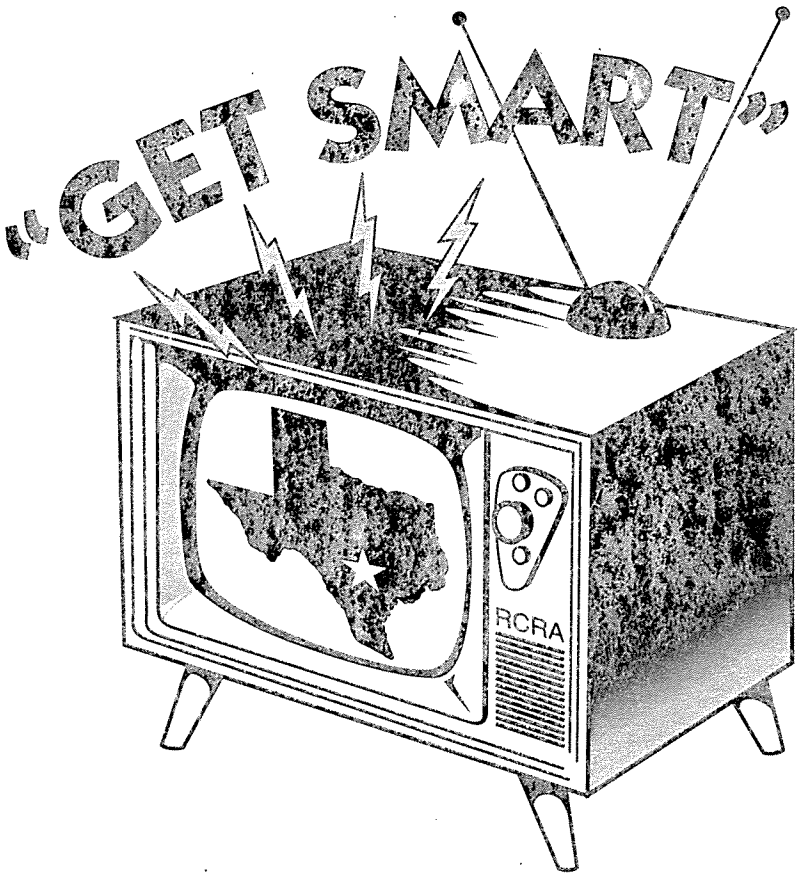
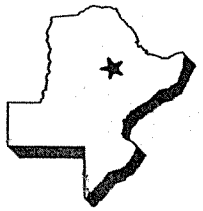
5th Annual
Texas Environmental Superconference



August 5–6, 1993
Thursday and Friday

Four Seasons Hotel
98 San Jacinto Blvd.
Austin, Texas



1993 *5th Annual* Texas Environmental Superconference

11:00 - 11:30	**Agency Consolidation -- *"Mission Impossible"*** Tony Grigsby Executive Director Texas Water Commission
11:30 - 12:00	**Subtitle D - Regulation of Municipal Waste Landfills -- *"Green Acres"*** Ron Bond Director, Municipal Solid Waste Division Texas Water Commission John Turner Browning-Ferris Industries Houston, Texas
12:00 - 1:15	**LUNCH**
1:15 - 2:00	**Clean Air Act: Significant New Developments -- *"The Fugitive"*** Kevin Bloomer Texas Air Control Board
2:00 - 2:30	**Stormwater Regulation Update -- *"Secret Storm."*** Rhonda Harris KPMG Peat Marwick Dallas, Texas
2:30 - 3:00	**Oilfield Waste -- *"Strike It Rich"*** Lori Wrotenberry Texas Railroad Commission
3:00 - 3:15	**BREAK***
	Moderator: ~~Gary Ashcraft~~ ~~Optimal Resources, Inc.~~ ~~Houston, Texas~~
3:15 - 4:00	**Mexican Environmental Law and NAFTA -- *"Let's Make a Deal"*** Bob Jones Jones and Neuse Austin, Texas Hector Villa Director-Border Affairs Division Texas Water Commission Gregg Cooke Office of the Attorney General Austin, Texas

* *Surprise Treat*

4:00 - 5:30 **Mock Trial With Jury Deliberations -- *"The Verdict is Yours"***

Moderator: Fran Phillips
Gardere & Wynne
Dallas, Texas

Judge: ~~Mary Kathryn Sahs~~ Bill Zukakant
~~Gardere & Wynn~~ TWC - office of hearings examiner
~~Dallas, Texas~~

Plaintiff Counsel: RICK
Frederick W. Addison, III
Locke, Purnell, Rain & Harrell
Dallas, Texas

Defendant Counsel: Frank Craig
Strasburger & Price
Dallas, Texas

Jury Selector: Ron T. Luke, J.D., PhD.
Research & Planning Consultants, Inc.
Austin, Texas

5:30 - 6:30 **CASH BAR**

FRIDAY, AUGUST 6, 1993

Moderator: Dan McClellan
Enecotech, Inc.
Austin, Texas

8:45 - 9:15 **How to Select an Environmental Consultant -- *"Who Do You Trust"***

Debra Baker
Mayor, Day, Caldwell, & Keeton
Houston, Texas

Dennis Caputo
Proler International, Inc.
Houston, Texas

9:15 - 9:45 **Environmental Ethics -- *"To Tell the Truth"***

John Slavich
Guida & Associates
Dallas, Texas

9:45 - 10:15 **Risk Assessment -- *"You Bet Your Life"***

Kathleen Kerr
Enecotech, Inc.
Austin, Texas

10:15 - 10:30 **BREAK**

Moderator: Cindy Smiley
Jones, Day, Reavis & Pogue
Austin, Texas

10:30 - 11:00 **Discovery Issues in Environmental Cases -- *"I've Got a Secret"***

Kathy Tullos
Kelly, Hart & Hallman
Austin, Texas

11:00 - 11:45 **Citizen Participation in Environmental Policymaking -- *"The People's Choice"***

Stacey Abel
The Environmental Defense Fund
Austin, Texas

Pam Giblin
Jones, Day, Reavis & Pogue
Austin, Texas

Erich Birch
Lloyd, Gosselink, Fowler, Blevins & Matthews
Austin, Texas

11:45 - 1:15 **LUNCH**

Moderator: Hollis Horner
Ensys, Inc.
Austin, Texas

1:15 - 1:45 **What to Do When an Inspector Shows Up -- *"Truth or Consequences"***

Jim Rice
Texas Water Commission
Region 7

Walt James
Winstead, Sechrest & Minick
Dallas, Texas

1:45 - 2:30 **Civil Enforcement -- *"Gimme a Break"***

Nancy Lynch
Director, Enforcement Policy
Texas Water Commission

Chris Amandes
Vinson & Elkins
Houston, Texas

2:30 - 3:15 **Criminal Enforcement -- *"Wanted Dead or Alive"***

Tom Kiehnhoff
U.S. Attorney's Office
Beaumont, Texas

Ken Houp
Austin, Texas

3:15 - 3:30 **BREAK**

Moderator: Susan Zachos
Kelly, Hart & Hallman
Austin, Texas

3:30 - 4:00 **Environmental Racism -- *"Eastside, Westside"***

Clyde Pikes
Texas Air Control Board

4:00 - 5:00 **PANEL DISCUSSION - "Ask the Chairmen" -- *"The Firing Line"***

Tony Grigsby
Texas Water Commission

Kirk Watson
Texas Air Control Board

5:00 **ADJOURN**

FIFTH ANNUAL
TEXAS ENVIRONMENTAL SUPERCONFERENCE

TABLE OF CONTENTS

1. **Current Developments -- *"One Day at a Time"***

   Richard Tavelli - Technical

   John Eldridge - Legal

   Henry Gilmore - Texas Legislature

2. **EPA Update -- *"The Twilight Zone"***

   Walter L. Sutton

3. **Agency Consolidation -- *"Mission Impossible"***

   Tony Grigsby

4. **Subtitle D - Regulation of Municipal Waste Landfills -- *"Green Acres"***

   Ron Bond

   John Turner

5. **Clean Air Act: Significant New Developments -- *"The Fugitive"***

   Kevin Bloomer

6. **Stormwater Regulation Update -- *"Secret Storm"***

   Rhonda Harris

7. **Oilfield Waste -- *"Strike It Rich"***

   Lori Wrotenberry

8. **Mexican Environmental Law and NAFTA -- *"Let's Make a Deal"***

Bob Jones

Hector Villa

Gregg Cooke

9. **Mock Trial With Jury Deliberations -- *"The Verdict is Yours"***

Judge: Mary Kathryn Sahs

Plaintiff Counsel: Frederick W. Addison, III

Defendant Counsel: Frank Craig

Jury Selector &
Videotaping: Ron T. Luke, J.D., Ph.D.

10. **How to Select an Environmental Consultant -- *"Who Do You Trust"***

Debra Baker

Dennis Caputo

11. **Environmental Ethics -- *"To Tell the Truth"***

John Slavich

12. **Risk Assessment -- *"You Bet Your Life"***

Kathleen Kerr

13. **Discovery Issues in Environmental Cases -- *"I've Got a Secret"***

Kathy Tullos

14. **Citizen Participation in Environmental Policymaking -- *"The People's Choice"***

Stacey Abel

Pam Giblin

Erich Birch

15. **What to Do When an Inspector Shows Up -- *"Truth or Consequences"***

Jim Rice

Walt James

16. **Civil Enforcement -- *"Gimme a Break"***

Nancy Lynch

Chris Amandes

17. **Criminal Enforcement -- *"Wanted Dead or Alive"***

Tom Kiehnhoff

Ken Houp

18. **Environmental Racism -- *"Eastside, Westside"***

Clyde Pikes

Current Developments

"One Day at a Time"

Richard Tavelli

John Eldridge

Henry Gilmore

RICHARD TAVELLI has been involved in the environmental industry for over seventeen years. He has served as a corporate environmental compliance officer charged with direct management responsibility for major environmental remediation projects and corporate compliance programs. Mr. Tavelli served as Director of Environmental Affairs for ENRON Corp. in Houston.

He also has served as Senior Environmental Technologist for Texas Eastern Gas Pipeline Company's $750 million PCB remediation program. In this capacity, he directed an interdisciplinary team of engineers and scientists that investigated remediation technologies by building a data base of some 400 companies. Verification of this data base was developed through international field observations and the company's funding of extensive laboratory and field testing under Mr. Tavelli's direction.

On the other side of the table, Mr. Tavelli has been active as a remediation contractor. He directed Houston based EMPAK's entree into the remediation business at several high profile Superfund sites in Texas and New Jersey.

Mr. Tavelli has also been an active participant in the commercilization of innovative technologies at GRC Environmental, where he served as President. He directed a turn around of this venture capitalized company and brought its patented dechlorination technology to commercial scale implementation.

Mr. Tavelli now serves as Chief Operating Officer of the Environmental Hazards Management Institute. This independent institute provides cutting edge services and educational products to foster greater recognition and understanding of environmental issues. It is a recognized leader in environmental education, with particular emphasis on children.

In addition, Mr. Tavelli is associated with the Borner Sakamoto Eco Partnership, an international consultancy focusing on environmental business strategies, business development, and technology commercialization.

Mr. Tavelli earned a B.A., with Honors, in Political Science from Williams College. He also has been awarded a Master In Public and Private Management (MPPM) from the School of Organization and Development of Yale University.

Among his professional affiliations, Mr. Tavelli is a founding member and convenor of the PCB Forum.

Technical Developments in the Environmental Industry

Given by

Richard Tavelli

At

The Fifth Annual Texas Environmental Superconference

Four Seasons Hotel, Austin, Texas

August 5, 1993

INTRODUCTION

Commercial activity in the United States associated with environmental matters is estimated to be on the order of some $134 billion in 1992 annual revenues. The growth in this industry is projected to continue to expand by 5% to 7% annually through this decade. See the "Environmental Business Journal", April 1993, at page 1 for an overview of the industry. A significant portion of this industry relates to application of technological processes for the collection, handling, sorting, and ultimate disposal of hazardous wastes.

This paper will provide a summary of current trends now affecting that market. Moving from this overview, I will discuss some emerging technologies applicable to several identified submarkets. The prospects for future technology development will also be explored.

INDUSTRY OVERVIEW

The demand for environmental technologies and services is created and driven by government regulation. Within the market, the demand for technological innovation is created by changing regulatory requirements and price competition. To understand what is happening in the arena of environmental technology development, it is necessary to understand what forces are moving the market. Set out below are some of the main factors that I see driving the market at this time.

* IT IS A BUYER'S MARKET

Over the last two years, for the first time in a decade, environmental companies have been experiencing a downturn in demand for their goods and services. With short-term demand down, firms are retrenching, laying off experienced personnel, and reevaluating capital investment plans. This downturn is one of the lagging effects of the recession that ended in 1991. It is compounded by the general uncertainty in the business community regarding the new administration's economic (tax) initiatives.

* THE PLAYERS IN THE MARKET ARE CHANGING

In this time of economic downturn, the industry is maturing. Many small and medium sized technology firms are disappearing or are being acquired. In addition, the end of the Cold War and its concomitant effects on the defense industry are

bringing many new vendors to the cleanup market. These are large, sophisticated corporations that are used to working for and with the DOD/DOE.

* A SENSE OF FOREIGN ENCROACHMENT

Across the globe, major corporations and entrepreneurs, often encouraged and/or funded by their governments, are bringing new technologies to the market. In the U.S., there is a growing sense of encroachment upon "our" market by sophisticaated efforts by Japanese and Eurpean companies. This feeling is reciprocated, especially in areas such as Eastern Europe and the tiger countries of Asia that have been the focus of an invasion of U.S. consultants and engineers seeking environmental work.

* A MORE ACTIVIST U.S.

The new administration, with Vice President Al Gore taking a leading position on environmental matters, brings a new activist philosophy and a belief in technology as salvation.

Environmental advocacy groups that have been critical of current technologies, such as incineration and cap and close, have been reinvigorated by the change in the administration. Their efforts to mandate greater technological development will be a strong factor in government rulemaking.

The "green consumer" movement will continue to seek technological improvements in packaging, pesticides, food additives, and other consumer products. It is likely that this awareness of environmental impingements will also continue with lead, indoor air pollution, ozone, and other atmospheric phenomena,

* NEW LAWS ARE CREATING DEMAND FOR NEW TECHNOLOGY-

-SLOWLY- Much like the Land Ban Regulations of the 1980's, the Clean Air Act Amendments and risk based remediation standards are changing the mix of required technologies. The now mandated cleanup of the DOE/DOD facilities will likely be the greatest source of inspiration and funding for new technology development in this industry for the next decade(s).

The effects of these regulatory changes, many of which are not yet even in final form, will influence the development of new technologies. Upcoming reauthorizations of RCRA, the Clean Water Act, and CERCLA will also affect the technology mix. Internationally, the increased attention to environmental matters, as reflected in the Rio conference, will foster demand for environmental technologies in the developing as well as the developed nations of the world.

To reduce costs and liabilities associated with environmental compliance, many manufacturers are now seeking process specific waste avoidance, recapture, or waste minimization solutions that replace end-of-pipe disposal. Waste streams that traditionally have gone to deep wells, landfills, and land farms are now being examined for such alternative methods.

Here in Texas, the Texas Water Commission's " Risk Reduction Rules Package" that was issued on December 18, 1992, will allow for a more flexible remediation standard setting process.

* REALITY IS SETTING IN

As noted above, the go go years of double digit growth experienced in the 1980's are over. Many investors and companies that looked to the environmental industry for high growth prospects have moved on to other investments, often poorer but wiser. Although the spirited efforts of small entrepreneurial entities will still be a factor in the technology market, increasingly, this industry is becoming consolidated and rationalized as it matures. Large, integrated companies will be seeking international markets to support the capital investments needed to fund their entry into the environmental business.

PRP's, with a decade of expensive Superfund remediations now on the books, are looking for more cost effective ways to meet their statutory obligations, including ways to change the statutes. This dissatisfaction is reflected in a growing body of opinion that is questioning society's capabilities, both technical and financial, to solve some of our remediation problems See "Technological Reality" one of a series of pamphlets produced by the Hazardous Waste Cleanup Project and staffed by Mr. John Quarles, Esq., and associates at the firm of Morgan, Lewis & Backius in Washington, D.C.

TECHNOLOGY TRENDS

Having identified these major trends that are affecting the environmental technology market, I would now like to move to the primary theme of this presentation, an update on emerging developments of technologies for the environmental market. I will be citing specific companies and technologies, as well as identifying industry trends. Mention of any company or product should not be construed as an endorsement. Additionally, let me offer the caveat that this summary is not intended to be all inclusive. In this business, new participants are always entering, while others are exiting this turbulent market.

ONSITE SOIL REMEDIATION

This submarket is strongly influenced in this country by the requirements of the Superfund and RCRA corrective action programs. Treatment regimes have evolved over time. From early "hog and haul" removals, the industry has moved to offsite destruction, primarily by incinerators, and to more complex onsite treatments. It is in this onsite treatment venue that I see a great deal of innovation and development.

1. Separation Technologies

There are two venues of onsite treatment that are showing promise at this time. The first is onsite separation technologies. Using hot air, steam, flocculants, solvents, surfactants, physical/mechanical separation devices such as centrifuges and vibrating bars, or a combination of these mechanisms, a number of vendors are now offering remediation services on a commercial scale.

To this list I must also add developments with electrical current, infrared, and other electromagnetic spectra. These are all in the bench scale to pilot phase of development.

Most of these separation technologies have application to organic contaminants. The soil washing and physical/mechanical separators also are applicable to metal

contaminants. Those employing elevated temperatures usually will not be applied to metal wastes due to concerns about volatilization or other dispersing phenomena.

To the familiar list of vendors offering this kind of treatment such as Brown and Root(B.E.S.T. Process), Weston, IT, Soiltech (Canonie), Waste Tech Services, WMX Technologies (Xtrax), and others must now be added new entrants that have been attracted by the allure of the refinery waste and hazardous waste markets. The list of new players includes Seaview Thermal Systems in association with Xytel-Bechtel Inc., of Houston and RETEC/Tetra.

Tetra is based in the Woodlands near Houston. The thermal desorption technology that they are marketing has been utilized as the basis for an EPA delisting of the K048 (dissolved air flotation waste) and the K051 (API separator sludge) generated at the Texas City Marathon Oil Refinery
See "EI Digest", June, 1993, at page 5.

Seaview's thermal desorption and distillation system is scheduled to be deployed at a New Jersey site this fall. See "HazTECH News", June 17, 1993, at page 93.

These technologies, whether soil washers, soil desorbers, solvent extractors, or physical/mechanical separators all have had to overcome some early technical problems. For instance, many early units were unable to process tight soil matrices that had high ratios of small sized soil particles, such as the Gumbo clays found throughout the Gulf Coast Region.

The size of the soil particles can be a limiting factor. If the active separating mechanism (steam, solvents, etc.) is not able to make contact with the contaminants, then these materials will not be removed from the host matrix. For this reason, many of these technologies were not found suitable for sites that required stringent cleanup standards, such as 10 parts per million (ppm) or less. Many of the vendors I have listed above can now demonstrate that these hurdles have been overcome.

A factor that the thermal units will have to face in the near future is meeting the same emissions limits imposed on incinerators if they are applied to RCRA hazardous and TSCA (PCB) wastes. Regulators are taking a more careful look at thermal units that operate in the temperature zones where formation of PICs, POHCs, and dioxin-like products of combustion is possible.

The advantage of these onsite separation systems is that they separate the hazardous constituents from the bulk of the clean matrix. Therefore, only the small contaminated fraction of the matrix has to be treated further by onsite or offsite systems to destroy or to immobilize permanently the hazardous constituents. This cost advantage can be eroded by inefficient processing rates at the separator caused by poor materials feeding and handling, inordinately long process treatment times, or expensive emissions or residue controls and/or disposal.

One very prominent new entry into the extraction/destruction technology ranks is Molten Metal's Catalytic Extraction Process. The company recently gained notice with its $44 million initial public stock offering and its continuing success in attracting blue ribbon board members and advisors. The technology utilizes a molten metal bath to separate and/or destroy wastes. It is designed to treat a wide range of wastes including metals and organics.

Its primary application will be for fixed based facilities incorporated into manufacturing or disposal facilities. The process is supposed to be able to recycle many of the contaminants after they are separated from the waste stream. Molten Metals is moving aggressively ahead with testing programs at its own facility in Massachusetts and with client/partners. It has also won an R and D contract with DOE to test its efficacy on mixed (radioactive and hazardous) wastes.

2. In Situ Applications

The other area where I find significant progress in treating soils contamination is the in situ application of separation and destruction technologies. By in situ, I mean treatment of the soil in place, without excavation or removal to either an onsite treatment plant or to an offsite disposal or treatment facility.

The soil venting and extraction processes developed by firms such as Terra Vac and Woodward Clyde, among others, are perhaps best known. These systems are aimed at extracting volatile wastes by inserting piping systems into the contaminated zone and then either through natural flow gradients or by enhanced (forced air or steam purge systems) flow mechanisms, the volatile contaminants are collected through the piping system and pumped to a collection device, such as activated carbon canisters, or to a destruction unit such as a thermal or catalytic oxidizer.

In situ bioremediation applications have been devised that take advantage of the same delivery mechanisms but have the added feature of destroying the contaminants by the digestive process of the microorganisms acting in situ. The in place matrix is perforated with a delivery tubing system. The requisite "bugs" are then introduced into this system. Often, the bugs are mixed into a liquid stream that contains nutrients. Some systems seek to augment the performance of the microorganisms by also introducing an enhanced supply of air (heated or ambient) or oxygen. Groundwater Technology, Bio-Rem Inc., and other firms are marketing this application.

Several applications of in situ treatments have been made using directional or horizontal drilling techniques. These techniques allow the treatment to go under existing structures or occlusions. Drilling this way also can be used to create collection trenches or galleries and to enhance the dispersal of the treatment mechanism (heat, steam, bugs, solvents. etc.).

One of the largest commercial applications of in situ bioremediation is currently being conducted by ENSR at the French Limited Superfund site in Crosby, Texas. Using an oxygen dissolution system to enhance the treatment of the sludge, this technique has replaced incineration as the preferred remedy. See "Environmental Technology News", May 1993, at page 33.

Perhaps one of the most exciting new advances in the application of in situ technologies comes from Accutech Remedial Systems (ARS) in New Jersey. Working with scientists at the New Jersey Institute of Technology, ARS has developed and demonstrated its Pneumatic Fracturing Extraction system , which also utilizes hot gas injection.

Using a patented air injector, this system uses high pressure air to crack low permeability matrices such as clay, shale, or bedrock. The fissures created then can be used to conduct extraction techniques or to apply thermal or bioremediation treatments. Recent tests for the EPA and the Air Force have demonstrated that this

technique could substantially decrease the cost of remediation in this kind of recalcitrant matrix. See" Hazmat World", December, 1992, at pp. 82-3.

A related in situ treatment enhancement technique is being investigated by the University of Cincinnati and the U.S. EPA at EPA's Center Hill facility. Utilizing techniques not unknown in the oil patch, researchers are enhancing soil venting extraction (SVE) and in situ bioremediation treatments with hydraulic and impulse fracturing techniques.

Hydraulic fracturing has been investigated at several sites for SVE enhancement. It entails pumping a viscous guar gum gel and sand at slightly elevated pressures for several minutes. The soil matrix is fractured as the gel is pumped in. Enzymes in the gum cause it to dissolve. As it flows back to the well, the sand moves into the voids, creating a more permeable matrix. This process is being studied in EPA's SITE program.

Impulse fracturing involves short (less than .5 seconds) bursts of high pressure (up to 8500 psi) injections of the gel followed by introduction of the sand. This technique works well with both tight and less consolidated soils. See U.S. EPA 68-C9-0031; WA#3-2F and "Technology Evaluation Report: Pilot-Scale Demonstrations of Hydraulic Fracturing to Enhance Remediation" from the SITE program.

3. A Maligned Technique Gets Better- Lime Treatment

Over the last three years, a controversial treatment approach was hotly touted by some industry and regulatory personnel, only to be finally abandoned after intensive testing by EPA, EPRI, and a host of private companies. The treatment was the addition of standard quick lime to PCB contaminated soils.

In the midst of all of this controversy, one company's efforts were generally overlooked. DCR Environmental, Inc., had been independently pursuing an application that utilized specially modified quick lime to stabilize PCB's; they did not claim that PCB's were destroyed. Instead, the company was focusing on the stabilization, immobilization, and dispersal properties that the proprietary DCR (tm) treatmemt offered.

Currently, Sound Environmental Services, Inc., which now holds an exclusive sub-license from DCR Environmental for all the DCR (tm) technologies, has been working with the German chemist who patented the original process to perfect the "Extended DCR (tm) Technology". This technology has been shown to destroy PCB's in the dry and at ambient temperatures. Sound has documented credible results in the field of chemical dehalogenation by adding special dehalogenating reagents to the original DCR (tm) process.

The dehalogenating process is greatly enhanced by the dispersion properties of the original DCR (tm) process. The dispersion characteristic was also key to making the original immobilization treatment so effective, as demonstrated in multiple uses by licensed vendors in Europe.

Now, based upon successful bench scale testing, Sound is currently negotiating with the U.S. Army for application of the dehalogenation process at a dioxin/herbicide site. The company is also negotiating with the U.S. Navy for similar treatment at a PCB site. In addition, a private client is negotiating for cleanup of a site contaminated with pesticides.

Given the DOD/DOE's interest in stabilization and mixed wastes processes, this suite of patented technology treatments could have a bright future despite its earlier brush with the quick lime scam.

GROUNDWATER REMEDIATION

The debate over the effectiveness of traditional pump and treat groundwater remediation technology, especially concerning DNAPLs, is now raging. As noted above, organized coalitions of Superfund PRPs and other interested parties are now orchestrating positions that challenge the efficacy and attainability of current cleanup standards and technologies.

I have found no simple solution to this problem, which will probably be the subject of intense review and research in the next decade. One solution that has been proposed is to remove the residual contaminants in the soils that serve as a source of contamination for the groundwater.

The horizontal drilling and in situ soil treatment technologies mentioned above, especially the fracturing technologies, may be beneficial here, if they indeed prove useful in removing the source of the groundwater contamination. The problems of verification and uncontrolled migration, which are inherent in any in situ application, will have to be addressed for these strateies to succeed.

One of the most intriguing technological applications in the groundwater category concerns monitoring, not remediation. U.S. DOE, at its national laboratories, has been experimenting with down hole, in situ monitoring and detection devices that are using chemically coated plates to detect very low levels of targeted contaminants.

A similar kind of sensitive sensing system is being investigated by Georgia Tech researchers. Their unit uses a laser to propagate a split beam. The contaminants cause differences in sensor readings that can then be calibrated to calculate low (parts per billion) concentrations. See "Hazmat World" June 1993, at page 66.

WASTEWATER REMEDIATION

Fixed wastewater treatment systems are also benefitting from a range of new and renewed applications of technologies. Several vendors are perfecting ultraviolet light (UV) ozonation technologies that destroy organics in aqueous streams. Electron beams applied to these waste streams are also offering promise. The Federal government is experimenting with solar collection systems that first volatilize the organics and then destroy them in a solar heated burner.

Another separation technology that is gaining acceptance is high efficiency filtration. These filters utilize new materials or composites of materials to filter out organics or water from aqueous streams.

A new extraction process that has been demonstrated to be effective on high organic waste strams is Clean Harbors Technology Corporation's Clean Extraction System. It utilizes carbon dioxide as the operative agent as a supercritical fluid. See "EI Digest", July 1993, at p.14.

A byproduct of wastewater systems that treat either industrial (organics and metals) or domestic waste streams is sludge. At this time , there are companies that are marketing an alternative to landfilling for sludges. Supercritical oxidation allows oxidation of organics in the liquid phase under conditions of increased temperature and pressure, that is, above the critical point of water.

Genesyst International is negotiating to complete the subsurface installation at the Sims Bayou Wastewater Treatment Plant in Houston. This installation already has the deep well shaft drilled.

The benefits of these systems is that they greatly reduce the volume of sludge or ash that has to be landfilled. They also should destroy the organic contaminants, thereby reducing toxicity and odors.

AIR EMISSIONS

Implementation of the Clean Air Act (CAA) Amendments of 1990 will be carried out over the next seven years, or longer. The Phase I compliance deadline for nonattainment provisions will be forcing many utilities to switch to lower sulfur coal and/or to start implementing reasonably attainable control technology standards (RACT) for NOx. Control of NOx and SO2 emissions will feature prominently in this regulatory regime.

Operators of affected facilities will have the opportunity of fine tuning their combustion systems by increasing oxidation efficiencies or by adding new or augmented emission control devices. Conventional technologies used for these purposes in this country are flue gas desulfurization and selective catalytic reduction.

Wet flue gas systems typically generate a sludge and a wastewater stream that have to be treated. A number of vendors are testing a range of new technologies that utilize dry absorbent systems or other chemicals that produce marketable products such as fertilizers and acids as a result of their operations.

Another kind of emissions that will be more tightly regulated under the 1990 CAA amendments are the organic air emissions. The Hazardous Organic National Emission Standards for Hazardous Air Pollutants (HON) affects major sources, as defined under Title III, in the synthetic organic chemical manufacturing industry (SOCMI) and seven other sources but exempts petroleum refining processes.

Working through the maze of acronyms of this statute, you will find that operators of these facilities must now reduce emissions from process vents, storage vessels, wastewater operations, and other equipment. The statute allows some averaging or emissions trading setoffs; however, major sources will be otherwise required to put in place maximum achievable control technology (MACT) to control a wide range of organic emissions.

In this country, these kinds of emissions have been controlled by physical or chemical processes that collect or neutralize the emissions. At this time, international transfer of an established European technology is taking place. European vendors are now licensing U.S. companies to market and install an array of biofilters.

Biofilters can come in a variety of configurations. In all of them, the organic emissions are pumped into contact with a host medium that contains microorganisms that have been selected for their capacity to metabolize the organics. In its most simple and elegant form, these biofilters are not much more than a pile of organic compost attached to a ventilation system and a control system to regulate flows, moisture, and possibly temperature. Since the organisms are metabolizing the organics, the byproducts are usually carbon dioxide, water, biomass, and some organic salts.

Vendors claim a wide range of applicability, including chlorinated organics, sulfur, and nitrogen compounds. See Ecosen, "Environmental Technology" January, 1993, p. 36; Envirogen testing styrene in "Waste Tech News" July 5, 1993 at p.7; EG&G treating toluene, acetone, and xylene emissions" The National Environmental Journal", March/April 1993, at pp. 26-27.; and in Texas, PPC Biofilter in Longview, in " Environmental Technology", November 1992, at p. 39.

Another entrant in the U.S. market is a German company, THR Parkner, which already is constructing a full- scale biofilter for a manufacturing company in the United States. Parkner is noted for its sophisticated computer controls.

The benefits possible with this technology include lower capital and operating costs and greater community acceptance than that given the traditional stack flares or chemical treatments. Based on my observation of such facilities now operating in Europe, I would suggest careful scrutiny of the small control and vent processes, rather than the large biomass containers. The bugs will continue to operate even in the winter under snow if they are properly aerated and fed. The control systems, if properly computerized, can make these units virtually unmanned facilities, which greatly enhances the cost advantage over typical chemical or thermal processes.

Another mechanism which can reduce emissions to meet HON requirements is to install better seals on their process equipment such as valves. One very novel example of technology transfer to the environmental industry is the case of using ferrofluids. This technology is well established in semiconductor manufacturing and for air bearings in computers and loudspeaker applications.

One company, Ferrofluidics, Inc. has been working with Chevron and DuPont to test its retrofit pump seals in refinery and petrochemical plants. These seals can create a nearly zero emission seal (reported at less than 1 PPM after one year of continuous monitoring). They were developed for controlling fluids in spacecraft; the operating mechanism is simply magnet forces that hold the ferrofluid seals in place. See" Environmental Technology", December, 1992. at p. 16.

UNDERGROUND STORAGE TANKS (UST)

This prosaic but bountiful part of the market has not sparked a great deal of technology innovation. The standard "tank yank" has sometimes been accompanied by innovative soil venting or bioremediation techniques to clean up the spilled contents. The method of dealing with the tank, however, has been to dig it up and haul it away, if the tank were accessible. Now a Houston company, ELIM-A-TANK, is offering a process that they report has won TWC approval. They clean the tank, in situ, by pumping in their proprietary biocleaner. When the biocleaner has degraded the organic tank contents, the biocleaner is pumped out, taken back for recycling, and the tank is filled with a proprietary slurry that hardens to an inert solid. See "Hazmat World", June 1993, at page 76.

PROSPECTS FOR FUTURE TECHNOLOGY DEVELOPMENT

In this presentation, I sought to provide emphasis on technology innovations that are at or near commercial availability. Again, the reader is advised that this list is not exhaustive, nor does it constitute "endorsement." In closing, I would like to offer some comments on the future of technology development and implementation.

1. MANY ARE CHOSEN, FEW ARE COMPETITIVE

A continuing stream of technological innovations is being generated from all corners of the globe.Many of these technologies are ingenious applications; however, many will not be commercialized because they cannot meet the economic competition. A prime example of this phenomenon is in the hazardous soils market. This market is dominated by offsite landfills in terms of pricing. Due to high capital investments in these facilities, their owners have a strong incentive to price the service under that of onsite competitors. Therefore, as along as regulations allow RCRA and TSCA solids to be disposed of in landfills, technology innovators must be able to market their services at or below the going rate for landfills. In short, there is no economic premium allowed for innovation.

2. ECONOMIC STIMULI WILL CONTINUE

The staggering costs of cleaning up waste facilities will continue to spur technological innovation. Major Superfund PRPs are working closely with U.S. EPA to investigate the efficacy and efficiency of in situ soil and water treatments. Also, vendors are examining the use of multiple step treatment trains using an array of technologies to deal more efficiently with the complex mixtures of wastes typically found at these sites.

The DOE and the DOD will offer not only a major market but also an enhanced resource for funding and testing technology innovations. The already implemented initiatives are providing multiple millions of dollars in funding, far surpassing the EPA's SITE programs. EPA and these other affected agencies are now working in closer cooperation to facilitate technology innovation.

