work and or structures in or affecting the course, condition, location, or capacity of navigable waters of the U.S. and artificial islands, installations, or other devices on the Outer Continental Shelf. The CWA authorizes the discharge of dredged or fill material into the waters of the U.S., including wetlands. The MPRSA authorizes the transportation of dredged material excavated from navigable waters of the U.S. for the purpose of dumping it in ocean waters. It is expected that the COE may authorize most pipeline repair activities under these Acts through the use of existing nationwide permits. Where the impacts on the aquatic resources may be more than minimal either individually or cumulatively, individual permits may be warranted, and in emergency situations, as defined by the COE, emergency permits may be used as necessary. Letters of permission and/or regional general permits may be established at the local and regional level to further abbreviate the permitting process. The different permitting program requirements and conditions are set forth in 33 CFR Parts 320-330.

The Federal Energy Regulatory Commission ("FERC") is responsible for authorizing the construction and operation of interstate natural gas pipelines. It issues certificates of public convenience and necessity for such pipelines under section 7 of the Natural Gas Act of 1938, as amended (the "NGA"), and authorizes the construction and siting of facilities for the import or export of natural gas under section 3 of the NGA. It also authorizes the construction and operation of natural gas pipelines pursuant to the Natural Gas Policy Act. The FERC's authorization requires that interstate pipelines maintain service at certificated levels. Pipeline repair projects can often be accomplished within existing authorizations and exemptions.

The Forest Service ("FS"), within the Department of Agriculture, is responsible for the management of 192 million acres of National Forest System ("NFS") lands. Many hundreds of miles of natural gas and hazardous liquid pipelines cross NFS lands. Most of these pipelines are permitted by a BLM-issued right-of-way grant, pursuant the authority granted to the Secretary of the Interior in section 28 of the Mineral Leasing Act of 1920, as amended. Those that are not are instead permitted by Forest Service-issued special use authorizations.

The Department of Energy ("DOE") is charged with developing and coordinating national energy policy. DOE protects U.S. national and economic security by promoting a diverse supply and delivery of reliable, affordable, and environmentally sound energy. DOE's Office of Energy Assurance ("EA") works in close collaboration with other

Federal agencies, State and local governments, and the private sector to protect the nation against severe energy supply disruptions such as those that can result from safety related reductions in pipeline operating pressures[1].

The Advisory Council on Historic Preservation ("ACHP") reviews and provides comments with regard to actions by Federal agencies that may affect properties listed or eligible to be listed on the National Register of Historic Places pursuant to the National Historic Preservation Act.

IV. PARTICIPATING AGENCY AGREEMENT

The Participating Agencies hereby agree to work with each other, and with other entities as appropriate (e.g., state agencies), to ensure that timely decisions are made to enable pipeline repairs to occur within the time periods specified by rule by the Department of Transportation, while ensuring that the environmental review responsibilities of each agency are met.

Specifically, each Participating Agency agrees to:

A. recognize that the DOT classifications of pipeline repairs mandate certain pipeline repairs within specific time frames;

B. provide information to facilitate information exchange through the National Pipeline Mapping System (NPMS) between pipeline operators and agencies with safety, environmental review, or energy supply assessment responsibilities, including:

    1. information from pipeline operators on the schedule for testing of their natural gas and hazardous liquid pipelines pursuant to DOT's Integrity Management Program (IMP) regulations;

    2. relevant contact information for agency officials with direct authority over permitting activities for each specific pipeline segment in the NPMS;

    3. regional and field level information, where practicable, on resources of concern, including, but not limited to, species and habitats protected under the Endangered Species Act;

[1] The Department of Transportation (DOT) integrity management regulations for pipelines specify timeframes within which certain types of repairs must be completed. When a pipeline operator cannot complete a repair within the required timeframe, those regulations require the operator to reduce the pipeline's operating pressure by 20% or more to ensure its continued safe operation; this reduction in product flow can have significant adverse impacts not only on the supply of fuel regionally, but also on the price of fuel nationally.

4. information on permits or authorizations that may be required to conduct repairs in areas in and around specific pipelines in the NPMS;[2] and

5. information on specific pipeline segments in the NPMS where disruption of the energy supply due to shut-down or operating pressure reductions could create critical risks to public health and safety[3];

C. participate in appropriate pre-inspection planning and coordination to determine, as much as possible, what actions would need to be undertaken should a repair be necessary.

D. ***[subject to available resources,]*** give priority to processing of permits for those repairs classified as "immediate" or "time-sensitive" pursuant to DOT's repair characterizations over other less urgent permit application reviews ***[when mitigation measures, such as reduced operating pressure, would be insufficient to permit temporary safe operation of the pipeline or would create an immediate adverse impact on energy supply]***;

E. work together at all appropriate administrative levels to define, regularly review, and where necessary, refine a set of Best Management Practices (BMPs) that, when used in making pipeline repairs, will aid the expedited consideration of permitting requests, minimize adverse impacts on the environment and reduce the need for post-repair remediation;

F. establish a Working Group to develop guidance documents with procedures that can be used to coordinate and expedite repair permitting processes for those repairs classified as "immediate" or "time-sensitive" pursuant to DOT's repair characterizations;

G. where disagreements arise among the Participating Agencies or between one or more Participating Agencies and State and local agencies and the pipeline operator, participate in any process established by the Ombudsman designated pursuant to 49 U.S.C. 60133(e) to assist in resolving those disagreements, consistent with protection of human health, public safety, and the environment.

V. IT IS MUTUALLY AGREED AND UNDERSTOOD THAT:

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[2] The exchange of information in this format does not replace a formal consultation or fulfill any consultation requirements under the Endangered Species Act.

[3] When a repair cannot be performed within the required timeframe, DOT regulations require the operator to reduce the pipeline's operating pressure by 20% or as much more as is necessary to ensure its continued safe operation; this reduction in product flow can have significant adverse impacts not only on fuel prices (as when regional shortages cause national price spikes), but also on public health and safety (as when fuel shortages during peak usage times threaten the availability of heat, lights, and clean water).

A. Nothing in this agreement will be construed by the Participating Agencies to require the obligation, appropriation, or expenditure of any money from the U.S. Treasury.

B. This Agreement may be modified or amended upon written request of any party hereto and the subsequent written concurrence of all of the Participating Agencies. Participation in this Agreement may be terminated sixty (60) days after providing written notice of such termination to the other Participating Agencies.

C. This Agreement is intended only to improve the working relationships of the Participating Agencies in connection with expeditious decisions with regard to coordination of environmental reviews for pipeline repair projects and is not intended to, nor does it create any right, benefit, or trust responsibility, substantive or procedural, enforceable at law or equity by a any person or party against the United States, its agencies, its officers, or any other person.

D. This Agreement is to be construed in a manner consistent with all effective existing laws and regulations.

E. This Agreement neither expands nor is in derogation of those powers and authorities (including existing authorities described in Part III of this Memorandum) vested in the Participating Agencies by applicable law, statutes or regulations.

F. The Participating Agencies intend to fully carry out the terms of this Agreement. All provisions in this Agreement, however, are subject to available resources.

G. This Agreement does not affect any guidelines related to information quality issued by the Participating Agencies in connection with section 515 of the Treasury and General Government Appropriations Act for FY 2001 (P.L. 106-554). Information disseminated pursuant to this Agreement will be subject to the information quality guidelines of the Participating Agency that disseminates such information, and requests for correction of such information will be addressed by such Participating Agency according to that Agency's established guidelines.

VI. PRINCIPAL CONTACTS

Each Participating Agency hereby designates, as shown in Appendix A, a principal point of contact for that agency. These contacts may be changed at the Participating Agency's discretion upon notice to the other Participating Agencies.

VII. SIGNATORIES

DRAFT

APPENDIX "A"
PRINCIPAL CONTACTS

The following are the principal initial contacts for each agency:

information provided in the direct final action pertaining to Virginia's solvent metal cleaning operations regulation, that is located in the "Rules and Regulations" section of this **Federal Register** publication. Please note that if EPA receives adverse comment on an amendment, paragraph, or section of this rule and if that provision may be severed from the remainder of the rule, EPA may adopt as final those provisions of the rule that are not the subject of an adverse comment.

Dated: June 14, 2004.

Thomas C. Voltaggio,

Acting Regional Administrator, Region III.

[FR Doc. 04–14215 Filed 6–23–04; 8:45 am]

BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 300

[FRL–7777–2]

National Oil and Hazardous Substances Pollution Contingency Plan; National Priorities List

AGENCY: Environmental Protection Agency.

ACTION: Notice of intent for a partial deletion of the U.S. Radium Corp. Superfund Site from the National Priorities List.

SUMMARY: The Environmental Protection Agency (EPA) Region 2 Office is issuing this notice of intent to delete the property known as 475 South Jefferson Street in Orange, New Jersey, which is part of Operable Unit Two of the U.S. Radium Corp. Superfund Site, from the National Priorities List (NPL) and requests public comment on this action. The U.S. Radium Corp. Site is listed on the NPL as located in Orange, New Jersey, but is composed of contiguous and non-contiguous properties in the municipalities of Orange, West Orange, and South Orange. The NPL constitutes Appendix B to the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), 40 CFR part 300, which EPA promulgated pursuant to section 105 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), as amended. EPA and the State of New Jersey, through the Department of Environmental Protection, have determined that all appropriate remedial actions related to the U.S. Radium Corp. Site have been completed at 475 South Jefferson Street and no further fund-financed remedial action at this property is appropriate under CERCLA.

In the "Rules and Regulations" section of today's **Federal Register**, we are publishing a direct final notice of deletion for the property known as 475 South Jefferson Street without prior notice of this action because we consider this is noncontroversial and anticipate no significant adverse comments. We have explained our basis for this deletion in the preamble to the direct final deletion. If we receive no significant comments on this notice of intent to delete, the direct final deletion, or other notices we will issue, we will not take further action on this notice of intent to delete. If we receive significant adverse comment(s), we will withdraw the direct final notice of deletion and it will not take effect. We will, as appropriate, address all public comments. If, after evaluating public comments, EPA decides to proceed with deletion, we will do so in a subsequent final deletion notice based on this notice of intent to delete. Any parties interested in commenting must do so at this time. For additional information, see the direct final notice of deletion which is located in the rules section of the **Federal Register**.

DATES: Comments concerning the partial deletion of the U.S. Radium Corp. Superfund Site must be received by July 26, 2004.

ADDRESSES: Written comments should be mailed to: Stephanie Vaughn, Remedial Project Manager, New Jersey Remediation Branch, Emergency and Remedial Response Division, U.S. Environmental Protection Agency, Region 2, 290 Broadway, 19th Floor, New York, New York 10007–1866.

FOR FURTHER INFORMATION CONTACT: Stephanie Vaughn, Remedial Project Manager, U.S. Environmental Protection Agency, Region 2, 290 Broadway, 19th Floor, New York, New York 10007–1866, phone: (212) 637–3914; fax: (212) 637–4393; e-mail: *vaughn.stephanie@epa.gov.*

SUPPLEMENTARY INFORMATION: For additional information, see the Direct Final Notice of Deletion which is located in the rules section of this **Federal Register**.

Authority: 42 U.S.C. 9601–9657; 33 U.S.C. 1321(c)(2); E.O.S 12777, 56 FR 54757, 3 CFR, 1991 Comp., p. 351; E.O. 12580, 52 FR 2923, 3 CFR, 1987 Comp., p. 193.

Dated: June 10, 2004.

Anthony Cancro,

Acting Regional Administrator—Region 2.

[FR Doc. 04–14217 Filed 6–23–04; 8:45 am]

BILLING CODE 6560–50–P

DEPARTMENT OF TRANSPORTATION

Research and Special Programs Administration

49 CFR Parts 192 and 195

[Docket No. RSPA–03–15852; Notice 1]

RIN 2137–AD96

Pipeline Safety: Public Education Programs for Hazardous Liquid and Gas Pipeline Operators

AGENCY: Research and Special Programs Administration (RSPA), Department of Transportation (DOT).

ACTION: Notice of proposed rulemaking.

SUMMARY: The Research and Special Programs Administration's (RSPA) Office of Pipeline Safety (OPS) proposes to require all gas and hazardous liquid pipeline operators to develop and implement public education programs based on the provisions of the American Petroleum Institute's (API) Recommended Practice (RP) 1162, *Public Awareness Programs for Pipeline Operators.*[1]

DATES: Interested persons are invited to submit written comments by August 23, 2004. Late-filed comments will be considered to the extent practicable.

ADDRESSES: You may submit comments (identified by DOT DMS Docket Number RSPA–03–15852) by any of the following methods:

- Web site: *http://dms.dot.gov.* Follow the instructions for submitting comments on the DOT electronic docket site.
- Fax: 1–202–493–2251.
- Mail: Docket Management Facility; Department of Transportation, 400 Seventh Street, SW., Nassif Building, Room PL–401, Washington, DC 20590–001.
- Hand Delivery: Room PL–401 on the plaza level of the Nassif Building, 400 Seventh Street, SW., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.
- Federal eRulemaking Portal: Go to *http://www.regulations.gov.* Follow the online instructions for submitting comments.

Instructions: All submissions must include the agency name and docket number or Regulatory Identification Number (RIN for this rulemaking. For

[1] API RP 1162 provides guidance on development, implementation, and evaluation of pipeline operator "public awareness" programs. Note that "public education programs," as used in this notice, and "public awareness programs," as used in API RP 1162, are considered to be the same and are used interchangeably for the purposes of this proposed rule.

detailed instructions on submitting comments and additional information on the rulemaking process, *see* the Public Participation heading of the **SUPPLEMENTARY INFORMATION** section of this document. Note that all comments received will be posted without change to *http://dms.dot.gov,* including any personal information provided. Please see the Privacy Act heading under Regulatory Notices.

Docket: For access to the docket to read background documents or comments received, go to *http://dms.dot.gov* at any time or to Room PL–40 on the plaza level of the Nassif Building, 400 Seventh Street, SW., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

Anyone is able to search the electronic form of all comments received into any of our dockets by the name of the individual submitting the comment (or signing the comment, if submitted on behalf of an association, business, labor union, etc.). You may review DOT's complete Privacy Act Statement in the **Federal Register** published on April 11, 2000 (volume 65, number 70; pages 19477–78) or you may visit *http://dms.dot.gov.*

You may obtain copies of this proposed rule or other material in the docket. All materials in this docket may be accessed electronically at *http://dms.dot.gov.*

FOR FURTHER INFORMATION CONTACT: Juan Carlos Martinez (202) 366–1933, by fax at (202) 366–4566, or by mail at U.S. Department of Transportation, 400 Seventh Street, SW., Washington, DC 20590, regarding the subject matter of this proposed rule. Additional information about this initiative may be obtained by accessing RSPA/OPS' Internet Web page at *http://ops.dot.gov.*

SUPPLEMENTARY INFORMATION:

Background

This proposed rule addresses pipeline operator programs to enhance awareness of and communications with:

- The affected public (*i.e.,* residents and places of congregation, such as businesses and schools) in the vicinity of the pipeline and associated right-of-way.
- Local and State emergency response and planning officials (*i.e.,* State and county emergency management agencies (EMAs) and local emergency planning committees (LEPCs)).
- Local public officials and governing councils.
- Excavators.