3. BIOREMEDIES, BIOREMEDIES, BIOREMEDIES

Long-term, bioremedies will be more prevalent in cleaning up a growing array of wastes as microorganisms are identified or developed that can handle recalcitrant wastes. The literature is continuing to show that bugs can be cultured to handle highly acidic streams, chlorinated organics, and metals. This treatment, however, is not a panacea. Also, as bioremediation moves from the lab to the commercial scale, the engineering hurdles may very well make this technology as expensive as other techniques.

4. THE MARKET IS EXPANDING

In my practice, I continue to see cases where vendors and technologists are reinventing the same wheels. This phenomena will decrease, I believe, as international data bases and technology transfers develop. Our experience in this country has shown that society's demand for improvement in the environment has not been eroded by economic or political factors. Clearly, as our understanding of

the causes of environmental impingements and risks grows, so too will our demand for innovative means, including technologies, to address those threats.

This continuing concern is already focusing attention to such areas as indoor air quality, lead contamination, and atmospheric phenomena. It is fostering demand for improved sensing devices such as in situ and field portable instrumentation. As we understand these problems better,statutory and regulatory strategies are being initiated.This will stimulate the demand for new technologies. s

5TH ANNUAL TEXAS ENVIRONMENTAL SUPERCONFERENCE
August, 1993

CURRENT DEVELOPMENTS - LEGAL

By John R. Eldridge
Hutcheson & Grundy, L.L.P.

I. CERCLA—A FEW RECENT DEVELOPMENTS

A. Divisibility/Apportionment of Harm

- A new and interesting defense strategy for CERCLA defendants consists of arguing that their waste did not cause or contribute to the hazardous substance release and the cleanup costs, or if their waste did do so, the harm caused is divisible. In essence, this is a means to address the joint and several nature of the CERCLA liability scheme.

- This "divisibility" argument comes from two recent federal court of appeals cases: U.S. v. Alcan Aluminum Corp., 964 F.2d 252 (3rd Cir. 1992) [Alcan I] and U.S. v. Alcan Aluminum Corp. v. Cornell University, 990 F.2d 711 (2nd Cir. 1993) [Alcan II]. Alcan argued, among other things, that it was not liable at two superfund sites because its waste caused neither the release nor the harm that triggered EPA response costs. (The waste consisted of a water/oil emulsion with trace metals.)

- First, both courts rejected Alcan's argument that the trace amounts of metals in Alcan's waste could not have caused the harm (i.e., the courts rejected the theory that CERCLA contains a quantitative threshold requirement).

- But, the Second Circuit followed the Third Circuit in deciding that Alcan was entitled to an opportunity to prove that its share of liability, based upon the facts surrounding its waste type and quantity, should be zero or some divisible portion of the harm. The courts followed the Restatement of Torts regarding joint tortfeasors to reach this conclusion, since the statute does not address the joint and several liability issues directly. The burden is on the defendant to show that the harm is divisible, and may do so, for example, by presenting evidence of toxicity, mobility, and synergistic capacity.

- Of potentially large importance is a defendant's ability to defeat EPA motions for summary judgment. The Alcan II court stated:

> To defeat the government's motion for summary judgment on the issue of divisibility, Alcan need only show that there are genuine issues of material fact regarding a reasonable basis for apportionment of liability.

- A significant question remains about when a CERCLA defendant has the opportunity to pursue the divisibility argument -- Alcan I says the district court must hold a hearing during the liability phase of the case; Alcan II says the trial court has discretion on timing.

B. Lender Liability

- Liability of lenders under CERCLA remains an unsettled area of law--the famous Fleet Factors case caused banks great concern because it appeared that a secured creditor's ability to control hazardous waste decisions might suffice for CERCLA § 107 operator liability. U.S. v. Fleet Factors Corp., 901 F.2d 1550 (11th Cir. 1990).

- EPA responded with interpretation of CERCLA's secured creditor exemption (40 C.F.R. § 300, 1100(c)(1))--the Lender Liability Rule, which countered much of the Fleet Factors thrust.

- Under EPA "lender liability rule" court must find

  — Actual participation in management to impose liability on lender

  — If borrower in control of facility then to prove actual control by bank requires proof of any three actions:

    - Bank exercises decision making control over the borrower's environmental compliance.

    - Bank assumes or manifests responsibility for overall management of the enterprises encompassing day-to-day decision making of the enterprise with respect to environmental compliance.

    - Bank assumes or manifests responsibility for the overall management of the enterprise encompassing day-to-day decision making with respect to all, or substantially all, of the operational aspects of the enterprise other than environmental compliance.

- Since the EPA rule, there have been a few district court decisions, most of which have favored the lenders. One 1993 case was State of Michigan, ex rel, et al. v. Lester Tiscornia, et al. v. Manufacturers National Bank of Detroit; Case No. 5:90-CV-62 (W.D. Michigan, Jan. 12, 1993). In this case:

  — Bank's president was on defendant's board of directors.

  — Board met once or twice a year to deal with pensions and capital spending issues.

  — Contractual provisions by Bank in loan documents required daily reporting, prohibited outside financing, banned dividends, and created blanket lien on all machinery and equipment

— Bank employee participated in monthly meetings.

— Bank recommended turnaround specialist.

— Bank recommended replacement of management personnel.

— Turnaround specialist provided Bank with information on a regular basis.

— CERCLA excluded Bank's liability because it did not participate in the management of the facility.

- Even though the potential CERCLA liability for banks has lessened due to EPA's rule and recent decisions, banks remain justifiably cautious about collateral -- they must still feel confident that they can resell the property to someone who will not benefit from the secured creditor exemption.

C. Trustee Liability

- Trustee liability under CERCLA has been undefined since the statute does not confront the issue directly. A few cases have attempted to resolve the relationship between the trustee's role and the liability scheme of CERCLA. The confusion arises due to the nature of trustee ownership and control of trust-held property.

- The federal district court in Phoenix recently addressed trusteeship liability in greater detail in two related rulings. City of Phoenix v. Garbage Services Co., 816 F.Supp. 564 (D. Ariz. 1993); and City of Phoenix v. Garbage Services Co., No. 89-1709SC, 1993 U.S. Dist. Lexis 5970 (D. Ariz. April 5, 1993). The court articulated three general rules governing CERCLA liability of trustees as owners:

- Where a trustee is held liable under §107(a)(1) as the current owner of contaminated property, the trustee's liability is limited to the extent that the trust assets are sufficient to indemnify him;

- Where a trustee is held liable under §107(a)(2), but the trustee did not have the power to control the use of the trust property, the trustee's liability is limited to the extent that the trust assets are sufficient to indemnify him;

- Where a trustee had the power to control the use of trust property, and knowingly allowed the property to be used for the disposal of hazardous substances, then the trustee is liable under subsection 107(a)(2) to the same extent that he would be liable if he held the property free of trust. *Garbage Services, Co.*, 1993 U.S. Dist. LEXIS 5970, at *16.

II. NAFTA MEETS NEPA

A. The North American Free Trade Agreement has received a great deal of attention, and Bob Jones and Hector Villa will be talking about "Mexican Environmental Law and NAFTA"

later today. The status of NAFTA remains unsettled, however, since this treaty must be ratified by the U.S. Senate before becoming effective, and since the courts have gotten involved. Also, the Clinton Administration has said it will not submit NAFTA to the Senate until side agreements on environmental and labor matters are worked out.

B. A U.S. federal district court recently ruled that NAFTA was subject to the National Environmental Policy Act (NEPA), which requires the preparation of an environmental impact statement (EIS) on major federal actions or proposals for legislation significantly affecting the environment. Public Citizen v. Office of U.S. Trade Representative, No. 92-2102; 1993 WL 232434 (D.D.C. June 30, 1993).

C. In Public Citizen, the court ruled (1) that the application of NEPA and the Administrative Procedures Act due to NAFTA does not impinge upon the President's powers to conduct foreign affairs (i.e., no separation of powers problem), (2) that the plaintiffs had standing because more stringent state and local environmental laws would be preempted by NAFTA and the allegations of possible environmental harm due to NAFTA were sufficiently concrete, and (3) that the NEPA triggers were met, necessitating an EIS.

D. The case status is:

PUBLIC CITIZEN V. OFFICE OF US TRADE REPRESENTATIVE DOCKET # 93-5212 IN DC FEDERAL COURT OF APPEALS	
Item	**Date**
Notice of appeal	Filed 7/2/93
Appellant (OTR) brief	Filed 7/19/93
Appellee (Public Citizen) brief	Filed 8/2/93
Appellant reply brief	Due 8/10/93
Oral Argument	Set for 8/24/93 @ 2:00 p.m.

E. Despite the ruling, an expedited appeal is under way, and no injunctive relief is sought. Thus, NAFTA will likely be submitted to Congress this year. However, if Judge Richey's decision is upheld, an EIS will be necessary and might result in delayed implementation of NAFTA.

III. INSURANCE AND ENVIRONMENTAL LIABILITIES

A. With the hugh increase in environmental liability resulting from CERCLA, RCRA and various state laws, businesses and individuals have begun pursuing their insurance carriers.

B. The insurance coverage disputes are often litigated, and there are many unresolved issues - even though the insurance policy language is often identical, the various states interpret the contracts differently.

C. The insurance industry is very aggressive in defending the coverage cases, and have developed some sophisticated strategies to avoid bad court decisions - they may settle if the facts are bad for them, or if they lose at the trial court level or the appellate level they settle to avoid a unfavorable opinion.

D. Background on the key disputes

- Most businesses have standard comprehensive general liability (CGL) policies.
- Under such policies, there must be an "occurrence" triggering coverage, there must be "damages" and none of the various exclusions can apply.
- Also, the insured must comply with the notice provisions.

E. "Occurrence"

- CGL policies normally define an "occurrence" as an accident, including a continuous or repeated exposure to conditions, which results, during the policy period, in bodily injury or property damage neither expected nor intended from the standpoint of the issued.
- The issue is whether releases of contaminants is an "occurrence"
- Can be interpreted as intentional (coverage usually denied) or "expected" damages due to pollution

F. Triggering Coverage

- When the property damage or bodily injury took place triggers the coverage
- Important because many different one year CGL policies may cover the damage
- Courts have come up with several trigger theories (continuous - initial exposure through final manifestation; manifestation - when discovered; injury in fact, etc.)
- The key lesson is that insured must notify/pursue carriers for multiple years when the contamination is of unknown origin.

G. Damages

- Issue is whether costs of cleanup are "damages" under CGL language ("will pay sums which the insured [owes] as damages")

H. Notice

- Must notify the carriers and send the "suit papers" as soon as possible

- Lesson is do not delay, even though some courts require showing of prejudice to insurer.

I. Exclusions

- Pollution exclusion written into policies in 1970's - very hotly contested issue, mainly because the exclusion does not apply if the release is "sudden and accidental" (can mean either unexpected or abrupt).

- Absolute exclusion [late 1980s]

- Owned or Leased Property Exclusion - since CGL policies insure against third party liability, there is no coverage for losses to the insured's own property; but, the usual concerns about migration often negate this exclusion.

J. Law in Texas

- Very few cases interpret the insurance coverage issues in Texas

- Capital Metals Finishing, Inc. and Carl Booth v. Aetna Casualty and Surety Co. et al, No. 91-3286 (147th Jud. Dist., Travis Co., Tex. May 23, 1993) (bench ruling by J. McCown). In a recent ruling from the bench, Judge McCown ruled favorably to the insured on several issues, including the insurance company's duty to defend and the possibility that some releases at the site were temporally sudden (did not decide whether pollution exclusion means temporal suddenness or unexpected). But see Union Pacific Resources v. Aetna, No. 352-138363-91 (352nd Jud. Dist., Tarrant Co., Tex., June 4, 1993 (bench ruling by J. Auld) (bench ruling that pollution exclusion "sudden and accidental" ceased insurer's duty to defend at a superfund site.

- Circle C Ranch Co. v. St. Paul Fire & Marine Ins. Co., No. 3-91-388 CV (Tex. App.--Austin May 5, 1993) opinion withdrawn (May 19, 1993). Court of Appeals ruled that sudden and accidental language does not preclude coverage, interpreting the contract language to apply "where the pollution was intentional or expected." Shortly after the opinion, Circle C and St. Paul entered into a settlement and the opinion was withdrawn. This has stirred a controversy.

HIGHLIGHTS OF ENVIRONMENTAL LEGISLATION ADOPTED BY THE 73RD TEXAS LEGISLATURE

HENRY H. GILMORE
Brown McCarroll & Oaks Hartline
1400 Franklin Plaza
111 Congress Avenue
Austin, Texas 78701
(512) 479-9795

5TH ANNUAL TEXAS ENVIRONMENTAL SUPERCONFERENCE
ENVIRONMENTAL AND NATURAL RESOURCES LAW SECTION
OF THE STATE BAR OF TEXAS
WATER ENVIRONMENT ASSOCIATION OF TEXAS
AIR & WASTE MANAGEMENT ASSOCIATION - SOUTHWEST SECTION
TEXAS AND CENTRAL TEXAS HAZARDOUS WASTE MANAGEMENT SOCIETIES
AUGUST 5, 1993

Henry H. Gilmore
Brown McCarroll & Oaks Hartline
Austin, Texas

Henry H. Gilmore is a partner in the Environmental Law Section of the Austin office of Brown McCarroll & Oaks Hartline. His practice focuses upon compliance and permitting issues associated with hazardous and solid waste facilities, municipal land use and endangered species issues, and legislative lobbying on environmental and business matters. He is a graduate of Loyola College in Baltimore, Maryland (B.A. 1981) and the SMU School of Law (J.D. 1984). He is a former member of the City of Austin Planning Commission and is a member of the Texas Air Control Board/Texas Water Commission Joint Task Force on Environmental Equity and Justice.

TABLE OF CONTENTS

Page

Introduction..... 1

Air Legislation..... 2

Fees and Taxes..... 3

Industrial and Hazardous Waste Legislation..... 4

Municipal Solid Waste Legislation..... 4

Petroleum Storage Tank Legislation..... 6

Water Legislation..... 6

Administrative Procedure..... 7

I. INTRODUCTION

The 73rd Texas Legislature faced a variety of pressing issues when it convened in January, 1993. Chief among these issues were education finance, adoption of a "no-new-taxes" budget, penal code reforms, and health care reforms. The only truly pressing environmental issue was resolution of the long-standing Edwards Aquifer battle in time to meet a court-imposed deadline, and that was a "local" issue, although of great interest to many in the State.

Adding to the general unease in January was the fact that these difficult decisions would be faced by a "new" House of Representatives. A new Speaker, Pete Laney, had been elected, providing a new, but unknown, leader in the House for the first time in 10 years. Nearly one fourth of the representatives were new members. And the House voted early to abide by new rules, changing many long-standing House practices.

The Senate was different this session also. Although Lt. Governor Bullock was not a new leader, for the first time since Reconstruction, the Senate was faced with a truly bi-partisan makeup. Senate Republicans held a sufficient number of seats that they could, as a partisan bloc, halt action in the Senate.

When the dust finally settled at the end of the session, the most pressing issues had all been resolved. It was not as "big" an environmental session as the 72nd Legislature, but that was in part because the 72nd Legislature was such an active session for environmental bills. Many of those who had been active in the environmental battles in 1991 decided to give those 1991 laws time to work or show their flaws, so only the most evident errors were "cleaned up."

Some environmental activists claimed that it was the worst environmental session of the decade - which is misleading to those of us who work for industrial interests. When designating this as the "worst" session, the activist groups were referring to non-industrial issues such as the allowance of hunting in State parks and various developer and land use issues. As industrial issues go, it was a good session, but the gains made by industry and business did not come at the expense of the interests of the environmental activists.

Generally, municipal solid waste was the big issue this session (aside from the Edwards Aquifer). Money (funding for the agencies) was also a major issue, although less in the limelight. The session was defined nearly as much by what didn't pass (numerous facility siting restrictions and operational limitations) as what did pass. However, as this discussion is confined to new environmental laws, the brief reviews will cover only the major issues that passed.

II. HIGHLIGHTS OF NEW LAWS OF THE 1993 LEGISLATIVE SESSION

A. Air

1. H.B. 2049, by Representative Saunders, is an "omnibus clean up bill" to amend the law passed last session implementing the Federal Clean Air Act Amendments. The new law primarily implements the federal Title V operating permit program. The new law creates separate and specific criteria and procedures for issuance of preconstruction permits and federal operating permits, and authorizes an interim program for receipt and processing of the initial wave of federal operating permit applications. H.B. 2049 authorizes the use of standard permits to satisfy preconstruction permitting requirements and extends the preconstruction permit renewal cycle from five to ten years for permits issued after December 1, 1991. The law allows Texas Air Control Board (TACB) rules to authorize new federal source activities to proceed prior to receipt of a federal operating permit, and authorizes unreasonable delays of decisions on federal operating permit applications to be appealed to district court. The bill prohibits TACB from requiring a federal operating permit application to be submitted until the Title V Program is approved by the Environmental Protection Agency (EPA). Finally, the law requires TACB to use general permits or standard exemptions to authorize emission control equipment. Effective June 9, 1993.

2. S.B. 513, by Senator Ellis, authorizes the creation of "area emission reduction credit organizations" to facilitate the identification, banking, and transfer of emission reduction credits within federal non-attainment areas (Houston-Galveston, Dallas-Ft. Worth, Beaumont-Port Arthur, and El Paso). These emission reduction credits can then be used to help meet federal "reasonable further progress" requirements and to facilitate the issuance of permits. S.B. 513 authorizes regional councils of government to establish the organizations, and requires an accounting of all emission reduction credits to be given annually to the TACB. Effective May 11, 1993.

3. S.B. 278, by Senator Montford, provided an emergency appropriation of $2.9 million to the TACB for use in urban airshed modeling. It is hoped that this modeling will provide more accurate information about air quality in Houston so that the TACB will have more information about which limitations on business activity will be necessary to meet air quality requirements. Effective March 25, 1993.

B. Fees and Taxes

1. S.B. 1201, by Senator Armbrister, amends the statutory solid waste fee parameters. The bill increases the maximum generation fees to $50,000 (from $25,000) for hazardous waste and to $10,000 (from $1,000) for industrial solid waste, and authorizes the assessment of commercial disposal fees for Class I industrial solid waste, which has previously been exempt from such fees. The bill limits the commercial industrial solid waste fees to 20% of the fee charged for hazardous waste disposed of in the same method, however. Finally, the new law raises the maximum waste management fee from $20 per ton (for landfilled wastes) to $40 per ton. With a higher maximum limit, all waste management fees are anticipated to rise following regulatory changes by the Texas Water Commission (TWC). Effective August 30, 1993.

2. H.B. 2605, by Representative Alexander, authorizes the TWC to establish uniform due dates, schedules, and collection procedures for fees and to place fees into one general operating fund for the agency. The current practice of having separate funds for various purposes; i.e., Superfund, hazardous waste management, etc., caused excess bookkeeping work. The bill requires accounting to ensure that expenditures are made only from appropriate fee sources, so that user fees in the waste area, for instance, are not expended on water quality activities. H.B. 2605 also raises the maximum water use application fee from $25,000 to $50,000. Most importantly, H.B. 2605 protects major funds of the TWC and TACB -- such as Superfund, the Clean Air Fund, the Used Oil Fee Fund, and others -- from being "swept" into the general revenue fund of the State. Because these agencies, and their successor agency, the Texas Natural Resource Conservation Commission (TNRCC), are funded almost completely by "user fees" on the regulated industry, the sweeping of unexpended funds into general revenue would have been devastating for continued environmental monitoring, as well as highly inequitable for the businesses who have paid the fees. Following passage of H.B. 2605, funds such as Superfund will be able to carry a balance forward from year-to-year without fear that the excess amounts necessary for future activities could be swept into general revenue. Effective August 30, 1993.

3. H.B. 1920, by Representative Stiles, creates an exemption from ad valorem taxation for real and personal property used for pollution control if the property is first acquired, used, or constructed after January 1, 1994. In order to qualify, the TNRCC must certify that the equipment is primarily for pollution control purposes and estimate the

environmental benefits that will be provided. The changes made by the law cannot become effective until adoption of a constitutional amendment, which comes before the voters November 2, 1993.

4. H.B. 1735, by Representative Earley, provides a similar type of ad valorem tax reduction, but does not require approval of the voters. This bill defines "environmental response requirement" as any remedial action to correct, mitigate, or prevent pollution, and defines that an environmental response requirement reduces the market value of property. The bill provides that the present value of such a requirement should be considered accordingly when determining the market value of property for tax appraisal purposes. Effective August 30, 1993.

C. Industrial and Hazardous Waste

1. S.B. 570, by Senator Ratliff, removes political subdivisions and/or their employees from Superfund liability if the contaminated property was involuntarily acquired (i.e., through abandonment or bankruptcy) and the subdivision did not cause or contribute to the release or threatened release. The bill also removes liability for such a Superfund site in Harris County even if a political subdivision installs a drainage project, so long as the subdivision does not act with gross negligence. Effective May 11, 1993.

2. H.B. 2432, by Representative Saunders, allows the State to seek up to three times the amount of the State's costs in an appeal of a Superfund case if an appealing party's defense is found to be frivolous or without foundation. The bill also allows a court to award damages in an appeal or a third-party claim of up to three times the defending party's costs if the appeal or claim is frivolous or without foundation. Effective June 8, 1993.

D. Municipal Solid Waste

1. S.B. 963, by Senator Sims, seeks to assure adequate solid waste landfill capacity in Texas by requiring the TWC to review anticipated wastestreams and the State's capacity to handle those waste streams, and requires the TWC to consult with local governments, businesses, and private waste management firms in preparing the State's strategic waste plan. The law also expands the use of the municipal solid waste tipping fee to include grants to fund studies and demonstration projects

to convert public facilities to full-cost accounting and to mitigate battery recycling efforts. Municipal governments will now be prohibited from adopting ordinances that restrict packaging, assess container deposits, or restrict solid waste processing. Effective September 1, 1993.

2. S.B. 1051, by Senator Parker, is an "omnibus" recycling bill that increases and revises the solid waste "tipping" fee to better assess the fee from differently-handled solid wastes. The bill also prohibits the tipping fee from being assessed on composted yard waste, provides a 15-20 percent refund of tipping fees if the refunded fees are used to help composting activities, and requires the TWC to set permitting guidelines for facilities that produce compost from mixed solid waste. The bill requires battery retailers to accept used batteries for recycling even if no new battery is purchased, and revises the used tire program by increasing fees and ensuring that used tires are recycled or properly disposed of prior to reimbursement of tire processors. The bill clarifies that source reduction should be used to reach the 40% municipal solid waste reduction goal and provides how to measure the effect of waste reduction activities. S.B. 1051 provides that the advisability of a yard waste ban on landfilling should be considered if the 40% reduction goal is not met by its target date of January 1, 1994. Finally, the bill provides for reimbursement to used oil centers that receive contaminated oil and adjusts the used oil fee mechanisms. Effective August 30, 1993.

3. H.B. 130, by Representative Kamel, requires landfill operators to certify to a contracting municipality that the landfill has sufficient capacity to fulfill the contract, if requested to do so by the municipality. The bill also prohibits a landfill from entering into a contract to accept waste from outside the municipality's jurisdiction if the contract would exceed the landfill's projected capacity unless alternative disposal is provided. Effective September 1, 1993.

4. H.B. 1951, by Representative Solis, creates a Class A misdemeanor for transporting and disposing of solid waste at a waste collection location without the owner's written authorization or at a location that is not an approved solid waste disposal site, and gives a $50 "bounty" for reports of illegal dumping. Effective September 1, 1993.

5. H.B. 2537, by Representative Gray, requires counties to issue permits for development over a closed municipal solid waste landfill and prohibits such development unless the applicant can certify that no health or environmental threat will occur. Counties are also authorized

to restrict building types, require air or water quality monitoring, and to place other restrictions on development. Effective September 1, 1993.

E. Petroleum Storage Tanks

1. S.B. 1243, by Senator Montford, provides an emergency transfer of $120 million to the Petroleum Storage Tank (PST) fund for immediate reimbursement of outstanding claims against the fund. This money is to be repaid throughout the biennium from the PST fees as they are paid to the State. The bill merely accelerates the time at which the funds are available for payment -- it does not increase money spent on the PST program. The bill also requires the TWC to use the PST fund in the "most efficient" manner, including prioritizing, auditing, and suspending payments from the fund. Effective September 1, 1993.

F. Water

1. S.B.s 503 and 502, by Senator Sims, designate the State Soil and Water Conservation Board (SWCB) as the lead agency for abating agricultural and silvicultural nonpoint source pollution and require that water quality assessments involving agricultural/silvicultural nonpoint source pollution be coordinated with the SWCB. The bills are effective April 29, 1993 and September 1, 1993, respectively.

2. S.B. 1477, by Senator Armbrister, resolved the ongoing Edwards Aquifer battle by creating the Edwards Aquifer Authority and empowering it to manage, conserve, and protect the aquifer. Withdrawal of water from the aquifer without a permit is prohibited, and withdrawals may not exceed 450,000 acre-feet/year prior to the year 2007 and 400,000 acre-feet/year thereafter. However, these withdrawal amounts may be increased if through other management strategies (i.e., springflow augmentation, recharge, etc.) additional water becomes available. Existing users must submit declarations of historic use for the period 1972-93, and they are to receive a permit for the maximum beneficial use without waste in a year. If claims exceed available water, all permits are to be reduced proportionately. Irrigation users are guaranteed minimum permitted water rights for each acre irrigated. Administrative and civil penalties and injunctive relief are authorized. Effective September 1, 1993.

3. S.B. 1049, by Senator Parker, revises the Oil Spill Prevention and Response Act that regulates spills of crude oil and petroleum in coastal waters. The bill primarily sets liability limits for natural resource damages, provides for damage assessment protocols, and allows the response fund to be used to fund a baseline assessment for up to $6 million. Effective September 1, 1993.

4. H.B. 832, by Representative Puente, increases the $1,000 per day limitation on penalties for local ordinance violations to allow for a $5,000 per day penalty for violations of ordinances regulating effluent limitations, stormwater, or discharges into municipal sewers. Effective September 1, 1993.

5. H.B. 2620, by Representative Saunders, limits the TWC's recovery of the cost of administering water quality management programs by watershed or river basin to not more than $5,000,000 for the fiscal years 1994-95. Effective August 30, 1993.

G. Administrative Procedure

1. S.B. 639, by Senator Sims, provides that once a determination of administrative or technical completeness has been made on a solid waste application, that determination may not be revoked. The bill also clarifies that substantial compliance with notice requirements is sufficient to provide the TWC jurisdiction over an application for hearing purposes. Effective June 20, 1993.

2. S.B. 750, by Senator Armbrister, requires the Texas Department of Commerce to conduct a review and analysis of the process by which agencies issue permits. The bill requires the TNRCC to be consulted when environmental permitting is studied. Effective September 1, 1993.

3. H.B. 2043, by Representative Saunders, specifically applies the Administrative Procedure and Texas Register Act to the environmental agencies and requires them to follow their own rules until they change the rules following notice and comment. The bill also allows certain municipal solid waste transfer stations to be exempted from permits if they meet TWC requirements, provides that Railroad Commission letters finding "no impairment" of oil and gas reservoirs are binding on the TWC for certain injection well applications, and requires state/federal determinations of land use compatibility to be supported by credible evidence in a public hearing. Effective June 18, 1993.

4. H.B. 2429, by Representative Saunders, allows the regulatory agencies to consider an alleged violator's willingness to contribute to a "supplemental environmental project" when setting a penalty for an environmental violation. The project must reduce pollutants reaching the environment or increase public awareness of environmental matters, but may not be a project necessary to bring the alleged violator into compliance with the law. Effective June 8, 1993.

5. H.B. 2434, by Representative Saunders, removes the current prohibition against TWC hearings examiners communicating with other members of the TWC Office of Hearings Examiners. Effective May 17, 1993.

III. CONCLUSION

Obviously, this speech is meant as an overview of the past legislative session, and cannot provide an exhaustive discussion -- or even an exhaustive review -- of all the environmental legislation passed in the 1993 session. However, I hope that this brief review will help alert you to the new laws in the environmental field, as well as some of the issues facing environmental practitioners in the upcoming months of rulemaking.

EPA Update

"The Twilight Zone"

Walter L. Sutton

WALTER L. SUTTON, JR. is Deputy Regional Counsel, Environmental Protection Agency, Region VI in Dallas, Texas. Prior to joining EPA in May, 1993, Mr. Sutton was Of Counsel with the law firm of Hughes & Luce, L.L.P. in Dallas, Texas. He was responsible for directing the firm's expansion in the field of environmental law and supporting the firm's state lobbying activities.

Mr. Sutton is immediate past Chair of the City of Dallas Environmental Health Advisory Commission, Chair of the Environmental Quality Committee of the ABA Section of Natural Resources, Energy, and Environmental Law, a member of the Executive Council of the Environmental Law Section of the Dallas Bar Association, and a member of the State Bar of Texas Board of Directors. He was President of the National Bar Association from 1987-88, and was deemed one of "The 100 Most Influential Black Americans" for 1988 as selected by Ebony Magazine. Previous positions held include Assistant Professor of Business Policy at the Edwin L. Cox School of Business, Southern Methodist University, Manager of state and local Government Relations at Texas Instruments Incorporated (TI), Dallas, Texas, and Environmental Counsel at TI.

Mr. Sutton received his B.S. in Business Administration from the University of Denver, his MBA from the University of Dallas Graduate School of Management, his J.D. from the University of Michigan Law School, and his Ph.D. in Management Science from the University of Texas at Dallas.

SUPERFUND ADMINISTRATIVE IMPROVEMENTS

I. NEW AND ENHANCED INITIATIVES

A. Enhance Enforcement Fairness and Reduce Transaction Costs

1. Greater Use of Allocation Tools
   - Demonstrate use of ADR and where appropriate, NBARs, in developing allocations at 20 sites; improve sharing of information on allocation issues
2. Foster More Small Volume Waste Contributor Settlements
   - Simplify requirements for determining eligibility for de minimis settlements; issue guidance on de micromis settlements; complete 15 ongoing settlements; initiate 35 new settlements
3. Greater Fairness for Owners at Superfund Sites
   - Issue Federal Lien guidance; decide whether to clarify requirements for "all appropriate inquiry" under CERCLA; develop model prospective purchaser agreement and supplemental prospective purchaser guidance
4. Evaluate Mixed Funding Policy
   - Evaluate options regarding use of mixed funding and streamlining of process; initiate demonstration projects; consider issuing revised mixed funding policy

B. Enhance Cleanup Effectiveness and Consistency

5. Streamline and Expedite the Cleanup Process
   - Implement presumptive remedies; develop standardized design specifications; issue and implement new DNAPL guidance; implement revised lead directive; issue land use policy
6. Develop Soil Trigger Levels
   - Issue soil trigger levels for 90 chemicals

C. Enhance Meaningful Public Involvement

7. Implement an Environmental Justice Strategy for Superfund Sites
   - Identify sites with equity concerns; convene a national workshop of affected citizens on environmental equity; develop revised national guidelines; address 10 pilot sites
8. Early and More Effective Community Involvement
   - Use NACEPT forum to listen to citizens' concerns; develop public participation strategy; implement innovative techniques at pilot sites

D. Enhance State Role

9. "State Deferral" of Certain Site Categories
   - Conduct pilots giving States lead at certain NPL-caliber sites; issue State deferral guidance

II. CONTINUING MANAGEMENT AND ENFORCEMENT INITIATIVES

10. Superfund Accelerated Cleanup Model (SACM)
11. Construction Completions
12. Contracts Management
13. Enforcement First
14. Accelerate Cleanup at Base Closures
15. Promote Use of Innovative Technology
16. Compliance Monitoring
17. Improve the Effectiveness of Cost Recovery

SUPERFUND ADMINISTRATIVE IMPROVEMENTS



EXECUTIVE SUMMARY

JUNE 23, 1993

June 23, 1993

SUPERFUND ADMINISTRATIVE IMPROVEMENTS

EXECUTIVE SUMMARY

INTRODUCTION

Superfund, the nation's hazardous waste cleanup program, is now more than 12 years old. After 12 years, we have made significant progress in reducing the risks posed to human health and natural ecosystems from releases of hazardous substances into the environment. As a result of Superfund, the people of the United States have received many benefits, including the elimination of the most serious health threats at contaminated sites, the restoration of sites to productive use, advances in cleanup technology, and reformation of corporate and government behavior towards the generation, disposal, and cleanup of hazardous wastes.

However, EPA recognizes that the Superfund program has also generated criticism. Specific criticisms focus on the pace and cost of cleanup, the degree to which sites are cleaned, the fairness of the liability scheme under CERCLA, the role of States in the process, and the role of local communities, particularly disadvantaged communities.

This point in Superfund history presents the Clinton Administration, Congress, EPA, and the public an opportunity to evaluate how the program has worked over the last dozen years and to make changes that will improve Superfund in the future. The Agency is committed to making such changes, whether they are administrative changes which can be implemented by EPA on its own, or legislative changes that must be enacted by Congress.

To explore options for making administrative improvements to Superfund, an agency-wide task force was established, the Superfund Administrative Improvements Task Force. Representatives from the Office of Solid Waste and Emergency Response (OSWER), the Office of Enforcement (OE), the Office of General Counsel (OGC), the Office of Policy, Planning and Evaluation (OPPE), the Office of Administration and Resources Management (OARM), the Office of Congressional and Legislative Affairs (OCLA), the Office of Research and Development (ORD), Region 2, Region 5, Region 9, and the Department of Justice (DOJ) participated in preparing this report. Task Force members met with many people, both inside and outside the Agency, to develop options for consideration.

To oversee all Superfund administrative and legislative issues, the Administrator also established a Superfund Steering Committee, chaired by the Deputy Administrator, Robert Sussman.

The Steering Committee included senior officials from OSWER, OE, OGC, OPPE, OARM, OCLA, ORD, Region 2, Region 3, Region 6 and DOJ. The Task Force recommendations were reviewed by this Steering Committee, which then advised the Task Force on the appropriate initiatives to adopt. The results of the Steering Committee and Task Force efforts are reflected in this report.

CRITERIA FOR ADMINISTRATIVE IMPROVEMENTS

This report focuses on administrative improvements to the Superfund program. It considers the issues of most concern to the Administration, Congress, and the public. The improvements included in this report can be achieved without changing the statute. Priority was given to actions which can be implemented before September 30, 1994, when the current Superfund legislation must be reauthorized. Within that framework, the Task Force looked at Superfund administrative improvements which: (a) enhance enforcement fairness and reduce transaction costs; (b) enhance cleanup effectiveness and consistency; (c) enhance meaningful public involvement; and (d) enhance the State role in the Superfund Program.

MAJOR GOALS

Using the above framework, initiatives were developed. The various initiatives identified can be categorized as follows:

- o Enhance enforcement fairness and reduce transaction costs
  - Greater use of allocation tools
  - Foster more small volume waste contributor settlements
  - Greater fairness for owners at Superfund sites
  - Evaluate mixed funding policy
- o Enhance cleanup effectiveness and consistency
  - Streamline and expedite the cleanup process by implementing presumptive remedy guidance and a new dense non-aqueous phase liquids (DNAPL) strategy
  - Develop soil trigger levels
- o Enhance Public Involvement
  - Implement an environmental justice strategy for Superfund sites
  - Early and more effective community involvement
- o Enhance State Role
  - State "deferral" of certain site categories

Each initiative is presented, suggestions for short-term and longer-term actions are discussed, and program implications are addressed in this report.

This report contains the recommendations of the Task Force which have been approved by the Superfund Steering Committee. The Agency will begin the implementation of these initiatives for program improvements immediately.

REPORT CONTENTS

This report describes Superfund administrative improvements which the Task Force believes will achieve the above goals. The Task Force made a concerted effort to identify in detail those specific EPA Headquarters and Regional actions that can be taken immediately to implement the new policy directions and evaluate the effectiveness of the changes. Thus, in addition to new and revised Headquarters policy and guidance, the report describes State deferral demonstration projects, new cost allocation demonstration projects, mixed funding demonstration projects and de minimis/de micromis demonstration projects, presumptive remedy demonstration projects and environmental justice demonstration projects. Our administrative improvements will have an immediate impact at Headquarters, as well as in the field at Superfund sites.

In addition to identifying new and enhanced initiatives, this report discusses other continuing Superfund initiatives which the Administrator and Deputy Administrator endorse and agree should continue. Changes to the EPA Superfund removal effort were not evaluated in the Task Force deliberations. This effort is one of the most successful components of the Superfund program.

RELATION TO SUPERFUND REAUTHORIZATION AND THE NATIONAL ADVISORY COUNCIL FOR ENVIRONMENTAL POLICY AND TECHNOLOGY (NACEPT)

EPA is also continuing its assessment of various options for improving Superfund through legislative changes. In order to assure that EPA is fully informed about the views of outside parties, the Administrator has created a new committee within NACEPT. NACEPT is an important advisory group to EPA, and its Superfund Committee will be made up of representatives from a broad segment of Superfund stakeholders, e.g., State and municipal governments, private industry, insurers, environmental groups, minority groups, local community organizations, and universities. The Superfund Committee, chaired by John Sawhill, President of the Nature Conservancy, will initiate a broad public dialogue on how Superfund can be improved, and this dialogue will involve representatives of all stakeholder groups, inside and outside government. This committee will hold a series of meetings this summer and then, as soon as possible, present

the Administrator with its assessment of available options -- both administrative and legislative -- for improving Superfund. The EPA staff will work closely with the committee in identifying options and gathering information. Thus, additional suggestions for administrative improvements could result from the NACEPT deliberations.

SUMMARY OF NEW AND ENHANCED ADMINISTRATIVE IMPROVEMENTS

Keeping our major goals in mind, the Task Force is recommending nine administrative improvements to the Superfund program. These improvements are discussed below. By implementing these improvements immediately, EPA will be able to explore its flexibility under the current statute, and thus determine what legislative changes are necessary or desirable.

A. Enhance Enforcement Fairness and Reduce Transaction Costs

INITIATIVE 1: GREATER USE OF ALLOCATION TOOLS

The Superfund program has been criticized for the high transaction costs that are incurred by PRPs in reaching settlements and in litigating where settlement efforts are unsuccessful. To address these concerns, EPA will, over the next 12 months, at approximately 20 sites with upcoming RD/RA negotiations, offer alternative dispute resolution (ADR) to facilitate PRP allocation deliberations. ADR involves a neutral third party who can be used to organize parties for negotiations, facilitate settlement deliberations, and/or provide an opinion to the parties to the negotiation. EPA believes that at certain sites, the use of some form of ADR can assist in reaching an allocation of responsibility among the PRPs with a savings of transaction costs. Where possible and appropriate, EPA may also prepare or adopt Nonbinding Preliminary Allocations of Responsibility (NBARs) to help promote settlement at the demonstration project sites. An NBAR is EPA's preliminary nonbinding allocation among PRPs of percentages of total response costs at a site.

As part of this initiative, EPA will also pilot the use of a binding allocation process in approximately three cases, to help ascertain whether that tool might also be useful. These binding allocation pilots and the aforementioned ADR demonstration projects will be initiated during the summer of 1993. In the fall of 1993, EPA will also perform outreach to the regulated community on the use of ADR techniques to support the resolution of Superfund actions.

In addition, the Agency will re-emphasize and reinforce directives already provided to the Regions on the importance of sharing information on allocation and liability issues with identified PRPs early in the Superfund process. Further, where

appropriate, EPA will be prepared to assist PRPs' allocation efforts by conducting follow-up information gathering activities and sharing the information with the PRPs. Guidance in these areas will be issued during July 1993. Finally, EPA will develop additional guidance regarding how to allocate responsibility among PRPs in the absence of volumetric data.

INITIATIVE 2: FOSTER MORE SMALL VOLUME WASTE CONTRIBUTOR SETTLEMENTS

Small volume waste contributors often complain that they are not able to settle with EPA until very late in the remedial process or when complete information about all PRPs is available. Moreover, complete volumetric information used for establishing eligibility for a de minimis settlement is not available at many sites. Also, de minimis settlements have often proven to be very time consuming and resource intensive for the EPA Regions. De minimis parties also assert that they incur substantial transaction costs in forming a steering committee group and distributing information. Finally, at several sites, parties that have sent extremely small amounts of waste (referred to as "de micromis parties") are finding themselves subject to contribution actions commenced by major waste contributors.

To address these issues, EPA will take a number of steps. EPA will immediately issue an additional directive so as to streamline the level of information necessary to make the de minimis findings under section 122(g) of CERCLA, and provide greater flexibility and judgement in entering into de minimis settlements. This streamlining should increase the number of sites where EPA can enter into de minimis settlements, and also make it easier for the Agency to settle out de minimis parties early in the process. EPA will also offer greater assistance to de minimis parties to facilitate the formation of the de minimis group and to disseminate information. In addition, the Agency will also identify sites where de micromis parties are subject to contribution actions and will aggressively move to settle with those parties.

The Agency will perform several actions in FY93 and FY94. In FY93, we will direct the Regions to implement the new settlement approach, complete ongoing de minimis settlements, issue guidance on de micromis settlements, institute negotiations at sites where PRPs have brought contribution actions against de micromis parties, and develop a communications strategy to assist PRPs involved in the de minimis and de micromis process (the Agency may pilot the use of ADR in this effort). EPA expects to complete approximately 15 more de minimis settlements for FY93 - there are already 12 final settlements this year with more than 650 parties. Using the new criteria, we can start negotiations at several additional sites this fiscal year. In FY94, we believe that we can target more de minimis sites using the new

criteria. We estimate that we can enter into approximately 35 de minimis settlements.

INITIATIVE 3: GREATER FAIRNESS FOR OWNERS AT SUPERFUND SITES

Concerns have been raised in the past that in some cases, EPA may not have given property owners sufficient notice and opportunity for comment before perfecting liens on their property. Concerns have also been raised by some that uncertainty regarding the meaning of "all appropriate inquiry", for purposes of the CERCLA innocent landowner defense, was discouraging the purchase and use of previously developed land and the provision of loans for such purchases. Similarly, some have expressed a concern that the Agency's policy on settlements with prospective purchasers was overly narrow in defining the circumstances under which EPA would be willing to grant a covenant not to sue to a prospective purchaser. To address these issues, EPA will: 1) issue supplemental Federal Lien procedures in FY93 which provide site owners an opportunity to submit information or meet with EPA before the Agency perfects a lien on their property; 2) decide, by December 1993, whether to clarify the requirements of "all appropriate inquiry" under CERCLA; and 3) issue supplemental prospective purchaser guidance during FY94, as well as a model prospective purchaser agreement.

INITIATIVE 4: EVALUATE MIXED FUNDING POLICY

Potentially Responsible Parties (PRPs) have objected that EPA's interpretation of its mixed funding authority is too conservative. PRPs also believe that the documentation requirements associated with preauthorization mixed funding are overly burdensome. EPA has commenced an evaluation of different mixed funding options, including an analysis of cost implications to the Trust Fund. As part of the evaluation, the Agency will also explore options for streamlining the mixed funding decision making process, and explore options available under the current regulation for streamlining the documentation requirements associated with preauthorization. This evaluation will be completed by August 1993. Further, in order to assist our evaluation effort and gather additional data on mixed funding, EPA will be piloting several mixed funding settlements in FY93 and FY94. The Agency will consider the results of its evaluation and the pilot projects in assessing whether changes to EPA's mixed funding policy are appropriate during FY94.

B. Enhance Cleanup Effectiveness and Consistency

INITIATIVE 5: STREAMLINING AND EXPEDITING THE CLEANUP PROCESS

The Superfund program is criticized for taking too long to decide upon remedies at sites and for the slow pace of achieving

cleanup. The program's site-specific decision making process is often pointed to as a major source of delay and inconsistency.

The Agency has begun efforts to standardize parts of the process and to take advantage of experience at sites across the country. Continuing and enhancing these efforts and expanding into new areas will improve efficiency and accelerate the program. EPA plans to develop standard specifications for some design components, clarify our policy on land use, set out approaches for dealing with lead contamination at sites and provide a strategy to address the problem of Dense Non-Aqueous Phase Liquids (DNAPLs) in ground water.

Under this initiative, EPA plans to develop a methodology for quickly assessing the presence of DNAPLs, characterizing site contamination problems, and a remedial strategy for addressing DNAPL contamination. As part of this initiative, the Agency will complete an evaluation of the pervasiveness of the presence of DNAPL contamination at NPL sites, present technology transfer seminars to focus on technical as well as policy issues in each EPA Region, and issue several technical guidance documents. Many of these actions will be completed during the summer of 1993.

We also plan to further promote the use of presumptive remedies. We plan to identify presumptive remedies for municipal landfills, and volatile organic chemicals in soils during FY93. We also plan to expand the use of presumptive remedies to other site categories, i.e., woodtreater sites, groundwater pump and treat sites, PCB sites, grain storage sites and coal gasification sites during FY94. We also plan to conduct demonstration projects of these various presumptive remedies during FY93 and FY94.

INITIATIVE 6: DEVELOP SOIL TRIGGER LEVELS

Contamination of soils occurs at virtually all hazardous waste sites. Levels of concern and cleanup levels have historically been set site-specifically through the risk assessment process. In addition, uncertainty about the hazards and the liability associated with levels of contamination have dampened property transfers.

EPA is developing soil trigger levels for a variety of chemicals, and these will be an important screening tool to identify contaminant levels below which there is no concern and above which further site-specific evaluation would be warranted. When exposure pathways at a site correspond to those for which soil trigger levels have been established (i.e., ingestion, inhalation and migration to ground water), the trigger level could also be used as a cleanup level. The soil trigger levels will accelerate investigation of soil contamination at sites, streamline the baseline risk assessment, and improve consistency

in soil cleanups between the RCRA corrective action program and Superfund. We plan to issue guidance on soil trigger levels for about 30 chemicals during FY93 and another 60 chemicals in FY94.

C. Enhance Public Involvement

INITIATIVE 7: IMPLEMENT AN ENVIRONMENTAL JUSTICE STRATEGY FOR SUPERFUND SITES

EPA will undertake a variety of activities to better assess potential areas of inequity at Superfund sites and identify appropriate solutions. By the end of this summer, EPA will complete a preliminary analysis of populations living near 200-300 listed Superfund sites, linking minority and site variables, and identifying ethnic populations living near multiple sites. By the end of FY93, EPA will identify a "demonstration" site in each Region at which environmental justice is of concern. The Regions will develop site-specific strategies for addressing equity issues at each site.

By next winter, EPA will catalog "lessons learned" from these demonstration efforts, which, along with the data and analysis described above, will form the basis of a new Superfund environmental justice strategy. To improve the flow and quality of useful information to culturally diverse communities, we will assign site project managers and community relations staff with appropriate language skills and cultural sensitivities. EPA will simplify instructions on applying for Technical Assistance Grants and publish them in English and Spanish this summer.

INITIATIVE 8: EARLY AND MORE EFFECTIVE COMMUNITY INVOLVEMENT

A critical problem in the Superfund program is the lack of support for the cleanup among the communities around Superfund sites. Citizen groups and communities are often dissatisfied with both the pace and the results of cleanup actions. Specific community involvement problems include difficulties in obtaining Technical Assistance Grants (TAGs), difficulties in obtaining and interpreting health studies, and inaccessibility of both key information and site decision makers.

To remedy this situation, EPA will prepare and implement a new Superfund public participation plan. The plan will be based on comments received from citizens at past EPA Superfund Public Forums and from comments received at an upcoming NACEPT meeting which will focus, in part, on public participation. EPA will also monitor the progress made by other Federal agencies as they establish Site-Specific Advisory Boards at their cleanup sites. EPA expects to be using this new public participation plan at Superfund sites by December 1993.

D. Enhance State Role

INITIATIVE 9: "STATE DEFERRAL" OF CERTAIN SITE CATEGORIES

EPA and the States have long agreed that the universe of hazardous substance sites potentially requiring cleanup was larger than either level of government could address alone. As a result, EPA will be unable to address the environmental threats at some sites for years, leaving potentially responsible parties (PRPs) in doubt about their liability and local communities at risk for some unremediated sites and without the productive use of the affected land. Several States have already developed increasingly sophisticated programs to clean up non-NPL sites, relying in part on EPA technical assistance and funding. EPA could encourage more environmental cleanup sooner, by expanding the State role to address sites that are potentially NPL-caliber, and enlisting the States' participation in a complementary cleanup program.

State "deferral" will encourage States to start addressing the potentially large number of sites now in the NPL listing queue, thus accelerating cleanup, minimizing the risk of duplicative State/Federal efforts, and offering PRPs a measure of confidence that only one agency will address the site. These "deferrals" will provide a negotiated division of responsibility for pre-NPL sites, to determine which agency will address any given site. They will stipulate that States have the initial responsibility to cleanup certain NPL-caliber sites (low- and medium-priority sites that EPA would not be able to address for several years). EPA will continue to focus Federal efforts on removal activities, high-priority NPL-caliber sites and on the NPL. EPA would not propose sites for the NPL that were being satisfactorily cleaned up by a participating State.

The Agency will begin several State deferral pilots in FY93. In these pilots, the State will take the lead for low- or medium-priority NPL-caliber sites that EPA would not be able to propose for the NPL or otherwise address in the near term. These would be sites for which the State has identified viable PRPs. EPA will provide oversight for the pilot programs through FY93 and 94, and develop a policy defining the appropriate scope and standards for State "deferral" as well as an appropriate Federal oversight role during March 1994. This initiative may include public notice-and-comment on the division of sites between EPA and States.

CONTINUING MANAGEMENT AND ENFORCEMENT INITIATIVES

Over the past several years, EPA has implemented a series of reforms to improve the effectiveness, efficiency, and equity of the Superfund program. These reforms have had a significant

impact on the Superfund program. The primary focus of these initiatives has been in four areas: (a) NPL construction completions; (b) the enforcement first initiative; (c) acceleration of cleanup, including the new Superfund Accelerated Cleanup Model (SACM); and (d) contracts management.

Construction Completions

EPA committed itself in FY92 to more than doubling (from 63 to a cumulative total of 130) the number of National Priorities List (NPL) construction completions; and tripling this number (to a cumulative total of 200) by the end of FY93. These specific program objectives (which we exceeded substantially in FY92) create momentum toward the completion of additional site activities. We currently have 169 NPL construction completions and are confident that we will reach our FY93 goal of 200. EPA will continue to work with States to identify opportunities for expediting construction completions and response actions.

Enforcement First

Regions will continue the "enforcement first" initiative to maximize PRP participation in the removal and remedial programs. As we test ways to increase fairness and reduce transaction costs and accelerate and complete cleanup, we will simultaneously explore ways to encourage PRPs to conduct investigations and cleanups earlier in the process. The initiatives outlined in this report are consistent with the "enforcement first" approach and EPA's commitment to site-specific polluter liability.

Responsible parties have been performing an ever increasing proportion of response actions at Superfund sites. Creative and effective use of all relevant enforcement tools is essential to completing construction and accelerating cleanup. Settlements with responsible parties to perform response actions are preferable where they can be achieved, but Regions should be prepared to utilize unilateral administrative orders (UAOs) and judicial actions, including actions for temporary and preliminary injunctive relief, in appropriate situations, to compel PRPs to undertake response actions. Equally important is effective monitoring of PRP compliance with existing Consent Decrees, Unilateral Administrative Orders and Administrative Orders on Consent, and taking appropriate enforcement action where there is failure or refusal to comply.

Accelerated Cleanup

The technical complexity of the hazardous waste site problem coupled with complex Superfund site study and cleanup requirements have given rise to concern about the slow pace of Superfund cleanups. For this reason, a Superfund paradigm, the Superfund Accelerated Cleanup Model (SACM), is under field

demonstration during FY93. Major components of SACM include: (1) Integrated Site Assessment Function; (2) Regional Decision Teams; (3) Increased Number of Early Actions (immediate threats to public health and safety will be eliminated first); (4) Long-term Remediation; and (5) Early Enforcement Actions. We are conducting pilot proposals that test the various facets of SACM. We intend to fully implement SACM in FY94.

Effective Contracts Management

Scrutiny of Superfund contracts by parties within and outside the Agency has pointed to the need for an emphasis on good contract management and made it not only a Superfund priority but also an Agency-wide priority. We need to continue to implement the recommendations of the Agency Task Force on Alternative Remedial Contracting Strategy (ARCS) contracts, and build a future with reliable cost-effective contracts across the program through implementation of the Superfund Long-Term Contracting Strategy. Responsible, trained, and reliable personnel should be used to oversee the procurement and administration of these contracts. Senior management involvement is essential for accountability.

Other Reforms

In addition to the above reforms, EPA has also made efforts to improve the Superfund program in other ways. These other initiatives include the following:

- Accelerate base closure
- Promote use of innovative technology
- Enforcement compliance monitoring
- Improve the effectiveness of cost recovery

These reforms have resulted in Superfund program improvements and will continue to have a major impact.

ECONOMIC REDEVELOPMENT

Virtually all of the initiatives for administrative improvement also serve to address another issue raised by Superfund -- barriers or disincentives to economic development. Contamination and the associated potential Superfund liability have created barriers to economic development at and around contaminated sites. Even for sites not on the NPL, the consequences of contaminated property include difficulties to transfer, lease or develop contaminated sites, even after cleanup. This problem is more acute in urban areas where the barriers to development of sites further exacerbates the distressed economic and social conditions which already exist in these communities - restricting or eliminating the availability of capital to provide economic opportunity and employment.

However, the disincentives to economic development may be lessened by many of the initiatives for administrative improvement, including development of prospective purchaser agreements, leveraging HUD and DOL resources to achieve greater development benefits from cleanup, particularly in disadvantaged and economically distressed areas, and early and more effective community involvement, including canvassing the public to better ascertain their needs from Superfund cleanups (e.g., economic development opportunities).

PROPOSED INITIATIVES NOT ADOPTED

There were other proposed initiatives for administrative improvement which were considered by the Task Force. However, they are not being adopted as administrative improvements at this time. Two of the most notable proposals were the clarification of Superfund cleanup goals, and a Federal policy regarding State non-NPL voluntary cleanup programs. A description of these proposals, and our reasons for not adopting them is provided below.

1. Clarify Superfund Cleanup Goals

Currently, Superfund cleanup goals are identified site-specifically on a continuum from exposure prevention to risk reduction to beneficial use to environmental restoration. The range of options available at an individual site can lead to inconsistency and add time to the decision-making process. EPA believes that we need to set clear objectives for Superfund cleanups by first defining the overall goals of the program, and then, specifying "how clean is clean", i.e., targeting a point on the above continuum.

However, we have concluded that this issue is too complex to adequately address through an administrative solution. Therefore, EPA has asked the NACEPT Superfund Committee to carefully examine this issue. EPA will also seek the views of Congress, the States and other parties on this very important issue. This input will be extremely important as the Administrator and Congress work together to address this issue in examining future Superfund legislation.

2. State Voluntary Cleanup Programs

Some States have already taken the initiative to develop and implement voluntary cleanup programs in order to address the large number of sites which have a low potential for being placed on the National Priorities List (NPL). EPA does not have the resources to address the large number of these sites, either through the current EPA site assessment program or through the development of a Federally-supervised voluntary cleanup program. The Superfund program believes our role may be best limited to

providing technical assistance to selected States for program development.

Although EPA is not addressing this area as an administrative initiative, we support the development of new State voluntary cleanup programs and the expansion of existing State programs to address the large number of non-NPL caliber sites. The longer term benefits of these programs will be to accelerate risk reduction at a larger number of sites. These programs will also ease the credit restrictions placed on private parties associated with these sites and facilitate property transfer and economic redevelopment.

RESOURCE IMPLICATIONS

It must be kept in mind that the current Superfund workload is quite demanding, and several Superfund reforms are currently underway. Now that decisions have been made on which administrative improvements to implement, EPA will have to establish priorities for the utilization of available Superfund resources. Although tradeoffs will be required, we will work with the Office of Management and Budget and Congress to assure that sufficient resources are made available to carry out these very important Superfund administrative improvements and to maintain the continued effectiveness of the program.

IMPLEMENTATION OF ADMINISTRATIVE IMPROVEMENTS

EPA is committed to working with the other Federal agencies, the States, potentially responsible parties, affected citizens, other stakeholder groups, and the general public in the implementation of these initiatives. EPA Headquarters and the ten EPA Regions will work together to implement these initiatives during FY93 and FY94.

Immediate interaction between EPA Headquarters and the Regions will include the following activities:

- A conference call by the Administrator and/or Deputy Administrator with EPA Regional Administrators to emphasize the importance of implementation of the Superfund administrative improvements.
- A directive from the EPA Administrator defining expectations for Superfund Headquarters and Regional managers and staff for each of the new initiatives.
- A national meeting of EPA Headquarters and Regional Superfund managers and senior DOJ officials chaired by the EPA Deputy Administrator to discuss implementation issues.

- Regular monthly conference calls of senior EPA Headquarters and Regional managers to discuss implementation of the administrative improvements.

- EPA Headquarters and Regions will work together to identify sites where demonstration projects of these Superfund reforms will be initiated this summer.

- A program of staff details from EPA Headquarters to the Regions and from the EPA Regions to Headquarters, as appropriate to implement these reforms.

- Each Regional office will be required to submit a Regional implementation plan defining specifically how these Superfund administrative improvements will be implemented in each Region during FY93 and FY94. Each plan will be submitted to the EPA Deputy Administrator by July 30, 1993.

Further, the EPA Task Force will provide assistance to EPA management in the conduct of the following activities:

- PREPARE A DETAILED NATIONAL IMPLEMENTATION PLAN, INCLUDING SCHEDULE AND RESOURCE COMMITMENTS, FOR THE ADMINISTRATIVE IMPROVEMENTS.

- HOLD SENIOR MANAGEMENT DOJ/EPA MEETINGS TO DEFINE FUTURE ROLES AND RESPONSIBILITIES OF RESPECTIVE AGENCIES.

- DEVELOP PLAN TO MONITOR IMPLEMENTATION AND EVALUATE EFFECTIVENESS OF ADMINISTRATIVE IMPROVEMENTS, INCLUDING MONITORING OF RESOURCES INVESTED.

- WORK WITH THE NACEPT SUPERFUND COMMITTEE IN THE EXAMINATION OF ADDITIONAL ADMINISTRATIVE IMPROVEMENTS.

<u>SUMMARY OF MAJOR ACTION ITEMS ASSOCIATED WITH ADMINISTRATIVE IMPROVEMENTS</u>

On the next four pages, we provide a brief listing of the major action items that EPA is committing to conduct as a part of this effort to make improvements to the Superfund program. We believe these actions will result in substantial program improvements.

SUMMARY OF ADMINISTRATIVE IMPROVEMENTS
MAJOR ACTION ITEMS

	FY93	**FY94**
1. GREATER USE OF ALLOCATION TOOLS	* Identify and Initiate Binding Allocation Pilots * Identify and offer ADR and/or NBAR at 20 sites * Issue information release guidance	* Complete & Evaluate Pilots * Issue Guidance for Allocating Costs * Conduct Superfund ADR Workshop
2. FOSTER SMALL WASTE CONTRIBUTOR SETTLEMENTS	* Complete 15 Ongoing De Minimis Settlements * Issue new directive streamlining level of information needed for De Minimis Settlements *Issue De Micromis Guidance * Begin Targeting De Minimis Sites Using New Criteria *Issue Communication Strategy for Assisting De Minimis and De Micromis Parties * Identify Sites for De Micromis settlements	* Complete 35 De Minimis and De Micromis Settlements using new criteria

	FY93	FY94
3. GREATER FAIRNESS FOR OWNERS AT SUPERFUND SITES	* Compile Standards Developed by Other Organizations relating to "All Appropriate Inquiry" * Issue Federal Lien Supplemental Guidance	* Decide Whether to Clarify Requirements for "All Appropriate Inquiry" * Develop Model Prospective Purchaser Agreement and Supplemental Purchaser Guidance
4. EVALUATE MIXED FUNDING POLICY	* Identify and Initiate Mixed Funding Pilots * Evaluate Mixed Funding Options & Implications * Explore Options for Streamlining Preauthorization and other Mixed Funding Procedures	* Complete & Evaluate Pilots * Consider Revising Mixed Funding Policy and Procedures

	FY93	FY94
5. STREAMLINE AND EXPEDITE THE CLEANUP PROCESS	* Issue Presumptive Remedy Fact Sheets: Municipal Landfills & VOCs in Soils * Conduct Presumptive Pilot Projects * Issue DNAPL Characterization & Waiver Guidance * Issue Lead (Pb) Directive * Examine Options for Standardizing Design Guide Specifications	* Issue Presumptive Remedy Fact Sheets: Woodtreaters, PCBs, Groundwater Pump & Treat, Coal Gasification, Grain Storage * Initiate new Presumptive Remedy Pilot Projects * Develop/Adopt Performance Specs, as Appropriate * Issue Land Use Policy
6. DEVELOP SOIL TRIGGER LEVELS	* Issue Soil Trigger Levels for 30 Contaminants	* Establish Trigger Levels for 60 More Contaminants * Pilot Test Use of Soil Trigger Levels at Selected Sites
7. IMPLEMENT AN ENVIRONMENTAL JUSTICE STRATEGY	* Identify 10 Superfund Sites for Environmental Justice Pilot Initiatives * Obtain Input on Environmental Justice Issues at NACEPT Forum * Issue Simplified TAG Application Instructions	* Evaluate Lessons Learned from Pilots & Prepare Environmental Justice Strategy * Implement New Strategy at Future Equity Sites

	FY93	FY94
8. EARLY AND MORE EFFECTIVE COMMUNITY INVOLVEMENT	* Implement Community Involvement Recommendations from Past Superfund Public Forums * Obtain Community Involvement Input from NACEPT Forums	* Develop new Public Participation Strategy * Test New Strategy at Selected Sites
9. STATE DEFERRAL OF CERTAIN SITE CATEGORIES	* Initiate Pilots in EPA Regions 3, 6 & 7 * Initiate Development of State Deferral Guidance	* Evaluate Pilots * Finalize Deferral Guidance

SUPERFUND ADMINISTRATIVE IMPROVEMENTS



FINAL REPORT

JUNE 23, 1993

June 23, 1993

SUPERFUND ADMINISTRATIVE IMPROVEMENTS

TABLE OF CONTENTS

I. NEW AND ENHANCED INITIATIVES

A. Enhance Enforcement Fairness and Reduce Transaction Costs

1. Greater Use of Allocation Tools 3

2. Foster More Settlements with Small Volume Waste Contributors 8

3. Greater Fairness for Owners at Superfund Sites . . . 11

4. Evaluate Mixed Funding Policy 14

B. Enhance Cleanup Effectiveness and Consistency

5. Streamline and Expedite the Cleanup Process 17

6. Develop Soil Trigger Levels 25

C. Enhance Meaningful Public Involvement

7. Implement an Environmental Justice Strategy for Superfund Sites 27

8. Early and More Effective Community Involvement . . . 31

D. Enhance State Role

9. "State Deferral" of Certain Site Categories 33

II. CONTINUING MANAGEMENT AND ENFORCEMENT INITIATIVES

10. Superfund Accelerated Cleanup Model (SACM) 37

11. Construction Completions 38

12. Contracts Management 40

13. Enforcement First 42

14. Accelerate Cleanup at Base Closures 43

15. Promote Use of Innovative Technology 46

16. Compliance Monitoring 49

17. Improve the Effectiveness of Cost Recovery 50

June 23, 1993

SUPERFUND ADMINISTRATIVE IMPROVEMENTS

INTRODUCTION

Superfund, the nation's hazardous waste cleanup program, is now more than 12 years old. After 12 years, we have made significant progress in reducing the risks posed to human health and natural ecosystems. As a result of Superfund, the people of the United States have received many benefits including the elimination of the most serious health threats at contaminated sites, the restoration of sites to productive use, advances in cleanup technology, and reformation of corporate and municipal behavior towards the generation, disposal, and cleanup of hazardous wastes.

However, EPA recognizes that certain aspects of the Superfund program have also generated criticism. Specific criticisms focus on the pace and cost of cleanup, the degree to which sites are cleaned, the fairness of the liability approach, the role of States in the process, and the role of local communities, particularly disadvantaged communities.

This point in Superfund history presents the Clinton Administration, Congress, EPA, and the public an opportunity to evaluate how the program has worked over the last dozen years and to make changes that will improve Superfund in the future. The Agency is committed to making such changes, whether they are administrative changes which can be implemented by EPA on its own, or legislative changes that must be enacted by Congress.

To explore potential initiatives for making administrative improvements to Superfund, an Agency-wide task force was established, the Superfund Administrative Improvements Task Force. Representatives from the Office of Solid Waste and Emergency Response (OSWER), the Office of Enforcement (OE), the Office of General Counsel (OGC), the Office of Policy, Planning and Evaluation (OPPE), the Office of Administration and Resources Management (OARM), the Office of Research and Development (ORD), Region 2, Region 5, Region 9, and the Department of Justice (DOJ) participated in preparing and reviewing this report. Task Force members met with many people, both inside and outside the Agency, to develop options for consideration.

To oversee all Superfund administrative and legislative issues, the Administrator established a Superfund Steering Committee, chaired by the Deputy Administrator, Robert Sussman. The Steering Committee includes senior officials from OSWER, OE, OGC, OCLA, OARM, ORD, OPPE and Region 2, Region 3, Region 6 and DOJ. The Task Force recommendations were reviewed by this Steering Committee which then advised the Task Force on the

appropriate initiatives to adopt. The results of the Steering Committee and Task Force efforts are reflected in this report.

This report focuses on administrative improvements to the Superfund program. It considers the issues of most concern to the Administration, Congress, and the public. The improvements included in this report can be achieved without changing the statute. Priority was given to actions which can be implemented before September 30, 1994, when the current Superfund legislation expires.

Within that framework, the Task Force looked at Superfund administrative improvements which: (a) enhance enforcement fairness and reduce transaction costs; (b) enhance cleanup effectiveness and consistency; (c) enhance meaningful public involvement; and (d) enhance the State role in the Superfund program. These new and enhanced initiatives are discussed in the first portions of this document.

In addition, several significant initiatives were already underway in the program. These continuing management and enforcement initiatives have improved the efficiency, effectiveness and fairness of the Superfund program. The continuing efforts already underway in the Agency are discussed in the latter portion of this report. Changes to the current EPA Superfund removal effort were not evaluated in the Task Force deliberations. This effort is one of the most successful components of the Superfund program.

I. NEW AND ENHANCED INITIATIVES

The various initiatives identified can be categorized as follows:

- Enhance enforcement fairness and reduce transaction costs
  - Greater use of allocation tools
  - Foster more small volume waste contributor settlements
  - Greater fairness for owners at Superfund sites
  - Evaluate mixed funding policy

- Enhance cleanup effectiveness and consistency

  - Streamline and expedite the cleanup process by implementing presumptive remedy guidance and a new dense non-aqueous phase liquids (DNAPL) strategy.
  - Develop soil trigger levels

- o Enhance Public Involvement
  - Implement an environmental justice strategy for Superfund sites
  - Early and more effective community involvement
- o Enhance State Role
  - State "deferral" of certain site categories

Each initiative is presented, suggestions for short-term and longer-term actions are discussed, and program implications are addressed in this report. This report contains the recommendations of the Task Force which have been approved by the Superfund Steering Committee. The Agency will begin the implementation of these initiatives for program improvement immediately.

A. Enhance Enforcement Fairness and Reduce Transaction Costs

INITIATIVE 1: GREATER USE OF ALLOCATION TOOLS

Issue

The Superfund program has been criticized for the high transaction costs that are incurred by PRPs in reaching settlements and in litigating where settlement efforts are unsuccessful. Several allocation tools that currently exist could be used more widely to promote settlement and reduce the transaction costs associated with achieving settlement. These settlement tools fall into three general categories: 1) tools that create proposed allocations; 2) tools that facilitate the sharing and development of allocation information; and 3) tools that provide guidance on developing allocations.