Public education and understanding of pipeline operations is vital to the continued safe operation of pipelines. Pipeline operator public education programs are an important factor in establishing communications and providing information necessary to enhance public understanding of how pipelines function and the public's role in promoting pipeline safety. When effectively and consistently managed, a pipeline operator public education program can provide significant value in enhanced public safety, improved pipeline safety and environmental performance, and enhanced emergency response coordination.

Enhancing requirements for pipeline operator public education programs is part of a broad effort by RSPA/OPS to enhance safety through promoting improved public communications by the pipeline industry and government pipeline regulators.

In proposing new requirements for pipeline operator public education programs, RSPA/OPS is also responding to calls by Congress in the Pipeline Safety Improvement Act of 2002 (Pub. L. 107–355; December 17, 2002) for standards prescribing the elements of public education programs. Simultaneously with this mandate, the pipeline industry has been developing recommendations for pipeline operator public education programs, which resulted in the development of API RP 1162. This standard was developed with extensive collaboration by all segments of the industry, input from RSPA/OPS and State pipeline regulators, and an opportunity for public review and comment. RSPA/OPS is taking advantage of the substantial work accomplished in the completion of this standard to adopt its provisions in this rule.[2]

Development of a new rule establishing additional requirements for pipeline operator public education programs is part of RSPA/OPS' broader pipeline safety communications initiative to promote pipeline safety by requiring enhanced communications by the pipeline industry with the public and to increase public awareness of pipeline operations and safety issues. In 2000, RSPA/OPS sponsored a pipeline communications exploratory group under the auspices of the statutorily mandated Technical Pipeline Safety Standards Committee (TPSSC) and the Technical Hazardous Liquid Pipeline Safety Standards Committee (THLPSSC), composed of representatives of RSPA/OPS, pipeline companies, industry groups, and local jurisdictions. The group met to explore the subject of pipeline communications and to identify opportunities for improvement.

Recent rulemaking activities by RSPA/OPS (*e.g.,* Liquid and Gas Pipeline Integrity Management, Operator Qualification) included increased efforts to inform the public regarding pipeline safety and regulation. These efforts have included public meetings and public-access Web sites. For example, the following public meetings on the Integrity Management rulemakings were held:

- November 18–19, 1999, in Herndon, Virginia.
- February 12–14, 2001, in Arlington, Virginia.
- August 7–8, 2001, in Houston, Texas.
- July 23–24, 2002, in Houston, Texas.
- March 14, 2003, in Washington, DC.
- April 25, 2003, in Dulles, Virginia.

The February 2001 public meeting in Arlington, Virginia, included presentations from different stakeholder viewpoints on public communications needs and the nature of additional pipeline information needed by the public, local officials, and emergency responders. Materials from this meeting are available in the electronic docket referenced above.

Current RSPA/OPS public communications initiatives include:

- Development and maintenance of a public information Web site *http://primis.rspa.dot.gov/pipelineinfo).*
- The Community Assistance and Technical Support (CATS) program with new positions at each RSPA/OPS regional office.
- A partnership between RSPA/OPS and the National Association of State Fire Marshals (NASFM) to develop information and training aimed at enhancing the safety of first responders to pipeline accidents and assessing pipeline security risks.
- A partnership between RSPA/OPS and the Transportation Research Board (TRB) of the National Research Council to examine model land use practices by local communities, with an objective of better managing encroachment risks.
- Development of mechanisms to provide information to local officials, such as the location of pipeline integrity assessments and centralized sources for post-accident information.

RSPA/OPS also sponsored meetings held in Bellevue, Washington, and Houston, Texas, on the subject of public communications. The general response from the public to these communications efforts by RSPA/OPS

[2] A link to API RP 1162 on the API standards Web site may be found at *http://primis.rspa.dot.gov/edu/rp1162.htm.*

was an expressed desire to receive more information on specific pipelines.

The Bellevue, Washington, meeting (transcript at *http://primis.rspa.dot.gov/comm/Bellevue_2003_01_29.htm*) included panel discussions during which local and State officials, local emergency planners and responders, and public representatives discussed the types of information that these stakeholders would like to receive from pipeline operators, the groups that should receive the information, and the modes of communication that would be effective in conveying the information. The panel members supported increased information from operators to members of the public in areas near pipeline facilities, to local officials of areas intersected by pipelines and areas that could be affected by releases from pipelines, and to emergency responders in areas that could be impacted by releases. The panel members advocated that operators provide this information through a wide range of communication modes, including published material, electronic media, mailings, and live meetings. The panel indicated a variety of information from operators could be important to understanding pipelines and promoting safety. Comments of other attendees at the meeting echoed the panel's comments.

In response to these comments, RSPA/OPS has supported the pipeline industry's initiatives to develop guidelines for operator public education programs. These initiatives resulted in API RP 1162.

Pipeline Safety Improvement Act of 2002

On December 17, 2002, Congress enacted the Pipeline Safety Improvement Act (PSIA) of 2002, mandating public education activities by pipeline operators and DOT, with a deadline of one year for performing these activities. These mandates require that:

- Each pipeline owner and operator carry out a continuing public education program.
- Each pipeline owner and operator use a one-call notification system prior to excavation and other damage prevention activities.
- Each pipeline owner and operator communicate to the public the possible hazards associated with unintended releases from the pipeline facility, including:
  - —Physical indications that such a release may have occurred,
  - —Steps that should be taken for public safety in the event of a pipeline release, and
  - —How to report a release or other event.
- Each pipeline owner and operator review its existing public education program for effectiveness and modify the program as necessary to include activities to advise affected municipalities, school districts, businesses, and residents of pipeline locations.
- DOT issue standards prescribing the elements of an effective public education program and develop material for use in the program.

As a first step in responding to these mandates, RSPA/OPS prepared a self-assessment form for each operator's use in reviewing its public education program. The draft form was first distributed to attendees at two public workshops held during September 2003 in Houston, Texas, and Baltimore, Maryland. The results of the self-assessment (which is based on a self-assessment process defined in API RP 1162) can serve as the basis for defining any necessary improvements to operator programs. RSPA/OPS issued an advisory notice [3] that required all pipeline operators to complete the self-assessment form and return it to RSPA/OPS by December 17, 2003 (the deadline prescribed in the PSIA).

To more fully implement the mandates of the PSIA, RSPA/OPS encouraged and supported the development of API RP 1162 and is now proposing this rule for pipeline operator public education programs, utilizing the provisions of API RP 1162 for these programs.

American Petroleum Institute (API) Recommended Practice API RP 1162

In 2001, at the request of RSPA/OPS, API began the development of a new standard for pipeline operator public education programs, designated as API Recommended Practice API RP 1162, through formation of an expanded task force that included representation from gas and liquid transmission pipeline operators and gas distribution pipeline operators. Representatives of RSPA/OPS and the National Association of Pipeline Safety Representatives (NAPSR) (representing State pipeline regulatory agencies) attended all meetings of the task force as observers and provided direction and input into both the process and the content of the standard. RSPA/OPS recognized the potential of the new standard to support its efforts to promote safety through improved public communications.

The API RP 1162 task force developed a draft standard for comment, which was presented at a meeting in Houston, Texas, on July 25, 2002. The meeting was attended by public officials and local emergency planning committees (LEPCs), as well as pipeline companies. Comments were also invited through the API Web site. Comments were incorporated in a new draft standard that API presented at a subsequent public meeting on pipeline public communications in Bellevue, Washington on January 29, 2003. This meeting was co-sponsored by RSPA/OPS, State pipeline regulators, and pipeline industry organizations. Additional comments were incorporated and a revised draft was issued on May 29, 2003, for API balloting and the beginning of the American National Standards Institute (ANSI) review process. A final corrected draft was issued on September 2, 2003. This draft was presented at the September 2003, public workshops held in Houston, TX and Baltimore, MD.

Pipeline industry organizations generally agreed with the direction of RSPA/OPS and the work of the API RP 1162 committee. In response, API issued a *Joint Statement on Enhancing Public Awareness Programs for the Pipeline Industry* (May 28, 2003), which committed the industry to adopting "* * * a consensus standard establishing a baseline public awareness program for pipeline operators * * *" and urged RSPA/OPS "* * * to satisfy any need to supplement current requirements for public awareness programs by incorporating [API] RP 1162 into its regulations * * *." The joint statement was signed by executives of the following organizations:

- API;
- Association of Oil Pipelines (AOPL);
- American Gas Association (AGA);
- Interstate Natural Gas Association of America (INGAA);
- American Public Gas Association (APGA).

The Proposed Rule

RSPA/OPS proposes a rule to require each pipeline operator to develop, implement, and maintain a public education program that complies with the requirements of API RP 1162. This proposed rule applies to all pipelines regulated under 49 CFR parts 192 and 195, including:

- Interstate and intrastate hazardous liquid transmission pipelines.
- Interstate and intrastate natural gas transmission pipelines.

[3] 68 FR 66155, *Pipeline Safety: Self-Assessment of Public Education Programs*, November 25, 2003. This notice may be viewed at *http://ops.dot.gov/whatsnew/AdvBulletinADB0308.pdf.*

- Natural gas distribution pipelines.
- Oil and gas gathering lines.

If an operator's current public education program does not comply with API RP 1162, the operator would be required to modify the program to come into compliance. Information on API RP 1162, including a link to the document, may be found at: *http://primis.rspa.dot.gov/edu/rp1162.htm.*

The proposed rule would require all pipeline operators to develop and implement public education programs that address the following stakeholder audiences:

- Affected public.
- Local officials.
- Emergency responders.
- Excavators/Contractors.
- Land Developers.
- One-Call Centers.

For each stakeholder audience, API RP 1162 defines requirements for public education programs, including:

- The message to be delivered to each audience.
- The frequency of message delivery.
- The methods/media to deliver the message.

The requirements include baseline program requirements, which apply throughout the operator's pipeline system, and supplemental requirements, which apply to specific locations along the pipeline system where relevant location-specific factors make additional education activities necessary. Operators are required to consider the following factors when deciding where supplemental program enhancements should be added to the program, what enhancements should be added, and which audience groups should be the target of the enhancements:

- Potential Hazards.
- High Consequence Areas (as defined in 49 CFR parts 192 and 195).
- Population density.
- Land development activity.
- Land farming activity.
- Third party damage incidents.
- Environmental considerations.
- Pipeline history in an area.
- Specific local situations.
- Regulatory requirements.
- Results from previous public education program evaluations.
- Other relevant needs.

Baseline and supplemental program requirements for different pipeline operator types are summarized in a set of tables in API RP 1162 that may be found at: *http://primis.rspa.dot.gov/edu/RP1162/Sect-2_Tables_Prelim_Post-to-Web_090903.pdf.*

Each operator is required to establish and periodically update a written public education program covering all program elements. The written program should include:

- A statement of the company's management commitment to achieving effective public/community education.
- A description of the roles and responsibilities of personnel administering the program.
- Identification of key personnel and their titles (including senior management responsible for the implementation, delivery and ongoing development of the program).
- Identification of the targeted audiences and the information to be communicated to each.
- Identification of the media and methods of communication to be used in the program, as well as the basis for selecting the chosen method and media.
- Documentation of the frequency and the basis for selecting that frequency for communicating with each of the targeted audiences.
- Identification of program enhancements, beyond the baseline program, and the basis for implementing such enhancements.
- The program evaluation process, including the evaluation objectives, methodology to be used to perform the evaluation and analysis of the results, and criteria for program improvement based on the results of the evaluation.

Regulatory Analyses and Notices

Executive Order 12866 and DOT Regulatory Policies and Procedures

The Department of Transportation (DOT) does not consider this proposed rule to be a significant regulatory action under section 3(f) of Executive Order 12866 (58 FR 51735; October 4, 1993). RSPA does not consider this proposed rule significant under DOT's regulatory policies and procedures (44 FR 11034: February 26, 1979). We prepared a Draft Regulatory Evaluation for this proposed rule and placed it in the public docket for review. The evaluation concludes that there will only be minimal additional costs for operators to comply with the proposed rule, as the rule is based on the API RP 1162, which encompasses consensus industry standard practices. Most operators have existing public education programs, some of which may need to be expanded to meet the requirements of API RP 1162, but this is not expected to involve significant cost. A primary benefit of this rulemaking is complying with Congressional mandates. In addition, increased public awareness that is obtained through the expansion of public education programs is expected to have some benefits due to a potential for fewer pipeline accidents from third party damage and improved emergency response. Pipeline industry organizations have already endorsed the use of API RP 1162 as the basis for new regulatory requirements for pipeline operator public education programs.

Regulatory Flexibility Act

Under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*), RSPA/OPS must consider whether a rulemaking would have a significant impact on a substantial number of small entities. This proposed rule has been developed in accordance with Executive Order 13272 (*Proper Consideration of Small Entities in Agency Rulemaking*) and DOT's procedures and policies to promote compliance with the Regulatory Flexibility Act. This ensures that the potential impacts of proposed rules on small entities are properly considered. The majority of gas transmission and hazardous liquid pipeline operators are large entities. Of the pipeline operators that are small entities, the majority are gas distribution operators. Two trade associations represent natural gas distribution operators: The AGA and the APGA. The APGA represents municipally-operated gas distribution systems. Conversations between RSPA and APGA indicate that there are approximately 950 municipally operated gas distribution operators. APGA represents 600 of these. Of these 600, APGA estimates that 550 of them would be classified as small entities. The APGA has held two teleconferences for its members concerning implementation of the public education program requirements of API RP 1162. They have indicated that compliance with the provisions of this standard would not represent a significant impact on their members, because of the possibility of flexibility in implementing the standard's requirements. APGA indicated that it would be willing to help small pipeline operators with compliance with this regulation. Based upon the above information showing that the economic impact of this rule on small entities will be minimal, I certify under section 605 of the Regulatory Flexibility Act that this regulation will not have a significant impact on a substantial number of small entities.

Paperwork Reduction Act

This proposed rule contains some information collection requirements. As required by the Paperwork Reduction Act of 1995 (44 U.S.C. 3507(d)), DOT will submit a copy of the Paperwork Reduction Act analysis to the Office of Management and Budget for its review and to the docket. The requirements for information collection include development by each pipeline operator

of a written public education program in compliance with API RP 1162. In addition, API RP 1162 includes requirements for public education program documentation and recordkeeping. The standard was developed by a pipeline industry group and reflects industry standard practices for these aspects of operator programs. Some operators may have increased required levels of documentation and recordkeeping, but these are not expected to be significant. Therefore, RSPA concludes that this proposed rule contains only a minor additional paperwork burden. RSPA has estimated that it will take each operator an additional 8 hours to submit these programs to RSPA, at a total cost over the industry of $19,200 per year.