Approach

A. Proposed Allocations: Alternative dispute resolution (ADR) could be used on a more routine basis to facilitate the process of allocating responsibility at sites. ADR involves a neutral third party who serves, at the discretion of the parties, to organize parties for negotiations (convening expert), facilitate settlement deliberations (mediator), and/or provide an opinion to the parties to a negotiation (arbitrator). An ADR professional may be hired to serve EPA, the PRPs, or both, to assist in reaching an allocation of responsibility among the PRPs. At its discretion, EPA may adopt, as its own allocation (or Nonbinding Preliminary Allocation of Responsibility (NBAR)), the allocation which is reached through the ADR process. An NBAR is EPA's preliminary nonbinding allocation among PRPs of percentages of total response costs at a site. We will be undertaking the following initiatives:

1. Binding Allocation Pilot Project: EPA will seek to pilot the arbitration of allocation determinations in approximately three cases. In these pilot cases, the allocation determination of the arbitrator will be binding on all PRPs subject to the arbitration and will be incorporated into appropriate settlement documents for the signature of the parties. Further, in this pilot project, the Agency will agree, subject to the limitations enumerated in 5 U.S.C. §590, to accept the arbitrator's allocation determination as the basis of settlement with the PRPs subject to the arbitration.

At the selected sites, an initial agreement regarding the use of arbitration will be reached between high-level EPA officials (including the Deputy Administrator) and corporate officials authorized to speak on behalf of the corporate PRPs. The corporate officials will be informed that the Agency will establish, with the assistance of PRPs, an arbitration to determine the allocation of costs among a group of PRPs identified by the Agency. The Agency will make every effort to identify and include the largest number of viable PRPs in the group subject to the arbitration. To facilitate the selection of an arbitrator, EPA will provide a list of approved third-party neutrals from which the PRPs may select their preferred arbitrator.

The arbitrator will be provided a specific time period in which to reach an allocation determination. The Agency will expeditiously provide the arbitrator with allocation-related information in its possession, consistent with EPA's information-release policy (see below), and all PRPs will be encouraged to provide relevant information for the arbitrator's consideration. Procedures for operation of the arbitration will be provided by the Agency.

2. Demonstration Projects Utilizing ADR and, where appropriate, NBARs: Over the next 12 months, approximately 20 sites with upcoming RD/RA negotiations (and additional cost recovery cases and removal action negotiations as appropriate) will be identified at which ADR will be offered to facilitate PRP allocation deliberations. The ADR professional will be available for the sole purpose of facilitating the attainment of an allocation agreement among the PRPs. EPA's ADR Liaison will provide support to Regional staff in identifying appropriate candidate cases. Where possible and appropriate, EPA may prepare or adopt NBARs to help promote settlement at the demonstration project sites.

At those sites which are selected as demonstration projects, the Agency will, subject to available HQ funding, offer the following three step process. First, the PRPs will be provided with the services of an external neutral ADR professional,

initially funded by the Agency, to assist in PRP organization and the convening of settlement negotiations, including the selection of an appropriate mediator if requested by the parties. Second, if requested by the PRPs, the Agency will initially fund a portion of the costs of neutral mediator services utilized by the PRPs to arrive at an allocation agreement. The mediator selected by the PRPs will be expeditiously provided information known to the Agency regarding the waste disposed of at the site and PRP practices, and the PRPs will be encouraged to provide any additional information they deem relevant. A specific timetable will be provided to the PRPs by EPA for conclusion of the mediation process.

Third, if no agreement is reached among the PRPs at the end of the specified period following initiation of mediation, EPA may, at its sole discretion, establish a nonbinding arbitration to develop a proposed allocation for the consideration of the PRPs and EPA. The PRPs will be encouraged to participate in the funding of arbitration services. The Agency will expeditiously provide the arbitrator with allocation-related information in its possession, consistent with EPA's information-release policy, and all PRPs will be encouraged to provide relevant information for the arbitrator's consideration. The arbitrator will be provided a finite period of time to develop an allocation proposal for the consideration of the PRPs and EPA. If the PRPs refuse to accept the proposed allocation, EPA may, where possible and appropriate, prepare an NBAR or adopt the arbitrator's proposal as EPA's own NBAR; EPA may also proceed with partial settlements and/or issue unilateral administrative orders and/or proceed with Fund-financed response action.

3. In conjunction with the two efforts identified above, EPA will perform outreach to the regulated community on the use of ADR techniques to support the resolution of Superfund actions. A workshop on the use of ADR in Superfund actions will be convened in November 1993. The workshop participants will include representatives from the regulated community, ADR service providers, and Agency and DOJ staff. The workshop will explore options for expanding and institutionalizing the use of ADR techniques into the Superfund enforcement process.

B. Information Sharing: EPA has recently issued a new policy that encourages the sharing of information on allocation and liability issues with identified PRPs early in the Superfund process. Specifically, the policy provides that "information on PRP waste contribution at CERCLA sites normally should be made available to all PRPs as soon as practicable, preferably well before special notice is issued." The policy details the specific types of information (e.g., waste tickets, logbooks, billing records) that should be provided, and expresses a preference in favor of release even where the information is potentially subject to claims of privilege or FOIA exemptions. A

follow-up memorandum will be issued indicating AA-level support for sharing this information with PRPs, as well as referencing the Agency's intent to assist PRPs in follow-up information gathering activities where appropriate. Further, a concerted effort will be made by the Agency to ensure that the information-release policy is uniformly and promptly implemented by the Regions.

C. Allocation Guidance: EPA will prepare a guidance identifying factors to consider when allocating response costs among PRPs, including in situations where there is an absence of volumetric information. These factors would be employed by the Agency and could be employed by PRPs in reaching allocation decisions. The guidance could address allocation issues such as the relative importance of toxicity and other waste characteristic factors in determining allocations of responsibility. EPA will review the results of the Clean Sites "Common Law of Allocation" to ensure that all relevant factors utilized in prior allocations are considered. The experience gained in the ADR demonstration projects highlighted above will also serve as an information base for this project. In addition, EPA will prepare a white paper that will analyze: 1) the number of sites where volumetric information is available; 2) the sites where the functional equivalent of an NBAR has been performed (e.g., volumetric allocations in the form of a waste-in list or transactional database); and 3) allocations and settlements that resulted from the development and release of such information.

FY93 ACTION ITEMS

Action	Complete
Issue follow-up memorandum regarding information release and assistance to PRPs in follow-up information gathering activities	7/93
Identify sites with upcoming RD/RA negotiations where ADR can be piloted	8/93
Identify and commence implementation of binding allocation at pilot sites	9/93

FY94 ACTION ITEMS

Action	Complete
Implement binding allocation and ADR at pilot sites	Ongoing

Identify sites with upcoming RD/RA negotiations where ADR can be piloted	Ongoing
Conduct a Superfund ADR Workshop	11/93
Prepare white paper on availability of volumetric information at sites	12/93
Issue guidance identifying factors to consider when allocating response costs	3/94

Program Implications

It is very difficult given the extreme variance in the complexity and size of cases to estimate the Agency resources required to support the binding allocation project and the additional piloting of the use of ADR for select RD/RA, removal, and cost recovery negotiations. Best estimates based upon the experience of the Agency and private ADR providers are that the cost to employ an outside neutral party to mediate and render an allocation determination ranges from $15,000 to $200,000, depending on the number of parties involved and the condition of site data. It is anticipated that the per site cost of using ADR in pilot cases will average $50,000. It is anticipated that the Agency's total share of ADR costs (provision of convening services and a portion of mediator/arbitrator costs) will average 30-40% of the total ADR costs at a site.

Assisting PRPs in reaching consensus on allocation schemes is one of the only mechanisms by which EPA can impact the PRPs' transaction costs associated with CERCLA negotiations. The experience of PRPs indicates that the use of ADR professionals to facilitate PRP allocation deliberations greatly increases the likelihood of success and reduces PRP transaction costs. In the short term, however, additional resources will be required to perform these demonstration projects. The additional Agency resources required to employ ADR techniques to reach allocation agreements may, in some cases, be offset by savings associated with more and/or faster settlements and reduced litigation. An additional benefit that may accrue from this effort is an increase in the overall number of parties participating in each settlement. EPA does not intend for the use of ADR to delay cleanup at any site.

Developing (and applying) the additional guidance on allocating response costs among PRPs may be difficult, given the complexity of many of the issues involved and their relative importance at particular sites. Although the guidance may not be completed prior to reauthorization, the draft will promote a

discussion of the issues, which may in turn be useful in the reauthorization process.

INITIATIVE 2: FOSTER MORE SETTLEMENTS WITH SMALL VOLUME WASTE CONTRIBUTORS

Issue

Small volume waste contributors often complain that they are not able to settle with EPA until very late in the remedy process. Moreover, volumetric information (recommended under EPA's pre-existing guidance) used for establishing eligibility for a de minimis settlement is not comprehensive at many sites. In addition, de minimis settlements can be time consuming and resource intensive.

At several sites, there are some extremely small volume or "de micromis" waste contributors that are increasingly finding themselves subject to lawsuits commenced by major contributors at a site ("contribution actions"). The de micromis parties are parties whom, as a matter of enforcement discretion, the Agency did not or would not normally pursue. De micromis parties have requested EPA assistance in resolving these actions.

The Agency has also found that in resolving the concerns of numerous parties in a de minimis settlement, many of the PRPs (who may be small businesses) complain that they spend substantial amounts of money (i.e., "transaction costs") in acquiring information about the Superfund process and understanding the terms of a proposed settlement. De minimis parties believe EPA should be more proactive in communicating the de minimis process.

Approach

To encourage more, early and expedited settlements and reduce the transaction costs of all parties, the Agency plans to: 1) simplify our requirements for determining a PRP's eligibility for a de minimis settlement and streamline the process for settling; (2) issue guidance to the Regions on settling with extremely small volume waste contributors ("de micromis parties") while aggressively moving to settle with de micromis parties subject to contribution actions; and 3) establish a communication strategy to assist small volume waste contributors in further understanding the de minimis and de micromis process.

The Agency is implementing several actions to simplify its requirements for determining a PRP's eligibility for an expedited de minimis settlement. They include: allowing Regions to make de minimis determinations based on an individual party's contribution relative to an estimate of the overall waste at the

site; no longer requiring a waste-in list prior to settling; and showing an increased willingness to settle with individual de minimis PRPs and not solely with de minimis parties as a group. In considering such settlements, Regions will make a reasoned judgement regarding the effect of the settlement on non-de minimis parties, recognizing that a certain amount of imprecision is inevitable (particularly in light of the limited amount of volumetric information available at many sites). Detailed information and extensive supporting documentation are not necessary for this determination. These settlements should also not foreclose the Region's ability to pursue an enforcement action against the non-de minimis parties to perform or finance the remedy.

To streamline the de minimis process once a party is eligible for a settlement, the Agency will be developing a model payment matrix. The streamlining will also include standardizing premiums relative to the scope of our covenant not to sue, and authorizing Regions to use estimates of future site costs in reaching settlements. EPA and the Department of Justice will provide for rapid elevation of key decisions regarding the implementation of the new de minimis procedures.

In a similar vein, EPA's approach to de micromis parties will be to quickly establish eligibility for settlement based on reduced informational requirements. Unlike the de minimis discussion above, de micromis settlements will not involve imposition of a premium or identification of a group of parties able to perform or finance the remedy. EPA will be developing a payment matrix to calculate the appropriate settlement amount.

The Agency will perform several actions in FY93 and FY94. In FY93, we will direct the Regions to implement the new de minimis settlement approach, complete ongoing de minimis settlements, issue the de micromis guidance, institute negotiations with de micromis parties at sites where PRPs have brought contribution actions against those parties, and develop a communication strategy to assist PRPs involved in the de minimis and de micromis process (the Agency may pilot the use of ADR in this effort). EPA expects to complete approximately 15 more de minimis settlements in FY93 - there are already 12 final settlements with more than 650 parties this year. Using the new criteria, we can start negotiations at several additional sites this fiscal year. In FY94, we believe that we can target more de minimis settlements using the new criteria. We estimate that we can enter into approximately 35 de minimis settlements.

FY93 ACTION ITEMS

Action	Complete
Inform Regions of new de minimis approach and direct implementation of new approach	7/93
Begin targeting de minimis sites using new criteria	7/93
Issue de micromis guidance	7/93
Issue a communication strategy Regions should follow for assisting de minimis and de micromis parties	7/93
Complete ongoing FY93 de minimis settlements at 15 more sites	9/93
Identify sites/ commence negotiations where de micromis parties are subject to contribution actions	Ongoing

FY94 ACTION ITEMS

Action	Complete
Identify sites/ commence negotiations where de micromis parties are subject to contribution actions	Ongoing
Ensure that Regions are using the new communication strategy	Ongoing
Complete approximately 35 de minimis settlements using new criteria	9/94
Complete settlements with de micromis parties	9/94

Program Implications

These initiatives will allow more, earlier and expedited de minimis settlements. They should also reduce the transaction costs for both the government and de minimis parties. However, increasing the number of de minimis settlements and the completion of de micromis settlements will, in the aggregate, require a greater allocation of Agency resources which might otherwise be devoted to cleanup or other enforcement activities.

These actions, in particular the de micromis initiative, will send the message that EPA will act aggressively when other parties bring nuisance contribution actions against extremely small volume waste contributors. The actions will increase fairness for small parties.

Establishing a communication strategy will assist the de minimis and de micromis parties in a greater understanding of the settlement process and in the receipt of information. There should also be a reduction in transaction costs for those parties.

INITIATIVE 3: GREATER FAIRNESS FOR OWNERS AT SUPERFUND SITES

A. ISSUE SUPPLEMENTAL FEDERAL LIEN GUIDANCE

Issue

PRPs have objected that before perfecting a Federal Lien under CERCLA, EPA does not give property owners sufficient notice and opportunity for comment.

Approach

EPA will issue supplemental Federal Lien procedures which provide a site owner the opportunity to submit information or meet with the Agency prior to EPA placing a Federal Lien on the owner's property.

FY93 ACTION ITEM

Action	Complete
Issue supplemental guidance	7/93

Program Implications

Issuance of the supplemental guidance will address concerns regarding giving owners of property notice and opportunity to be heard prior to perfecting a CERCLA lien. It will also increase the administrative burden (time and resources) associated with

the perfection of liens and delay somewhat EPA's perfection of liens on individual sites.

B. SETTING A STANDARD FOR "ALL APPROPRIATE INQUIRY"

Issue

To qualify for CERCLA's innocent landowner defense, a party must have undertaken, at the time the land was acquired, "all appropriate inquiry into the previous ownership and uses of the property consistent with good commercial or customary practice in an effort to minimize liability." EPA has not developed a standard for "all appropriate inquiry," but has made determinations of innocent landowner status site by site.

Concerns have been raised that the lack of a standard has created uncertainty and has reportedly led to the following situations: 1) lending institutions are wary about providing loans for the purchase of property and accepting property as collateral; 2) the private sector may be abandoning previously developed land and developing virgin land; and 3) businesses may be paying for inadequate property assessments.

Approach

After identifying some basic criteria regarding the meaning of "all appropriate inquiry", the Agency will examine standards already developed by private organizations and other federal agencies, and evaluate the need for EPA to clarify the requirements of "all appropriate inquiry" under Section 101(35) of CERCLA.

FY93 ACTION ITEMS

Action	Complete
Identify criteria for evaluating standards developed by other organizations	9/93
Request standards from other organizations	9/93

FY94 ACTION ITEMS

Action	
Decide whether to clarify the requirements of "all appropriate inquiry" under CERCLA	12/93

If appropriate, clarify requirements 9/94

Program Implications

If EPA were to adopt a standard regarding the meaning of "all appropriate inquiry", certainty would be provided to persons (i.e., individuals, industry, lenders) who want to purchase property as to the Agency's position on the actions which are necessary to appropriately inquire into previous uses of property, for purposes of the innocent landowner defense.

Development of a new standard by EPA might be resource-intensive. Adopting a pre-existing standard would save Agency resources, would be more likely to be embraced by the business community and would result in more certainty for existing environmental audits. At the same time, adopting an Agency standard might exclude the standards being developed by other groups or discourage the development of better property assessment tools. Recognizing several acceptable pre-existing standards would help address these issues. Any EPA standard might be the subject of disputes.

C. EXPAND USE OF THE PROSPECTIVE PURCHASER GUIDANCE; DEVELOP MODEL PROSPECTIVE PURCHASER AGREEMENT

Issue

At some NPL sites, prospective purchasers of contaminated property are willing to conduct or finance some cleanup work in return for a covenant not to sue from EPA. Our current policy restricts the use of these agreements to situations where the Agency is planning on taking an enforcement action at the site, and where a substantial benefit (such as payment or performance) not otherwise available would be received by the Agency for cleanup of the site by the purchaser. At sites where these conditions are not met, cleanups that could be partially conducted or funded by private prospective purchasers may be left to EPA to complete. In effect, contaminated property that could be put to productive use may remain abandoned for an extended period. This problem is of particular concern in some urban areas.

Approach

We will expand the use of our prospective purchaser guidance to show greater willingness to negotiate where it will facilitate or assist in the re-use or development of contaminated or formerly contaminated property. Further, EPA will prepare a Model Prospective Purchaser Agreement to help expedite the approval

process. In addition, EPA will evaluate the "no action" assurance policy criteria and application.

FY93 ACTION ITEMS

Action	Complete
Develop criteria for expanding the guidance	9/93

FY94 ACTION ITEMS

Action	
Issue supplemental prospective purchaser guidance	6/94
Issue model prospective purchaser agreement	6/94

Program Implications

This initiative will result in the Agency being perceived as being more fair in resolving the potential liability of parties whose purchase of contaminated property would otherwise make them PRPs. Expanded use of prospective purchaser settlements will create economic incentives to develop contaminated or potentially contaminated properties.

At the same time, with this initiative, it will become more difficult for the Agency to remain outside of purely private real estate transactions. Extensive use of prospective purchaser agreements could be resource intensive.

INITIATIVE 4: EVALUATE MIXED FUNDING POLICY

Issue

The Agency uses mixed funding in situations where it is appropriate to recover less than 100% of the site costs in a particular settlement. There are three types of mixed funding: preauthorization (where PRPs perform the work and the Agency agrees to reimburse them for a portion of the costs), cashouts (where the PRPs fund a portion of the work which EPA performs), and mixed work (where the PRP and the Agency perform different aspects of the cleanup).

PRPs believe that the Agency's interpretation of its mixed funding authority is too conservative and that mixed funding is appropriate in other situations, particularly where inequities exist or risks associated with remedy implementation are a

concern. In addition, PRPs believe that the application and documentation requirements, as well as contracting requirements, associated with preauthorization mixed funding are overly burdensome and may actually create a disincentive to its use.

The Agency recently completed a fact-finding exercise regarding mixed funding to obtain the current views of interested organizations and individuals. The Agency was particularly interested in perceptions of the advantages and disadvantages of EPA's current policies and practices with respect to mixed funding; whether increased use of mixed funding should be encouraged, and what obstacles exist to such increased use; and recommendations for policy or legislative changes. As a result of this fact-finding, the Agency is currently conducting an evaluation of mixed funding options, including potential cost implications of expanding use of mixed funding.

Lastly, the Agency is interested in looking for ways to use mixed funding to achieve added program benefits, such as use of innovative technologies, faster cleanups, and addressing environmental justice concerns.

Approach

During FY93, the Agency will conduct a two-part evaluation of mixed funding. The first part will evaluate several different mixed funding options and quantify the cost implications to the Fund. The Agency expects to complete this phase of the evaluation during July 1993. The second part of the evaluation will explore options for streamlining the mixed funding decision making process, and will also explore options available under the current regulation (40 CFR Part 307) for streamlining the application and documentation requirements associated with preauthorization. This part of the evaluation is expected to be completed in August 1993.

In order to better assist our evaluation effort and gather data on mixed funding use, the Agency will be piloting several mixed funding settlement demonstration projects in FY93 and FY94. Candidate sites will be identified by July 1993. Negotiations with PRPs for these mixed funding demonstration projects are anticipated to begin by the end of FY93 and to be completed by March 1994. The Agency will begin compiling information about these negotiations in December 1993. Based on experience and the evaluation of the mixed funding demonstration projects, EPA will identify opportunities for streamlining preauthorization procedures and requirements by March 1994. Based on the results of studies and demonstration projects over the next year, EPA will consider revising the mixed funding policy.

FY93 ACTION ITEMS

Action	Complete
Evaluation of mixed funding options	7/93
Identify candidate sites for demonstration projects	7/93
Explore options to streamline preauthorization procedures and requirements. Utilize demonstration projects, as appropriate.	8/93

FY94 ACTION ITEMS

Action	Complete
Complete negotiations for mixed funding demonstration projects	3/94
Based on an evaluation of the demonstration projects, recommend measures to streamline preauthorization procedures and requirements	3/94
Based on an evaluation of the demonstration projects, consider revising the mixed funding policy	9/94

Program Implications

Streamlining preauthorization procedures and requirements will ease implementation of mixed funding. If EPA were to expand the use of mixed funding, the Superfund program might benefit from more settlements and, in some cases, earlier cleanups, less litigation and fewer CERCLA §106(b)(2) reimbursement petitions. Further, the Superfund program may be perceived to be more fair. Such increases in fairness must be balanced with the concepts of joint and several liability.

At the same time, expanding the use of mixed funding could create significant demands on the Trust Fund -- potentially resulting in the delay of cleanups -- and make negotiations more difficult in those cases where the Agency feels the use of mixed funding is inappropriate. Accordingly, the categories of cases eligible for mixed funding will need to be carefully defined. Given the ramifications of mixed funding, it will be important to examine legislative aspects of this issue.

B. Enhance Cleanup Effectiveness and Consistency

INITIATIVE 5: STREAMLINE AND EXPEDITE THE CLEANUP PROCESS

INTRODUCTION

The Superfund program is criticized for taking too long to decide upon remedies at sites and for the slow pace of achieving cleanup. The program's site-specific decision making process is often pointed to as a major source of delay. Making decisions on a site by site basis also leads, at least on the surface, to criticism about the consistency of decisions nationwide.

In 1991, the Agency began efforts to standardize parts of the remedy selection process and increased efforts to take advantage of experience at sites across the country. Continuing these efforts and expanding into new areas will improve efficiency and accelerate the program. In particular, the current process of site characterization, evaluating the feasibility of cleanup options, and design may be unnecessarily complex, site-specific, and lengthy. The new and enhanced efforts highlighted here represent improvements in these areas which can save time and money, and will increase the national consistency of Superfund cleanups.

A. PRESUMPTIVE REMEDIES

Issue

Current practice in implementing the RI/FS process has resulted in extensive site-specific analysis being conducted at similar sites across the country. EPA studies show that despite this intensive site-specific effort, the same types of remedies tend to be selected for certain categories of sites. This repetition of activities across the country to carefully document site-specific decision making is expensive and time-consuming and may be unnecessary to ensure that appropriate remedies are chosen.

Approach

Agency work in the presumptive remedies area involves developing guidance and demonstration/field studies that are designed to recognize and capitalize on patterns in selection of remedy decisions for specific site types. In this way, those who must deal with similar sites in the future can better focus data collection efforts and limit feasibility analyses to those remedial options holding the greatest likelihood of success.

We have begun to pilot presumptive remedies for municipal landfills and are beginning pilot work on other presumptive remedies for woodtreater sites, ground water contamination sites,

sites with volatile organic compounds in soils, coal gasification sites, PCB sites and grain storage facilities.

FY93 ACTION ITEMS

Action	Complete
Identify Presumptive Remedies, Issue Guidance and Begin Demonstration Projects on:	9/93
1) General Presumptive Remedies	
2) Municipal Landfills	
3) Volatile Organics in Soils	

FY94 ACTION ITEMS

Action	Complete
Identify Presumptive Remedies, Issue Guidance on:	
1) Groundwater Pump & Treat (see discussion on DNAPLs)	1/94
2) Woodtreater Sites	6/94
3) PCB Sites	6/94
4) Coal Gasification Sites	6/94
5) Grain Storage Sites	6/94
Initiate Demonstration Projects:	9/94
Develop Evaluation Scheme	
Evaluate preliminary MWLF pilots	
Municipal Landfill Site	
Groundwater Site, VOCs in Soils Site	
Region 7 demonstration projects for Coal Gasification, PCBs, and Grain Bins	

Program Implications

A substantial number of NPL sites have certain similar attributes that will benefit from a standardized approach. For the presumptive remedy categories noted, approximately 600 sites currently on the NPL may benefit in some way. Of these sites, approximately 350 involve ground water, 50 municipal landfills, 100 VOCs in soils, 30 woodtreaters and 70 PCB sites. There is some overlap between the ground water and other categories.

Use of presumptive remedies is expected to create greater consistency, certainty and quality of remedy decisions in the near term, and time and cost savings are expected to increase over time as additional sites from these categories are added to

the NPL. This initiative will also encourage consistency and will assist in speeding cleanup at a substantial number of sites that enter into voluntary cleanup programs or are regulated under the RCRA corrective action program or are conducted by private parties. Success is primarily expected in reduced time and cost for the RI/FS.

The benefits of the presumptive remedy approach will include more focused data collection during the RI, including earlier treatability studies and collection of data necessary to design a remedy, the potential for a more streamlined risk assessment, and evaluation of a narrower range of remedial options. These principles can also be applied at sites on the NPL other than those specific types targeted for presumptive remedy guidance, which can expand the influence of this initiative and achieve faster risk reduction as well as time and cost savings for more sites.

Use of presumptive remedies affords the local community some certainty that remedies are implementable and effective, and establishes a reasonable expectation upfront about the level of cleanup that can be achieved.

In spite of the benefits, in some cases, reliance on presumptive remedies could retard the integration of innovative technologies into the selection of remedies for certain categories of sites. Some responsible parties have also expressed concern that presumptive remedies may contain overly conservative assumptions and could lead to unnecessarily expensive remedies. EPA will therefore, need to be aware of these specific instances, be careful not to exclude more innovative approaches, and look carefully at its assumptions in developing presumptive remedies.

It should be noted that the presumptive remedies are those options which we will focus on most frequently for specific site types; however, another alternative might be selected in appropriate circumstances.

B. STANDARDIZED SPECIFICATIONS FOR USE DURING DESIGN

Issue

As more remedial designs are completed, many different specifications have been developed by the design community for various construction components. These specifications can be standardized and made available for use on future designs efforts with minimal adaptation to site-specific conditions. Standard specifications will save time and money for design development, EPA and State review, and construction oversight.

Approach

EPA will, through an existing Interagency Agreement with the U. S. Army Corps of Engineers (USACE), identify construction components suited to application of standard specifications. The USACE will develop specifications and, after review, make them available to the Federal, State and contractor community through their existing Construction Criteria Base (CCB). The data base will be periodically updated and revised with new specifications and input from the field. Examples of specifications under consideration or in development are air stripping systems, site clearing and grubbing, thermal treatment systems, and health and safety requirements.

FY93 ACTION ITEMS

Action	Complete
Survey EPA Regions and other Federal agencies for already available specifications and opportunities to develop specifications.	11/93

FY94 ACTION ITEMS

Evaluate which construction components have the biggest potential for high pay-back from the use of specifications.	12/93
Using phased approach, modify or develop specifications and made available through the database.	9/94

Program Implications

This effort could reduce costs required for remedial design by eliminating the need to develop new specifications each time for aspects that are common to many sites. The time required to develop design packages as well as the EPA review time for previously approved elements of design packages can also be reduced. Guide specifications can also increase consistency and efficiency in design development through a common understanding of project expectations.

C. GUIDANCE AND TRAINING FOR ADDRESSING DNAPL CONTAMINATION

Issue

The presence or absence of Dense Non-Aqueous Phase Liquids (DNAPLs) at Superfund sites can control the ultimate success or failure of groundwater remediation. Because of the complex nature of DNAPLs fate and transport, they may go undetected under current site characterization strategies, leading to incomplete site assessments, inadequate remedial design, and additional costs during remedial action. The presence of DNAPLs complicates remediation and in many cases, make complete aquifer cleanup infeasible with current technologies. In addition, the presence of DNAPLs can extend negotiation times with PRPs due to the PRPs' efforts to persuade EPA not to attempt to restore ground water to drinking water quality.

EPA research indicates that about 85% of NPL sites have some degree of ground water contamination, and that approximately 60% of those have a high probability that DNAPLs are present. EPA estimates that a similar percentage of RCRA corrective action sites will also face DNAPL problems.

Approach

Under this initiative, EPA will develop the methodology for quickly assessing the presence of DNAPLs, for characterizing site contamination problems, and a remedial strategy for addressing DNAPL contamination. At this time, the Agency is considering several components to be key in an effective strategy for addressing ground water contamination sites in general and DNAPL sites in particular.

The strategy involves early evaluation of the likelihood of the presence of DNAPLs, and, if DNAPLs are likely, design of the site investigation and remedial actions to address two different parts of the ground water contamination problem: 1) the dissolved contaminant plume, and 2) subsurface DNAPL sources within the plume. The investigation and remedial actions will utilize a phased approach, which will include locating the extent of the dissolved plume and subsurface zones where DNAPLs are present; initiating early containment actions to prevent further spread of contaminants; and, where practicable, ultimately remediating the dissolved plume to achieve cleanup standards, while containing, reducing and managing the subsurface DNAPL source to minimize further release of contaminants. The use of enhanced recovery or innovative technologies should also be considered to remediate DNAPLs in the source zones.

As part of this initiative, the Agency will complete an evaluation of the pervasiveness of the presence of DNAPL

contamination at NPL sites, present technology transfer seminars to focus on technical as well as policy issues, and issue several technical guidance documents. The Agency will also develop Model Consent Decree language to address the technical impracticability ARAR waiver issue for DNAPLs where Records of Decision do not already address it.

FY93 ACTION ITEMS

Action	Complete
Complete study of pervasiveness of DNAPLs at NPL sites.	7/93
Complete training/policy seminars in all Regions	7/93
Issue Model Consent Decree language	7/93
Develop technical and policy guidance on characterizing DNAPL sites and clarifying technical impracticability waivers.	9/93

FY94 ACTION ITEMS

Action	Complete
Issue DNAPL strategy as part of presumptive remedy guidance for ground water (see presumptive remedy discussion)	1/94
Issue Three Fact Sheets to address (1) free phase DNAPL removal, (2) field investigation and (3) sampling issues	9/94
Evaluate progress related to technical and policy guidance implementation	9/94

Program Implications

This initiative will see direct benefits in both the RCRA Corrective Action and Superfund remedial programs, and will assist in the evaluation of thousands of additional sites not currently on the NPL. It will increase the consistency and quality of decisions regarding DNAPL contamination and better focus data collection. The training and policy workshops in the Regions will bring state-of-the-science knowledge to those making decisions at sites with DNAPLs.

However, once the presence of DNAPL is determined, some site characterizations may take longer than currently anticipated, and sites with active or proposed pump and treat systems may need to be revisited in light of new knowledge of the difficulties in remediating sites with DNAPLs using conventional methods. This initiative may result in increased pressure for technical impracticability waivers, but will also assist in making such a determination.

D. LEAD INITIATIVE

Issue

Lead is a highly toxic metal, producing a range of adverse health effects, particularly in children and fetuses. Effects include nervous and reproductive system disorders, delays in neurological and physical development, cognitive and behavioral changes and hypertension. Adverse effects have been found at lower and lower blood lead levels.

Lead is a common contaminant found at many Superfund and RCRA sites, including approximately 25 Large Area Lead Sites, which are primarily large mine tailing or smelting sites where lead is a significant contaminant. Because of the pervasive nature of this problem, there is a need for a national approach to dealing with this issue.

Approach

The Superfund program is working in tandem with EPA's overall lead strategy, the goal of which is to reduce lead exposures to the fullest extent practicable, with particular interest in reducing the risk to children to avoid high blood lead levels.

Specifically, the Agency is developing a revised Lead Directive that will provide guidance on soil lead cleanup levels at Superfund and RCRA sites. This guidance will aid risk managers in making decisions about whether remedial action is warranted and in selecting final soil lead cleanup levels that are protective of human health.

The revised Directive will take into account the interests and concerns of outside agencies such as CDC and ATSDR, as well as the activities and requirements of other parts of the Agency, such as the development of Title X of the Comprehensive Housing and Urban Development Act of 1992, which requires EPA to promulgate health-based standards for lead in soil, paint and dust. Development of the revised Directive is being coordinated closely with work on formulating a strategy for Large Area Lead Sites. Part or all of the strategy for Large Area Lead Sites may

be incorporated into the revised Directive. Results from EPA's Three City Study, a six-year study of Boston, Baltimore and Cincinnati to look at lead levels in soil and blood lead levels in children, will also contribute to the revised Directive.

FY93 ACTION ITEMS

Action	Complete
Issue draft OSWER Lead Directive, potentially incorporating part or all of the Large Area Lead Sites Directive	8/93

FY94 ACTION ITEMS

Action	Complete
Issue combined Title X (lead paint) comprehensive guidance	4/94

Program Implications

Approximately one third of NPL sites list lead as a contaminant. Furthermore, lead is a concern at many RCRA sites. Completion of the revised Directive and coordination on other agency lead efforts will reduce lead exposures to the maximum extent practicable, with particular benefit in reducing the risk to children.

National consistency would be increased by setting cleanup standards for lead, and the impact of this Directive will extend to other non-Superfund sites as well.

E. CLARIFY THE ROLE OF LAND USE IN REMEDY SELECTION

Issue

Land use is an important consideration in determining the extent of remediation appropriate for Superfund sites because it affects the types and frequency of exposure which are likely to occur. The remedies selected through the Superfund remedy selection process determine the extent to which hazardous constituents may remain at the site, and therefore ultimately impact available land and ground water use.

CERCLA does not explicitly address the issue of land use, and the NCP only addresses land use in general terms in the preamble. Some stakeholders feel there should be a more explicit assessment of future land use in the Superfund remedy selection process.

The Agency has been criticized for making land use decisions without input and involvement from local communities. In addition, EPA has been criticized for making conservative land use assumptions in selecting Superfund remedies, in part due to the frequent assumption in practice that future land use would be residential for many sites. Providing clearer direction on the land use issue would further streamline the remedial process.

Approach

The Agency will develop a policy clarifying the role of land use in the remedy selection process. Elements of this policy which EPA is considering address interaction and consultation with the public and local authorities in determining potential future land use scenarios, and clarification of the expectations concerning what land use assumptions are reasonable.

FY94 ACTION ITEMS

Action	Complete
Issue land use policy	10/93

Program Implications

By clarifying the role of land use in remedy selection, EPA could foster faster, more consistent cleanups because the land use assumptions would be more explicit and predictable. In addition, through improved interaction with local communities on this issue, EPA would enhance community participation and acceptance of our remedy selection decisions.