Comments are invited on: (a) The need for the proposed collection of information for the proper performance of the functions of the agency, including whether the information will have practical utility; (b) the accuracy of the agency's estimate of the burden of the proposed collection of information, including the validity of the methodology and assumptions used; (c) ways to enhance the quality, utility and clarity of the information to be collected; and (d) ways to minimize the burden of the collection of information on those who are to respond, including the use of appropriate automated, electronic, mechanical, or other technological collection techniques.

Executive Order 13175

This proposed rule has been analyzed in accordance with the principles and criteria contained in Executive Order 13084 (*Consultation and Coordination with Indian Tribal Governments*). Because this proposed rule does not significantly or uniquely affect the communities of the Indian tribal governments and does not impose substantial direct compliance costs, the funding and consultation requirements of Executive Order 13175 do not apply.

Executive Order 13132

This proposed rule has been analyzed in accordance with the principles and criteria contained in Executive Order 13132 (Federalism). This proposed rule does not propose any regulation that:

(1) Has substantial direct effects on the States, the relationship between the national government and the States, or the distribution of power and responsibilities among the various levels of government,

(2) Imposes substantial direct compliance costs on States and local governments, or

(3) Preempts State law.

Therefore, the consultation and funding requirements of Executive Order 13132 (64 FR 43255; August 10, 1999) do not apply. It should be noted that representatives of the National Association of Pipeline Safety Representatives (NAPSR), which includes State pipeline safety regulators, have participated extensively in the development and review of API RP 1162, which forms the basis for this proposed rule.

Unfunded Mandates

This proposed rule does not impose unfunded mandates under the Unfunded Mandates Reform Act of 1995. It does not result in costs of $100 million or more to either State, local, or tribal governments, in the aggregate, or to the private sector. An industry working group, along with participants from NAPSR, developed API RP 1162, which forms the basis for the rule. Industry organizations have endorsed this approach to setting requirements for operator public education programs. RSPA/OPS believes this to be the least burdensome alternative that achieves the objective of the rule.

National Environmental Policy Act

RSPA/OPS has analyzed the proposed rule for purposes of the National Environmental Policy Act (42 U.S.C. 4321 *et seq.*) and have preliminarily determined that this action would not significantly affect the quality of the environment. The rule requires development of pipeline operator public education programs that follow API RP 1162. This may result in expanded public education activities by operators, but will not result in physical disruption of the environment in the vicinity of pipelines. These additional public education activities can have a positive environmental effect, if increased public awareness results in a lower frequency of pipeline accidents due to excavation damage or if increased awareness results in lower consequences of pipeline accidents due to more effective emergency response to accidents. These potential positive benefits are not expected to be significant, however. The Environmental Assessment of this proposed rule is available for review in the docket.

Executive Order 13211

This proposed rulemaking is not a "significant energy action" under Executive Order 13211 (Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use). It is not a significant regulatory action under Executive Order 12866 and is not likely to have a significant adverse effect on the supply, distribution, or use of energy. Further, this rulemaking has not been designated by the Administrator of the Office of Information and Regulatory Affairs as a significant energy action.

List of Subjects

49 CFR Part 192

Agency procedures, Gas, Natural gas, Pipeline safety, Public education, Reporting and recordkeeping requirements.

49 CFR Part 195

Agency procedures, Hazardous liquid, Oil, Petroleum, Pipeline safety, Public education, Reporting and recordkeeping requirements.

In consideration of the foregoing, RSPA/OPS proposes to amend parts 192 and 195 of title 49 of the Code of Federal Regulations as follows:

PART 192—TRANSPORTATION OF NATURAL AND OTHER GAS BY PIPELINE: MINIMUM FEDERAL SAFETY STANDARDS

1. The authority citation for part 192 continues to read as follows:

Authority: 49 U.S.C. 5103, 60102, 60104, 60108, 60109, 60110, 60113, and 60118; and 49 CFR 1.53.

2. Section 192.7 is amended to revise the table in paragraph (c)(2) by adding a new item B.(5) to read as follows:

§ 192.7 Incorporation by reference.

* * * * *

(c) * * *

(2) * * *

Source and name of referenced material	49 CFR reference
A. * * *	
B. * * *	
(5) API RP 1162 "Public Awareness Programs for Pipeline Operators" (2003).	§ 192.616
* * * * *	

3. Section 192.616 is revised to read as follows:

§ 192.616 Public education.

Each pipeline operator shall establish a continuing public education program to enable all interested and affected parties to recognize a gas pipeline emergency, to react safely to the emergency, and to report the emergency to the operator or appropriate public officials. Each operator is required to develop, implement, and maintain a public education program that complies

with standard API RP 1162 (*IBR, see* § 192.7).

PART 195—TRANSPORTATION OF HAZARDOUS LIQUIDS BY PIPELINE

4. The authority citation for part 195 continues to read as follows:

Authority: 49 U.S.C. 5103, 60102, 60104, 60108, 60109 and 60118; and 49 CFR 1.53.

5. Section 195.3 is amended to revise the table in paragraph (c) by redesignating items B.(13) through B.(16) as B.(14) through B.(17) and adding a new item B.(13) to read as follows:

§ 195.3 Material incorporated by reference.

* * * * *

(c) * * *

Source and name of referenced material	49 CFR reference
A. * * *	
B. * * *	
(13) API RP 1162 "Public Awareness Programs for Pipeline Operators" (2003)	§ 195.440; 195
(14) API Recommended Practice 2003 "Protection Against Ignitions Arising out of Static, Lightning, and Stray Currents" (6th edition, 1998).	§§ 195.134; 195.444; 195.405(a)
(15) API Publication 2026 "Safe Access/Egress Involving Floating Roofs of Storage Tanks in Petroleum Service" (2nd edition, 1998).	§ 195.405(b)
(16) API Recommended Practice 2350 "Overfill Protection for Storage Tanks In Petroleum Facilities" (2nd edition, 1996).	§ 195.428(c)
(17) API Standard 2510 "Design and Construction of LPG Installations" (7th edition, 1995)	§§ 195.132(b)(3); 195.205(b)(3); 195.264(b)(2); 195.264(e)(4); 195.307(e); 195.428(c); 195.432(c)
* * * * * * *	

6. Section 195.440 is revised to read as follows:

§ 195.440 Public education.

Each pipeline operator shall establish a continuing public education program to enable all interested and affected parties to recognize a hazardous liquid pipeline emergency, to react safely to the emergency, and to report the emergency to the operator or appropriate public officials. Each operator is required to develop, implement, and maintain a public education program that complies with the requirements of standard API RP 1162 (*IBR, see* § 195.3).

Issued in Washington, DC, on June 3, 2004.

Stacey L. Gerard,

Associate Administrator, Office of Pipeline Safety.

[FR Doc. 04–12993 Filed 6–23–04; 8:45 am]

BILLING CODE 4910–60–P

TABLES – Summary of RP 1162 Program Recommendations

PRELIMINARY – These tables are an excerpt from the RP 1162 BALLOTED DRAFT, dated 8/27/03; the tables are subject to change following final publication edits

Table 2-1 – Summary
Public Awareness Communications for
Hazardous Liquids and Natural Gas Transmission Pipeline Operators

Stakeholder Audience	Message Type	Delivery Frequency	Delivery Method and/or Media
2-1.1 Affected Public			
Residents located along transmission pipeline ROW **and** **Places of Congregation**	**Baseline Messages:** • Pipeline purpose and reliability • Awareness of hazards and prevention measures undertaken • Damage Prevention Awareness • One-Call Requirements • Leak Recognition and Response • Pipeline Location Information • How to get additional information • Availability of list of pipeline operators through NPMS	**Baseline Frequency** = 2 years	**Baseline Activity:** • Targeted Distribution of Print Materials, AND • Pipeline Markers
	Supplemental Message: • Information and/or overview of operator's Integrity Management Plan • ROW encroachment prevention • Any planned major maintenance/construction activity	**Supplemental Frequency:** Additional frequency and supplemental efforts as determined by specifics of the pipeline segment or environment	**Supplemental Activity:** • Print Materials • Personal Contact • Telephone Calls • Group Meetings • Open Houses
Residents near storage or other major operational facilities	**Supplemental Message:** • Information and/or overview of operator's Integrity Management Plan • Special incident response notification and/or evacuation measures ***if*** appropriate to product or facility • Facility purpose	**Supplemental Frequency:** Additional frequency and supplemental efforts as determined by specifics of the pipeline segment or environment	**Supplemental Activity:** • Print Materials • Personal Contact • Telephone Calls • Group Meetings • Open Houses

TABLES – Summary of RP 1162 Program Recommendations

PRELIMINARY – These tables are an excerpt from the RP 1162 BALLOTED DRAFT, dated 8/27/03; the tables are subject to change following final publication edits

2-1.2 Emergency Officials			
Emergency Officials	**Baseline Messages:** • Pipeline purpose and reliability • Awareness of hazards and prevention measures undertaken • Emergency Preparedness Communications • Potential hazards • Pipeline Location Information and availability of NPMS • How to get additional information	**Baseline Frequency =** Annual	**Baseline Activity:** • Personal Contact (generally preferred) OR • Targeted Distribution of Print Materials OR • Group Meetings OR • Telephone Calls with Targeted Distribution of Print Materials
	Supplemental Message: • Provide information and /or overview of Integrity measures undertaken • Maintenance construction activity	**Supplemental Frequency:** Additional frequency and supplemental efforts as determined by specifics of the pipeline segment or environment	**Supplemental Activity:** • Emergency Tabletop, Deployment Exercises • Facility Tour • Open House
2-1.3 Local Public Officials			
Public Officials	**Baseline Messages:** • Pipeline purpose and reliability • Awareness of hazards and prevention measures undertaken • Emergency Preparedness Communications • One Call Requirements • Pipeline Location Info and availability of NPMS • How to get additional information	• **Baseline Frequency = 3 Years**	**Baseline Activity:** • Targeted Distribution of Print Materials
	Supplemental Message: • If applicable, provide information about designation of HCA (or other factors unique to segment) and summary of integrity measures undertaken • ROW encroachment prevention • Maintenance Construction activity	**Supplemental Frequency:** • If in HCA, then annual contact to appropriate public safety officials • Otherwise, as appropriate to level of activity or upon request	**Supplemental Activity:** • Personal Contact • Telephone Calls • Videos and CDs

TABLES – Summary of RP 1162 Program Recommendations

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2-1.4 Excavators			
Excavators / Contractors	**Baseline Messages:** • Pipeline purpose and reliability • Awareness of hazards and prevention measures undertaken • Damage Prevention Awareness • One-call Requirements • Leak Recognition and Response • How to get additional information	**Baseline Frequency =** Annual	**Baseline Activity:** • Targeted Distribution of Print Materials • One-Call Center Outreach AND • Pipeline Markers
	Supplemental Messages: Pipeline purpose, prevention measures and reliability	**Supplemental Frequency:** Additional frequency and supplemental efforts as determined by specifics of the pipeline segment or environment	**Supplemental Activity:** • Personal Contact • Group Meetings
Land Developers	**Supplemental Messages:** • Pipeline purpose and reliability • Awareness of hazards and prevention measures undertaken • Damage Prevention Awareness • One-Call Requirements • Leak Recognition and Response • ROW Encroachment Prevention • Availability of list of pipeline operators through NPMS	**Supplemental Frequency:** Frequency as determined by specifics of the pipeline segment or environment	**Supplemental Activity:** • Targeted Distribution of Print Materials • Pipeline Markers • Personal Contact • Group Meetings • Telephone Calls
One-Call Centers	• Pipeline location information • Other requirements of the applicable One-Call Center	• Requirements of the applicable One-Call Center	**Baseline Activity:** • Membership in Appropriate One-Call Center • Requirements of the Applicable One-Call Center • Maps (as required)

TABLES – Summary of RP 1162 Program Recommendations

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	Supplemental Messages: • One-Call system performance • Accurate line location information • One-Call system improvements	**Supplemental Frequency:** As changes in pipeline routes or contact information occur or as required by state requirements	**Supplement Activity:** • Targeted Distribution of Print Materials • Personal Contact • Telephone Calls

Table 2-2 – Summary
Public Awareness Communications for
Local Natural Gas Distribution (LDC) Companies

Stakeholder Audience	Message Type	Suggested Frequency	Suggested Delivery Method and/or Media
2-2.1 Affected Public			
Residents along the Distribution System	**Baseline Messages:** • Pipeline purpose and reliability • Awareness of hazards and prevention measures undertaken • Damage Prevention Awareness • Leak Recognition and Response • How to get additional information	**Baseline Frequency =** Annual	**Baseline Activity:** • Public Service Announcements, OR • Paid Advertising, OR • Bill Stuffers (for combination electric & gas companies)
		Supplemental Frequency: • Additional frequency and supplemental efforts as determined by specifics of the pipeline segment or environment	**Supplemental Activity:** • Targeted Distribution of Print Materials • Newspaper and Magazines • Community Events or • Community Neighborhood Newsletters
LDC Customers	**Baseline Messages:** • Pipeline purpose and reliability • Awareness of hazards and prevention measures	**Baseline Frequency =** twice annually	**Baseline Activity:** • Bill stuffers

TABLES – Summary of RP 1162 Program Recommendations

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Stakeholder Audience	Message Type	Suggested Frequency	Suggested Delivery Method and/or Media
	undertaken • Damage Prevention Awareness • Leak Recognition and Response • How to get additional information	**Supplemental Frequency:** • Additional frequency and supplemental efforts as determined by specifics of the pipeline segment or environment	**Supplemental Activity:** • Targeted Distribution of Print Materials
2-2.2 Emergency Officials			
Emergency Officials	**Baseline Messages:** • Pipeline purpose and reliability • Awareness of hazards and prevention measures undertaken • Emergency Preparedness Communications • How to get additional information	**Baseline Frequency** = Annual	**Baseline Activity:** • Print Materials, OR • Group Meetings
		Supplemental Frequency: • Additional frequency and supplemental efforts as determined by specifics of the pipeline segment or environment	**Supplemental Activity:** • Telephone Calls • Personal Contact • Videos and CDs
2-2.3 Local Public Officials			
Public Officials	**Baseline Messages:** • Pipeline purpose and reliability • Awareness of hazards and prevention measures undertaken • Emergency Preparedness Communications • How to get additional information	• **Baseline Frequency** = 3 years	**Baseline Activity:** • Targeted Distribution of Print Materials
		Supplemental Frequency: • Additional frequency and supplemental efforts as determined by specifics of the pipeline segment or environment	**Supplemental Activity:** • Group Meetings • Telephone Calls • Personal Contact
2-2.4 Excavators			
Excavators / Contractors	**Baseline Messages:** • Pipeline purpose and reliability • Awareness of hazards and	**Baseline Frequency** = Annual	**Baseline Activity:** • One-Call Center Outreach OR • Group Meetings

TABLES – Summary of RP 1162 Program Recommendations

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Stakeholder Audience	Message Type	Suggested Frequency	Suggested Delivery Method and/or Media
	prevention measures undertaken • Leak Recognition and Response • One-Call requirements • How to get additional information	**Supplemental Frequency:** • Additional frequency and supplemental efforts as determined by specifics of the pipeline segment or environment	**Supplemental Activity:** • Personal Contact • Videos and CDs • Open Houses
One-Call Centers	• Pipeline location information • Other requirements of the applicable One-Call Center	• Requirements of the applicable One-Call Center	**Baseline Activity:** • Membership in Appropriate One-Call Center • Requirements of the Applicable One-Call Center • Maps (as required)
	Supplemental Messages: • One-Call system performance • Accurate line location information • One-Call system improvements	**Supplemental Frequency:** As changes in pipeline routes or contact information occur or as required by state requirements	**Supplement Activity:** • Targeted Distribution of Print Materials • Personal Contact • Telephone Calls • Maps (as required)

TABLES – Summary of RP 1162 Program Recommendations

PRELIMINARY – These tables are an excerpt from the RP 1162 BALLOTED DRAFT, dated 8/27/03; the tables are subject to change following final publication edits

Table 2-3 – Summary Public Awareness Communications for Gathering Pipeline Operators

Stakeholder Audience	Message Type	Delivery Frequency	Delivery Method and/or Media
2-3.1 Affected Public			
Residents, **and** **Places of Congregation within area of potential impact**	**Baseline Messages:** • Gathering pipeline purpose • Awareness of hazards • Prevention measures undertaken • Damage Prevention Awareness • One-Call Requirements • Leak Recognition and Response • How to get additional information	**Baseline Frequency** = 2 Years	**Baseline Activity:** • Targeted Distribution of Print Materials OR • Personal Contact
	Supplemental Messages: • Planned maintenance construction activity • Special emergency procedures if sour gas or other segment specific reason.	**Supplemental Frequency:** • Annually for sour gas gathering lines • Additional frequency as determined by specifics of the pipeline segment or environment.	**Supplemental Activity:** may include: • Pipeline Markers • Print Materials • Personal Contact • Telephone Calls • Group Meetings • Mass Media • Other Activities described in Section 5
2-3.2 Emergency Officials			
Emergency Officials	**Baseline Messages:** • Gathering pipeline location and purpose • Awareness of hazards • Prevention measures undertaken • Emergency Preparedness Communications, Company contact and response information • Specific description of products transported and any potential special hazards • How to get additional information	**Baseline Frequency** = Annual	**Baseline Activity:** • Personal Contact (generally preferred) OR • Targeted Distribution of Print Materials OR • Group Meetings OR • Telephone Calls with Targeted Distribution of Print Materials

TABLES – Summary of RP 1162 Program Recommendations

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Stakeholder Audience	Message Type	Delivery Frequency	Delivery Method and/or Media
	Supplemental Messages: • Planned maintenance construction activity • Special emergency procedures if sour gas or other segment specific reason.		**Supplemental Activity:** • Emergency Tabletop. Deployment Exercises • Facility Tour • Open House
2-3.3 Local Public Officials			
Public Officials	**Baseline Messages:** • General location and purpose of gathering pipeline • Awareness of hazards • Prevention measures undertaken • Copies of materials provided to Affected Public and Emergency Officials • Company contacts • How to get additional information	**Baseline Frequency =** 3 years	**Baseline Activity:** • Targeted Distribution of Print Materials
	Supplemental Message: • ROW encroachment prevention • Maintenance Construction activity • Special emergency procedures if sour gas or other segment specific reasons.	**Supplemental Frequency:** • If in HCA, then more frequent or annual contact with appropriate public safety officials • Otherwise as appropriate to level of activity or upon request	**Supplemental Activity:** • Personal Contact • Telephone Calls • Videos and CDs
2-3.4 Excavators			
Excavators / Contractors	**Baseline Messages:** • General location and purpose of gathering pipeline • Awareness of hazards • Prevention measures	**Baseline Frequency =** Annual	**Baseline Activity:** • Targeted Distribution of Print Materials • One-Call Center Outreach AND • Pipeline Markers

TABLES – Summary of RP 1162 Program Recommendations

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Stakeholder Audience	Message Type	Delivery Frequency	Delivery Method and/or Media
	undertaken • Damage Prevention Awareness • One-Call Requirements • Leak Recognition and Response • How to get additional information		**Supplemental Activity:** • Personal Contact • Group Meetings • One-Call Center Outreach • Mass Media
Land Developers	**Supplemental Messages:** • General location and purpose of gathering pipeline • Awareness of hazards • Prevention measures undertaken • Damage Prevention Awareness	**Supplemental Frequency:** Frequency as determined by specifics of the pipeline segment or environment	**Supplemental Activity:** • Targeted Distribution of Print Materials • Personal Contact • Group Meetings • Telephone Calls
One-Call Centers	• Pipeline location information • Other requirements of the applicable One-Call Center	• Requirements of the applicable One-Call Center	**Baseline Activity:** • Membership in Appropriate One-Call Center • Requirements of the Applicable One-Call Center • Maps (as required)
	Supplemental Messages: • One-Call system performance • Accurate line location information • One-Call system improvements	**Supplemental Frequency:** As changes in pipeline routes or contact information occur or as required by state requirements	**Supplement Activity:** • Targeted Distribution of Print Materials • Personal Contact • Telephone Calls • Maps (as required)

(HCFC–225cb); decafluoropentane (HFC 43–10mee); difluoromethane (HFC–32); ethylfluoride (HFC–161); 1,1,1,3,3,3-hexafluoropropane (HFC–236fa); 1,1,2,2,3-pentafluoropropane (HFC–245ca); 1,1,2,3,3-pentafluoropropane (HFC–245ea); 1,1,1,2,3-pentafluoropropane (HFC–245eb); 1,1,1,3,3-pentafluoropropane (HFC–245fa); 1,1,1,2,3,3-hexafluoropropane (HFC–236ea); 1,1,1,3,3-pentafluorobutane (HFC–365mfc); chlorofluoromethane (HCFC–31); 1,2-dichloro-1,1,2-trifluoroethane (HCFC–123a); 1-chloro-1-fluoroethane (HCFC–151a); 1,1,1,2,2,3,3,4,4-nonafluoro-4-methoxybutane ($C_4F_9OCH_3$); 2-(difluoromethoxymethyl)-1,1,1,2,3,3,3-heptafluoropropane ($(CF_3)_2CFCF_2OCH_3$); 1-ethoxy-1,1,2,2,3,3,4,4,4-nonafluorobutane ($C_4F_9OC_2H_5$); 2-(ethoxydifluoromethyl)-1,1,1,2,3,3,3-heptafluoropropane ($(CF_3)_2CFCF_2OC_2H_5$); and methyl acetate from the definition of VOM or VOC and thereby, from regulation as ozone precursors.

(i) Incorporation by reference.

(A) Illinois Administrative Code Title 35: Environmental Protection, Subtitle B: Air Pollution, Chapter 1: Pollution Control Board, Subchapter c: Emission Standards and Limitations for Stationary Sources, Part 211: Definitions and General Provisions, Subpart B: Definitions, Section 211.7150 Volatile Organic Material (VOM) or Volatile Organic Compound (VOC), amended at 22 Illinois Register 11405, effective June 22, 1998.

[FR Doc. 04–14382 Filed 6–25–04; 8:45 am]

BILLING CODE 6560–50–P

DEPARTMENT OF TRANSPORTATION

Research and Special Programs Administration

49 CFR Part 192

[Docket No. RSPA–03–16330; Amdt. 192–97]

RIN 2137–AB71

Pipeline Safety: Passage of Internal Inspection Devices

AGENCY: Research and Special Programs Administration (RSPA), DOT.

ACTION: Final rule.

SUMMARY: The Research and Special Programs Administration (RSPA) published a regulation requiring that new gas transmission lines and sections of existing transmission lines in which pipe or components are replaced be designed and constructed to accommodate the passage of instrumented internal inspection devices. Responding to petitions for reconsideration, RSPA stayed enforcement on some facilities and invited comments on proposed changes to the regulation. The present action concludes our consideration of the petitions and comments. For existing onshore transmission lines, this action restricts the regulation to replacements of pipe or components. For offshore transmission lines, the regulation is restricted to certain new lines that run between platforms or from platforms to shore. The action aligns the regulation with the supporting congressional directive and a related Marine Board recommendation.

DATES: This Final Rule takes effect July 28, 2004. Offshore transmission lines covered by revised § 192.150 are those on which construction begins after December 28, 2005.

FOR FURTHER INFORMATION CONTACT: L. M. Furrow by phone at 202–366–4559, by fax at 202–366–4566, by mail at U.S. Department of Transportation, 400 Seventh Street, SW., Washington, DC 20590, or by e-mail at *buck.furrow@rspa.dot.gov.*

SUPPLEMENTARY INFORMATION:

Background

This proceeding began when RSPA proposed regulations (49 CFR 192.150 and 195.120) that would require operators, except in certain impracticable situations, to design and construct new and replacement gas transmission lines and new and replacement hazardous liquid pipelines to accommodate the passage of instrumented internal inspection devices (57 FR 54745; Nov. 20, 1992) ("Notice 1").[1] The proposed regulations were in response to congressional directives in Sections 108(b) and 207(b) of the Pipeline Safety Reauthorization Act of 1988 (Pub. L. 100–561; Oct. 31, 1988).[2]

Instrumented internal inspection devices, also called "smart pigs," travel with the flow of fluid in pipelines. Along the way, they collect data that operators subsequently analyze and investigate to learn the physical condition of the pipeline. However, operators cannot use smart pigs in pipelines that contain obstructions to their passage, such as short radius bends or valves that do not open fully. The purpose of the proposed regulations was to make pipelines open to the passage of smart pigs wherever practicable.

Persons who submitted written comments on the proposed regulations generally sought to expand the number of impracticable situations in which design and construction for the passage of smart pigs would not be mandatory. In a Final Rule document (59 FR 17281; April 12, 1994) ("1994 Final Rule"), we responded to these comments by including the following additional exceptions in final §§ 192.150 and 195.120:

- Pipe for which there is no commercially available smart pig.
- Transmission lines in Class 4 (urban) locations that operate with a gas distribution system.
- Piping associated with storage facilities.
- Emergency or other unforeseen construction problems for which the operator seeks post-construction approval.
- Offshore pipelines less than 10 inches in nominal diameter that transport gas or hazardous liquid to onshore facilities.

In the 1994 Final Rule, we also changed the proposed regulations in response to comments that the terms "replacement transmission line" and "replacement pipeline" were unclear. We had used these terms to identify which existing pipelines operators

[1] The proposed gas transmission line regulation (49 CFR 192.150) was substantially identical to the proposed regulation for hazardous liquid pipelines (49 CFR 195.120). Proposed § 192.150 reads as follows:

§ 192.150 Provision for internal passage of inspection devices.

(a) Except as provided in paragraph (b) of this section, each new transmission line and each replacement transmission line must be designed and constructed to accommodate the passage of instrumented internal inspection devices.

(b) Paragraph (a) of this section does not apply to manifolds, station piping (such as compressor stations, metering stations, or regulator stations), cross-overs, and fittings that provide branch line junctures (such as tees and other lateral connections), and any other piping that the Administrator finds in a particular case would be impracticable to design and construct to accommodate the passage of an instrumented internal inspection device. In the case of fittings providing branch line junctures, however, restraining elements must be added to the fitting so that pigs can pass in the direction of straight flow.

[2] Section 108(b) added the following new Section 3(g) to the Natural Gas Pipeline Safety Act of 1968: (g) Instrumented Internal Inspection Devices.—The Secretary shall, by regulation, establish minimum Federal safety standards requiring that—

(1) the design and construction of new transmission facilities, and

(2) when replacement of existing transmission facilities or equipment is required, the replacement of such existing facilities, be carried out, to the extent practicable, in a manner so as to accommodate the passage through such transmission facilities of instrumented internal inspection devices (commonly referred to as "smart pigs").

Section 207(b) added a similar new section 203(k) to the Hazardous Liquid Pipeline Safety Act of 1979.

would have to modify to accommodate the passage of smart pigs. The commenters suggested several alternative terms, including "replaced component" or "replaced line section." Although we agreed the proposed terms lacked clarity, we did not use the suggested alternatives in final §§ 192.150(a) and 195.120(a). Instead the final rules required that when operators replace any line pipe or component, they must design and construct the entire line section containing the replacement to accommodate the passage of smart pigs ("replacement provision").[3] Also, based on the definition of "line section" in § 195.2, we added the following definition to § 192.3: "*Line section* means a continuous run of transmission line between adjacent compressor stations, between a compressor station and storage facilities, between a compressor station and a block valve, or between adjacent block valves." We rejected as fruitless the idea of applying the proposed terms just to replaced pipe or components. Our reasoning was that if operators never replaced some existing obstructions, the pipelines would never accommodate the passage of smart pigs, or become piggable.

After publication of the 1994 Final Rule, the American Gas Association (AGA) and the Interstate Natural Gas Association of America (INGAA) asked us to stay the effective date of the replacement provision. They argued that construction projects require lengthy advance planning for, among other things, design, contracting, funding, and government approvals, and that compliance with § 192.150 would cause adverse consequences. In addition, AGA and INGAA each submitted a petition for reconsideration of the replacement provision, citing procedural errors. INGAA also sought exemption of all offshore gas transmission lines from § 192.150.

In view of the serious nature of these requests, on May 12, 1994, we suspended enforcement of the replacement provision, except as it applies to the pipe or component being replaced. Subsequently we published a notice proposing changes to § 192.150 that would relax the effect of the regulation, but not fully grant the petitions for reconsideration (59 FR 49896; Sept. 30, 1994) (Notice of Proposed Rulemaking (NPRM)). Specifically the proposed changes would do the following:

- For transmission lines in Class 1 and 2 locations (areas of low population), limit the replacement provision to the component being replaced, if modifying the entire line section is infeasible and unnecessary for future safety.
- For transmission lines in Class 1 and 2 locations, postpone mandatory compliance with the replacement provision, apart from the component being replaced, until February 2, 1995.
- Exempt all offshore transmission lines (other than new transmission lines 10¾ inches or larger) if the operator runs cleaning pigs regularly to remove condensate and inspects risers regularly for corrosion.

We did not propose similar changes to § 195.120 primarily because no one requested reconsideration of § 195.120. The lack of a request was most likely because hazardous liquid pipelines have historically been designed for the passage of internal inspection equipment. We also thought the risk of environmental damage posed by hazardous liquid spills weighed against changing § 195.120. Nevertheless, since there was no apparent need to change § 195.120, we announced in the NPRM that we would begin to enforce the replacement provision of that regulation in full. We also said we would continue to suspend enforcement on gas transmission lines until February 2, 1995, or until we completed action on compliance dates, whichever occurred first (59 FR 49897).