INITIATIVE 6: DEVELOP SOIL TRIGGER LEVELS

Issue

Contamination of soils occurs at virtually all sites requiring remediation. Levels of concern and cleanup levels have historically been set site-specifically through the risk assessment process, which takes significant time and effort. In addition, uncertainty about the hazards and the liability associated with levels of contamination have dampened property transfers.

Approach

EPA has initiated the soil trigger levels effort as an important screening tool to identify contaminant levels below which there is no concern and above which further site-specific evaluation would be warranted. When exposure pathways at a site correspond to those for which soil trigger levels have been

established (i.e., ingestion, inhalation and migration to ground water), the trigger level could also be used as a cleanup level.

EPA will develop soil trigger levels to accelerate investigation of soil contamination at sites, streamline the baseline risk assessment, and improve consistency in soil cleanups between the RCRA Corrective Action program and Superfund.

FY93 ACTION ITEMS

Action	Complete
Issue guidance presenting soil trigger levels for 30 frequently found contaminants	9/93

FY94 ACTION ITEMS

Action	Complete
Identify trigger levels for an estimated 60 additional chemicals	6/94
In second quarter, initiate demonstration projects to field test trigger levels at sites in three different phases of cleanup	9/94

Program Implications

Use of soil trigger levels will save money and time by facilitating more rapid identification of problem areas of sites and limiting the need for a full soil exposure pathway risk assessment in many cases. The levels may serve as cleanup levels for simple sites with limited exposure pathways, when pathways correspond to those for which trigger levels have been established.

This initiative will bring consistency to the Superfund and RCRA corrective action programs and may promote more voluntary cleanups by indicating a level below which the Agency would have no further concern, thereby affecting a universe of sites well beyond the NPL and RCRA hazardous waste facilities.

Some difficulty in applying these soil trigger levels may arise because they may conflict with those that have been established by States. In addition, since trigger levels were not developed entirely for use as cleanup levels, there may be

initial confusion between the use of the soil trigger levels and the continuing need at many sites to establish cleanup levels for actions.

C. Enhance Meaningful Public Involvement

INITIATIVE 7: IMPLEMENT AN ENVIRONMENTAL JUSTICE STRATEGY FOR SUPERFUND SITES

Issue

Some studies indicate that people of color and the poor may be exposed to greater health risks than the general population. These communities are often affected by multiple sources of environmental risk including industrial pollution, vehicle emissions, proximity to hazardous waste sites, and often, lead-based paint. Certain sociological factors, such as poor nutrition and limited access to health care may make residents of these communities even more susceptible to the effects of environmental hazards. Language and cultural differences and lower education levels make access to information a particular problem in multi-cultural and low income communities. Lack of information has a direct impact on the degree to which people can effectively participate in cleanup decision-making.

Approach

A number of issues have been raised with respect to environmental justice in Superfund cleanup. EPA will undertake a variety of activities to better assess potential areas of inequity and identify appropriate solutions. Using the knowledge gained, EPA will develop a proactive strategy for environmental justice at Superfund sites.

EPA will review all Superfund sites where equity issues have been raised. We will also work closely with State and tribal governments to actively identify potential hazardous waste sites in minority and low income areas. EPA will examine in depth the history and details of the issues, the ways in which the issues were handled, and successful and unsuccessful issue resolution strategies. By the end of this summer, EPA will complete a preliminary analysis of populations living near 200-300 listed Superfund sites which will link minority and site variables, and identify ethnic populations living near multiple sites. Collection of this data is a critical first step in developing a proactive strategy for dealing with Superfund equity issues.

By the end of FY93, EPA will identify demonstration sites in each Region at which environmental justice is of concern. The Regions will assess the key issues and take proactive measures to deal with them effectively which may include a multi-media team approach. By next spring, EPA will catalog "lessons learned"

from these efforts, which, along with the data and analysis described above, will form the basis of the Superfund environmental justice strategy.

Region IV has already identified a demonstration site in a very poor county in rural Georgia where the degree of exposure and risk is still unclear. The Region will devote substantial resources to educating local residents about chemical exposure and potential health effects early on in the Superfund process. They will work closely with ATSDR to assure that any required health assessment and monitoring is done in a way acceptable to the community. They will also try to identify additional public health options available to the community beyond the limits of Superfund.

EPA will foster partnerships with other Federal agencies to leverage the benefits of a Superfund cleanup with the work of other agencies such as HUD, where a Superfund site is in a community receiving a block grant, or with the Department of Labor which might offer job training funds. We will also investigate drawing in the resources of the ATSDR and the Public Health Service in areas where the public health problems extend beyond the scope of Superfund cleanup authorities.

To improve the flow and quality of useful information to culturally diverse communities, we will assign site project managers and community relations staff with appropriate language skills and cultural sensitivities. EPA will simplify instructions on applying for Technical Assistance Grants and publish them in English and Spanish this summer. We will also place special emphasis on working closely with low income and minority communities to help them through the grant process.

EPA will continue to translate documents into non-English languages and provide translators for public hearings in multi-cultural communities. We will also investigate alternatives to public hearings as potentially more effective ways to share information in multi-cultural and low-income settings. These will include informal meetings in local churches and private homes, briefings for local health officials, and use of minority media outlets, such as non-English radio stations.

We will develop a program for involving local retired community residents in community relations at sensitive Superfund sites. These "Superfund Seniors" will be valuable assets in maintaining open lines of communications between the community and EPA during the Superfund cleanup. We will also investigate the feasibility of using the proposed National Volunteer Service Corps to improve outreach to multi-cultural communities. College graduates representing broad racial and cultural diversity will act as local ombudsmen in Superfund communities in partial repayment of their college loans. This will serve to interest

young idealistic persons of color and minorities in environmental issues, fill the employment pipeline with experienced and dedicated environmental professionals, and develop a cadre of well informed citizens who care about the environment and are empowered to lead and fully participate in environmental decision-making.

Other Environmental Justice Initiatives

In addition to the initiatives, EPA is working on several other concepts designed to improve understanding of environmental and public health issues and bring more people of color into environmental careers and policy-making. This summer, EPA will pilot a teachers' institute at an historically black college, specially targeted at teachers in low income and multi-cultural communities. The curriculum is designed to improve teachers' understanding of environmental issues in general, with particular emphasis on how they can empower their communities to fully participate in waste cleanup decision-making. Evaluation of this first major national pilot will be completed this fall, and three additional institutes will be scheduled at other locations next summer.

During the winter of 1993, we will work with three communities where military bases will be closing. Base closures that will significantly affect employment in multi-cultural communities will be chosen for these demonstrations. We will assist the Department of Defense in working with these local communities to retrain DOD workers in environmental restoration skills for immediate employability on those bases, and for future opportunities with other environmental contractors.

FY93 ACTION ITEMS

Action	Complete
Review equity issues raised to date	6/93
Complete analysis of population demographics	8/93
Identify 10 Regional sites for environmental justice action with possible multi-media approach	8/93
Publish simplified TAG materials	8/93
National meeting sponsored by NACEPT to hear citizens' ideas on environmental justice	9/93

Identify opportunities for coordination at sites with HUD, DOL, PHS, etc.	9/93

FY94 ACTION ITEMS

Action	Complete
In-depth analysis of equity case studies with definition of environmental justice sites	1/94
Develop "Superfund Seniors" program	6/94
Compile "lessons learned" from Regional demonstration sites	6/94
Develop national college volunteer program	9/94
Draft equity strategy for future Superfund sites	9/94
Publish Superfund documents including TAG information in Spanish	9/94

Program Implications

These initiatives address important issues of equity and justice in the Superfund program, help assure a fully representative, culturally sensitive, and qualified environmental workforce, leverage the benefits of Superfund cleanup where our actions can be taken in conjunction with the program of other Federal agencies such as HUD, DOL, and ATSDR, and help improve the degree and quality of involvement by all communities in Superfund site solutions. These initiatives also underscore EPA's commitment to correcting environmental inequities by devoting the resources necessary to accomplish the activities described. This approach may also impact other similar Agency programs such as RCRA corrective action.

It is important to note, however, that the responsibilities for meeting these commitments will be met, for the most part, by Regional community relations coordinators and remedial project managers. These people are already seriously over-committed in the caseload that they currently carry. Experience to date has indicated that each environmental justice site, especially if a multi-media approach is planned, will require a significant resource commitment.

INITIATIVE 8: EARLY AND MORE EFFECTIVE COMMUNITY INVOLVEMENT

Issue

A critical problem in the Superfund program is the lack of support for the cleanup among the communities around Superfund sites. Citizen groups and communities are often dissatisfied with both the pace and the results of cleanup actions. Specific community relations problems include difficulties in obtaining Technical Assistance Grants (TAGs), difficulties in obtaining and interpreting health studies, and inaccessibility to both key information and site decision makers.

Public participation is critical to the effective and speedy implementation of cleanups at Superfund sites. As we look for ways to streamline and accelerate the pace of cleanups at Superfund sites, EPA must increase its efforts to achieve earlier and more effective community involvement at each site. EPA must clearly identify the expectations and needs of communities affected by hazardous waste sites and focus national attention on the importance of public participation.

Approach

The EPA has held a series of four Superfund Revitalization Public Forum meetings. These meetings have been held in a variety of locations to solicit input on improvements to the Superfund program from a wide cross section of Superfund stakeholders. Topics discussed have covered a wide range of issues including increased citizen participation. The first action item will be to review the comments received at these meetings on increasing public participation and assess the potential of each comment to improve public participation at Superfund sites. The next item will be to use the NACEPT sponsored forums to solicit additional input on earlier and more effective public involvement at Superfund sites.

In addition, the Office of Federal Facilities Enforcement will work with other Federal agencies to monitor their improvements in public participation in their cleanup programs. Specifically, OFFE will issue guidance on implementation of citizen Site-Specific Advisory Boards at Federal sites.

The Agency's effort will culminate in the development and implementation of an improved Superfund public participation plan. Issues to be addressed in the plan are what aspects of cleanups are most important to communities (i.e., speed, economic development, aesthetics, ecological restoration), how to ensure broad community representation, the development of an information availability policy, alternatives to the Technical Assistance Grant (TAGs) program, the role of the Agency for Toxic Substances

and Disease Registry (ATSDR), and the possibility of developing Site-Specific Advisory Boards.

In order to further encourage community involvement in decision-making, the Agency will identify Superfund sites where innovative community involvement approaches and techniques are being applied and will be applied. Site activities will include the standard and innovative approaches currently being used by the Regions, as well as additional innovative techniques identified in the NACEPT process.

FY93 ACTION ITEMS

Action	Complete
Conduct a review of Superfund issues raised at EPA public forums and assess potential changes.	6/93
Issue guidance on implementation of citizen Site-Specific Advisory Boards at Federal facility sites.	9/93
Status report on DOE efforts to establish 5 citizen Site-Specific Advisory Boards.	9/93
National meeting sponsored by NACEPT to hear citizens' ideas on public participation.	9/93
Identify sites/projects where other innovative techniques will be initiated.	9/93

FY94 ACTION ITEMS

Action	Complete
Prepare and implement new Superfund public participation plan.	12/93
At the same time, assess impact to other programs, particularly RCRA corrective action.	3/94
Continued work with DOE and DOD to begin Site-Specific Advisory Boards.	9/94

Program Implications

Increased efforts to achieve earlier and more effective public involvement will enhance community buy-in and increase equity and fairness. In the long term, effective community involvement will speed-up the Superfund process by involving the community early in the process and resolving possible conflicts. It will also increase the Agency's credibility with communities around Superfund sites. Increases on the emphasis of public involvement will add to the workload and require additional FTEs or a reduction in emphasis in other areas.

D. Enhance State Role

INITIATIVE 9: "STATE DEFERRAL" OF CERTAIN SITE CATEGORIES

Issue

EPA and the States have long agreed that the universe of hazardous substance sites potentially requiring cleanup was larger than either level of government could address alone in the near future. At current budget levels, EPA will be unable to address the environmental threats at some sites for years, leaving potentially responsible parties (PRPs) in doubt about their CERCLA liability and local communities at risk from some unremediated sites and without the productive use of the affected land. This delay, and the attendant uncertainty, led responsible parties to choose between: cleaning up their sites without Federal involvement (at the risk of having EPA propose the site anyway for the National Priorities List (NPL) and require additional response action at the site); or, waiting for EPA to assess the site for listing on the NPL, with no assurance whether or when that might happen.

The current and potential universe of CERCLA sites include: (1) NPL sites, (2) NPL-caliber sites, i.e., sites that have a high probability (based on initial assessments) of achieving a Hazardous Ranking System (HRS) score of at least 28.5, (3) removal actions, i.e., high-risk sites requiring a short term Federal response, and (4) non-NPL-caliber sites that do not require a Federal removal action. In addition, many hazardous substance sites and activities are addressed by other authorities, such as RCRA, TSCA and State programs. The "State Deferral" initiative focuses on category #2 (NPL-caliber sites) and proposes a negotiated division of responsibility between States and EPA for NPL-caliber sites that have not yet been proposed for listing. This initiative would not alter the current EPA programs for categories #1 and #3--sites that have already been listed on the NPL and sites addressed under EPA's removal program, nor would it alter activities conducted under non-CERCLA authorities (EPA and State authorities). Note that a

significant number of States (about 15) have voluntary cleanup programs to address category #4, non-NPL-caliber sites that do not require a Federal removal action. EPA encourages the development of these State voluntary cleanup programs.

Approach

EPA will encourage earlier environmental cleanup by openly enlisting the States' participation in a complementary cleanup program. Over the past several years, many States have been developing increasingly sophisticated and experienced programs. EPA has helped the States develop their programs by providing money and technical assistance, under the Core Program begun in 1987, as well as under RCRA grants. In addition, many States have (or are developing) voluntary cleanup programs for non-NPL-caliber sites, and many have been authorized to implement RCRA corrective action programs. As a result, several States are already cleaning up significant numbers of non-NPL sites. By expanding the State role to address NPL-caliber sites, EPA will take fuller advantage of the combined strength of the Federal program and of the State capabilities we have helped develop.

State deferral will encourage qualified, interested States to address under State laws, the large number of sites now in EPA's NPL listing queue, thereby accelerating cleanup, minimizing the risk of duplicative State/Federal efforts, and offering PRPs a measure of confidence that only one agency will address the site. EPA and individual States will openly negotiate a division of responsibility for NPL-caliber sites, to determine which agency would address any given site. The National Contingency Plan (NCP) requires EPA to hold annual planning discussions with the States to assign "lead Agency" roles for NPL sites. Under this approach, EPA-State discussions will be enlarged to include NPL-caliber sites.

These "deferrals" will stipulate that States have the initial responsibility to cleanup certain NPL-caliber sites. These would be low- or medium-priority NPL-caliber sites, i.e., sites that EPA would not be able to address for several years. While EPA will defer these sites from NPL listing as long as satisfactory progress is made, EPA will retain the incentive of NPL listing as leverage to motivate reluctant responsible parties to clean up under State supervision. EPA will consider concerns raised by the public during this process.

EPA will continue to focus Federal resources on (a) removal activities at high-risk sites requiring a short-term response, (b) early actions at high-priority NPL-caliber sites (see also Initiative #10, Superfund Accelerated Cleanup Model), and (c) remedial activity for sites on the NPL. The NPL will list sites that meet NPL criteria and that a State is unwilling or unable to

clean up. EPA will not propose sites for the NPL that are being satisfactorily cleaned up under State "deferrals."

States might implement their expanded cleanup programs using State trust funds to pay for cleanups, State enforcement authorities, and/or voluntary cleanups performed by PRPs. EPA will implement this initiative by publishing a policy describing the kinds of sites States may address, the capabilities interested States will have to demonstrate, the conditions and circumstances under which EPA will enter into "deferral" with a State, and answering essential questions, such as:

- Generally what types of sites will be State-lead?
- What cleanup process or standards will EPA want the State to adopt?
- What kind of oversight role will EPA have for the State program generally, or for the State's site-by-site decisions?
- What financial and other assistance will EPA offer to States wanting to take on this partnership?
- How can State "deferrals" best be coordinated with the existing policy for deferring to RCRA corrective action authorities?

The Agency has identified several States to pilot an expanded State role. In these demonstration pilots, the State will take the lead for selected low- and medium-priority NPL-caliber sites that EPA would not be able to propose for the NPL or otherwise address in the near term. These would be sites for which the State has identified viable PRPs. In these pilots, EPA will provide oversight for the State program to ensure that the overall cleanup process and standards for NPL-caliber sites are consistent with CERCLA and NCP standards. These pilots will also provide an opportunity to define an appropriate, targeted level of EPA oversight for site-specific decisions.

FY93 ACTION ITEMS

Action	Complete
Establish HQ/Regional Work Group to address key implementation questions, and assess early State-lead experiences	7/93
Identify source of funds for State program support (not remedial action funds) and	9/93

initiate deferral pilots with Regions III (MD), VI (NM) and VII (KS)

FY94 ACTION ITEMS

Action	Complete
Identify additional States which might be willing to enter into deferrals with EPA	12/93
Monitor ongoing pilot States to identify issues	Ongoing
Issue interim guidance setting criteria and process, and inviting States to enter into deferrals with EPA	3/94

Program Implications

EPA has finished PA/SI work on 6,000 sites which now await further decisions towards potential NPL proposal, with an additional 3,000 or so sites approaching this status, yet program resources are likely to allow for preparation of HRS scoring packages on only approximately 100 sites per year. While we have historically proposed for the NPL only a small proportion of the sites we review, all 9,000 of these sites can only remain clouded by uncertainty until EPA can act on them. The great majority of these could potentially be addressed sooner through State deferral with willing, capable States, while ensuring that (1) EPA and the States do not duplicate each other's efforts; (2) EPA's limited resources are focused on the remaining sites; and (3) States are able to credibly manage and implement cleanups so as to provide a measure of confidence to the PRPs and communities that EPA will not reverse the State's cleanup determinations at some unforeseeable future time.

II. CONTINUING MANAGEMENT AND ENFORCEMENT INITIATIVES

Over the past several years, EPA has initiated and implemented a series of reforms to improve the effectiveness, efficiency and equity in the Superfund program. These changes have had a beneficial impact and are expected to continue bringing improvements to the program.

This section of the report will focus on several of the major changes currently undergoing implementation. Included in the discussion are: (10) the Superfund Accelerated Cleanup Model, (11) construction completions; (12) improvements to contract management; (13) "Enforcement First"; (14) accelerating cleanup at base closures. Also discussed are: (15) promoting the use of innovative technologies; (16) compliance monitoring; and (17) improving the effectiveness of cost recovery. The following discussions also include action items and program implications of these continuing initiatives.

INITIATIVE 10: SUPERFUND ACCELERATED CLEANUP MODEL (SACM)

Issue

Superfund was first designed with the expectation that a small number of contaminated sites existed and those would receive total cleanup to pristine conditions. Experience has brought us to a new environmental equilibrium. The Agency has identified thousands of potential sites in the Superfund universe. We now recognize that the Agency must balance cleanup resources with the need to tackle worst pollution sources first and reduce risk to people and the environment. This, along with the desire to quickly reduce risk, is the intent of SACM.

Approach

SACM focuses Superfund on the very substantial risk reduction that is now being achieved and still achievable by using all elements of the Superfund program to expedite response. No longer will Superfund's success be measured solely by how many sites are eliminated from the National Priorities List (NPL). SACM will achieve appropriate cleanup at as many sites as possible, in order to reduce risk to people and the environment posed by hazardous waste. SACM is currently being implemented in the Regions through pilots and Regional Decision Teams have been formed in each Region. Preliminary guidance on implementation has been issued and we are applying SACM principles to all phases of work to ensure a smooth transition to full implementation in Fiscal Year 1994.

FY93 ACTION ITEMS

Action	Complete
Issue detailed operational guidance for full implementation of SACM	9/93
Evaluate results of pilot projects	9/93

FY94 ACTION ITEMS

Action	Complete
Begin full implementation of SACM in each Region	Ongoing

Program Implications

The Superfund program expects that full implementation will cut years off the process by eliminating delays and rework, combining separate, yet similar, stages of site assessment. We also expect that SACM will improve consistency, reduce costs and increase the speed with which hazardous waste sites are remediated by developing presumptive remedies which use cleanup techniques that have been effective in the past at similar sites in the future. (SACM will also be married with other streamlining efforts as they are adopted, such as the decision to use soil trigger levels). Regions are finding that the resource implications of SACM implementation include the need to concentrate resources at the front end of the process. This will create a minor impact on the traditional remedial process in FY94. However, use of SACM will provide results the public will value by focusing on the worst sites first to quickly reduce short-term risks through early actions and to restore the environment through long-term actions.

INITIATIVE 11: CONSTRUCTION COMPLETIONS

Issue

In the early years of Superfund, the Agency focused on getting sites into the cleanup "pipeline." More recently, the Agency's priority at Superfund sites was to select remedies and secure private-party implementation of the remedies. Now that the program has matured, attention has moved to sites near the end of the "pipeline," and completing remedy construction has become an important measure for the success of the program. As a consequence, the Agency has intensified its efforts to increase the number and rate of completions.

Approach

In FY92, the Agency established national targets to more than double the number of National Priorities List (NPL) construction completions by the end of FY92 from 63 to 130 and to more than triple completions by the end of FY93 to 200. To maintain this pace, EPA completes construction at NPL sites at a rate of more than one a week.

The Agency initiated several activities to ensure reaching the national NPL construction completion targets. A collaborative approach was undertaken where the Regions and Headquarters work jointly to achieve the national targets without holding each Region responsible for a specific number of completions. The elements of the collaborative approach include: developing a comprehensive list of all potential construction completion candidates; tracking and communicating the status of each of these sites through the Lead Region for Superfund (currently Region 8); holding monthly conference calls with the Regional Waste Management Division Directors; streamlining the requirements for completions; and clarifying the completion procedures for EPA project managers.

Currently, NPL construction completions total 165 sites and the Agency expects to meet the FY93 goal of 200 sites. Further refinements to the construction completion process will occur during FY93.

FY93 ACTION ITEMS

Action	Complete
Issue "Construction Completion Care Package" which compiles all relevant guidance and policy documents for Regional project managers	6/93
Issue guidance clarifying declaration of construction completion at soil vapor extraction and certain bioremediation sites.	7/93
Complete construction at 200th NPL site	9/93
Conduct monthly conference calls with Regions	Ongoing

Program Implications

As a result of the national attention on construction completions, Superfund achieved a total of 149 completions, significantly exceeding the FY92 goal of 130 completions. The focus on construction completions has had an impact on Regional cleanup priorities. In order to reach the national targets, the Regions emphasized work on potential construction completions, resulting in a shift of attention from sites in other parts of the pipeline. The future rate of construction completions will inevitably be affected by any changes to Superfund's cleanup priorities.

INITIATIVE 12: CONTRACTS MANAGEMENT

Issue

From the inception of the Superfund program, the majority of work has been contracted out. Superfund contracts currently constitute the majority of all EPA contracts (by dollar volume). No other program in EPA had been structured to manage large, intricate contracts for the extremely complex work of handling, analyzing, studying and cleaning up hazardous waste. As the Superfund program grew, the amount of work contracted also grew and the management problems attendant with this growth also multiplied. By 1989, it was apparent that Superfund contracting required a restructuring and problems brought to light in 1991 in the management of the Alternative Remedial Contracts Strategy (ARCS) contracts and the Contract Laboratory Program (CLP) demanded reform.

Approach

The centralized approach to contract management which had served the Superfund program in the past became archaic and an impediment to most field activities and in late 1989, the program developed a Superfund Long-Term Contracting Strategy which is restructuring all new Superfund contracts over the next decade according to function (e.g., architectural/engineering, rapid cleanup response) rather than by program area (e.g., removal, remedial, etc.). This strategy will have all new field contracts managed by the Regional offices rather than centrally managed by Headquarters, improving the efficiency and direct management of the contractors. In addition, the management problems brought to light under the ARCS and CLP contracts led to major reforms in the management controls of Superfund contracts. In the case of ARCS, 28 of the 32 recommendations made by the Task Force to improve ARCS management have been adopted. They encompass items such as the development of independent government cost estimates for all work assignments in excess of $25,000, limiting expenditures for contract management, reforms to the award fee

process and formation of Regional Management Teams to oversee contract management in the Regions. Similar reforms have occurred in the management of the CLP.

FY93 ACTION ITEMS

Action	Complete
Issue solicitation for Response Action Contracts	6/93
Issue Remedial Independent Government Cost Estimation Guidance	6/93
Issue Remedial Contracts Cost Management Manual	8/93
START Procurement Package to OAM	8/93

FY94 ACTION ITEMS

Action	Complete
Issue START contract solicitation	10/93
Award Enforcement Support Contracts (1 contract per Region)	10/93-2/94
Issue RESAT contract solicitation	8/94
Award START Contracts	9/94

Program Implications

Superfund has taken concrete steps to improve contract management and assuage many of the criticisms engendered by past practices. A limitation to additional improvement of the Regional management of contracts is the lack of contracting officer resources in the Regions. Resources to develop guidance and improve oversight have already been invested by the program and need to continue to see the benefits of cost efficiency and effective contract management. The Superfund Long-Term Contracting Strategy will see smaller contracts, managed by the personnel in the offices where the work is conducted. In addition, the opportunity for smaller firms to compete for many of these contracts are increased due to the smaller size and Regional location, rather than large national or other geographic coverage requirements. Superfund is beginning to see the benefits of investing in good management practices by cost savings in areas such as program management and in improved performance by our contractors.

INITIATIVE 13: ENFORCEMENT FIRST

Issue

In the early days of the Superfund program, EPA's efforts were concentrated on initiating the study phase of Superfund. As the program developed, the ability to identify responsible parties grew. Rather than expending fund money to finance study and cleanup of sites, it became clear that the burden should be shifted to the responsible parties under Agency oversight.

Approach

The 90-Day Study of Superfund, completed in 1989, made a number of recommendations to strengthen enforcement and increase private party response. These recommendations involved increased use of enforcement and settlement authorities, better integration of enforcement and Fund-financed cleanup activities, improved case management and case support, stronger responsible party oversight and cost recovery, and better intergovernmental coordination.

Based on these recommendations, the Administrator shifted the emphasis of the program to "Enforcement First" and added resources to the enforcement program. As a result, the portion of remedial actions conducted by PRPs increased from 30 percent in FY87 to 70 percent in FY92. During that same time period, the value of CERCLA settlements increased from less than half a billion a year to almost $1.5 billion. EPA will continue to evaluate Regional enforcement performance on a variety of grounds, including RD/RA negotiation completions, the number of civil judicial referrals of RD/RA settlements and cost recovery actions, unilateral orders in compliance, the value of response actions, and the number of enforcement actions to compel compliance with existing orders and decrees.

Program Implications

The continued importance of enforcement and maximization of PRP involvement in remedial and removal activities was re-emphasized by the Acting Assistant Administrator for the Office of Solid Waste and Emergency Response and the Office of Enforcement in a memo dated February 2, 1993. More recently, the Administrator has reinforced the "polluter pays" principle in testimony before Congress and reaffirmed EPA's commitment to enforcement first.

As EPA tests out new ways to increase enforcement fairness, reduce transaction costs, and accelerate cleanups, the Agency will continue to use its enforcement authorities to encourage PRPs to conduct investigations and cleanups. EPA believes the

initiatives outlined in this report are consistent with the "enforcement first" approach and EPA's commitment to the principle of site-specific polluter liability.

INITIATIVE 14: ACCELERATE CLEANUP AT BASE CLOSURES

Issue

The cleanup challenge at Federal facilities is heightened at closing or realigning installations because of pressure for expeditious transfer of property to non-Federal interests for economic development. State and local communities are understandably concerned about the impact of base closure and realignment on their economies. The timely reutilization of these installations is essential if the Federal government is to minimize the economic dislocations to these communities. There are two facets to this problem: identifying areas of closing bases that are not contaminated or are otherwise suitable for transfer, and identifying ways to accelerate cleanup on those areas of closing bases that are contaminated.

In October, 1992 Congress passed the Community Environmental Response Facilitation Act (CERFA), which directs the Department of Defense (DOD) to conduct a review of its real property on closing bases to identify parcels that are uncontaminated. EPA must concur in the identification for property on the NPL. CERFA also amended CERCLA Section 120(h)(3) to allow for property transfers by deed at the point when cleanup remedies are constructed, installed and demonstrated to EPA to be properly and successfully operational. This provision was not limited to closing or realigning bases on the NPL.

Approach

There are three major efforts underway by DOD and EPA to expedite land transfers and accelerate cleanups at closing bases and other Federal installations. DOD has the lead to develop guidances on base closures, and EPA is developing policies to address future land use at Federal Facilities, and to apply the Superfund Accelerated Cleanup Model (SACM), as appropriate.

With respect to base closures, DOD currently has the lead on two guidances to expedite the transfer of property by deed or by lease. These are the guidances on "Finding of Suitability to Transfer" (FOST) and "Finding of Suitability to Lease" (FOSL). These guidances will define a process to identify parcels of land suitable to transfer or lease (criteria will differ somewhat); ensure that transfers or leases do not interfere with cleanup actions being conducted under Federal Facility Agreements; and assure compliance with applicable environmental requirements.

For both guidances, DOD and EPA are working towards a final policy deadline of September 30, 1993. EPA is working to facilitate this process, without compromising the substance of environmental protection. This is an opportunity for all involved parties to work together cooperatively and defuse the conflicts that are often seen between economic development and environmental protection.

EPA will develop guidances for Federal facilities in two key areas, to facilitate cleanup of closing bases (as well as other Federal installations) as follows:

(i) Future Land Use at Federal Facilities

EPA and other Federal agencies have debated various means to include future land use assumptions within the risk assessment process. In practice, EPA has often taken a conservative approach to land use (i.e., residential) when making remedy decisions. Other Federal agencies have long argued that many of their contaminated areas will not have public access or residential use and will have restricted access. In the case of closing bases, future land use is frequently known early in the RI/FS process. The NCP and relevant EPA guidances have some flexibility to allow for reasonable assumptions about future land use to be made.

Early resolution of this matter is especially critical where future land use and redevelopment will minimize the economic impact of base closings. EPA will develop an issue paper on land-use options at Federal facilities and possibly a subsequent land use policy particular to Federal facilities. This will be coordinated with the land use directive to be issued under Initiative Number 5.

(ii) Accelerated Cleanup Policy

Since the announcement last summer of the Superfund Accelerated Cleanup Model (SACM), other Federal agencies have been requesting EPA guidance on the scope and limits of accelerated cleanup efforts at their installations. Although certain components of SACM are readily transferable, CERCLA Section 120 and Executive Order 12580 limit EPA's role at NPL and non-NPL sites. EPA is now drafting a policy which endorses the application of SACM along with installation-wide joint planning, identification of cleanup standards based on land use; concurrent review of documents; intensive in-person review of documents and resolution of issues; overlapping phases of the CERCLA process; identification and implementation of interim response actions and removal actions; reduced levels of oversight/less document review; utilization of innovative technologies; and improvements of contracting procedures. In addition, because of EPA resource limitations which may delay site clean up, EPA is considering

deferring oversight responsibility to the States. EPA is already working with other Federal agencies to identify demonstration projects/sites for these approaches.

FY93 ACTION ITEMS

Action	Complete
DOD, with EPA input, issue final guidance for policy on Finding of Suitability to Transfer (FOST) clean parcels	9/93
DOD, with EPA input, issue final guidance for policy on Finding of Suitability to Lease (FOSL) clean parcels	9/93

NOTE: FOST and FOSL policies and guidance are DOD deliverables

Issue policy on Accelerated Cleanup at Federal facilities	9/93
Identify Federal facility sites for accelerated cleanup demonstration projects	9/93
Monitor quarterly progress of demonstration projects	Ongoing
Develop issue paper on land use at Federal facilities	10/93

Program Implications

The FOST and FOSL policies will provide for the timely identification of properties for transfer by deed or lease. Without the policies, EPA could become a bottleneck in the transfer process. The accelerated cleanup guidance and the Federal facility land use policy will clarify policy issues and will not delay property transfers. Expedited cleanup will result in faster and more cleanups, and possibly cost savings in the long term.

INITIATIVE 15: PROMOTE USE OF INNOVATIVE TECHNOLOGY

A. Promote Use of Innovative Technology at Orphan Sites and Federal Facilities through Accelerating Public/Private Partnership

Issue

Technology development and evaluation are hampered by a shortage of facilities where larger-scale testing can be conducted using actual hazardous waste. "Orphan" sites and Federal facilities are excellent candidates for larger-scale testing. PRP-lead sites may also be suitable for such purposes under appropriate circumstances.

Approach

In FY93, the Agency will mobilize an additional 4 Federal facilities with up to 28 private parties where larger-scale testing of innovative technologies can be conducted. After selecting the candidates and establishing evaluation criteria, the Agency will initiate these demonstration projects.

The Agency will also be continuing efforts to work with DOD and DOE to develop public/private technology initiatives.

FY93 ACTION ITEMS

Action	Complete
Continue DOD McClellan Partnership	Ongoing
Develop Policy re: Fed Facilities as Test Centers	8/93
Mobilize Private Firms to Participate in Additional Partnerships at a Conference with Deputy Administrator and Senior EPA Officials	9/93
Conclude Agreement with DOE on Pinellas facility	9/93
Develop Policy re: use of innovative technology in agreements, orders and IAGs	9/93

FY94 ACTION ITEMS

Action	Complete
Develop Evaluation Methodology	10/93
Develop Procurement Package(s)	Ongoing
Initiate demonstration projects	Ongoing
Prepare for and Conduct Conference on Barriers to Use of Innovative Technology	1/94

Program Implications

Activity in this area will accelerate the development of promising innovative technologies. The pilot projects will provide increased confidence that the tested technologies will work at larger scales and through a range of operating conditions. As a result, the pilot projects will provide information useful in remedy selection decisions (including cost data) at other sites.

The testing of innovative technologies may cause cleanup delays and increased costs at the pilot sites. Successful implementation of partnerships will be affected by availability of resources for evaluation.

B. Assess Adequacy of Innovative Technology Data Bases

Issue

Information on remedial technology performance is currently limited. Whether treatability study information or the results of full-scale remediation efforts, it is essential that this information be collected and made readily available through data bases and/or other appropriate mechanisms to Federal and State site-specific decision-makers and program managers, and to other interested parties.

Approach

Technology performance and cost information will be acquired from EPA, other Federal agencies such as DOD and DOE, state lead cleanups, and private sector activities. EPA currently has data bases which contain some information on remediation technology performance including the Alternative Treatment Technology

Information Clearinghouse (ATTIC) and the Vendor Information System of Innovative Treatment Technologies (VISITT). EPA is in the process of developing the Decision Document Data Base (3-DB) to address many of the information management shortcomings which have been identified by internal and external studies.

The Agency will undertake the following activities to implement this option:

1) Assess existing mechanisms for acquiring information with particular focus on EPA data and information from other Federal agencies. Merge EPA efforts with those of the Air Force to collect cost and performance data. Investigate mechanisms to improve acquisition of information from State and private sector activities.

2) Assess existing and proposed data bases - Areas to be investigated include currency and utility of information and ease of access and use.

3) Institute improvements as necessary in information acquisition and dissemination mechanisms.

FY93 ACTION ITEMS

Action	Complete
Ensure that treatment technology information is provided to repositories	9/93

FY94 ACTION ITEMS

Action	Complete
Assess existing and potential technology data bases	1/94
Upgrade data bases if necessary	8/94

Program Implications

Comprehensive, readily accessible treatment technology information improves timeliness and consistency of remedy-selection. It also facilitates implementation of initiatives such as presumptive remedies. Lastly, it reduces risk associated with emerging technologies. Reviewing and upgrading the data bases will require a commitment of new resources to this area.

INITIATIVE 16: COMPLIANCE MONITORING

Issue

We have been very successful in our efforts to get PRPs to clean-up sites. In FY92, PRPs signed consent agreements (or were in compliance with unilateral orders) totaling approximately $1.5 billion. The total value of PRP obligations is now $7.5 billion. As the number and total dollar value of PRP commitments increase, monitoring PRP compliance with these agreements and orders becomes increasingly important. Fully 70% of all new remedies are enforcement-lead, and this level is expected to continue. An aggressive program of compliance monitoring and enforcement will ensure that enforcement-lead cleanups progress in a timely fashion.

In FY92, OSWER defined national milestones for the terms and conditions of compliance with CERCLA orders and decrees. The Regions are free to develop their own procedures for compliance monitoring and enforcement so long as these procedures provide for clearly defined roles and responsibilities for program and ORC staff; routine documentation of non-compliance; documentation of recommended responses to non-compliance; management review and concurrence with recommended responses to non-compliance; and notification of Regional financial management staff when a stipulated penalty assessment is made. OSWER has not mandated any particular compliance monitoring arrangement and intends to continue with this approach so long as significant Regional progress continues to be made in implementing compliance monitoring programs.

Approach

OSWER is currently working with the Regions to develop Regional compliance monitoring and enforcement procedures. Draft procedures are expected to be substantially completed by September 1993. Concurrent with the development of these procedures, Regional program offices will install enhanced compliance tracking systems based on the FY92 terms and conditions milestones, and will begin entering compliance data into these systems for FY92 and FY93 orders and decrees.

During FY94, terms and conditions data for all remaining orders and decrees will be entered into compliance tracking systems, and Regional compliance monitoring and enforcement procedures will be revised and finalized. During the second quarter of FY94, OSWER will work with the Regions to develop reporting and success measures for compliance monitoring and enforcement. In addition, Regional compliance monitoring and enforcement procedures should be revised and finalized by June 1994.

FY93 ACTION ITEMS

Action	Complete
Develop Draft Regional Procedures	9/93

FY94 ACTION ITEMS

Action	
Define Reporting Measures	3/94
Begin Entering FY92 and FY93 Order and Decree Data	3/94
Finalize Regional Procedures	6/94
Enter pre-FY92 Order and Decree Data	9/94

Program Implications

Assuring compliance with CERCLA orders and decrees will send a strong message to the PRP community that the Agency is aggressively monitoring compliance with its consent agreements. By having procedures in place in all ten Regions, the Agency will also be signaling to the PRP community that it intends to enforce against non-compliers. As a result, PRP cleanups should be conducted in a more timely fashion. Implementation of a compliance monitoring program will, however, take a significant investment in time and resources to extract and enter compliance data for the approximately 1300 orders and decrees that are currently active.

INITIATIVE 17: IMPROVE THE EFFECTIVENESS OF COST RECOVERY

There has been criticism that EPA has not been actively recovering federal money spent in the Superfund program and is in danger of missing its opportunities in certain cases due to the statute of limitations. To address these concerns, EPA is currently undertaking several initiatives including: integrating financial and Superfund information systems, and promulgating the cost recovery rule.

A. IMPROVE INTERACTION BETWEEN THE FINANCIAL AND SUPERFUND INFORMATION SYSTEMS

Issue

The information systems used by the Financial Management Division (FMD) and by Superfund record different information on Superfund sites. The Superfund information system does not

receive current Agency obligation and disbursement information from the FMD financial system. Because of this, the cost data maintained by FMD and the obligations and planning data maintained by Superfund are sometimes difficult to match. There has not been a system-wide reconciliation between the two systems, and as a result, it is very difficult to combine data from the two systems to obtain a full report for cost recovery activities.

Approach

Establish automated reports that effectively merge data from the two systems. Resolve certain issues related to comparability of identifiers and general access to data.

FY93 ACTION ITEMS

Action Items	Complete
Develop an SOL report that uses CERCLIS planning data, CERCLIS obligations and IFMS actual past costs to present a complete picture of both past and future SOLs, and their respective past costs	7/93
Develop a general cost recovery report that uses CERCLIS planning data, CERCLIS obligations and IFMS actual past costs to present a complete picture of recoverable past costs and the status of all efforts to address those costs.	9/93

FY94 ACTION ITEMS

Action Items	Complete
Engage FMD in developing permanent links between CERCLIS and IFMS	9/94

Program Implications

Improving data systems will allow better matching of site activity and actual costs and matching of settlements and receipt of settlement funds. In this way, the program can base case targeting on actual past cost data rather than planned obligations, and substantially reduce staff time devoted to data verification.

B. COST RECOVERY RULE

Issue

Several operational issues concerning cost recovery were not fully defined in CERCLA or the NCP. These issues include: identifying the types of costs included in indirect cost rates and the methodology used to calculate them; clarifying the types of documentation that the government will provide as part of a cost recovery case; and interpreting how CERCLA's Statute of Limitations (SOL) is to be applied to sites with multiple response actions. As a result, the cost recovery program risks considerable transaction costs from case-by-case disputes on these points. Promulgation of a rule clarifying these matters should, in the long term, reduce transaction costs.

Approach

The proposed rule has been published in the Federal Register and the public comment period has closed. Consideration of comments received has been a collaborative effort involving a number of EPA offices and DOJ. Work continues to review public comments and incorporate revisions as appropriate.

FY93 ACTION ITEMS

Action Items	Complete
Continue reviewing comments and drafting revisions to proposed rule, as appropriate	Ongoing

FY94 ACTION ITEMS

Action Items	Complete
Decide whether to promulgate Cost Recovery Rule	12/93

Program Implications

The final Cost Recovery Rule will address several important issues, including cost documentation requirements and how the statute of limitations applies at sites with multiple response actions. While most provisions could be implemented without the rule, each case would, in the absence of the rule, still be subject to case-by-case challenges.

Agency Consolidation

"Mission Impossible"

Tony Grigsby

Anthony C. Grigsby
Introduction

Anthony Grigsby is the Executive Director of the Texas Water Commission. He is an attorney and received his law degree with honors from the University of Texas School of Law in 1985.

Tony also has a Masters of Public Affairs degree from the LBJ School of Public Affairs at the University of Texas which he received in 1979. He earned his bachelor of science degree from Michigan State University, where he graduated with high honors and Phi Beta Kappa in 1975.

Tony worked for nine years as a legislative aide at the State Capitol. He left the Capitol in 1986 to become an attorney with the law firm Jones, Day, Reavis & Pogue, where for six years he was a lobbyist and an administrative lawyer.

Tony joined the Texas Water Commission in January 1992 as the Assistant General Counsel. His duties included advising the Commissioners about legislation and contested cases.

On February 8, 1993, Tony was appointed to be the Assistant Executive Director of the agency and on April 15 of this year he was named Executive Director after Jesús Garza announced he was taking a position as the Assistant Manager of the City of Austin. Tony's new position charges him with managing a 1600 employee agency that administers environmental laws affecting water and waste management. He also leads a Consolidation Management Team which is planning the merger of the Texas Water Commission and the Texas Air Control Board to become the Texas Natural Resource Conservation Commission.

multimedia inspection + enforcement

Subtitle D - Regulation of Municipal Waste Landfills

"Green Acres"

Ron Bond

John Turner

SUBTITLE D REGULATION IN TEXAS

Presented by:
Ronald L. Bond, P.E., Director
Municipal Solid Waste Division
Texas Water Commission

TO

Fifth Annual
Environmental Superconference
August 5-6, 1993
Austin, Texas



RONALD L. BOND, P.E.

Ron Bond received his Bachelor's Degree in Civil Engineering from Mississippi State University, and a Master's Degree in Interdisciplinary Studies from Southwest Texas State University. He has also completed graduate work in environmental engineering at the University of Tennessee at Knoxville. He is a registered professional engineer in Texas, Florida, and Tennessee. He has been the Director of the Municipal Solid Waste Division of the Texas Water Commission since July of 1992. Prior to that, he was an Assistant Division Director at the Texas Water Development Board. His background also includes over 25 years experience in private sector employment, and working for municipal governments in a variety of positions including Utilities Director, City Engineer, and Public Works Director. He is a former officer in the Civil Engineer Corps of the United States Navy.

TABLE OF CONTENTS

INTRODUCTION 2

HISTORY OF SUBTITLE D 2

PHILOSOPHY OF IMPLEMENTATION 2

STATE OF TEXAS IMPLEMENTATION 3
- A. PUBLIC INPUT 3
- B. IMPLEMENTATION POLICY IN TEXAS 4
- C. THE RULES DRAFTING PROCESS 4
- D. ORGANIZATION OF THE NEW RULES 5
- E. RULES ADOPTION 7

REMAINING ISSUES 8

LATEST DEVELOPMENTS 9

TEXAS WATER COMMISSION MUNICIPAL SOLID WASTE DIVISION ACTION PLAN FOR FISCAL YEAR 1994 11
- A. REVIEW OF THE NEW RULES FOR INCONSISTENCIES AND TECHNICAL ERRORS 11
- B. THE ARID LANDFILL EXEMPTION PROCESS 11
- C. ALTERNATIVE DESIGNS 11
- D. ELIMINATING THE BACKLOG OF PERMITS 12

SUMMARY 12

ATTACHMENT 1 - SUBTITLE D/TWC RULE CROSS-REFERENCE 13

SUBTITLE D REGULATION IN TEXAS

Presented by:
Ronald L. Bond, P.E., Director
Municipal Solid Waste Division, Texas Water Commission

TO

Fifth Annual Environmental Superconference
August 5-6, 1993
Austin, Texas

I. INTRODUCTION

It was fascinating and amusing to note that the individual presentations included in this conference have been subtitled with the names of television programs. It was also gratifying to note that this particular presentation had been subtitled "Green Acres", for one of the most popular situation comedies of the 1960's. I am unsure as to whether or not this title is meant to reflect upon the beauty of a properly completed landfill under the Subtitle D regulations, or that the implementation of Subtitle D has been a comedy of errors. We will assume the former, since I believe that a properly constructed Subtitle D landfill definitely could deserve that title.

II. HISTORY OF SUBTITLE D

As most of you know, Subtitle D was born out of the Resource Conservation and Recovery Act of 1976, Section 1008, which directed the Environmental Protection Agency (EPA) to publish guidelines for solid waste management, including criteria that defines solid waste management practices which are prohibited. Section 4010, which was added by the Hazardous and Solid Waste Amendments of 1984, directs EPA to revise criteria for facilities that may receive hazardous household waste or small quantity generator hazardous waste. In addition, Section 405 of the Clean Water Act provides authority for some of the Subtitle D regulations relating to landfills in which sewage sludge is disposed.

On October 9, 1991, EPA finally got around to issuing the final rule which now constitutes the Subtitle D regulations, and which are included under the Code of Federal Regulations, 40 CFR parts 257 and 258. Although the rules were finally published in October, 1991, the first effective date for the regulations is October 9, 1993, thus allowing two years for states to develop programs, and the regulated community to gear up to meet the new regulations.

III. PHILOSOPHY OF IMPLEMENTATION

Subtitle D regulations are similar to some other Federal programs, but they differ in a number of respects. The intention of the program is that the states will be the primary implementors of the regulations, although in the absence of state action, the rules are self-implementing in all of the states. They further provide for citizen suits to be

brought to enforce the provisions of the act. EPA has minimal capability for enforcing the regulations, and thus will depend upon either states or citizens to require compliance. The regulations also differentiate between states in which EPA has approved solid waste programs, and those which do not have this approval. Landfill operators in those states which have approved programs have access to much greater flexibility in meeting the standards, than those in unapproved states. The fact that a landfill is under state permitting and enforcement programs will also give substantial protections from citizen suits.

IV. STATE OF TEXAS IMPLEMENTATION

Senate Bill 2, First Called Session, 72nd Legislature, transferred all the powers, duties, rights and obligations of the Texas Department of Health pertaining to the disposal of solid waste to the Texas Water Commission, effective March 1, 1992. The Municipal Solid Waste rules were administratively transferred from Title 25, Part 1, Texas Department of Health to Title 31, Part 9, Texas Water Commission on March 3, 1992.

A. PUBLIC INPUT

After EPA issued final rules implementing Subtitle D of the Federal Resource Conservation and Recovery Act (RCRA), relating to Municipal Solid Waste Landfills (MSWLF), a committee within the Texas Water Commission (TWC), in cooperation with the Regulatory Oversight Committee of the Municipal Solid Waste Management and Resource Recovery Advisory Council, developed a concept paper which was published June 1, 1992. The concept paper contained 20 proposed revisions to existing State of Texas Municipal Solid Waste (MSW) rules proposed for implementation early in the summer of 1992, along with 17 proposed revisions to MSW rules implementing Subtitle D, later in the summer. Public meetings to receive comments on the concept paper were held in 11 cities across the state. Written comments were received until July 15, 1992.

As a result of the public comment process, 1,341 individual comments on the rules were received, synopsized and categorized from 180 individuals, organizations and political subdivisions. After review of these comments, TWC made certain basic decisions regarding the scope and timing of the proposed rules.

TWC considered time constraints, the potential difficulties in writing rules with different implementation dates and the potential for an early rules package to interfere with a later Subtitle D package, and decided that only one rules package on issues related to design criteria, ground water, operations and others which are related to Subtitle D would be considered.

An overwhelming number of commenters perceived that the proposed rules greatly exceeded Subtitle D requirements, and were opposed to them. These commenters cited the Subtitle D preamble, which specifically identified cost as a major consideration, and emphasized flexibility to states in meeting

Citizens suits

need approval fr. Amy Gen

performance standards. Many commenters cited older populations, fixed incomes and economic conditions in small communities as reasons not to increase Subtitle D requirements. A few commenters supported more stringent rules to address public health and environmental problems in Texas, citing current alleged abuses by landfill operators, unknown long-term impacts of landfilling practices, and future potential uses for all ground waters.

B. IMPLEMENTATION POLICY IN TEXAS

TWC staff reviewed the EPA Subtitle D preamble, considered the impacts of substantially more stringent rules on local governments, and solicited policy guidance from the Commissioners, who issued a policy statement that the rules should not exceed mandated Subtitle D levels.

The TWC committed to obtain State program approval from EPA, so that Subtitle D flexibility will be available to the regulated community. To achieve this, rules must be in place to demonstrate to EPA that the State has procedures which insure that the Subtitle D performance standards are implemented and enforced. Texas is also not a typical state, encompassing, as it does, such a large and diverse region, in hydrology, geography and population. Accordingly, blanket application of only Subtitle D standards could result in lack of protection for some of Texas' unique features, such as the Edwards Aquifer.

After considering all these factors along with the comments received, it was determined that the rules changes should be limited to Subtitle D requirements, with the stipulations that:

1. Unique Texas resources must be adequately protected.
2. Rules needed to achieve EPA program approval would be included.
3. Rules would be re-formatted to improve organization.
4. Minor changes to improve clarity and update outdated provisions would be considered on a case-by-case basis.

C. THE RULES DRAFTING PROCESS

After internal revisions to the proposed rules by TWC staff, the Texas Water Commission appointed a special advisory panel to assist TWC staff in finalizing the draft rules, in conjunction with the Regulatory Oversight Committee of the Municipal Solid Waste Management and Resource Recovery Advisory Council.

A total of six meetings were held with this advisory group, resulting in the draft rules which were published on March 9, 1993, in the ***Texas Register***.

Major issues considered in drafting the rules included both environmental and economic considerations.

After reaching the decision to essentially limit the scope of the rule-making to the implementation of Subtitle D requirements, it became clear that, due to the structure of the existing rules and the impact that Subtitle D issues had on most of the major subchapters, it would be most efficient to repeal the existing rules, and replace them with new subchapters subdivided generally along the lines of the Federal Subtitle D rules. The new rules are subdivided into Subchapters A through L, and provisions of the existing rules have been reorganized into this new subchapter format, along subject matter lines, so as to produce a more readable and useable document. Except for these format changes and a few cleanup and clarification changes, current rules have been retained for those portions of existing regulations which were not impacted by Subtitle D. Attachment 1 cross references new rules provisions to the Subtitle D requirements.

D. ORGANIZATION OF THE NEW RULES

One of the major issues dealt with in the new rules is the exemption for the small municipal solid waste landfills which are located in arid regions of the state, which are eligible for exemption from some of the Subtitle D requirements. Great concern about cost was expressed on behalf of these small landfill operators, who generally have very limited financial resources, and who would be impacted most severely by Subtitle D requirements.

Therefore, Subchapter A contains simplified provisions whereby a small municipal solid waste landfill operator can demonstrate compliance with the exemption criteria at minimal expense, while at the same time ensuring that environmental safeguards imposed by Subtitle D will be met. New Subchapter A sets forth specific procedural requirements for obtaining the arid exemption, which will be approved administratively, unless there is reason for the Executive Director to believe that such approval would result in groundwater contamination, in which case the exemption request can be denied, and subsequently appealed by the applicant to the Texas Water Commission.

Subchapter B, relating to solid waste storage, collection and transportation was not substantially changed, beyond reorganization into the newly created subchapter classification.

Subchapter D, classification of municipal solid waste facilities was substantially altered, since the implementation of the Subtitle D rules will result in the elimination of Type II and Type III landfills in the old classification system.
New Subchapter E, Permits Procedures, consolidates all of the permitting requirements previously scattered among other subchapters in the old rules into one location, and also alters the submission requirements format from Part A and Part B, provided for in the old rules, to Part I through V, which is intended to simplify and provide greater specificity to applicants as to what information is required, and when it is to be submitted.

Subchapter F was changed substantially, to include Subtitle D requirements for operating criteria, gas control and management, cover requirements and recordkeeping procedures. In addition, some upgrading of current rules are included in this new subchapter, including better marking of landfill disposal areas, the proposal for which received virtually unanimous support in the concept paper comments. In addition, the site operating plan is better defined, and some changes were made to permit greater flexibility in the hours of operation and the disposal of large items.

Subchapter G, which includes operational standards for solid waste processing and experimental sites, was not substantially changed.

Subchapter H, groundwater protection design and operation, was substantially altered, to comply with Subtitle D requirements, and numerous portions of the old rules were consolidated into this subchapter in order to provide a coherent document. The design requirements have been written so as to take maximum advantage of the flexibility provided in the Subtitle D rules for alternative designs, which can be custom tailored to meet site specific requirements while still achieving the performance standards provided for in the Federal rules.

Subchapter I, groundwater monitoring and corrective action, is substantially altered, and consists chiefly of new requirements mandated by Subtitle D. Portions of the old rules relating to groundwater have been relocated to this subchapter.

Subchapter J, closure and post closure, is heavily impacted by the Subtitle D rules, and is dominated by changes related to them.

Subchapter K, Financial Assurance, is also heavily influenced by Subtitle D requirements and is composed almost entirely of Subtitle D requirements.

Subchapter L is a new subchapter relating to location restrictions, and is dominated by Subtitle D requirements, while location restrictions in current rules have been relocated to this new subchapter designation.

In summary, the Municipal Solid Waste Rules for the State of Texas were rewritten following a policy mandated by the Texas Water Commissioners that Subtitle D requirements would be included in the rules, but not exceeded. While the organization of the rules was changed substantially in order to accommodate new Subtitle D requirements and provide a more readable and useable format, substantial changes to current regulations not mandated by Subtitle D were not generally made. The rules are a product of extensive public input, and intensive review and negotiations with representatives from a wide variety of interest groups represented by the advisory group appointed by the Texas Water Commissioners. While there are still issues needing resolution, it is believed that the new rules represent rules which will improve environmental protection in Texas, while minimizing the cost impact on landfill owners and operators.

E. RULES ADOPTION

Public hearings to receive comments on the proposed amendments were held in 7 cities across the state between April 12 - April 15, 1993; written comments were received through April 15, 1993.

As a result of the public comment process, 1,298 individual comments on the rules were received, synopsized, and categorized from 90 individuals, organizations, corporations, and political subdivisions.

Most commenters felt that the rules had implemented Subtitle D without exceeding the Federal standards and were very complimentary of the rulemaking process. A few commenters expressed disappointment and felt the rules exceed Federal standards, continue to be rigid and uncompromising, and are too stringent. A few commenters asked for general clarification of definitions.

Several hundred comments pertained to issues that were beyond the scope of the rulemaking. Based upon comments received, the Commission will consider possible future rulemaking to deal with some of these issues and concerns, after receiving program approval from EPA.

Numerous commenters requested changes that would make the rule inconsistent with Subtitle D. The Commission could not relax or delete a standard contained in Subtitle D since Subtitle D is self-implementing on October 9, 1993. The Commission is seeking program approval from EPA to administer the Subtitle D program in Texas, and relaxing or deleting a standard would result in the Texas program being rejected. A few of the requested changes are summarized as follows:

1. Increase the small landfill exemption volume from < 20 TPD to 250 TPD.
2. Extend the effective date of the rule.
3. Remove the ban on field filtering.
4. Reduce the HDPE liner thickness requirement.
5. Reduce the requirement that the final cover system must be as impermeable as the bottom liner system.
6. Revise the rule to allow the recirculation of leachate and gas condensate at any MSWLF unit, not just at those with a composite liner.
7. Reduce the requirements for demonstrating an alternative liner.
8. Delete the requirement for public involvement in the selection of a corrective action remedy.

Numerous commenters requested changes that would make the rule more stringent than Subtitle D. In a letter to Governor Richards dated July 17, 1992, the Commissioners and the Executive Director of the Texas Water Commission had committed to establishing municipal solid waste regulations that were no more stringent than Subtitle D, unless such measures are necessary to protect key resources such as the Edwards Aquifer. Therefore, these requested changes were not incorporated.

A large number of commenters requested changes to non-Subtitle D portions of the existing Municipal Solid Waste Regulations. The focus of this rulemaking was to incorporate the requirements of Subtitle D. Very few changes were made to non-Subtitle D issues contained in the rules. Since the Commission repealed and re-proposed the portion of the rule that was not Subtitle D, several commenters made recommendations to those portions of the rule. The comments focused on processing and enclosed containers. The Commission is not considering these changes at this time.

Many comments dealt with issues that are necessary for the enforcement and implementation of Subtitle D. Since Subtitle D is a self implementing rule, many of the requirements center around the placing of required plans and documentation in the operating record. Approved states must demonstrate to EPA that they have a program capable of implementing and enforcing the requirements of Subtitle D. Therefore, in approved states, those plans and certification will have to be submitted for Executive Director review and approval. The majority of the comments in this group centered on specifications that exist in the rule. Most of these specifications exist in current rules and are necessary for the implementation and enforcement of the program.

After the draft rules were revised in response to the public comments, two additional meetings were held with the special advisory group, resulting in recommendations from the group and the Municipal Solid Waste and Resource Recovery Advisory Council that the final rules be adopted. The Commission did so on May 23rd 1993, and final rules were published in the Texas Register on June 18, 1993.

IV. REMAINING ISSUES

Although the rules were generally supported by all of the major interest groups, there are still a number of issues on which there is disagreement, and which may require rules changes in the future. Because of the time pressure related to obtaining EPA program approval as soon as possible, all parties agreed that the rules should be adopted, and EPA approval obtained, after which these issues would be reviewed and appropriate "cleanup" changes would be proposed.

One particularly troublesome issue which is not resolved by the new rules relates to the extension of landfill excavations below groundwater tables. Current rules allow for this condition, but provide that clean soil material must be added on top of the liner, as ballast to prevent hydrostatic uplift on the liner surface. Subtitle D rules introduce several new design considerations, including the potential for flexible membrane liners and leachate collection systems. These new factors complicate design considerations, when the bottom of the excavation is below the groundwater table. Considerable discussion on this issue occurred in the meetings with the special advisory group appointed by the Texas Water Commission. After consideration of a number of options, it was decided that the most practicable alternative, given the time available, was to maintain the current rules governing the construction of landfill

excavations below the groundwater table, and create a special blue ribbon panel of technical experts to evaluate the design of landfills under these circumstances, research the rules in other states to determine how they are dealing with this issue, and develop a specific recommendation for rule changes, if indicated, to be put forth at a later date, after approval of the Subtitle D rules. This panel is now working and has representation from the regulated community, academic circles, consultants, and TWC staff. Recommendations are expected by late summer, 1993.

Other changes which will be considered over the next several months include possible rulemaking to deal with:

1. Development of a separate Subchapter including all of the requirements for the design and operation of Type IV facilities. Type IV facilities are construction/demolition landfills which receive no household or other putrescible waste, and which do not fall under the purview of Subtitle D.
2. Requirements for additional testing of leachate.
3. Requirement for full-time inspection on-site during liner construction activities.
4. Additional location restrictions with respect to sole-source aquifers and residences.
5. Additional performance criteria for larger landfills in arid areas of the state.
6. Rules regarding the transfer of medical waste, particularly in rural areas of the state.
7. Revisions to that portion of the rules which essentially preserved existing municipal solid waste regulations, many of which are either obsolete or outdated.
8. Hours of operation for municipal solid waste landfill units.
9. Revisions to the location restrictions for municipal solid waste landfill units located near airports.
10. Clarification of a number of definitions which have the potential for affecting how the rules are interpreted and applied.

VI. LATEST DEVELOPMENTS

There have been two major developments with respect to Subtitle D rules in Texas, which are unresolved at the time of writing of this paper. The first involves the small landfill arid exemption from groundwater monitoring. On May 7, 1993, the Federal Appeals Court for the District of Colombia reached a decision that EPA did not have statutory authority to exempt landfills from groundwater monitoring, and remanded the matter back to EPA for correction. The Texas Subtitle D rules still contain an exemption from groundwater monitoring for these small arid area landfills. It is unclear at this time what action EPA proposes to take with respect to this Court decision. There is a possibility of an appeal of this decision to the U.S. Supreme Court, but such an action will be timeconsuming. EPA has not, at this writing, proposed any changes to the Subtitle D rules, so we, in Texas, are proceeding forward with rules which allow for the exemption. Simultaneously, the State of Texas is working with other Western States to propose some alternative rule language which will preserve as much of the groundwater monitoring exemption as is possible, given the Court decision. Since current Texas regulations do provide for some well and spring sampling, where they

exist, it is possible that the Texas regulations could be considered in compliance with the new regulations, for those landfills which have existing wells close enough to sample and monitor. For landfills that do not have existing wells or springs, some monitoring may ultimately be required, in order to comply with the Court decision.

The other recent development is EPA's decision, or perhaps indecision is a better word, regarding the extension of Subtitle D deadlines. EPA released a statement in May that it intended to publish rules proposing to extend the deadline for compliance with Subtitle D from October 9, 1993 to April 9, 1994 with provisions for further extensions in certain instances, and an extension of the financial assurance regulations for one year from the current April 9, 1994 effective date. This action was proposed in response to efforts in the Congress to legislatively extend the effective date of the regulations by as much as two years. Shortly after release of this statement by EPA regarding its intention to extend the deadline, however, this proposal ran into opposition from the Senate Environmental Committee leaders, Senators Chafee and Baucus, who urged EPA not to extend the deadline, since it would penalize those landfills, mostly commercially operated ones, which had proceeded in good faith to comply with the regulations by October 9, 1993. The latest information available at the time this paper is being written, is that EPA may propose a six month extension for landfills which receive less than 20 tons per day, with no extensions for others, and/or a permissive extension which would allow states to extend deadlines based on a case-by-case analysis of the situation.

Another reason for EPA's proposal to extend the deadlines is the long delays in getting state programs approved. The latest estimate by EPA is that only about 12 to 15 states will receive program approval by EPA prior to the October 9, 1993 deadline. Most of the rest of the states could receive program approval by January of 1994, or shortly thereafter. A few state programs may not be approved until much later, if at all. We expect the State of Texas program to be approved by October 9, 1993, or shortly thereafter, depending upon the length of time the Attorney General's Office takes in reviewing the recently approved regulations, which were published in final form in the ***Texas Register*** on June 18, 1993, and providing certification to EPA that all necessary regulatory and legal authority is in place to enforce Subtitle D regulations. Another issue which was recently raised by EPA concerns the ability of citizens to intervene in state court actions, and this is expected to be handled through a memorandum of understanding between the Texas Water Commission and the Attorney General's Office, but which may require publication and public comment under the Administrative Procedures and Texas Register Act.

In summary, Texas had completed essentially all of the actions necessary to obtain the EPA program approval by June 18, 1993, except for legal certification of the Attorney General's Office and resolution of the citizen suit issue with EPA. If EPA proposes changes to the rules with respect to the groundwater monitoring requirement for small exempt landfills, or extends the deadlines for the effective date of Subtitle D regulations, either of these actions could affect the timing of when state program approval is obtained.

VII. TEXAS WATER COMMISSION MUNICIPAL SOLID WASTE DIVISION ACTION PLAN FOR FISCAL YEAR 1994

Since most of the issues regarding EPA rules implementation and program approval are expected to be resolved by the beginning of the fiscal year on September 1, 1993, the Municipal Solid Waste Division of the Texas Water Commission will be focusing on several initiatives, with respect to the implementation of the Subtitle D program in Texas. These major initiatives will include the following:

A. REVIEW OF THE NEW RULES FOR INCONSISTENCIES AND TECHNICAL ERRORS.

Since the development of these new rules was a massive effort, conducted with extensive public input during a relatively short period of time, it is anticipated that as the rules are applied, inconsistencies and technical errors will be noted which will require correction. Municipal Solid Waste Division will propose periodic rules "cleanup" amendments, as necessary to correct and fine-tune the regulations.

B. THE ARID LANDFILL EXEMPTION PROCESS.

The processing of arid exemption requests will be continued and accelerated to insure that the small landfills are able to take advantage of the exemption. A complete application package and procedure has been developed and the Municipal Solid Waste Division has already reviewed and given tentative approval for the exemption to a number of landfills. Resolution of the groundwater monitoring requirement will be critical to the continuation of this program.

C. ALTERNATIVE DESIGNS.

The state program approval will allow flexibility for liner designs. While this flexibility will probably be economically beneficial to the landfill operators in the state, there is currently no history or track record for performance requirements. The only standard is the EPA requirement that any alternative design must be shown to provide protection to groundwater, as demonstrated by the fact that maximum contaminant levels for the list of 24 constituents included in Table I of the regulations must not be exceeded. The Municipal Solid Waste Division has invested considerable effort in training of staff on two models, the HELP and MULTI-MED models, both of which are recognized by EPA as being appropriate tools for evaluating alternative liner designs.

Although the models are quite straightforward and can be run on most personal computers, there is considerable question as to the appropriate input data which are necessary to ensure the effectiveness of the models. The Municipal Solid Waste Division has issued example problems and recommended ranges for most of these parameters, although many of them must be determined on a site specific basis. We expect to continue to develop the standards for

performance based design during the first year. We believe that there will be generally accepted methodologies available by the end of fiscal year 1994, which can be quickly and easily evaluated by the Municipal Solid Waste Division, thereby speeding up the process of alternative liner design approval.

D. ELIMINATING THE BACKLOG OF PERMITS.

The Municipal Solid Waste Division is committed to eliminating the backlog of permits which existed on December 1, 1992, by April, 1994. Currently, this backlog has been reduced by over 75%, and it is expected that we will reach our goal. In addition to the permit backlog, we continue to pursue our goal of an average processing time of 18 months for municipal solid waste permits. With adequate staffing and training, we are now in a position to achieve this goal, and are optimistic about our prospects.

VIII. SUMMARY

The saga of Subtitle D implementation in Texas has been one involving uncertainty, conflict, frustration, and changing signals over a period of two years or more. However, it has also been a story of consultation, cooperation, and consensus building among the many interest groups involved in the municipal solid waste community in Texas. Overall, implementation has been successful, in that rules have been developed and approved which are generally accepted by all factions, although there remain numerous individual issues which remain to be resolved. Plans have been developed for resolving these issues over a period of time. The Municipal Solid Waste Division is now functioning well, and is fully staffed in both the permitting and groundwater protection areas, as well as compliance and enforcement. Service to our customers has improved, and we are well on our way to achieving the goals of backlog elimination and streamlining of the permitting process. Although many challenges remain, we are confident that there will be a happy ending to the "Green Acres" episode on Subtitle D implementation in Texas.