After reviewing the comments on the NPRM, we realized we would not complete the rulemaking before February 2, 1995. So on January 30, 1995, we issued another suspension of enforcement (60 FR 7133; Feb. 7, 1995). On existing onshore transmission lines, we continued the previous suspension, and on offshore transmission lines, we suspended enforcement of § 192.150 entirely. We said these suspensions would stay in effect until we responded to the comments on the NPRM and established new compliance dates. The suspensions did not affect new onshore transmission lines or replacements of pipe or components in existing onshore transmission lines.

Comments on the NPRM

Fifty-seven persons responded to the invitation to comment on the NPRM. Comments came from pipeline operators, pipeline trade associations, and government agencies.

AGA considered the proposed changes to § 192.150 impracticable and unreasonable, and said they would not significantly reduce industry's costs of compliance. AGA estimated that even if the replacement provision applied only to Class 3 and 4 pipelines, compliance would cost industry more than $100 million a year. It urged us to rescind the replacement provision rather than adopt the proposed changes.

Other commenters largely objected to the replacement provision without directly addressing the proposed changes. Most of these commenters saw the replacement provision as an unnecessary high-cost burden that would cause the delay of other maintenance work or safety objectives. Many of them suggested that on existing transmission lines § 192.150 should apply only to replacements of pipe and components. Four commenters argued we should not apply the replacement provision to Class 3 transmission lines operated with distribution systems because these lines have constraints similar to those of exempt Class 4 lines. Six commenters, including INGAA, expected improvements in the technology of smart pigs would make the replacement provision unnecessary. INGAA also suggested that preparing line sections for smart pig inspections before deciding the inspections are needed is not proper risk management.

Six commenters, including INGAA, suggested that § 192.150 should exempt all offshore transmission lines. Two of these commenters urged exemption without the proposed preconditions, which they argued were unnecessary in view of usual operating practices and corrosion control regulations. Mostly these commenters contended that designing and constructing these lines to provide for the future use of smart pigs would be very costly, technically difficult, and of almost no benefit to the public because of the remote location. They attributed the costs and difficulties to the normal configuration of offshore transmission lines, essentially an underwater network of different pipe sizes with multiple right-angle connections, making smart pig passage from one line to another and installation of launcher or receivers at connection point impracticable. However, two commenters supported the Marine Board's recommendation (discussed below) that, whenever reasonably practical, operators design new medium-to-large-diameter lines running between platforms and platforms to shore for the passage of smart pigs.

Several commenters addressed the question of what alternative to the replacement provision would ensure

[3] Final §§ 192.150(a) and 195.120(a) are substantially identical. Final § 192.150(a) reads as follows: *§ 192.150 Passage of internal inspection devices.*

(a) Except as provided in paragraphs (b) and (c) of this section, each new transmission line and each line section of a transmission line where the line pipe, valve, fitting, or other line component is replaced must be designed and constructed to accommodate the passage of instrumented internal inspection devices.

that existing transmission lines eventually accommodate the passage of smart pigs. A few commenters said there was no alternative. Others said the accommodation of smart pigs would gradually result from planned replacement programs or from a combination of replaced pipe and components, new installations, and removal of obstructions. Two commenters stated the alternative was continuously improving technology.

Advisory Committee Consideration

The Technical Pipeline Safety Standards Committee (TPSSC) considered the NPRM at a meeting in Washington, DC, on May 2, 1995. TPSSC is a statutory, advisory committee that advises RSPA on proposed safety standards and other policies for gas pipelines. The committee has an authorized membership of 15 persons, five each representing government, industry, and the public. Each member has qualifications to consider the technical feasibility, reasonableness, cost-effectiveness, and practicability of proposed gas pipeline safety standards. A transcript of the meeting is available in the Nassif Building, Room 7128, 400 Seventh Street, SW, Washington, DC 20590–0001.

TPSSC's discussion at the meeting dwelled on the replacement provision of § 192.150(a). One member thought the provision put too much emphasis on a single method of evaluating pipeline integrity (using smart pigs) when alternatives are available. Other members questioned the benefit of requiring operators to do more than just insure that replacement pipe and components accommodate the passage of smart pigs. Still other members were concerned the replacement provision would cause an undesirable reallocation of resources by reducing funds available for more important maintenance needs. In the end, TPSSC voted nine to one to recommend that we amend the replacement provision to apply only to replacements of pipe or components.

The rest of TPSSC's discussion concerned application of § 192.150 to offshore transmission lines. One member stated emphatically that the regulation should not apply offshore because the cost of design and construction would be too great. An industry representative in the audience added that normal sub-sea designs inherently do not permit the passage of smart pigs due to right angles between connecting pipelines. This industry representative also said that other than in a few places, running smart pigs in offshore gas transmission lines was not technically feasible. With little further discussion, TPSSC voted unanimously to recommend that we exempt all offshore transmission lines from § 192.150.

Resolving the Issues

Essentially we face two issues in deciding whether to change § 192.150: The first is whether the replacement provision is justified. And the second is whether to exclude additional transmission lines from coverage.

Replacement provision. The controversy over the replacement provision began with our response to Notice 1 commenters who requested clarification of the term "replacement transmission line." We had used the term in proposed § 192.150(a) to identify the portions of existing transmission line that operators would have to design and construct to accommodate the passage of smart pigs.

A strong inference of what "replacement transmission line" meant is found in the following excerpt from Notice 1 concerning the purpose of the proposed regulations:

> Sections 108(b) and 207(b) of the Reauthorization Act (Pub. L. 100–561) require DOT to require operators to design and construct certain new pipeline facilities and replacement pipeline facilities (*i.e.*, pipeline facilities that replace existing facilities), to the extent practicable, to accommodate the passage of smart pigs. To meet this statutory requirement, the rules proposed by this notice would, with limited exceptions, prohibit any physical restriction on the passage of a smart pig in the design or construction of new or replacement pipelines. (57 FR 54746).

In the first sentence of the excerpt, the term "replacement pipeline facilities" identifies which existing facilities Congress wanted operators to design and construct to accommodate the passage of smart pigs. The parenthetical expression leaves no doubt that we intended the term to mean "facilities that replace existing facilities." The second sentence further explains that to meet this congressional directive on existing facilities, the proposed rules would prohibit restrictions in "replacement pipelines." Given that in Part 192 a "transmission line" is a type of "pipeline" which in turn is a type of "pipeline facility" (see § 192.3), it follows that in Notice 1 we intended "replacement transmission line" to refer to a transmission line that replaces an existing transmission line.

This interpretation of Notice 1 is consistent with the legislative history of Pub. L.100–561. In its report on H.R. 2266, the House bill that led to the pig passage requirement, the Committee on Energy and Commerce discussed the limited effect the bill would have on existing pipelines. The Committee said the "requirement would *only apply to repairs or replacements* that * * * could be done in a manner to facilitate the use of smart pigs." (H.R. Rept. 100–445, Part 1, 100th Cong., 1st Sess., at 15, emphasis added).

In the 1994 Final Rule, however, we did not refer to Notice 1 or the Committee report to answer commenters' questions about the meaning of "replacement transmission line." Instead we dropped the term from the final regulations in favor of the replacement provision, which has a much broader effect than the design and construction of replacements. It requires that each transmission line section containing a replacement must be designed and constructed to accommodate the passage of smart pigs.

To justify this change in the final regulations, we pointed to Notice 1 comments that suggested alternatives to "replacement transmission line," such as "replacement line section" or "replacement transmission section." However, these comments were made by persons who suggested that for existing transmission lines we restrict application of the proposed rules to actual replacements. Thus, in the present reconsideration of the replacement provision, we looked for a better reason that would explain the change.

We believe that reason lies in the explanation we gave in the 1994 Final Rule for rejecting the idea that "replacement" should mean only replacement of pipe or components. We said if the regulations were so limited, "then pipelines with restrictive components, such as elbows and tight radius field bends (which when properly maintained never need replacement) would never be piggable." (59 FR 17279). We amplified this reasoning—that some existing pipelines might never become piggable—when, in the same paragraph, we said the clear intent of the congressional mandate was to improve an existing pipeline's piggability. A further example of this reasoning is in the NPRM. There we explained that applying § 192.150 to single components rather than line sections "would result in virtually no change in the 'piggability' of existing pipelines" and that "Congress clearly intended that change in the 'piggability' occur." (59 FR 49897). It seems, therefore, that our strong interest in carrying out the will of Congress to make existing transmission lines piggable was behind the replacement provision in § 192.150.

Notwithstanding this prior reasoning, recent legislation and RSPA rulemaking have reduced the significance of the replacement provision in reaching the piggability goal. Section 14 of the Pipeline Safety Improvement Act of 2002 (Pub. L. 107–355; Dec. 17, 2002) requires gas pipeline operators to analyze and reduce the risks to their facilities in highly populated areas using integrity management programs prescribed by DOT regulations. Last year RSPA published the required regulations on integrity management programs (68 FR 69778; Dec. 15, 2003). The backbone of the regulations is a requirement to use smart pigs, pressure testing, direct assessment, or an equivalent technology periodically to assess the effects of potential risks on pipeline integrity. Comments submitted in response to the rulemaking proposal indicated that operators strongly prefer to use smart pigs as the method of assessment and will modify their transmission lines as necessary to accommodate smart pigs. For convenience of pig launching and retrieving and to maximize pigging benefits, planned modifications most likely will include considerable mileage outside areas covered by the new regulations. We believe this approach is prudent because pigging yields much more information about the condition of a pipeline and should lower compliance costs when widely used. Thus, regardless of the replacement provision, the new integrity management regulations should result in increased piggability of existing transmission lines in and near areas of high population, areas where the risk of damage from a pipeline rupture is greatest.

In sum, the NPRM commenters and the TPSSC opposed the replacement provision and did not back our NPRM proposal to relax it. Moreover, the goal of the replacement provision—ensuring the piggability of existing transmission—will likely be met in and near areas of greatest risk through compliance with the new integrity management regulations. Therefore, upon further consideration of the record and the integrity management rulemaking, we have decided to revise the replacement provision of § 192.150(a) to apply only to replacements of pipe or components. Because this decision is consistent with our long-running stay of enforcement, it should not affect operators' current methods of compliance. Also, it will enable operators to focus their line modification resources on areas of greatest risk rather than spread them helter-skelter across their systems as the present rule requires.

Offshore transmission lines. The offshore issue first arose when 11 commenters to Notice 1 suggested we exempt all offshore pipelines from the final regulations. The commenters generally said design features, including short bends and right-angle connections, made it impracticable for offshore pipelines to accommodate the passage of smart pigs. Because of these comments, we exempted offshore pipelines less than 10 inches in nominal diameter that transport gas or hazardous liquid to onshore facilities (§ 192.150(b)(7) and § 195.120(b)(6)).

INGAA was dissatisfied with this outcome and, in its petition for reconsideration, asked us to exempt all new and replacement offshore transmission lines from § 192.150. Among other things, INGAA argued that making offshore transmission lines piggable would be of little benefit because the offshore location and operators' maintenance practices significantly limit the risk they pose. Largely accepting this argument, in the NPRM we proposed to modify the offshore exemption in § 192.150(b)(7). The modified exemption would cover all existing transmission lines and new transmission lines less than 10¾ inches in outside diameter if operators regularly run cleaning pigs through the lines to remove condensate and regularly inspect risers for corrosion.

To support our decision to continue applying § 192.150 to new lines 10¾ inches or larger in outside diameter, we noted that nothing in the record showed that offshore transmission lines are incapable of being designed and constructed to accommodate smart pigs. We also relied on a 1994 report titled "Improving the Safety of Marine Pipelines" prepared by a committee of scientists and engineers expert in offshore development and management. The Marine Board of the National Research Council established the committee in response to requests by RSPA and the Minerals Management Service to review and assess various offshore pipeline issues. The report is available on the Web from the National Academies Press at *http://books.nap.edu/books/0309050472/html/*. After concluding that modification of existing pipelines to accommodate smart pigs would generally be uneconomic, the committee recommended that "[n]ew medium-to large-diameter pipelines running from platform to platform or platform to shore should be designed to accommodate smart pigs whenever reasonably practical."

As stated above, NPRM commenters generally opposed applying § 192.150 to offshore transmission lines, and the TPSSC supported that view. The rationale related to customary offshore construction practices and the inability to run pigs through interconnected lines. However, no commenter or TPSSC member objected specifically to applying the regulation to new lines 10¾ inches or larger in outside diameter, and two commenters supported the idea within the limits of the Marine Board's recommendation. By comparison, since the 1994 Final Rule took effect, § 195.120 has required operators to design and construct offshore hazardous liquid pipelines 10¾ inches or larger in outside diameter to accommodate the passage of smart pigs. And nothing presented by the NPRM commenters suggests operators cannot similarly design and construct new gas transmission lines.

All these considerations, especially the Marine Board's recommendation, weigh toward continuing to apply § 192.150 to new offshore transmission lines 10¾ inches or larger in outside diameter. At the same time, we agree with the two NPRM commenters who suggested we limit the regulation's offshore coverage to new lines running from platform to platform or platform to shore whenever reasonably practical, as the Marine Board recommended. We also agree with the commenters who suggested that conditioning the exemption of other offshore lines on certain maintenance practices is unnecessary. As discussed in the NPRM, operators regularly remove condensate from transmission lines, and Part 192 already requires regular inspections for corrosion.

However, before making a final decision, we sought further public input because the offshore issue had not been aired for some time. So we published a notice (68 FR 67128; Dec. 1, 2003) seeking comments on the following questions:

- Do operators of offshore gas transmission lines still object to applying § 192.150 to new offshore transmission lines 10 inches or larger?
- If the answer is yes, given that new hazardous liquid pipelines 10 inches or larger are meeting § 195.120, what differences are there between gas and liquid pipeline design and construction practices that would justify exempting new offshore gas transmission lines 10 inches or larger from § 192.150?
- Regarding the Marine Board's recommendation, when would it not be "reasonably practical" to design new gas transmission lines 10 inches or larger running between platforms or

platforms and shore to accommodate the passage of smart pigs?

We received four responses to the request for comments: Barb Sachau of Florham Park, New Jersey; Duke Energy Gas Transmission Corporation (Duke); El Paso Pipeline Group (El Paso); and INGAA. Of these commenters, only Duke offered useful information in response to the questions. Ms. Sachau merely urged us to adopt the utmost safety standards. El Paso supported INGAA's petition for reconsideration, but said it could not respond properly to the questions because the on-line docket (Docket No. RSPA–03–16330) did not contain the "technical material" referenced in INGAA's petition or the Marine Board study. El Paso said it needed more time for research, and asked us to extend the comment period 30 days. INGAA also requested more time to submit comments (15 days), stating that its time had been occupied by work related to RSPA's new Integrity Management Rule, published December 15, 2003, and by end-of-year holidays.