ATTACHMENT 1 - SUBTITLE D/TWC RULE CROSS-REFERENCE

Subtitle D Section	TWC MSWR Section	TWC Page
257.1(c)(10)	[na]	2
257.2	330.2	2
257 App. I	330.235(h)(1)	239
258.1(a)	330.1(a)	1
(b)	330.3(a)	34
(c)	(b)	34
(d)	(c)	34
(e)	(d)	35
(f)(1)	(e)	35
(f)(2)	(f)	36
(f)(3)	(g)	37
(g)	330.5(b)	44
(h)	330.5(b)	44
(i)	330.5(f)	48
(j)	330.1(b), 330.3(h)	1,38
258.2	330.2	2
258.3	330.1(a)	1
258.10(a)	330.300(a)	364
(b)	(b)	364
(c)	(c)	364
(d)	330.2	2
258.11(a)	330.301	365
(b)	330.2	2

Subtitle D Section	TWC MSWR Section	TWC Page
258.12(a)	330.302	365
(b)	330.2	2
258.13(a)	330.303(a) and 330.204	368,203
(b)	330.2	2
258.14(a), (b)	330.304	370
258.15(a)	330.305	371
(b)	330.2	2
258.16(a)	330.250(b)	265
(b)	(c)	266
258.20(a)	330.114(5)(A)-(E)	159
(b)	330.2	2
258.21(a)	330.133(a)	170
(b)	(c)	171
(c)	(d)	172
258.22(a)	330.126	167
(b)	330.2 [as *vector*]	2
258.23(a)	330.56(n)(1)	134
(b)	(2)	135
(c)	(3), (4)	135,136
(d)	330.2	2
258.24(a), (b)	330.125(a)	167
258.25	330.116	160
258.26(a)	330.55(b)(2)	108
(b)	(1)(B),(1)(D)	107,108

Subtitle D Section	TWC MSWR Section	TWC Page
258.27(a)	330.55(b)(1)(B)	107
(b)	(1)(D)	108
258.28(a)	330.5(e)(6)(A)	47
(b)	(B)	47
(c)	330.2	2
258.29(a)	330.113(b)	156
(b)	(c)	157
(c)	(e)	158
258.40(a)	330.200(a)	198
(b)	(b)	198
(c)	(c)	199
(d)	(d)	199
(e)	[na]	
258.50(a)	330.230(a)	215
(b)	(b)	215
(c)	(c)(1-4)	216-217
(d)	(d)	218
(e)	(e)	218
(f)	330.2	2
(g)	[covered in individual sections]	

Subtitle D Section	TWC MSWR Section	TWC Page
258.51(a)	330.231(a)	219
(b)	(b)	220
(c)	(d)	221
(d)	(e), (e)(1)	221,222
258.53(a)	330.233(a)-(b)(1)	223-224
(b)	(b)(3), (c)	225
(c)	(d)	225
(d)	(b)(2)	224
258.53(e)	330.233(e)	225
(f)	(b)(3)	225
(g)	(f)	226
(h)	(g)	227
(i)	(h)	229
258.54(a)	330.234(a)	229
(b)	(b), (b)(1)	231
(c)	(d)	232
258.55(a)	330.235(a)	233
(b)	(b)	233
(c)	(c)	235
(d)	(d)	235
(e)	(e)	236
(f)	(f)	237
(g)	(g)	237
(h)	(h)	238
(i)	(i)	239
(j)	(j)	240

Subtitle D Section	TWC MSWR Section	TWC Page
258.56(a)	330.236(a)	240
(b)	(b)	241
(c)	(c)	241
(d)	(d)	241
258.57(a)	330.237(a)	242
(b)	(b)	242
(c)	(c)	242
(d)	(d)	244
(e)	(e)	245
(f)	(f)	246
258.58(a)	330.238(a)	246
(b)	(b)	248
(c)	(c)	248
(d)	(d)	249
(e)	(e)	249
(f)	(f)	251
258.58(g)	330.238(g)	251
258.60(a)	330.253(b)	269
(b)	(c)	270
(c)	(d)	270
(d)	(e)(1)	271
(e)	(e)(2)	272
(f)	(e)(4)	272
(g)	(e)(5)	273
(h)	(e)(6)	273

Subtitle D Section	TWC MSWR Section	TWC Page
(i)	(e)(8)	274
(j)	(e)(9)	275
258.61(a)	330.254(b)(1)(A)-(E)	277-278
(b)	(b)(2)	278
(c)	(b)(3)	278
(d)	(b)(3)	278
(e)	330.256	283
258.70(a), (b)	330.280	284
258.71(a)	330.281(a)	284
(b)	(b)	286
258.72(a)	330.283(a)	289
(b)	(b)	291
258.73(a)	330.284(a)	291
(b)	(b)	293
258.74	330.285(a)	294
(a)	(b)	294
(b)	(c)(1)-(7)	297-300
(c)	(d)(1), (3)-(5)	301,302
(d)	(e)	304
(e)	(f)	308
(f)	(g)	314
(g)	(f)	308
(h)	(g)	314

Subtitle D Section	TWC MSWR Section	TWC Page
258.74(i)	330.285[na]	
(j)	(i)	321
(k)	(h)	321
(l)	(j)	321

JOHN H. TURNER

John H. Turner is the Director, State Regulatory Affairs, for Browning-Ferris Industries, Inc., Houston, Texas. Previously, he served as Association Counsel to the National Solid Wastes Management Association ("NSWMA"), a trade group in Washington, D.C. which represents the waste services industry. There, he specialized in administrative law matters with an emphasis on environmental regulation and litigation. He has been involved in a wide range of solid waste issues with Federal, state, and local agencies, as well as in the courts. He is a frequent speaker on environmental matters, and has authored several articles pertaining to solid and hazardous waste law. Mr. Turner has represented clients in the private practice of law in connection with numerous environmental areas, including matters arising under CERCLA, RCRA, the Clean Air and Water Acts, and state statutes and regulations.

THE PART 258 SUBTITLE D RULES--FEDERAL ISSUES

John Turner
Director, State Regulatory Affairs
Browning-Ferris Industries

I. WHY ARE THE PART 258 RULES NECESSARY?

(1) Most of the new EPA Resource Conservation and Recovery Act ("RCRA") Subtitle D landfill regulations will become effective on October 9, 1993. Many states, including Texas, have begun or completed the process of revising their laws or regulations governing municipal solid waste landfills in order to come into compliance. Several states have already obtained either "full" or "partial" Part 258 program approval from the EPA. The new rules will significantly improve the safety of existing and future municipal solid waste landfills. The rules also present many communities with both a challenge and an opportunity.

(2) In order to appreciate the significance of the new regulations, it is useful to briefly review the environmental concerns that prompted the EPA to act. In 1988, the EPA reported that of 163 municipal solid waste landfills studied (mostly older, poorly designed or located sites), 73 had groundwater contamination. At several sites, drinking water sources were contaminated. The Agency also found that 22 percent of all Superfund sites were solid waste landfills.

(3) The 1988 report also emphasized that, of the surveyed facilities, "more than 500" landfills violated state groundwater standards, 845 violated air standards, and 660 "were cited for surface water contamination." The Agency's conclusions were consistent with the findings of a 1986 EPA report. The earlier report concluded that merely 15 percent of all landfills had a liner, only 5 percent had leachate collection systems, and only 25 percent engaged in groundwater monitoring. At the same time, fully 70 percent of the landfills in operation in 1978 had closed by 1989.

(4) The EPA also found that "there are certain gaps in some regulatory programs, which may result in inadequate protection of human health and the environment in some parts of the country." The U.S. Congress also recognized the need to toughen the standards applicable to municipal solid waste landfills by enacting Section 4010 of RCRA.

(5) By 1984, it was clear to the U.S. Congress that municipal solid waste landfills deserved greater attention from Congress. BFI strongly supported the Congress's insistence upon increased Federal and state controls. Congress noted, for example, that although solid waste landfills were the "recipients of unknown quantities of hazardous waste", the "construction, siting, and monitoring standards for these facilities are either nonexistent or far less restrictive than those governing hazardous waste disposal facilities." H.R. Conf. Rep. No.1133, 98th Cong., 2d Sess. (1984),

reprinted in 1984 U.S. Code Cong. & Admin. News 5649, 5688. The vast majority--if not all--of the solid waste disposal facilities which were mentioned in the legislative history were small facilities.

(6) Congress emphasized the need for prompt action, by noting that:

> Subtitle D facilities are the recipients of unknown quantities of hazardous waste and other dangerous materials from the disposal of household waste, small quantity generator wastes and illegal dumping. Since construction, siting, and monitoring standards for these facilities are either non-existent or far less restrictive than those governing hazardous waste disposal facilities, environmental and health problems caused by Subtitle D facilities are becoming increasingly serious and widespread.

H.R. Conf. Rep. No. 1133, 98th Cong., 2d Sess. 17, reprinted in 1984 U.S. Code Cong. & Ad. News 5649, 5688.

The 1984 amendments required, in Section 4010(c), 42 U.S.C. Section 6949(c), that "not later than March 31, 1988, the Administrator shall promulgate revisions of the criteria promulgated under paragraph (1) of section 4004(a) and under section 1008(a)(3) for facilities that may receive hazardous household waste or hazardous wastes from small quantity generators under section 3001(d). The criteria shall be those necessary to protect human health and the environment and may take into account the practicable capability of such facilities. At a minimum such revisions for facilities potentially receiving such wastes should require ground water monitoring as necessary to detect contamination, establish criteria for the acceptable location of new or existing facilities, and provide for corrective action as appropriate."

(7) The Part 258 MSWLF rule was, despite the statutory deadline, promulgated forty-one (41) months late. 56 Fed. Reg. 50,978 (October 9, 1991). The rule was not issued until litigation was commenced by several environmental groups. See Natural Resources Defense Council, et al. v. Reilly, D.D.C. Civ. No. 91-1105C, Order of Dismissal (December 19, 1991).

II. WHAT ARE THE EPA PROPOSALS REGARDING LIMITED EXTENSIONS OF CERTAIN PART 258 DEADLINES, AND ARE EXTENSIONS IN THE INTEREST OF PUBLIC HEALTH AND THE ENVIRONMENT?

(1) As of the date of this outline, the EPA has issued several press releases that detail the parameters of a limited extension of certain Part 258 deadlines for certain small MSWLFs. The EPA came under pressure from small landfill operators and communities in several Midwestern states to extend Part 258 deadlines for as much as two years. Several bills were introduced in Congress or drafted

for possible introduction. The EPA initially announced its intention to propose an across-the-board extension of six months, with a one-year extension of the deadline for the financial assurance requirements. Concerns voiced by environmental groups, the NAACP, the waste management industry, and members of Congress prompted the Agency to significantly narrow the scope of the proposed extensions.

(2) The EPA proposal will apparently extend the effective date of the Part 258 rules only for small landfills. MSWLFs that receive less than 100 tons per day on an annual average will now have until April 9, 1994 to comply with the Federal requirements. The EPA insists that the extension will be "one time only". Landfills that receive up to 20 tons per day will have an additional two years to comply with the Subtitle D regulations. The financial responsibility requirements will become effective a year after the date originally proposed--April, 1995 rather than April, 1994.

(3) Without question, any extension of Part 258-related deadlines by a State must be no more generous than the EPA final rule. Moreover, if the EPA lacks statutory authority under RCRA to extend Part 258 deadlines, there is subsequently no authority for a similar extension in State regulations. In any event, a State does not have to extend any Part 258 deadline--it can enforce any more stringent requirement.

(4) There is considerable uncertainty as to whether the EPA has existing statutory authority to extend Part 258 compliance deadlines. Congress, in Section 4010(c) of RCRA, established in 1984 a firm, unambiguous deadline for the promulgation of Subtitle D regulations--a deadline which was ignored for more than three years by the Agency. There is, moreover, evidence that Congress did not intend that the Agency extend compliance deadlines in the absence of congressional approval. Section 4010(c)(1)(B)-(C), 42 U.S.C. Section 6945(c)(1)(B)-(C), requires that states adopt and implement a permit program to enforce the revised Subtitle D criteria within 18 months of the date of promulgation of the rule (April 9, 1993). The statute provides that:

> (1)(B) Not later than 18 months after the promulgation of revised criteria under subsection 4004(a) (as required by section 4010 (c)), each State shall adopt and implement a permit program or other system o(f) prior approval and conditions, to assure that each solid waste management facility within such State which may receive hazardous household waste or hazardous waste due to the provision of section 3001(d) for small quantity generators (otherwise not subject to the requirement for a permit under section 3005) will comply with the criteria revised under section 4004(a).

(C) The Administrator shall determine whether each State has developed an adequate program under this paragraph. The Administrator may make such a determination in conjunction with approval, disapproval or partial approval of a State plan under section 4007.

(5) Clearly, the EPA does not have the authority to ignore unambiguous deadlines established by Congress. See, e.g., Delaney v. EPA, 898 F.2d 687, 691 (9th Cir.), cert. denied, 111 S. Ct. 556 (1990); Sierra Club v. Thomas, 828 F.2d 783, 791 (D.C. Cir. 1987) (when a nondiscretionary duty exists to comply with a statutory deadline, "Congress accords a particular agency action such high priority as to impose upon the agency a categorical mandate that deprives it of all discretion over the timing of its work").

(6) The requirement that state permitting-enforcement programs be in place and approved by the Agency within 18 months of promulgation of the rule demonstrates that Congress was concerned both with promulgation and implementation of the Subtitle D criteria. Congress, in setting a March 31, 1988 promulgation deadline, emphasized the urgent need for the establishment of Federal criteria to govern municipal solid waste landfills. See S. Rep. No. 284, 98th Cong., 1st Sess. 49 (1983) ("The impetus for requiring these revisions is primarily the concern for potential disposal of hazardous materials with hazardous wastes. Therefore, in revising the criteria the Agency should focus initially on landfills and surface impoundments where this is most likely to occur.") But Congress did not merely insist that the Agency issue a rule within a short time frame--it unambiguously declared that the rule should be **implemented** through enforceable state programs within 18 months.

(7) Nor, the argument goes, can the "practicable capability" language of Section 4010 justify a casual approach to implementation of the revised criteria. Just as "practicable capability" could not save the small landfill groundwater exemption from invalidation, it cannot support an extension of any compliance deadline. The actual language utilized by Congress is, once again, of critical importance. Congress specified that the revised criteria must create standards "necessary to protect human health and the environment", although the Agency "may" consider the "practicable capability" of solid waste disposal facilities. At a minimum, the Congress insisted that environmental controls similar to those contained in the Subtitle C regulations--groundwater monitoring, locational requirements, and corrective action measures--be specified.

The reference to "practicable capability" arose in the context of the development by the EPA of uniform national standards--standards that were to "avert serious disruptions of the solid waste disposal industry", 130 Cong. Rec. S13,814 (daily ed. Oct. 5, 1984) (statement of Sen. Randolph)--rather than the implementation or

subsequent revision of the regulations by the EPA or by an approved state. Although the term was not defined by Congress, it is clear that the unambiguous mandate upon the EPA--and hence upon any state that seeks approval of a Subtitle D program--is to promulgate standards necessary to protect human health and the environment. To the extent "practicable capability" enters into the equation at all, the EPA has already addressed the issue by specifying areas of flexibility which may be addressed by approved state programs.

(8) The requirement that EPA determinations not be "arbitrary and capricious", RCRA Section 7006(a), 42 U.S.C. Section 6976(a), also supports the view that the Agency may not extend compliance deadlines if the mandate of Section 4010(c)--the prompt development and implementation of minimum Federal standards--is compromised. Under Section 7006(a), the standard of review is the same as under Section 10(e) of the Administrative Procedure Act, 5 U.S.C. Section 706(2)(a) (i.e., whether agency action is "arbitrary, capricious, an abuse of discretion or otherwise not in accordance with the law."). This review requires a "searching and careful inquiry" to ensure that the Agency engaged in reasoned decisionmaking, based upon consideration of relevant factors. See, e.g., International Ladies' Garment Union v. Donovan, 722 F.2d 795, 815 (D.C. Cir. 1983), cert. denied, 469 U.S. 820 (1984); Specialty Equip. Mkt. Ass'n v. Ruckelshaus, 720 F.2d 124, 132 (D.C. Cir. 1983).

(9) Even if the Agency otherwise possessed the statutory authority to extend a compliance deadline, an extension created without the benefit of a comprehensive examination of the effects of delay upon human health and the environment (which has, to date, not been conducted) would both contradict Section 4010(c) and be arbitrary and capricious. The terms of Section 4010(c) clearly mandate that the EPA standards be "those necessary to protect human health and the environment." Likewise, courts have held that the failure of a regulatory agency to compile and examine data on the consequences of its determination renders the action plainly arbitrary and unreasonable. See, e.g., Motor Vehicle Mfrs. Ass'n v. State Farm Mutual Ins., 463 U.S. 29, 50 (1983) (if agency fails to provide a "reasoned basis" for its decision, the court may not supply one); Natural Resources Defense Council v. EPA, 822 F.2d 104, 111 (D.C. Cir. 1987) (Agency must supply "reasoned basis" for its actions); ILGU v. Donovan, supra, 722 F.2d at 814, 815 n.35, 817 (same).

(10) Moreover, where the activity involves a reversal of the agency's prior established position (here, with regard to compliance deadlines), the agency has a special obligation to supply a "reasoned analysis" for the change. See, e.g., MVFA v. State Farm, supra, 403 U.S. at 42, 57 (1983); Greater Boston Television Corp. v. FCC, 444 F.2d 841, 852 (D.C. Cir. 1970), cert. denied, 403 U.S. 923 (1971). In fact, in such a case

> if there is a presumption from which judicial review should start, that presumption is. . .against changes in

current policy that are not justified by the rulemaking record.

ILGU v. Donovan, supra, 722 F.2d at 813 (citation omitted) (emphasis in original). Indeed, "sudden and profound alterations in an agency's policy constitute 'danger signals' that the will of Congress is being ignored." Small Refiners Task Force v. EPA, 705 F.2d 506, 526 (D.C. Cir. 1983). See also MVWA v. State Farm, supra, 463 U.S. at 42-42; Environmental Defense Fund v. EPA, 852 F.2d 1316, 1329-30 (D.C. Cir. 1988) (revocation or revision of prior agency position that results in failure to fully implement Congress' intent is arbitrary).

III. THE JUDICIAL NARROWING OF THE "SMALL LANDFILL EXEMPTION"

(1) A Federal appeals court has invalidated a major component of the EPA "small landfill exemption", described at 40 C.F.R. Section 258.1, by holding that the EPA, and approved States, cannot exempt any municipal solid waste landfill from groundwater monitoring requirements. In Sierra Club and Natural Resources Defense Council v. U.S. EPA, No. 92-1003 (May 7, 1993), the U.S. Court of Appeals for the District of Columbia, in a decision with binding effect upon the EPA and approved states nationwide, ruled that the Federal and corresponding state rules could not exempt any MSW landfill from groundwater monitoring requirements. The court concluded that the RCRA statute requires groundwater monitoring at all MSW landfills, regardless of size or location, in order to appropriately detect contamination. The court based its determination on the express language of RCRA, which requires that groundwater monitoring be mandated "as necessary to detect contamination." 42 U.S.C. Section 949a(c).

(2) The court noted that the EPA had failed to produce any evidence that "small" landfills do not cause groundwater contamination--indeed, it noted that the evidence was overwhelmingly to the contrary. The court stated that it agreed with the EPA's original view, stated in the preamble to the proposed Part 258 rules, that "ground-water monitoring at all facilities. . .is viewed by the Agency as an essential measure to ensure protection of human health and the environment." 53 Fed. Reg. 33,366 (emphasis added). The EPA had reached its earlier conclusion because "ground-water monitoring is the most reliable method for determining whether a landfill is in compliance with the overall performance standards" and in light of the fact that "(e)ven the best designs, operating practices, and quality control procedures cannot always prevent unexpected failure of a landfill." Id.

(3) The court, in invalidating the exemption from groundwater monitoring and corrective action requirements, stated that "(w)hile such factors as size, location and climate may affect the extent or kind of monitoring necessary to detect contamination at a specific facility, they cannot justify exemption from the statutory

monitoring requirement." Accordingly, the court ordered the EPA to specifically require that all MSW landfills monitor groundwater quality--"the Agency must revise its final rule to require groundwater monitoring, as necessary to detect contamination, at all landfills. . . .(W)e vacate the rule's small landfill exemption and remand to the Agency for further action consistent with the statutory requirement."

(4) While the court's order invalidated the "small landfill exemption", the ruling is best viewed with regard to the conditional exemption from groundwater monitoring-corrective action requirements, rather than groundwater monitoring and liner design criteria. Nonetheless, it is clear that the EPA cannot authorize a state program that fails to ensure that all MSW landfills appropriately monitor groundwater quality. The EPA proposal to extend groundwater monitoring compliance deadlines for the less-than-20 tons per day facilities was in response to the court's ruling.

IV. THE IMPORTANCE OF THE PROMULGATION BY THE U.S. EPA OF THE STATE-TRIBAL IMPLEMENTATION RULE ("STIR") PURSUANT TO THE FEDERAL ADMINISTRATIVE PROCEDURE ACT.

(1) Many States and members of the regulated community have emphasized the urgent need for the EPA to propose and promulgate, without further delay, the State-Tribal Implementation Rule ("STIR"). It is clear that, in the absence of a final rule, no mechanism currently exists to supervise or govern entire or partial state program approvals. See, e.g., Brock v. Cathedral Bluffs Shale Oil Co., 796 F.2d 533, 538 (D.C. Cir. 1986) (even proposed rules have no legal effect, and affected parties cannot seek pre-promulgation judicial review of the Agency's proposal). The legitimacy of program approvals--particularly partial approvals--will remain in doubt until a final rule sets forth specific parameters for the approval and withdrawal process. At present, there is no defined procedure to govern program approvals and withdrawals--and the promulgation of the STIR pursuant to the Administrative Procedure Act ("APA") could clarify many of the issues that have created considerable confusion and uncertainty.

(2) The STIR document is apparently intended to set forth minimum standards for the approval of state Subtitle D programs. In addition, it would create a "partial" approval mechanism and ostensibly describe a process for withdrawal of an approved program. These matters, while of critical importance, are not described specifically in either the RCRA statute or the revised criteria. Without adherence to the APA, interested states, owners/operators of affected municipal solid waste facilities, and the general public will not be able to ascertain the standards utilized by the Agency to evaluate permit program submissions. A rulemaking proceeding is particularly necessary in light of the fact that the document reflects an entirely new method for EPA

determinations on state solid waste management programs, and, in fact, a method different from that utilized to evaluate previously prepared state plans under RCRA. It is simply unfair to apply the STIR document in a conclusive fashion without proper notice and opportunity for comment in the manner required by the APA.

Moreover, it is clear that, to the extent that the draft STIR document is used to approve or partially approve state permit programs, the EPA must proceed through rulemaking in accordance with the APA, 5 U.S.C. Sections 500-706. Because there has been no public notice and no opportunity for comment, the Agency has to date unfairly and improperly denied members of the public their right to participate in what is, in fact, rulemaking.

(3) Section 4 of the Administrative Procedure Act, 5 U.S.C. Section 553, requires agencies to provide public notice and an opportunity for comment before imposing rules on those they regulate. "Rule" is broadly defined as:

> the whole or a part of an agency statement of general or particular applicability and future effect designed to implement, interpret, or prescribe law or policy or describing the organization, procedure, or practice requirements of an agency. . . .

5 U.S.C. Section 551(4). As the courts have repeatedly observed, the "breadth of this definition cannot be gainsaid," e.g., Batterton v. Marshall, 648 F.2d 694, 700 (D.C. Cir. 1980), and the exemptions to the notice and comment requirements of Section 553 are therefore to be construed narrowly. Environmental Defense Fund v. Gorsuch, 713 F.2d 802, 816 (D.C. Cir. 1983); American Bus Association v. United States, 627 F.2d 525, 528 (D.C. Cir. 1980).

An examination of the language of the APA itself makes it clear that the draft STIR, as utilized to actually grant program approvals, is a rule. The definition of a rule includes "an agency statement of general. . .and future effect designed to implement. . .law or policy", as well as "a statement. . .designed to implement. . .the organization. . .requirements of an agency. . . ." 5 U.S.C. Section 551(4). In the past, the EPA honored that language by conducting notice and comment rulemaking on the scope of its regulations governing authorization under the Subtitle C and UST programs. See 40 C.F.R. Section 271.1 (requirements for final authorization); Section 271.121 (requirements for interim Subtitle C authorization); 53 Fed. Reg. 37,081 (Sept. 23, 1988) (final rules on technical requirements and state UST program approval). Here, however, the Agency, while describing certain components of the draft rule, has ignored the APA.

Put simply, the courts have regularly condemned such corner-cutting, especially when the Agency is essentially imposing a binding norm--such as setting conditions on program approval--which will have a substantial impact on States, facility owners/operators, and the general public. See, e.g., Shell Oil Co.

v. EPA, 950 F.2d 741 (D.C. Cir. 1991); American Trucking Associations v. Interstate Commerce Commission, 659 F.2d 452 (5th Cir. 1981); American Bus Association v. United States, 627 F.2d 525 (D.C. Cir. 1980); Brown Express, Inc. v. United States, 607 F.2d 695 (5th Cir. 1979); Pickus v. United States Board of Parole, 507 F.2d 1107 (D.C. Cir. 1974); Lewis-Mota v. Secretary of Labor, 469 F.2d 478 (2d Cir. 1972); Texaco, Inc. v. Federal Power Commission, 412 F.2d 740 (3d Cir. 1969).

(4) As the courts have repeatedly admonished federal agencies, Congress had a good reason for requiring notice and comment. Public participation allows the agencies to learn of the ramifications of proposed governmental actions and affords safeguards to private interests affected by such governmental actions. See S. Doc. No. 248, 79th Cong., 2d Sess. 19-20 (1946), cited in Batterton v. Marshall, 648 F.2d at 703 n.47. The essential purpose of requiring notice and comment opportunities is "to reintroduce public participation and fairness to affected parties after governmental authority has been delegated to unrepresentative agencies." Id. See also American Bus Association v. United States, 627 F.2d at 528; New Jersey Department of Environmental Protection v. United States Environmental Protection Agency, 626 F.2d 1038, 1045 (D.C. Cir. 1980) ("(i)t is now a commonplace that notice and comment rule-making is a primary method of assuring that an agency's decisions will be informed and responsive."). Only if an agency has infused the administrative process with the degree of openness, explanation, and participatory democracy required by the APA will it negate the dangers of arbitrariness and irrationality in the formulation of rules. Weyerhaeuser Co. v. Costle, 590 F.2d 1011, 1027-28 (D.C. Cir. 1978).

(5) The need for disciplined agency proceedings is especially great when, as here, the Agency is embarking on a new process--one that is radically different from the prior approach to state plan review and approval (see 40 C.F.R. Part 256 ("Guidelines for Development and Implementation of State Solid Waste Management Plans")) without explaining its reasons for doing so. Motor Vehicle Manufacturers Association v. State Farm Mutual Automobile Insurance Co., 463 U.S. 29 (1983). While an agency certainly has a right "to modify or even overrule an established precedent or approach," it must also be mindful of "the equally essential proposition that. . .it must provide an opinion or analysis indicating that the standard is being changed and not ignored", remembering, furthermore, to "explain its reasons (beyond merely enumerating) factual differences, if any, between similar cases." Columbia Broadcasting System v. Federal Communications Commission, 454 F.2d 1018, 1026 (D.C. Cir. 1971) (citing Melody Music, Inc. v. Federal Communications Commission, 345 F.2d 730, 733 (D.C. Cir. 1965); see also Greater Boston Television Corp. v. Federal Communications Commission, 444 F.2d 841, 852 (D.C. Cir. 1970), cert. denied, 403 U.S. 923 (1971).

(6) Finally, although the APA provides for some exceptions to the requirement that a rule be promulgated pursuant to notice-and-comment rulemaking, e.g., 5 U.S.C. Section 553(b)(3)(A) (interpretive rules, general statements of policy), these exceptions do not apply here. See, e.g., Petry v. Block, 737 F.2d 1193, 1200 (D.C. Cir. 1984); Environmental Defense Fund v. Gorsuch, 713 F.2d 802, 816 (D.C. 1983); American Bus Association v. United States, 726 F.2d 525, 528 (D.C. Cir. 1980). In sharp contrast to the unpublished internal STIR document, the Agency has frequently published "interpretive" rules and general statements of policy in the Federal Register and in several instances has solicited public comments. See, e.g., 51 Fed. Reg. 25,004 (1986) (Environmental Auditing Statement--Final Policy Statement); 51 Fed. Reg. 20,418 (1986) (Interpretative Rule on the Interim Prohibition Against Installation of Unprotected Underground Storage Tanks); 47 Fed. Reg. 8,010 (1982) (Policy Statement Related to Rules on Interim Authorization of State Hazardous Waste Rules).

V. THE IMPORTANCE OF CONDITIONING EPA APPROVAL OF A STATE PART 258 PROGRAM UPON THE STATE'S COMMITMENT THAT THE WAIVER/EXEMPTION PROCESS WILL NOT BE USED TO RESULT IN THE IMPOSITION OF ANY REQUIREMENT LESS STRINGENT THAN SUBTITLE D REQUIREMENTS.

(1) A state exemption or waiver process that results in standards less stringent than the Subtitle D requirements could defeat the purpose of the revised criteria--the establishment of minimum nationwide standards. Congress clearly expected that baseline EPA standards would be created and uniformly implemented pursuant to Subtitle D. See, e.g., 42 U.S.C. Section 6949(c). RCRA does not permit the establishment of preferential waivers or variances beyond those specifically authorized in the revised Subtitle D rules. Indeed, Section 4005(c)(1)(C) of RCRA directs the EPA to determine whether State permit programs are adequate to ensure compliance with Part 258. Moreover, the revised criteria clearly emphasize the need for consistent application of the design and performance standards. Certainly, the Part 258 criteria provide States and Tribes with substantial flexibility to consider local site-specific conditions by the creation of design and performance standards. It is equally clear, however, that the draft STIR rule requires that all existing and new facilities "shall have a permit incorporating the conditions" identified in the rule so as "to ensure compliance with 40 C.F.R. Part 258."

(2) Congress and the Agency have emphasized that state permitting and compliance monitoring requirements and enforcement authorities must ensure compliance with Part 258. States need not be required to abandon their variance/exemption procedures in order to obtain approval under Subtitle D. However, the only way to reconcile state variance procedures with the requirements of the Federal rules is to expressly condition program approval upon the State's assurance that the variance or exemption process will not be used to result in the imposition of any requirement less stringent than Subtitle

D requirements. See 56 Fed. Reg. at 50, 979, 50,995. Otherwise, open-ended variance procedures could be created or utilized in approved states to obviate what should be minimum and uniformly-applied requirements. See, e.g., Humphrey, The Federal and State Roles in Environmental Enforcement: A Proposal for a More Effective and Efficient Relationship, 14 Harv. Envt'l L. Rev. 7, 38 (1990) (authorized state programs should ensure enforcement of Federal standards).

(3) The courts have, likewise, noted that exemptions or variances should not be used by the EPA or by approved states to avoid minimum Federal standards. As the court emphasized in Mississippi Commission on Natural Resources v. Costle, 625 F.2d 1269, 1276 (5th Cir. 1979), Federal standards must be consistently enforced by authorized states. The court noted that "(i)t was not unreasonable for the EPA Administrator to interpret the (Clean Water) Act as allowing him to require states to justify standards not in conformance with the criteria policy." See also EPA v. National Crushed Stone Association, 449 U.S. 64, 76 (1980), on remand, 643 F.2d 163 (4th Cir. 1981) ("To allow a variance based on economic capability and not to require adherence to the prescribed minimum technology would permit the employment of the very practices the Administrator had rejected in establishing the best practicable technology currently in use in the industry."); Crown Simpson Pulp Co. v. Costle, 642 F.2d 323, 326 (9th Cir. 1981) (variances should be granted only in exceptional cases).

(4) The Agency's failure to delineate the scope of state variance or exemption provisions would also contradict the terms of the APA. In particular, it is clear that administrative decisions that conflict with a statute--here, Sections 4005 and 4010(c) of RCRA--cannot withstand scrutiny under the APA. Chevron U.S.A. v. Natural Resources Defense Council, 467 U.S. 837, 844-45 (1984). In Natural Resources Defense Council v. Herrington, 768 F.2d 1355 (D.C. Cir. 1985), the court stated that "when an agency does not reasonably accommodate the policies of a statute or reaches a decision that 'is not one that Congress would have sanctioned', a reviewing court must intervene to enforce the policy decisions made by Congress." Id. at 1383 (citations omitted). See also Motor Vehicle Manufacturers Association v. State Farm Mutual Insurance Company, 463 U.S. 29, 43 (1983) (agency action is arbitrary and capricious is agency "relied on factors which Congress ha(d) not intended it to consider (or) entirely failed to consider an important aspect of the problem").

(5) In the Subtitle C program, the Agency has determined that it will not authorize hazardous waste programs unless the state agrees "not to use the waiver or variance (procedure) so that it would result in the imposition of any requirement less stringent than comparable Federal program requirements. Additionally, the (state) Attorney General must certify that State law allows the State agency to limit the use of the waiver provision in this fashion.

The State must also agree in the (Memorandum of Agreement) to inform EPA of the issuance of any variance or waiver." U.S. EPA, Office of Solid Waste and Emergency Response, State Consolidated RCRA Authorization Manual 1.3-9 (Jan. 21, 1988) (OSWER Directive No. 9540.00-1C) (emphasis added).

While the Subtitle C approach does not mandate the abolition of state variance or exemption provisions, it clearly emphasizes the necessity of compliance with minimum Federal requirements. A similar approach in the Part 258 program would be reasonable.

V. THE NEED FOR THE DEVELOPMENT OF FEDERAL MINIMUM STANDARDS FOR INDUSTRIAL NON-HAZARDOUS WASTE MANAGEMENT UNDER SUBTITLE D OF RCRA.

(1) According to EPA and congressional estimates, at least 7.5 billion tons of industrial waste disposed of each year is largely unregulated. A 1988 EPA study found that 97 percent of the unregulated industrial wastes are liquid wastes disposed of in surface impoundments. These impoundments generally lack liners, leak detection systems, or other devices to prevent discharges to the environment. There are some 20,000 unregulated disposal sites for industrial waste in the United States--including surface impoundments, landfills, and waste piles. See U.S. EPA, 1 Report to Congress: Solid Waste Disposal in the United States 11 (1988).