We did not grant El Paso's or INGAA's request to extend the comment period, because both commenters offered weak excuses for not meeting the deadline and did not suggest what new information we would receive if the deadline were extended. We especially differed with El Paso's contention that the "technical material" mentioned in INGAA's petition and the Marine Board study were not in the on-line docket. The only reference to technical material occurs on page 6 of the petition, where INGAA states: "RSPA was provided with an abundance of technical reasons why offshore pipelines cannot be smart pigged." The context clearly implies that INGAA was referring to technical reasons contained in the rulemaking record. The 1994 Final Rule discusses these reasons, and we put a copy of the 1994 Final Rule in the on-line docket to make it easier for persons to respond to the request for comments. In addition, the notice included a Web address for the Marine Board study, effectively placing that study in the on-line docket. Although the comment deadline was not extended, our customary policy is to consider late-filed comments whenever practical, but neither commenter submitted anything more to the docket.

In its comments on the offshore issue, Duke opposed applying § 192.150 to existing offshore gas pipelines. Yet it supported the Marine Board's recommendation on the design of certain new offshore pipelines, calling the recommendation an appropriate application of the congressional requirement. As to when designing for pig passage would not be reasonably practical, Duke suggested it would not be practical if pig launching or receiving were constrained by platform space or configuration. Nor would it be reasonably practical, Duke said, if the new pipeline were designed to have multiple lateral connections between launching and receiving points. Similarly, a participant at the May 2, 1995 TPSSC meeting suggested design would not be practical if it includes a lateral connection large enough to cause a smart pig to turn.

We agree it makes little sense to design and construct a new platform-connected transmission line for smart pig passage if the platform lacks room for equipment and handling needed to launch or retrieve smart pigs. We are less certain, however, about the consequences of designs that provide taps for future lateral connections, either through manifolds or more than one individual connection. While comments indicate that right-angle connections are common on offshore pipelines and impede smart pig passage from laterals to trunklines, it is not clear that these connections necessarily restrict the passage of smart pigs through the trunkline. Wye connections can be used in some situations to alleviate problems that might arise from right-angle connections, although they may not be suitable in all situations. Thus to be sure the pig passage requirement is not frustrated by designs that include taps for lateral connections, we believe operators should consider using non-obstructive alternatives wherever reasonably practical. Thus we are willing to exempt designs with obstructive taps only if the operator has considered alternative designs and can explain why they are not reasonably practical for the intended application.

Accordingly, based on our earlier conclusions and Duke's latest input, we are revising § 192.150(b)(7) consistent with the Marine Board's recommendation. New offshore transmission lines 10" inches or more in outside diameter that run from platform to platform or platform to shore will have to be designed and constructed to accommodate the passage of smart pigs. This requirement will not apply, however, if platform space or configuration is not compatible with launching or retrieving smart pigs. Nor will it apply if the design includes one or more taps for lateral connections and the operator can demonstrate, based on investigation or experience, that use of a tap that does not obstruct the passage of instrumented internal inspection devices is not reasonably practical under the design circumstances.

Although § 192.150 already applies to new offshore transmission lines 10¾ inches or more in outside diameter, because of our long-running suspension of enforcement, operators will probably need time to plan for compliance with revised § 192.150(b)(7). So we decided to require compliance only on lines on which construction begins more than 18 months after the date of publication of the present Final Rule.

The changes we are making to § 192.150 remove the need to continue in force the suspension of enforcement dated January 30, 1995 (60 FR 7133; Feb. 7, 1995). Therefore, we are withdrawing the suspension as of the effective date of this Final Rule, which is shown in "Dates" heading above.

Regulatory Analyses and Notices

Executive Order 12866 and DOT Policies and Procedures

We do not consider this rulemaking to be a significant regulatory action under Section 3(f) of Executive Order 12866 (58 FR 51735; Oct. 4, 1993). Therefore, the Office of Management and Budget (OMB) has not received a copy of this rulemaking to review. In addition, we do not consider this rulemaking to be significant under DOT regulatory policies and procedures (44 FR 11034: February 26, 1979).

This rulemaking merely relaxes certain provisions of the 1994 Final Rule. It does not establish any new requirements. It will reduce the costs to pipeline operators by limiting the amount of pipelines and pipeline components that operators must modify onshore and reduce the amount of pipeline offshore that is subject to regulation. A copy of the regulatory evaluation is available in the public docket for review.

Regulatory Flexibility Act

This rulemaking relaxes certain provisions of § 192.150 and does not establish any new requirements. Therefore, based on these facts, I certify, under Section 605 of the Regulatory Flexibility Act (5 U.S.C. 605), that this rulemaking will not have a significant impact on a substantial number of small entities.

Executive Order 13084

We have analyzed this rulemaking according to the principles and criteria contained in Executive Order 13084, "Consultation and Coordination with Indian Tribal Governments." Because the rulemaking will not significantly or uniquely affect the communities of the Indian tribal governments and will not impose substantial direct compliance

costs, the funding and consultation requirements of Executive Order 13084 do not apply.

Paperwork Reduction Act

This rulemaking does not contain any additional information collection requirements.

Unfunded Mandates Reform Act of 1995

This rulemaking will not impose unfunded mandates under the Unfunded Mandates Reform Act of 1995. It would not result in costs of $100 million or more to either State, local, or tribal governments, in the aggregate, or to the private sector, and would be the least burdensome alternative that achieves the objective of the rule.

National Environmental Policy Act

Because this rulemaking merely relaxes certain provisions of § 192.150 and does not establish any new requirements, it does not create any significant environmental issues. Therefore, we have not analyzed this rulemaking under the National Environmental Policy Act (42 U.S.C. 4321 *et seq.*).

Executive Order 13132

We have analyzed this rulemaking according to the principles and criteria contained in Executive Order 13132 ("Federalism"). The rulemaking does not establish any regulation that: (1) Has a substantial direct effect on the States, the relationship between the National government and the States, or the distribution of power and responsibilities among the various levels of government; (2) imposes substantial direct compliance cost on State and local governments; or (3) preempts State law. Therefore, the consultation and funding requirements of Executive Order 13132 do not apply.

Executive Order 13211

This rulemaking is not a "Significant energy action" under Executive Order 13211. It is not a significant regulatory action under Executive Order 12866 and is not likely to have a significant adverse effect on the supply, distribution, or use of energy. Further, this rulemaking has not been designated by the Administrator of the Office of Information and Regulatory Affairs as a significant energy action.

List of Subjects in 49 CFR Part 192

Natural gas, Pipeline safety, Reporting and recordkeeping requirements.

■ For the reasons discussed in this preamble, RSPA amends 49 CFR Part 192 as follows:

PART 192—TRANSPORTATION OF NATURAL AND OTHER GAS BY PIPELINE: MINIMUM FEDERAL SAFETY STANDARDS

■ 1. The authority citation for part 192 continues to read as follows:

Authority: 49 U.S.C. 5103, 60102, 60104, 60108, 60109, 60110, 60113, and 60118; and 49 CFR 1.53.

■ 2. Revise § 192.150(a) and (b)(7) to read as follows:

§ 192.150 Passage of internal inspection devices.

(a) Except as provided in paragraphs (b) and (c) of this section, each new transmission line and each replacement of line pipe, valve, fitting, or other line component in a transmission line must be designed and constructed to accommodate the passage of instrumented internal inspection devices.

(b) * * *

(7) Offshore transmission lines, except transmission lines 10¾ inches (273 millimeters) or more in outside diameter on which construction begins after December 28, 2005, that run from platform to platform or platform to shore unless—

(i) Platform space or configuration is incompatible with launching or retrieving instrumented internal inspection devices; or

(ii) If the design includes taps for lateral connections, the operator can demonstrate, based on investigation or experience, that there is no reasonably practical alternative under the design circumstances to the use of a tap that will obstruct the passage of instrumented internal inspection devices; and

* * * * *

Issued in Washington, DC, on June 23, 2004.

Samuel G. Bonasso,

Deputy Administrator.

[FR Doc. 04–14638 Filed 6–25–04; 8:45 am]

BILLING CODE 4910–60–P

SMALL BUSINESS ADMINISTRATION

[Declaration of Disaster #3585]

State of Indiana (Amendment #2)

In accordance with a notice received from the Department of Homeland Security—Federal Emergency Management Agency, effective June 22, 2004, the above numbered declaration is hereby amended to include Brown, Clay, Delaware, Greene, Henry, Jasper, Lake, Madison, Monroe, Newton, Owen, Putnam, and Tipton Counties as disaster areas due to damages caused by severe storms, tornadoes, and flooding occurring on May 27, 2004, and continuing.

In addition, applications for economic injury loans from small businesses located in the contiguous counties of Fayette, Jay, LaPorte, Porter, Randolph, Sullivan, Vigo, and Wayne in the State of Indiana; and Cook, Kankakee, and Will Counties in the State of Illinois may be filed until the specified date at the previously designated location. All other counties contiguous to the above named primary counties have been previously declared.

All other information remains the same, *i.e.*, the deadline for filing applications for physical damage is August 2, 2004, and for economic injury the deadline is March 3, 2005.

(Catalog of Federal Domestic Assistance Program Nos. 59002 and 59008)

Dated: June 23, 2004.

Cheri L. Cannon,

Acting Associate Administrator for Disaster Assistance.

[FR Doc. 04–14713 Filed 6–28–04; 8:45 am]

BILLING CODE 8025–01–P

SMALL BUSINESS ADMINISTRATION

[Declaration of Disaster #3590]

Commonwealth of Kentucky (Amendment #1)

In accordance with a notice received from the Department of Homeland Security—Federal Emergency Management Agency, effective June 18, 2004, the above numbered declaration is hereby amended to establish the incident period for this disaster as beginning on May 26, 2004 and continuing through June 18, 2004.

All other information remains the same, *i.e.*, the deadline for filing applications for physical damage is August 9, 2004, and for economic injury the deadline is March 10, 2005.

(Catalog of Federal Domestic Assistance Program Nos. 59002 and 59008)

Dated: June 23, 2004.

Cheri L. Cannon,

Acting Associate Administrator for Disaster Assistance.

[FR Doc. 04–14714 Filed 6–28–04; 8:45 am]

BILLING CODE 8025–01–P

SMALL BUSINESS ADMINISTRATION

Public Federal Regulatory Enforcement Fairness Roundtable; Region X Regulatory Fairness Board

The Small Business Administration Region X Regulatory Fairness Board and the SBA Office of the National Ombudsman will hold a Public Roundtable on Wednesday, July 28, 2004 at 8:30 a.m. at the State Capitol Building, Hearing Room E, 900 Court Street, NE., Salem, OR 97301–4042, to provide small business owners and representatives of trade associations with an opportunity to share information concerning the federal regulatory enforcement and compliance environment.

Anyone wishing to attend or to make a presentation must contact Moe Mowery in writing or by fax, in order to be put on the agenda. Moe Mowery, Business Development Officer, Small Business Administration Portland District Office, 1515 S.W. Fifth Avenue, Suite 1050, Portland, OR 97201–5494, phone (503) 326–5209, fax (202) 481–4411, e-mail: *marlin.mowery@sba.gov.*

For more information, see our Web site at *http://www.sba.gov/ombudsman.*

Dated: June 23, 2004.

Peter Sorum,

Senior Advisor, Office of the National Ombudsman.

[FR Doc. 04–14712 Filed 6–28–04; 8:45 am]

BILLING CODE 8025–01–P

DEPARTMENT OF TRANSPORTATION

Research and Special Programs Administration

[Docket No. RSPA–04–17401]

Pipeline Safety: Development of Class Location Change Waiver Criteria

AGENCY: Office of Pipeline Safety, Research and Special Programs Administration, DOT.

ACTION: Notice; criteria for class location change waivers.

SUMMARY: This notice announces the availability of the criteria that the Office of Pipeline Safety (OPS) will use in considering waiver applications submitted by operators of natural gas pipeline segments that have experienced a change in class location. A class location change results from new construction in the vicinity of a pipeline segment and, in the absence of a waiver, triggers a requirement that the maximum allowable operating pressure be confirmed or revised. The criteria matrix provides information and guidance to pipeline operators concerning the specific pipe design and operating parameters within which OPS is likely to consider a class location waiver application to be consistent with pipeline safety.

FOR FURTHER INFORMATION CONTACT: Joy Kadnar, (tel: 202–366–0568; e-mail *joy.kadnar@rspa.dot.gov* regarding the subject matter of this notice. A copy of the new criteria for consideration of gas pipeline Class Location waiver applications can be accessed in the docket captioned above on the DOT's Docket Management System Web site at: *http://dms.dot.gov.* Additional information about RSPA/OPS Class Location waiver criteria can be found at *http://primis.rspa.dot.gov/gasimp.*

ADDRESSES: For access to the docket to read background documents or comments, go to *http://dms.dot.gov* at any time or to Room PL–40 on the plaza level of the Nassif Building, 400 Seventh Street, SW., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal Holidays.

SUPPLEMENTARY INFORMATION:

Background

The criteria document available in the docket establishes guidelines for the consideration of requests for waiver of the requirement at 49 CFR 192.611 to confirm or revise the maximum allowable operating pressure (MAOP) of a natural gas pipeline after a change in class location has occurred. If granted, a class location waiver would allow a pipeline operator to perform alternative risk control activities based on the principles and requirements of the Integrity Management Program in lieu of pipe replacement or pressure reduction.

On December 15, 2003, the Office of Pipeline Safety (OPS) published a Final Rule requiring operators of gas transmission pipelines to develop and implement integrity management programs for their pipelines in high consequence areas (68 FR 69778; Dec. 15, 2003). The cost-benefit analysis in the rule states that:

> Another benefit to be realized from implementing this rule is reduced cost to the pipeline industry for assuring safety in areas along pipelines with relatively more population. The improved knowledge of pipeline integrity that will result from

implementing this rule will provide a technical basis for providing relief to operators from current requirements to reduce operating stresses in pipelines when population near them increases. Regulations currently require that pipelines with higher local population density operate at lower pressures. This is intended to provide an extra safety margin in those areas. Operators typically replace pipeline when population increases, because reducing pressure to reduce stresses reduces the ability of the pipeline to carry gas. Areas with population growth typically require more, not less, gas. Replacing pipeline, however, is very costly. Providing safety assurance in another manner, such as by implementing this rule, could allow RSPA/OPS to waive some pipe replacement. RSPA/OPS estimates that such waivers could result in a reduction in costs to industry of $1 billion over the next 20 years, with no reduction in public safety.

In addition to being factored into the cost-benefit analysis of the Integrity Management Program rule, the technical soundness of issuing class location waivers has been considered in connection with the following regulations, standards, and programs:

- The Risk Management Demonstration Program
- The Integrity Management Program regulations (49 CFR Part 192, Subpart O)
- The development of ASME Standard B31.8S "Managing System Integrity of Gas Pipelines"
- Various requests for waiver regarding compliance activities in class location change areas

The provision of class location waivers, where warranted, is intended to benefit both the public and pipeline operators. First, within the waiver area the pipeline operator will be conducting in-line inspections and other assessment methods, substantially increasing the operator's knowledge of the integrity of pipe structures and potentially accelerating the identification and repair of actionable anomalies that could pose a threat to the public and environment. Second, in addition to performing in-line inspections of the pipe located within the waiver areas, in most cases, operators will perform in-line inspection and repairs of any actionable anomalies identified up to 25 miles upstream and downstream of the waiver area, substantially increasing the protection afforded to populated and environmentally sensitive areas along the right of way. Third, provision of a class location waiver may avoid the delivery interruptions, supply shortages, and additional costs associated with excavating and replacing the pipe in the affected areas.

Candidates for Waiver Consideration

The vehicle for an operator seeking a class location waiver will be through the normal case-by-case waiver approval process. Under 49 U.S.C. 60118, OPS may grant a waiver of any regulatory requirement if granting the waiver is "not inconsistent with pipeline safety." Therefore, each operator submitting a waiver request has the burden of demonstrating that the proposed waiver would not be inconsistent with pipeline safety with respect to the particular pipe in the affected area. Each waiver request is also subject to public notice and comment. Operators of intrastate pipelines are required to submit waiver requests at the state level.

Beginning in 2004, requests for class location waivers will be considered for a number of candidate sites. During this initial period, OPS will gather data to assess whether the integrity management programs and other alternative risk control activities these waivers would be conditioned upon are being implemented effectively. The monitoring of compliance with the required activities will be conducted through periodic operator reporting requirements as well as scheduled pipeline inspections. If, after a class location waiver is granted, OPS determines that the waiver is no longer consistent with public safety, OPS may take appropriate regulatory action up to and including retraction of the waiver and requiring immediate compliance with the MAOP restrictions otherwise applicable to the changed class location. Any pipeline or pipeline section for which a class location waiver is granted remains subject to all other requirements of 49 CFR Parts 190, 191, and 192.

Criteria

The age and manufacturing process of the pipe, construction processes used and operating and maintenance history are all significant factors that must be considered in the waiver process. Additionally, certain threshold requirements must be met in order for a pipeline section to be considered a candidate site. Among these requirements are:

- No pipe segments changing to Class 4 locations will be considered
- No bare pipe will be considered
- No pipe containing wrinkle bends will be considered
- No pipe segments operating above 72% SMYS will be considered for a Class 3 waiver
- Records must be produced that show a hydrostatic test to at least 1.25 x MAOP
- In-line inspection must have been performed with no significant anomalies identified that indicate systemic problems
- Up to 25 miles of pipe either side of the waiver location must be included in the pipeline company's Integrity Management Program and periodically inspected with an in-line inspection technique

While each waiver request is considered in its entirety, requests involving pipelines with operating conditions reflecting higher risk will merit more rigorous scrutiny and require increasing levels of justification. The criteria document outlines in more detail the specific parameters of pipe design and operating conditions that OPS considers in reviewing class location waiver requests. It contains three categories specifying: (1) The parameters within which a waiver request is likely to be considered consistent with pipeline safety; (2) the parameters within which a request is less likely to be considered consistent with pipeline safety; and (3) those within which a request is unlikely to be considered consistent with pipeline safety. These criteria reflect OPS' current thinking and are subject to change as more experience with the issuance of class location waivers is gained.

Notification Requirements

Under 49 CFR 192.611(d) class location change sites have a 24-month remediation time limit that begins with the identification of the site. Accordingly, operators who have candidate sites should submit written notice to OPS of their intent to request a class location waiver as early in the 24-month period as possible. With respect to intrastate pipelines, since state agency approval is required, the operator should submit the notice to both the applicable state agency and OPS. In the notification, the operator must include the following information:

- A list of the proposed waiver sites including their beginning and ending mileposts and a map of the class change location(s), adjacent housing and other structures (within the 1320-foot corridor, or C–FER Circle if potential impact radius is greater than 660 feet (must have actual data, do not prorate)), identification of current and previous class location designation, and the reason for the class change. The operator shall indicate when this condition changed creating the new class location area and will provide verification of those date changes.
- Attributes associated with the inspection area containing the proposed waiver location(s) including:

  ○ Pipe Vintage

  —Date of installation

—Pipe manufacturer
- Diameter, wall thickness, grade and seam type
- Coating type
- Depth of Cover
- Local geology and risks associated with the terrain
- Maximum Allowable Operating Pressure (MAOP) (revised MAOP, if applicable); historical maximum and minimum operating pressure
- Hydrostatic test records
- Girth weld radiography records
- In-line inspection records (date launched, tool type, vendor or operator evaluated log, dig records, was the tool tolerance accurately reflected in digs)
- Cathodic Protection records

• Identify the inspection area containing the proposed waiver location(s).

• Limits of HCAs within the inspection area containing the proposed waiver location(s), if applicable.

• Direct Assessment results for the proposed waiver area (ECDA, SCCDA, and coating)

• Any incidents associated with the inspection area containing the proposed waiver location(s) (both reportable and non reportable)

• History of leaks on the pipeline in the inspection area containing the proposed waiver location(s) (both reportable and non reportable)

• List of all repairs on the pipeline within the inspection area containing the proposed waiver location(s).

• On-going damage prevention initiatives on the pipeline within the inspection area containing the proposed waiver location(s) and a discussion of its effectiveness.

• A list of all Safety Related Condition Reports related to line pipe integrity submitted on the inspection area containing the proposed waiver location(s).

• A summary of the integrity threats to which the pipe within the site is susceptible based on Part 192 criteria.

• An in-line inspection schedule and a hydrostatic testing schedule (if a valid in-line inspection and hydrostatic test have not already been conducted). These inspections/tests must be scheduled such that they will be completed, and any actionable anomalies remediated in accordance with Part 192, Subpart O, prior to the end of the 24-month compliance window. The operator shall provide 30 days prior notice of any ILI or direct assessments to be performed within the inspection area containing the waiver location(s). **Note:** Final approval of the waiver will be based on the results of the hydrostatic test and ILI results and remedial activities.

• The operator must determine and provide certification that the inspections/activities associated with this site will not impact or defer any of the operator's assessments for HCAs under Part 192, Subpart O, particularly those associated with the most significant 50%.

• A summary list of any additional proposed alternative risk control activities for each candidate site, including any sites not located in a HCA (*i.e.*, inspections and assessments, electrical surveys, increased patrolling, leak surveys, public education, etc. above and beyond the current requirements of Part 192). Include the mileposts within which each activity would be conducted (additional mileage upstream and downstream of the waiver area is expected) and the proposed time interval for performing the activities on an ongoing basis. Note that OPS may require that the scope or the interval of any proposed alternative risk control activity be modified or require additional activities before granting a waiver.

• Describe the safety benefit both to the specific waiver request site, and areas outside the waiver location. This should specifically include the number of residences and identified sites at the proposed waiver location(s) and within the inspection area containing the waiver location(s).

Reporting Requirements

Within three months following approval of a class location waiver and annually thereafter, operators will be required to periodically report the following:

• Define the economic benefit to the company. This should address both the cost avoided from not replacing the pipe as well as the added costs of the inspection program (required for the initial report only).

• The results of any ILI or direct assessments performed within the inspection area containing the waiver location(s) during the previous year.

• Any new integrity threats identified within the inspection area containing the waiver location(s) during the previous year.

• Any encroachment in the inspection area including the waiver location(s) including the number of new residences or gathering areas.

• Any incidents associated with the inspection area containing the waiver location(s) that occurred during the previous year. (both reportable and non reportable)

• Any leaks on the pipeline in the inspection area containing the waiver location(s) that occurred during the previous year. (both reportable and non reportable)

• List of all repairs on the pipeline the inspection area containing the waiver location(s) made during the previous year.

• On-going damage prevention initiatives on the pipeline in the inspection area containing the waiver location(s) and a discussion on its success.

• Any mergers, acquisitions, transfers of assets, or other events affecting the regulatory responsibility of the company operating the pipeline to which the waiver applies.

Supplemental Reporting

To the extent possible, the pipeline company should provide the following information with the first annual report:

• Describe the benefit to the public in terms of energy availability. Availability should address the benefit of avoided disruptions required for pipe replacement and the benefit of maintaining system capacity.

Authority: 49 U.S.C. 60102, 60109, 60117.

Issued in Washington, DC, on June 24, 2004.

Richard D. Huriaux,

Director, Technical Standards, Office of Pipeline Safety.

[FR Doc. 04–14725 Filed 6–28–04; 8:45 am]

BILLING CODE 4910–60–P

DEPARTMENT OF TRANSPORTATION

Research and Special Programs Administration

[Docket No. RSPA–03–17375; Notice 2]

Pipeline Safety: Grant of Waiver; GulfTerra Field Services LLC

AGENCY: Research and Special Programs Administration (RSPA); U.S. Department of Transportation (DOT).

ACTION: Notice; grant of waiver.

SUMMARY: GulfTerra Field Services LLC (GTFS), requested a waiver of compliance with the regulatory requirements at 49 CFR 192.619(a)(2)(ii), 192.503, and 192.505 for certain offshore pipeline segments of the deepwater Phoenix Gas Gathering System (Phoenix). GTFS is requesting a waiver from the post-construction hydrotesting requirement for selected segments of the Phoenix system.

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Web Sites

1. ACTIONS TAKEN AND NEEDED FOR IMPROVING PIPELINE SAFETY
   Research and Special Programs Administration
   Report Number: SC-2004-064
   Date Issued: June 14, 2004

   (DOT Inspector General Report): http://www.oig.dot.gov/show_pdf.php?id=1344

2. Liquid Pipeline Integrity Management Program Web Site:
   http://primis.rspa.dot.gov/iim/index.htm

3. Gas Pipeline Integrity Management Program Web Site:
   http://primis.rspa.dot.gov/gasimp/

4. Office of Pipeline Safety: www.ops.gov

5. Common Ground Alliance:

   Web Site: www.commongroundalliance.com

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PIPELINE REGULATION

Texas Environmental Superconference

Austin, Texas
August 6, 2004

John A. Jacobi, P.E.

U.S. Department of Transportation
Research and Special Programs Administration

The problem with pipelines is that they're invisible. You can't see 'em. You can't touch 'em. You can't cozy up to 'em. There's never been a John Wayne movie about them like you've seen with railroads, and even oil wells. There are no novels about them. You've never heard anyone humming, "I've been working on the pipeline." They have no natural constituency.

Ellen Gay Baker
Manager, Regulatory Affairs
Enron Corp.

(Testimony before FERC or TXRRC several years ago)

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Topics

1. Office of Pipeline Safety
2. Facilitation of Federal Pipeline Permits
3. New OPS Initiatives/Programs
4. Liquefied Natural Gas (LNG) Projects
5. Common Ground Alliance

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Office of Pipeline Safety (OPS)

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OPS Mission Statement

"To ensure the safe, reliable, and environmentally sound operation of the Nation's pipeline transportation system."

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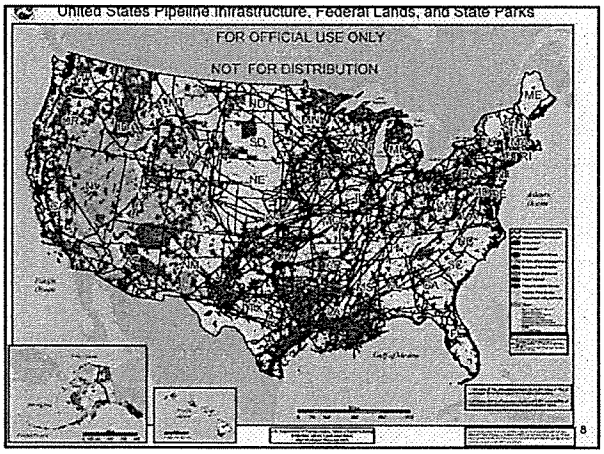
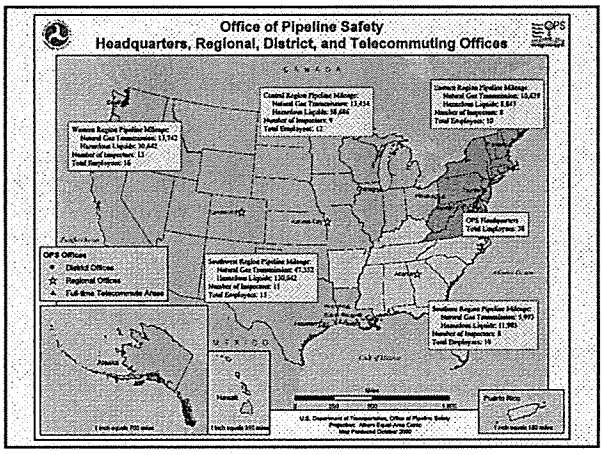
Statutory Charge

- Natural Gas Pipeline Safety Act of 1968
- Hazardous Liquid Pipeline Safety Act of 1979
- Oil Pollution Act of 1990
- Transportation Equity Act for the 21st Century
- Pipeline Safety Improvement Act of 2002





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OPS Headcount

REGION	CY 2000	CURRENT	Increase	% Inc.
East	10	13	3	30
South	10	14	4	40
Central	12	19	7	58
SW	13	26	13	100
West	16	18	2	13
HQ	38	99	61	161
TOTAL	99	189	90	91

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Community Assistance and Technical Services (CATS)

U.S. Department of Transportation
Research and Special Programs Administration

The CATS Team Mission

To advance public safety, environmental protection and pipeline reliability by facilitating clear communications among all pipeline stakeholders, including the public, the operators and government officials.

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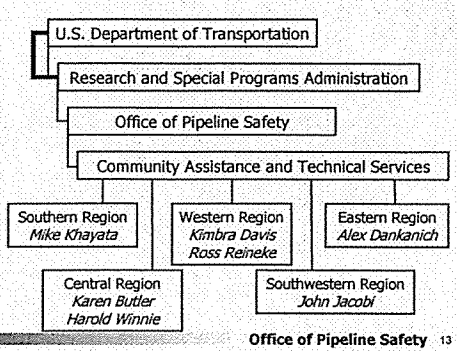
Where the CATS program fits



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Key Elements of the CATS Program:

- Damage prevention
- Permit facilitation and technical assistance
- Outreach and public awareness
- Special projects

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Damage Prevention

- Common Ground Alliance
- Pipeline Safety Improvement Act of 2002
- Operators and trade organizations
- Excavators / Contractors / Homeowners
- Utility Coordination Committees and Damage Prevention Councils
- Statewide Damage Prevention Assessment and Improvement Program

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Permit Facilitation and Technical Assistance

- PSIA 2002 – Established a White House Interagency Task Force
  - Memorandum of Understanding (MOU) re implementation and facilitation
  - DOT (OPS) is lead agency
  - Only for repairs
- Outreach to other federal and state agencies
- Individual operator requests

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Outreach and Public Awareness

Partnership approach to pipeline safety by educating and enabling stakeholders such as:

- Public/community/homeowner groups
- Pipeline safety advocates
- City and county governments
- Industry
- Tribal councils and tribal emergency planning groups
- Local Emergency Planning Committees

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Outreach and Public Awareness

State Pipeline Safety Program Support

- NAPSR relations
- Participating in state partner public meetings and seminars
- Communicating OPS initiatives to state partners
- Other state partner support

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The Future - 1

Secretary Mineta Proposal (12/16/03)

- Reorganize RSPA into Research and Innovative Technology Administration (RITA)
- Create a Federal Railroad and Pipeline Administration by combining OPS & FRA
  - Rail & P/L are fixed Transportation Structures
  - P/Ls look more like RRs than any other mode
  - OPS & FRA both focus on safety & enforcement
  - OPS will benefit from FRA expertise

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The Future - 2

Pipeline Safety Administration Establishment Act (HR-4277)

Proposed (5/04)

- Separate administration under DOT
- Administrator appointed by President
- Administrator would report directly to Secretary of Transportation
- Would replace RSPA and have all of RSPA's current authority

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The Future - 3

DOT IG 6/14/04 Report

- 6 "housekeeping" recommendations
- Major Recommendation: Integrity Management for Distribution Pipelines

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The Future Summary

- API, AGA, INGAA, Association of Oil Pipelines and American Public Gas Association Oppose the Secretary's Proposal and Support HR 4277
- Any Reorganization will take TIME
- Integrity Management for Distribution Systems will eventually happen
- OPS will continue to work hard to enhance Pipeline Safety

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Facilitation of Federal Permits

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White House Interagency Task Force

- Established by Pipeline Safety Improvement Act of 2002
- Multi-agency effort
- Develop a memorandum of understanding (MOU) to address a problem and make a difference
- Visualize the problem

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Benefit of MOU

The MOU will establish a high level agreement to develop procedures that will accelerate the pace of Federal permitting with:

- Advance planning among affected agencies
- Specific commitments to share information
- Continual procedural enhancements

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Participating Agencies

- Council on Environmental Quality
- Department of Transportation
- Environmental Protection Agency
- Department of the Interior
- Department of Commerce
- Department of Defense
- FERC
- Department of Agriculture
- Department of Energy
- Advisory Council on Historic Preservation

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Major MOU Issues

- What constitutes a pipeline repair?
- Footprints and impacts
- Timing issues around repairs
- The identification and use of Best Management Practices
- When will it be "final"?

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Participating agencies agree to:

1. Recognize that some pipeline repairs must be completed within specific timeframes
2. Exchange information via the National Pipeline Mapping System
3. Participate in pre-planning efforts that expedite the permitting process
4. Give priority to processing of permits for immediate or time-sensitive repairs

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Participating agencies agree to:

5. Work together on Best Management Practices
6. Participate in dispute resolution through a process established by the designated ombudsman (*Roger Little at OPS)*
7. Establish a Working Group to develop guidance documents that can be used to coordinate and expedite repair permitting processes (*Ron Montagna at BLM)*

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Actions to Expedite Federal Permits

- Permits are still Required
- Lack of Planning will NOT be Viewed Sympathetically
- File Applications ASAP
- Contact your CATS Manager
- CATS Manager MAY be able to Expedite Federal (and possibly state) Permits

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New Initiatives/Programs

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New Initiatives/Programs

- CATS Program (already addressed)
- Public Awareness (API 1162)
- Internal Inspection Devices (Pigging)
- Class Location Change Waiver Criteria
- Integrity Management
  - Liquid
  - Gas
  - Distribution Systems (conceptual stages at this time)

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API RP 1162 Public Awareness Programs

The "Recommended Practice," referred to as RP 1162, is an industry-wide effort to make public education and pipeline awareness campaigns more effective in reaching intended audiences in the communities operators serve.

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RP 1162 provides guidance for:

- Intra- and interstate hazardous liquid pipelines
- Intra- and interstate natural gas transmission pipelines
- Local distribution pipelines
- Gathering pipelines

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Target audiences include

- Affected public
- Landowners, residents and visitors to places of congregation near the pipeline
- Local and state emergency planning and response officials
- Local public officials and governing councils
- Excavators

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Specific guidance in development and implementation

- Public awareness program development
- Definitions of key stakeholder audiences
- Message content, delivery, frequency
- Recommendations for enhancement of baseline program
- Program documentation and record-keeping
- Program effectiveness evaluation methodologies

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Current Status

- Voluntary Self-Assessment complete
- NOPR published 6/24/04 (69 FR 35279)
- Public Comment Period open until 8/23/04
- Final Rule as soon as end of CY 2004 (probably mid-year CY 2005)

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Internal Inspection Devices (Pigging) Final Rule

- Published 6/28/04, effective 7/28/04
- New transmission line and each replacement of line pipe, valve, fitting, or other line component in a transmission line must be designed and constructed to accommodate the passage of instrumented internal inspection devices.
- Exception for new offshore transmission lines

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CLASS LOCATION CHANGE WAIVER CRITERIA

- Maximum Allowable Operating Pressure (MAOP) may be reduced if class location changes (192.611)
- Testing may be required
- Pipe segments meeting certain criteria may be eligible for waiver
- Waiver criteria are included in your printed materials

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Integrity Management

- Hazardous Liquids (http://primis.rspa.dot.gov/iim/index.htm)
- Gas (http://primis.rspa.dot.gov/gasimp/)
- Distribution Systems (no Web Site yet)

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IMP Goals

- Accelerating the integrity assessment of pipelines in High Consequence Areas
- Improving integrity management systems within companies
- Improving the government's role in reviewing the adequacy of integrity programs and plans
- Providing increased public assurance in pipeline safety

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Liquid IMP

- First became effective May 29, 2001
- At least half of the line pipe affecting HCAs must be assessed by September 30, 2004
- OPS is conducting Liquid IMP Inspections
- See Web site for guidance

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Gas IMP

- Final rule published on December 12, 2003
- Regulation became effective on February 14, 2004
- Operator must develop and follow a written integrity management program no later than December 17, 2004
- FAQ's are now on WEB Site
- OPS will begin inspections next year

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Distribution System IMP

- Just Getting Started
- PSIA 2002 only requires IMP for *transmission* lines
- Issue: piggability of distribution systems
- Issue: safety record of distribution systems – half the accidents but 4x the fatalities & 3.5x the injuries of gas & liquid transmission lines combined

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Table 4. Pipeline Accidents, Fatalities, and Injuries
January 1994 through December 2003

Type of Pipeline Segment	Total Number of Accidents	Total Number of Fatalities	Total Number of Injuries	Average Number of Fatalities per Year	Average Number of Injuries per Year
Natural Gas Distribution	1,228	174	662	17.4	66.2
Hazardous Liquid	1,666	117	81	1.7	8.1
Natural Gas Transmission	792	26	97	2.6	9.7

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DIGIT Team

- DIGIT = Distribution Infrastructure Government/Industry Team
- Ad Hoc group originated by AGA (all members must be AGA members)
- OPS Providing Technical Expertise
- Only AGA, APGA, states & industry members have a vote (15 members)
- Have conducted one survey
- No set time line but recommendation planned by mid or late CY 2005

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Liquefied Natural Gas (LNG)

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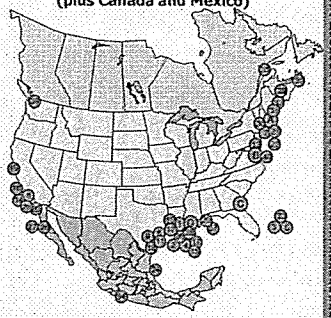
LNG FEDERAL JURISDICTION

NGA Section 3	FERC – Authorize import site; Lead Federal agency for NEPA.
49 CFR Part 193	DOT/OPS – Promulgate and enforce Minimum Federal Standards for safety and security of LNG facilities on land.
33 CFR Part 127	Coast Guard – Enforce its safety and security requirements for waterfront facilities and LNG vessel transport.

FERC

Existing and Proposed Lower-48 LNG Terminals
(plus Canada and Mexico)



March 2004

Office of Energy Projects

U.S. Department of Transportation
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LNG Projects

- At least 6 in Texas and 5 in Louisiana
- VERY EXPENSIVE Projects but potentially very profitable
- Not every project will be built
- Lots of Activists to Oppose Projects
- SIGNIFICANT Permitting Requirements

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Common Ground Alliance (CGA)

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Common Ground Alliance

- The roots of the CGA are found in the "Common Ground Study of One-Call Systems & Damage Prevention Best Practices."
- This landmark study, sponsored by the U.S. DOT Office of Pipeline Safety, was completed in 1999 by experts from the damage prevention community.

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Mission & Purpose

- The Damage Prevention Path Forward initiative led to the development of the nonprofit organization now nationally recognized as the Common Ground Alliance (CGA).
- The CGA was developed to support industry efforts to continue the implementation and development of the Damage Prevention Best Practices.

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CGA Board of Directors by Stakeholder Group

Telecommunications: P.J. Aduskevicz, Network VP - AT&T

Excavators: James Barron, President - Ronkin Construction

State Regulators: Glynn Blanton, Chief Gas Pipeline Safety Division - Tennessee Regulatory Authority

Insurance: James Bush – Arthur J. Gallagher & Co.

Railroad: Bob Vanderclute, Executive Vice President Safety/Operations – Association of American Railroads

Oil: Timothy Felt, President & CEO – Explorer Pipeline Company

Locators: Todd Foje, CEO – Great Plains Location Service

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CGA Board of Directors by Stakeholder Group

Public Works: Leonard Krumm, Senior Consultant – CNA Consulting Engineers

One Call: Ron Olitsky, President – Underground Service Alert of Southern California

Equipment Manufacturing: Scott Pollman, Director – Subsite Electronics & Downhole Tools

Gas: Paul Preketes, Senior Vice President of Gas Operations – Consumers Energy

Engineering: John Robertson, President – The Spectra Group, Inc.

Roadbuilders: Vic Weston, President – Tri-State Road Boring

Electric: Alan Yonkman, Director – Detroit Edison

U.S. Department of Transportation
Research and Special Programs Administration

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CONCLUSION

- OPS is growing
- Integrity (Risk) Management will make efficient use of both OPS and industry resources
- OPS is trying to be "smarter" not "harder"
- Your CATS Manager is your friend

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John Jacobi joined the Office of Pipeline Safety, Southwest Region in 2003 with over 20 years of natural gas and liquids pipeline experience. A professional engineer (TX) and licensed attorney (TX & FL), he began his career with the U.S. Army Materiel Command with assignments at Red River Army Depot and the Aviation Systems Command before becoming Chief Engineer, Lake City Army Ammunition Plant. His private sector experience includes 13 years with Tenneco Inc. and Tennessee Gas Pipeline (TGP) including stints as a Planning Manager, Manager of Technical Services, and as an attorney dealing with health, safety and environmental compliance issues for both Tenneco Inc. and TGP. He left Tenneco for a career as an environmental consultant focusing on regulatory compliance, pipelines and energy issues. At the state level, he served as Chief, Bureau of Environmental Health for the Texas Department of Health where he managed regulatory programs such as asbestos, lead in paint, hazardous communications, industrial hygiene, indoor air quality, general sanitation and product safety. He has also served as in-house counsel for a public bulk liquids storage facility on the Texas Gulf coast.

A former Presidential Exchange Executive, Mr. Jacobi received his Bachelor of Science in Mechanical Engineering (with Honors) from Rose-Hulman Institute of Technology, his Master of Science in Industrial Engineering from Texas A & M University, and his Juris Doctorate from the University of Missouri - Kansas City.

Mr. Jacobi resides in Houston with his wife of 37 years, Jane. In his spare time, he enjoys flying, golf and bridge.

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BIOGRAPHICAL INFORMATION

Lydia González Gromatzky is Deputy Director of the Office of Legal Services of the TCEQ. She is a graduate of the University of Texas School of Law. After graduation, she joined the Austin office of Hays, McConn, Price and Pickering. She joined the Texas Water Commission as a staff attorney in the Legal Division in 1988 and was subsequently promoted to different positions within the Office of Legal Services with increasing responsibilities. She has served as Deputy Director since November of 2002.

BIOGRAPHICAL INFORMATION

Jennifer A. Sidnell has been with the Texas Natural Resource Conservation Commission, or its predecessor agencies since September, 1982. Prior to that date, she received her B.S. and M.S. in Biology and Aquatic Ecology, respectively at Stephen F. Austin State University.

Since her tenure with the Agency, she has worked in various agency programs. Beginning in September, 1982 and through December, 1985 she worked as a water quality investigator in the Houston Regional Office.

In January, 1986 she accepted a position as Wastewater Enforcement Coordinator in the Austin Central Office. In September, 1987 she was promoted to Section Chief over the Wastewater Enforcement Section and held that position until she transferred to the Municipal Solid Waste Division on March 1, 1993 to oversee and manage implementation of the Automotive Waste Recycling Section.

In August, 1996 she moved to accept the position of director over water programs for Field Operations Division. With the reorganization of Central Office Field Operations Division in February, 1999, she became Assistant Division Director over Program Support. In that capacity she supervised a central office staff of nineteen and directed the technical inspection, enforcement and emergency response activities of 750 field staff in 26 air, water, and waste programs in 16 Region offices.

In February, 2001 she moved to assume the responsibilities of Special Assistant for the Office of Compliance and Enforcement reporting directly to the Deputy Director, and management of the Information Technology Section which is responsible for the development, implementation and maintenance of all OCE data systems.

In February, 2002 she moved to assume the responsibilities of Special Assistant for the Office of Permitting, Remediation and Registration reporting directly to the Deputy Director. In addition to addressing general permitting, TARA and Remediation issues, she also manages operation of the Information Technology Section which is responsible for the development, implementation, and maintenance of all OPRR data systems. She also oversights operation of the Central Registry project and its interaction and migration/integration of Legacy systems.

Effective November, 2002 she accepted the position of Director, Field Operations Division. In that capacity she is responsible for management and operation of the almost 800 field staff located in 16 TCEQ Regional Offices in Texas. She oversights and ensures implementation of 26 agency programs that are mandated to perform investigations at the approximately 220,000 regulated facilities across the state. She is also responsible for the Dam Safety, Edwards Aquifer, and Water Master programs which are entirely housed in FOD. Citizen requests for assistance, complaints, and nuisance odor investigations are conducted by the Field Operations Division. Also, the Citizen's Collected Evidence program is managed by Field Operations Division.