As one commentator has noted:

> The magnitude of the industrial waste problem is overwhelming when stated in figures. Nationally, about 211 million tons of municipal waste and approximately 300 million tons of hazardous waste are generated annually. These numbers seem small compared with the 7,600 million tons of industrial waste that are generated and disposed of on-site annually. Industrial waste is generated in amounts that are 36 times larger than municipal waste, and 25 times larger than hazardous waste. Industrial waste may represent as much as 94 percent of municipal, hazardous, and industrial wastes combined.
>
> These statistics both understate and overstate the size of the problem. On one hand, the data do not include disposal away from the site where the waste was generated, which is the fate of much industrial waste. On the other hand, 96.6 percent of industrial waste goes to impoundments (ponds or lagoons) for storage, treatment, or disposal. Not all wastes that go to industrial impoundments are ultimately disposed there, since 29 percent of these impoundments have discharge permits. Much of the industrial waste stream is discharged into surface waters after treatment or storage in impoundments under the Federal Water Pollution Control Act's (FWPCA) National Pollution Discharge Elimination System (NPDES) program. Moreover,

> evaporation at waste water treatment or storage impoundments reduces the industrial waste stream.
>
> It is not clear, however, that surface discharges and evaporation significantly reduce the magnitude of the problem. Liquid wastes have a greater ability than comparable solid wastes to leach into the ground and groundwater, even if these liquid wastes are not intended to be disposed of in impoundments. The potential magnitude of groundwater pollution from some of these impoundments is not necessarily diminished by the fact that the polluting constituents they contain can be measured only in parts per million or parts per billion. Additionally, treatment and storage ponds or lagoons have become disposal impoundments because they are filled over time and then abandoned and closed.

Dernbach, Industrial Waste: Saving the Worst for Last?, 20 Env. Law. Rep. 10,283-84 (July, 1990).

An April 1990 study conducted by the U.S. General Accounting Office ("GAO") concluded that "EPA's data strongly suggest that some industrial facilities may contaminate groundwater and thus threaten human health and the environment." General Accounting Office, Nonhazardous Waste: Environmental Safeguards for Industrial Facilities Need to be Developed 17 (1990). The EPA's 1988 study, which emphasized that "industrial Subtitle D facilities are a cause for concern", 1 Report to Congress, supra, at 34, noted that "less than five percent of the industrial waste impoundments had a synthetic liner system, that only 17.4 percent had some kind of natural liner (e.g., clay), and that only 8.6 percent had any groundwater monitoring. Significantly, 416 of the 1,396 impoundments with groundwater monitoring showed groundwater contamination." Dernbach, supra, at 10,285.

(2) Despite evidence that enormous quantities of industrial wastes are land disposed of each year in the United States--with much of the waste disposed of improperly--the EPA failed to specifically address industrial waste facilities in the Part 258 Subtitle D rules. As the U.S. Office of Technology Assessment noted:

> HSWA required EPA to revise the Subtitle D criteria for facilities that may receive household hazardous waste or small quantity generator hazardous waste, especially by taking into account potential effects on groundwater. In response, EPA recently issued revised criteria for municipal solid waste landfills. The revisions address location restrictions; design criteria based on performance goals; operating criteria; groundwater monitoring and corrective action requirements; financial assurance requirements for closure, postclosure care, and known releases; and closure and postclosure care standards

> based on performance goals. The revision focuses on MSW landfills, even though only a small fraction of the Subtitle D universe consists of municipal solid waste and landfills are used to manage only a small fraction of the Subtitle D universe.

U.S. Congress, Office of Technology Assessment, Managing Industrial Solid Wastes From Manufacturing, Mining, Oil and Gas Production, and Utility Coal Combustion--Background Paper, OTA-BP-O-82 (Feb. 1992), at 14. Accordingly, "(d)evelopment of a Federal Subtitle D regulatory program for manufacturing wastes is generally further behind than similar programs for exempted special wastes. EPA believes it is necessary to understand Subtitle D manufacturing wastes in greater detail and to assess their relative risks before developing new regulatory efforts." Id. at 110. Although the Agency participated in meetings, which were conducted by The Keystone Center, to attempt to develop consensus agreements or requirements on an "interim" program that would be self-implementing, the EPA continues to declare that additional information or resources are needed. Likewise, the Congress appears to have deferred any serious discussion of industrial waste issues in the RCRA reauthorization process.

(3) Although some states--Pennsylvania is a notable recent example--have moved to fill the void, "other states probably will not amend their regulations (to address industrial waste facilities) unless EPA issues new criteria for Subtitle D (industrial) waste management facilities." Id. at 107. At present, only a few states have enacted laws or promulgated regulations that comprehensively address industrial waste management. The OTA report concluded that "(i)n many states, relatively few regulatory requirements exist beyond those contained in the Federal Subtitle D landfill criteria, which are applied in most instances to municipal landfills." Id. at 106 (emphasis included):

> For example, Alabama exempts all industrial surface impoundments established before 1979 (when the State instituted a permit requirement) unless they are associated with wastewater treatment plants that discharge to surface water. Texas exempts all on-site landfills and on-site surface impoundments that are not a part of a wastewater treatment plant. According to EPA (as cited in the GAO study), facilities exempted from permits could threaten groundwater because they may handle harmful substances but not be required to have environmental controls.

Id. at 106. The OTA report found that "(n)o systematic summary is available on the overall efficacy and enforcement of current State regulations. As of 1985, according to EPA's State census, more than half of all industrial surface impoundments, 84 percent of land application units, and almost 20 percent of industrial landfills

were being inspected by State agencies once every 2 years or less frequently in the mid-1980s." Id. at 107.

(4) The unwillingness of the EPA and Congress to forcefully address this issue emphasizes the need for states to act promptly. Some states--such as California, New York, Pennsylvania, and Texas--have revised their regulations to include some controls on manufacturing waste. While it seems clear that Section 4010(c) of RCRA required EPA to address facilities potentially receiving small quantity generator or household hazardous waste, it is equally apparent that the Congress expects EPA to address the remaining facilities as necessary to meet its statutory responsibilities.

(5) In the recent Sierra Club litigation concerning Part 258, the court noted that industrial waste and construction and demolition debris landfills were definitely subject to Subtitle D controls and noted that the plaintiffs should ask a Federal district court to establish a binding timetable on the EPA for the issuance of Federal minimum standards. The court reasoned that Congress had specifically sought to include such nonhazardous disposal facilities within the reach of Subtitle D. For example, Congressman Eckart, the sponsor of the House Amendment that created Section 4010, noted the importance of addressing management standards at surface impoundments--regardless of whether they receive small quantity generator or household hazardous waste. He stressed that "(m)any of the impoundments are located in areas in which there is a strong chance of groundwater contamination--85 percent of all sites are located in areas where there is a potential drinking water source within 1 mile and two-thirds of these sites do not have liners." 129 Cong. Rec. H9161 (daily ed. Nov. 3, 1983). He also described Subtitle D--in the absence of any Federal controls on industrial facilities--as a "no man's land of regulation." Id. He concluded by declaring that "this amendment (section 4010) takes the first step to protecting our groundwaters from these numerous impoundments which may endanger them. . . ." Id.

(6) Similarly, the report of the Senate noted that "in revising the (Subtitle D) criteria the Agency should focus initially on municipal landfills and subtitle D surface impoundments where" small quantity and household hazardous materials were most likely to have been disposed along with Nonhazardous waste. S. Rep. No. 98-284, 98th Cong., 1st Sess. 52. The thousands of surface impoundments, land application units and waste piles that accept--virtually without any regulatory controls--industrial waste are certainly as likely to pose a potential threat to the environment at least as great as any active municipal solid waste landfill. Moreover, the sheer number of impoundments and other facilities presents a cumulative potential for environmental degradation that far exceeds that posed by MSW facilities.

Clean Air Act: Significant New Developments

"The Fugitive"

Kevin Bloomer

1990 Federal Clean Air Act:

Significant New Developments

"The Fugitive"

Kevin Bloomer has worked in the Regulation Development Division for the Texas Air Control Board since January 1992. Previously, he worked as a pipeline engineer for Williams Brothers Engineering and as a sales engineer for Edwards High Vacuum and Koch Corrosion Control. Kevin has two Bachelor of Science degrees in Chemistry and Chemical Engineering from Oklahoma State University.

Texas Environmental Superconference

Clean Air Act: Significant New Developments

I. INTRODUCTION AND BACKGROUND - *The 1990 FCAA Amendments*

Title I "Nonattainment Areas"

Title II "Motor Vehicles"

Title III "Air Toxics"

Title IV "Acid Rain"

Title V "Permits"

II. TITLE I HIGHLIGHTS - *VOC and NO_x, the Ozone Precursors*

III. TITLE I REQUIREMENTS - *More Rule Revisions*

A. Reg VII's on the books - Highlights, framework

B. Reg V - Latest rule proposals for 15% RFP
1. Mandated Rules
2. Core Rules
3. Committal/Contingency Rules

IV. WHO'S AFFECTED? *NEARLY EVERYONE!*

A. Small Businesses

B. Big Businesses

C. Motorists

D. Consumers

Texas Environmental Superconference

Clean Air Act: Significant New Developments

V. FUTURE RULES - *More Stringent Standards & More Flexibility*

A. Title I - State Regulations
   1. General Rules (Banking in ozone nonattainment areas)
   2. Reg I (PM10 - El Paso)
   3. Reg II (SO_2 - potential Harris County)
   4. Reg III (lead - Collin County and possibly Bexar County)
   5. Reg IV (Ozone in nonattainment areas and CO in El Paso controlled with mobile source measures)
   6. Reg V
   7. Reg VI (Permits for new source review in all nonattainment areas)
   8. Reg VII
   9. Reg IX (CO - El Paso)

B. Title II - Reg IV

C. Title III - State Regulations
   1. Reg III
   2. Reg V

D. Title IV - State Regulations
   1. possibly Reg I (because particulate matter can act as an initiator of acid rain droplets)
   2. Reg II
   3. Reg VII

E. Title V - State Regulations
   1. Reg VI (separated Texas permits program from the new operating permits program)
   2. Reg XII (new Chapter 122)

1990 FEDERAL CLEAN AIR ACT AMENDMENTS

TITLE I - **Nonattainment**

TITLE II - **Mobile Sources**

TITLE III - **Hazardous Air Pollutants**

TITLE IV - **Acid Rain** Sulfur dioxide

TITLE V - **Permits**

TITLE VI - **Stratospheric Ozone**

TITLE VII - **Enforcement**

TITLE VIII - **Miscellaneous Provisions**

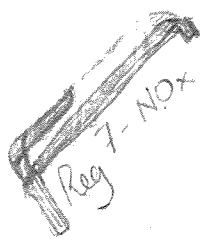
TITLE IX - **Research**

TITLE X - **Disadvantaged Business**

TITLE XI - **Employment Transition Assistance**

What if ignore feds?

1) fed highway funds
2) bump up nonattain classification
3) flip
4) New Source 2:1 offset



Clean Air Act: Significant New Developments

Title I "Nonattainment Areas"
SUMMARY

- CATEGORIES Divides cities into six categories for ozone (3 years - marginal, 6 years - moderate, 9 years - serious, 15-17 years - severe, 20 years - extreme) and two categories for carbon monoxide.

- % REDUCTION Applies to ozone only. Moderate areas and above must achieve 15% VOC reduction within six years of enactment. For serious and above, average of 3% VOC per year thereafter until attainment. Annual VOC and NO_x reductions as needed to attain. The 15% and 3% is from an adjusted baseline emission inventory and all reductions except those from FMVCP, gasoline volatility, RACT, and I/M fixups are creditable. Possible exemption from percent reduction based on technological feasibility, if SIP adopts measures similar to those in next higher category and if all feasible measures are adopted in the first six years. NO_x substitution for VOC possible after six years.

- PRESCRIBED MEASURES Major NO_x sources must meet same requirements as major VOC sources unless EPA finds no benefit. All ozone nonattainment areas correct existing RACT rules and I/M programs.
  - Moderate areas add basic I/M, Stage II, and RACT on new and existing CTG identified sources and 100-ton non-CTG identified sources, and make an attainment demonstration.
  - Serious areas add enhanced I/M, RACT on 50-ton non-CTG identified sources, a fleet vehicle program in areas of population of 250,000 and larger, TCMs needed to offset vehicle growth, special rules for source modifications, and photochemical grid modeling as the attainment demonstration.
  - Severe areas add RACT for 25-ton non-CTG identified sources and provisions requiring adoption of TCMs, if necessary, to meet progress requirements and employer trip reduction provisions.
  - Extreme areas add RACT for 10-ton sources, eliminate feasibility exemption from 15% and 3%, add NO_x reductions from clean fuels or advanced technology, have peak hour traffic controls, can get SIP approval based on anticipated new technology.

- FEDERAL MEASURES EPA issues 11 new CTGs and CTGs for aerospace coatings, shipbuilding and repair, marine vessels rule, and consumer products rules. Requires an ACT for 25-ton NO_x and VOC sources.

- SANCTIONS Grace period of 18 months to cure planning failure. Then must apply one of two sanctions (modified highway ban or 2:1 offset ratio for new sources). Air grants are available. Existing construction bans remain, but no new ones added.

Clean Air Act: Significant New Developments

Title I "Nonattainment Areas"
SUMMARY continued

- FEDERAL IMPLEMENTATION PLANS (FIPs) Within two years of state failure to develop an adequate SIP, mandatory attainment FIPs are required.

- TRANSPORT Sets up an 11 Northeast state transport commission. Requires transport states to adopt RACT for existing and new CTGs, RACT on major (50-ton) non-CTG identified sources, enhanced I/M in MSAs with a population larger than 100,000, and Stage II or equivalent. No opt-out of VOC measures is allowed. Major NO_x sources must meet same requirements as major VOC sources unless EPA finds no benefit.

- CO AND PM-10 Wintertime oxygenated fuels in all CO areas greater than 9.4 ppm. Areas greater than 12.7 ppm must add VMT forecast, enhanced I/M, and demonstrate attainment. Serious CO areas add TCMs as in severe ozone areas. PM-10 areas initially designated nonattainment must attain by December 1994 (possible extension until 2001). Moderate areas adopt RACM. Serious areas adopt BACM. Serious CO and PM-10 areas adopt measures to achieve 5% reduction per year, effective upon failure to attain.

THE PROBLEM

Ozone > NAAQS (0.12 ppm)

HOUSTON	EL PASO
0.22 ppm	0.17 ppm

BEAUMONT	DALLAS/FT WORTH
0.16 ppm	0.14 ppm

SOURCE: 56 FR 56694, 11/6/91

THE SOLUTION (IDEAL)

- Apply best science and engineering
to develop best policies
to solve problem.

1) Urban Airshed Model (UAM)

2) Predict Attainment via multiple pathways

3) Least Cost Path

4) Attain Ozone NAAQS by:

HOUSTON	EL PASO
2007	1999
BEAUMONT	DALLAS/FT WORTH
1999	1996

Texas Air Control Board Regulations

General Rules (31 TAC Chapter 101) rev. July 16, 1993

Procedural Rules (31 TAC Chapter 103) rev. July 16, 1993

Enforcement Rules (31 TAC Chapter 105) rev. October 25, 1985

Regulation I (31 TAC Chapter 111) Control of Air Pollution From Visible Emissions And Particulate Matter rev. June 18, 1993

Regulation II (31 TAC Chapter 112) Control of Air Pollution From Sulfur Compounds rev. September 18, 1992

Regulation III (31 TAC Chapter 113) Control of Air Pollution From Toxic Materials rev. August 14, 1987

Regulation IV (31 TAC Chapter 114) Control of Air Pollution From Motor Vehicles rev. January 15, 1993

Regulation V (31 TAC Chapter 115) Control of Air Pollution From Volatile Organic Compounds rev. October 16, 1992

Regulation VI (31 TAC Chapter 116) Control of Air Pollution By Permits for New Construction or Modification rev. October 16, 1992

Regulation VII (31 TAC Chapter 117) Control of Air Pollution From Nitrogen Compounds rev. May 11, 1993

Regulation VIII (31 TAC Chapter 118) Control of Air Pollution Episodes rev. April 14, 1989

Regulation IX (31 TAC Chapter 119) Control of Air Pollution From Carbon Monoxide rev. March 30, 1979

Regulation X (31 TAC Chapter 120) Control of Air Pollution From Hazardous Waste or Solid Waste Management Facilities rev. December 13, 1991

Regulation XI (31 TAC Chapter 121) Control of Air Pollution From Municipal Solid Waste Facilities rev. June 22, 1990

PROPOSED Regulation XII (31 TAC Chapter 122) Federal Operating Permits

Inspection Fee Schedule as part of General Rules rev. July 16, 1993

Standard Exemption List as part of Regulation VI rev. June 18, 1992

Stormwater Regulation Update

"Secret Storm"

Rhonda Harris

"SECRET STORM"
An Update of the Storm Water Regulations

Rhonda E. Harris, P.E.
Manager
National Utilities Consulting Practice
KPMG Peat Marwick
Dallas, Texas

August 5, 1993

Biosketch 7/09/93

Rhonda E. Harris, P.E.

Rhonda E. Harris, P.E. is a Manager in the National Utilities Consulting Practice of KPMG Peat Marwick. She provides management consulting services for municipal and investor-owned utilities in the water, wastewater, stormwater and solid waste areas. Ms. Harris received her Bachelor of Science Degree in Civil Engineering from the University of Texas at Arlington, and her Masters Degree in Business Administration from Southern Methodist University in Dallas, Texas.

Ms. Harris has over 14 years experience in design and construction of stormwater, wastewater and drinking water systems and facilities throughout North Texas and Oklahoma, with a broad background in development and installation of such systems.

Prior to joining KPMG Peat Marwick, Ms. Harris was an Environmental Engineer of the Stormwater Group at the Environmental Protection Agency, which oversees the implementation of the new Stormwater Regulations for municipalities and industries in Region 6, including Arkansas, Oklahoma, Louisiana, Texas and New Mexico. In this capacity, Ms. Harris was directly involved with the rulemaking for the stormwater regulations and the general permits for industrial and construction activities.

"SECRET STORM"
An Update of the Storm Water Regulations

Rhonda E. Harris, P.E.
KPMG Peat Marwick

TABLE OF CONTENTS

I. INTRODUCTION

II. HISTORY OF THE PROGRAM

III. MAJOR ITEMS OF INTEREST

A. REPORTS TO CONGRESS

B. "MEGA" GENERAL PERMITS

C. PHASE 2 OF THE STORM WATER PROGRAM

IV. CONCLUSION

"SECRET STORM"
An Update of the Storm Water Regulations

Rhonda E. Harris, P.E.
Manager
National Utilities Consulting Practice
KPMG Peat Marwick

I. INTRODUCTION

The storm water regulations developed and implemented by the Environmental Protection Agency do indeed sometimes seem like a "Secret Storm" due to the many twists, turns and delays in finalizing important portions of the regulations. There are several specific tracks currently being pursued in the program and designated as Phase 1. These are:

a) permitting requirements for municipal separate storm sewer systems serving areas with a population of over 100,000;

b) coverage under two existing General Permits - one for discharges associated with industrial activities, and one for discharges associated with construction activities; and

c) permitting currently being pursued by several thousand industries under the group storm water application option.

The Storm Water program is somewhat convoluted, primarily due to the magnitude of the coverage requirements. This discussion should clear up some of the major question areas of the program.

Three major items in the Storm Water Program that will be of interest in the coming months are:

a) the two Reports to Congress that were required by the Clean Water Act Amendments of 1987,

b) proposed issuance of a series of "Mega" general permits for storm water discharges associated with industrial activities developed from the group storm water applications, and

c) proposed issuance of Phase 2 requirements for all other storm water discharges not currently covered by Phase 1 of the regulations.

II. HISTORY OF THE PROGRAM

The Federal Water Pollution Control Act of 1972 (also known as the Clean Water Act) included storm water discharges in the original list of problems to be addressed by the regulations. Storm water discharges were described as part of the non-point source discharges at that time. The Clean Water Act Amendments of 1987 further defined storm water discharges as point source discharges, and therefore subject to permitting under the National Pollutant Discharge Elimination System (NPDES) permitting program.

Congress directed the Environmental Protection Agency to develop regulations covering these storm water discharges and the permitting requirements for them. Subsequently, through proposal, public comment and final issuance, the Regulations for Storm Water Discharges were promulgated in the Federal Register on November 16, 1990.

These November 16, 1990, regulations covered storm water discharges from municipal separate storm sewer systems serving areas with populations of over 100,000, and a selected group of industrial activities. These industrial activities covered the following:

1. Facilities subject to storm water effluent limitations guidelines, new source performance standards, or toxic pollutant effluent standards under 40 CFR subchapter N;

2. Facilities classified as Standard Industrial Classification (SIC) 23 (except 2434), 26 (except 265 and 267), 28 (except 283), 29, 311, 32 (except 323), 33, 3441, 373;

3. Facilities classified as SIC codes 10 through 14, including active or inactive mining operations and oil and gas exploration, production, processing or treatment operations, or transmission facilities that discharge storm water contaminated by contact with or that has come into contact with, any overburden, raw material, intermediate products, finished products, byproducts or waste products located on the site of such operations;

4. Hazardous waste treatment, storage or disposal facilities, including those that are operating under interim status of a permit under Subtitle of RCRA;

5. Landfills, land application sites, and open dumps that have received any industrial wastes (waste that is received from any of the facilities described under this section), including those subject to regulation under Subtitle D of RCRA;

6. Facilities involved in the recycling of materials, including metal scrapyards, battery reclaimers, salvage yards, and automobile junkyards, including but

limited to those classified as SIC 5015 and 5093;

7. Steam electric power generating facilities, including coal handling sites;

8. Transportation facilities classified as SIC codes 40, 41, 42 (except 4221-4225), 43, 44, 45 and 5171 which have vehicle maintenance shops, equipment cleaning operations, or airport deicing operations;

9. Treatment works treating domestic sewage or any other sewage sludge or wastewater treatment device or system, used in the storage treatment, recycling,, and reclamation of municipal or domestic sewage, including land dedicated to the disposal of sewage sludge that is located within the confines of the facility,with a design flow of 1.0 million gallons per day or more, or required to have an approved pretreatment program under 40 CFR 403;

10. Construction activity including clearing, grading and excavation activities except operations that result in the disturbance of less than 5 acres of total land area which are not part of a larger common plan of development or sale;

11. Facilities under SIC codes 20, 21, 22, 23, 2434, 25, 265, 267, 27, 283, 285, 30, 31 (except 311), 323, 34 (except 3441), 35, 36, 37 (except 373), 38, 39, 4221-4225, (and which are not otherwise included in categories 1-10).

One small caveat to this regulation was published in late 1991. The Intermodal Surface Transportation Efficiency Act of 1991 (also known as the ISTEA) postponed (**but did not exempt**) to Phase 2, the requirement for municipal separate storm sewer systems serving areas with population of less than 100,000 to permit their industrial activities. There were three exceptions to this postponement. Airports, power plants, and landfills that do not meet the requirements of Subtitle D of RCRA must be permitted under Phase 1 of the Storm Water Program, even though the municipalities that operate them serve populations of less than 100,000.

The General Permit for Storm Water Discharges Associated with Industrial Activities, and the General Permit for Storm Water Discharges Associated with Construction Activities were promulgated in final form on September 9, 1992, and went into effect on October 1, 1992. Along with these General Permits, a Request for Comments regarding Phase 2 of the Storm Water regulations was issued.

In the original 1990 regulations, the remaining municipal separate storm sewer systems serving areas with a population of less than 100,000 and all other remaining industrial activities not listed were prohibited from being permitted prior to October 1, 1992. However, exceptions have always been available to the Director due to water quality concerns. But, theoretically, what the regulation meant was that all of these entities <u>were</u> required to be permitted after that date. Therefore, the EPA issued (in the Federal Register, on December

18, 1992) postponement of implementation of the remaining portion of the program, termed Phase 2, until regulations could be developed by October 1, 1993, and implemented by October 1, 1994.

III. MAJOR ITEMS OF INTEREST

A. REPORTS TO CONGRESS

What are the next steps? As noted earlier, there are three major items of interest currently underway. Two Reports to Congress are due from the Agency (in reality, these are past due). The First Report to Congress requires a scientific assessment of the nature and source of pollutants for both municipal separate storm sewer systems and industrial activities, with technical information on the basis for inclusion of these activities in the Storm Water Program. The Second Report to Congress outlines further who should be included in the Storm Water Program (and more specifically, who should be included in Phase 2 of the Program), based on the technical information developed for the First Report.

These Reports to Congress are projected to be presented prior to the August recess, but a more realistic time frame is that they will be presented when Congress reconvenes after Labor Day, 1993.

B. "MEGA" GENERAL PERMITS

EPA Headquarters and each of the EPA Region Offices are currently working on development of the "Mega" general permits for storm water discharges associated with industrial activities, based on the information provided by the group storm water permit applications. These "Mega" general permits will be industry specific, utilizing information that was developed for the original General Permit for Discharges Associated with Industrial Activities. The additional information provided by the group applicants will be utilized to customize the detailed parameters of the general permit for the particular industrial activities.

These "Mega" general permits are expected to be sent to EPA Management for review by the last week of July. As soon as the drafts of the "Mega" general permits are complete, they will be sent to the Regions for a "straw man" review. This time frame could be as early as August of 1993, or it could be as late as several months, depending on how long the Management at EPA chooses to retain them.

When the "Mega" general permits go out to the Regions for review, EPA may choose to allow them to be released to the public, also, for a "straw man" poll. This release of the proposed "Mega" general permits to the public will not be the formal publication in the Federal Register for Draft Notice of the permits; rather, it will be an informal look at the proposed details of the permits, so that major problems or corrections may be made prior to

official publication.

When EPA has provided a "straw man" draft permit available for public comment in the past, the typical comment time frame is approximately two to six months. Subsequently, the official publication in the draft form is printed in the Federal Register. The most optimistic time frame for these"Mega" general permits would be issuance of the draft notice by October of 1993. The public comment period will most likely be in the neighborhood of 60 to 90 days from date of draft issuance. Final issuance of the "Mega" general permits could be anywhere from 120 days to one year after draft issuance, depending on the amount and types of comments received during the comment period.

C. PHASE 2 OF THE STORM WATER PROGRAM

Phase 2 of the Storm Water Program covers **all** other storm water discharges not covered by Phase 1. This includes all remaining municipal separate storm sewer systems serving areas with a population of less than 100,000, and all remaining industrial activities. Obviously this is an enormous group of activities, several orders of magnitude larger than the approximately 250 municipal separate storm sewer systems and 100,000 to 200,000 industrial activities covered under Phase 1.

The EPA will by necessity have to look at this remaining group in a "ladder" fashion, by bringing segments of the group into the program on a time-step basis. It is expected that this "ladder" will include a "stepped" approach to the municipal separate storm sewer systems based on the population of the covered areas. For instance, the EPA could provide that municipal separate storm sewer systems serving populations of 50,000 to 100,000 be the next group to come into the program, then 25,000 to 50,000, 10,000 to 25,000 and so on. Each of these "steps" would bring in a much larger group of municipal separate storm sewer systems, but the requirements would most likely be tiered according to the systems' sophistication and capabilities. This permitting approach would be very similar to the way that the NPDES permitting strategy was utilized for wastewater treatment facilities from 1972 to the present.

In addition, it is likely that each "step" of the Storm Water program would include a specific group of industrial activities until all industrial activities are eventually included. The requirements for each successive group of industrial activities would be developed based on the parameters of the industries included.

The sheer magnitude of the Storm Water program dwarfs any other program that the EPA has instituted to date; and currently, they have not developed additional resources to deal with it. Many of the states that have received delegated authority for the NPDES program are struggling to meet their regulatory requirements to the EPA. Nevertheless, the program will continue to grow.

Some states, such as California and Oregon, have tried to take a pro-active approach to the storm water program by setting up a permitting system that covers the vast majority of storm water discharges associated with industrial activities and associated with construction activities with a series of General Permits. These General Permits go one step further than the EPA's General Permits in that they do try to deal with more specific water quality parameters for particular industrial activities.

This approach is very similar to what the EPA will be developing for the "Mega" general permits from the group applications, and the EPA is certainly drawing upon information provided by these group applications. As noted earlier, these "Mega" general permits will be developed from industry specific parameters that best fit the groups included in the application process.

IV. CONCLUSION

The Storm Water Program, although not a difficult program to understand, is somewhat convoluted, and therefore somewhat confusing. Despite the predictions of some skeptics, however, it is here to stay. Therefore, professionals in the environmental field must become aware of the details of the program and stay current with new developments. Municipal and industrial clients who are not currently covered in the Storm Water Program should be kept informed about any new developments in this program which may affect them.

The EPA has a goal to meet congressional mandates for "fishable and swimmable" waters of the United States. To meet this mandate, the EPA expects the players in the Storm Water Program, both municipal separate storm sewer systems and industrial activities, to be proactive, doing whatever is necessary to prevent pollutants from contaminating storm water discharges. The prevention of these pollutants from entering storm water discharges will prevent the contamination of waters of the United States. Prevention of pollution in storm water discharges will thus measurably improve the quality of waters of the United States, thereby moving closer to the EPA's mandated goal.

Oilfield Waste

"Strike It Rich"

Lori Wrotenberry

BIOGRAPHY

LORI WROTENBERY is Director of Environmental Services for the Oil and Gas Division of the Railroad Commission of Texas. She heads up the Environmental Services Section (formerly Underground Injection Control Section), which performs most of the environmental rulemaking and permitting functions of the Oil and Gas Division. She also serves on several interagency committees that coordinate activities relating to the protection of human health and the environment.

Previously she served as Staff Attorney and then Assistant Director for the Underground Injection Control Section. She came to the Railroad Commission of Texas from the Texas Department of Water Resources, where she worked on water rights and water quality matters as a staff attorney in the General Counsel's Office.

Ms. Wrotenbery is a member of the State Bar of Texas. She is a graduate of Harvard Law School, where she was an executive editor of the Harvard Environmental Law Review. She also holds a B.S. in Geology from the University of Texas at Austin and a B.A. in Anthropology from Wellesley College.

CONTACT: Railroad Commission of Texas
P.O. Box 12967
Austin, TX 78711-2967
(512) 463-6810

Oil Field Wastes:
Update on Railroad Commission Programs

Lori Wrotenbery
Director of Environmental Services
Oil and Gas Division
Railroad Commission of Texas

5th Annual Texas Environmental Superconference
August 5-6, 1993

I. Introduction

A. Railroad Commission Jurisdiction

In addition to regulating a wide range of oil and gas operations for the purpose of conserving oil and gas resources, the Railroad Commission of Texas regulates oil and gas exploration and production operations to protect the state's water resources. The scope of the Commission's environmental programs for oil and gas exploration and production operations is determined principally by section 91.101 of the Texas Natural Resources Code, which lists various oil and gas activities subject to the Commission's jurisdiction. Through a Memorandum of Understanding (MOU), the Railroad Commission of Texas, the Texas Water Commission, and the Texas Department of Health have further elaborated on the division of jurisdiction among the agencies over wastes from various oil and gas activities. The MOU summarizes the statutory authority of each of the agencies and then discusses the division of jurisdiction with regard to specific activities.

The MOU was last revised in 1987, when each of the participating agencies adopted the MOU by reference in its rules. The agencies are now in the process of updating the MOU.

Much has changed since 1987. The Railroad Commission has a new oil field cleanup program, most of the Department of Health's waste management responsibilities have been transferred to the Water Commission, and new issues like naturally occurring radioactive materials (NORM) have arisen. Also, the U.S. Environmental Protection Agency (EPA) has clarified the scope of the oil and gas exemption from hazardous waste regulation,[1] and the Railroad Commission is working on new rules for hazardous, non-exempt oil and gas wastes.[2] The revised MOU will reflect these developments. Moreover, in working with the current MOU, the agencies have identified some provisions that need to be clarified or expanded, such as the discussion of the division of

---

[1] See Part III.A. below.

[2] See Part IV below.

jurisdiction over the waste management activities of various types of oil field service companies.

The pending revision, however, will not change the basic provisions of the MOU outlining the scope of the Railroad Commission's environmental programs for oil and gas operations. In summary, the Commission's environmental programs cover the following types of oil and gas activities:

- Drilling, operation, and plugging of wells associated with the exploration, development, or production of oil or gas, including oil or gas wells, fluid injection wells used in enhanced recovery projects, and disposal wells.
- Separation and treatment of produced fluids in the field or at natural gas processing plants.
- Storage of crude oil before it enters a refinery.
- Underground storage of hydrocarbons in salt caverns or natural gas in depleted reservoirs.
- Transportation of crude oil or natural gas by pipeline.
- Storage, hauling, disposal, or reclamation of wastes generated by these activities.

B. Historical Summary

The Railroad Commission's environmental programs for oil and gas exploration and production operations have a long history dating back to 1919, when the Commission adopted a rule requiring fresh water to be protected during drilling and plugging operations.[3] At that time, the state already had a law on the books dating from 1899 that required wells to be constructed with casing and plugged upon abandonment.[4] Ironically, the purpose of that law was to protect oil and gas from fresh water--surface water penetrating through abandoned wells was ruining an oil field in Navarro County. Nevertheless, the law did specifically require wells to be constructed with wrought iron or steel casing to isolate the fresh water formations. It also required wells to be plugged upon abandonment.

---

[3]Rule 20, Oil and Gas Circular No. 7, June 18, 1919 (available at the Railroad Commission Library and the University of Texas Center for American History).

[4]H.B. No. 542, 26th Leg., R.S., ch. 49, 1899 Tex. Gen. Laws 68.

Over the years, the Railroad Commission adopted increasingly stringent and more comprehensive water protection rules. For example, in the 1930's, the Commission began regulating underground injection through special orders issued for injection projects after notice and hearing. And in 1969, the Commission issued a statewide order that required Commission approval for the use of a pit to store or dispose of saltwater.[5] This order also prohibited the discharge of saltwater without a permit.

In recent years, the Railroad Commission has intensified its efforts to strengthen its environmental regulations and increase compliance. Since 1980, the Commission has amended all of its major statewide rules pertaining to environmental protection, has adopted several new rules, and has been granted additional enforcement authority. For example:

- In 1981, the Commission amended its rules for fluid injection and disposal wells[6] to establish more specific technical standards, broader notice requirements for permit applications, and new monitoring and reporting requirements for permitted wells. At the same time, the Commission adopted a new rule governing underground hydrocarbon storage wells.[7] In 1982, the Commission received primary enforcement authority from EPA for the Class II Underground Injection Control Program.

- Also in 1982, the Commission amended its rules to incorporate state-of-the-art requirements for casing, cementing, and plugging wells.[8]

- In 1983, the Texas Legislature authorized the Commission to assess administrative penalties of up to $10,000 per day for a violation of its safety or pollution prevention rules,[9]

---

[5]Special Order Amending Rule 8 of the General Conservation Rules of Statewide Application, Docket No. 20-56,841, April 3, 1967 (effective January 1, 1969).

[6]Rule 9 (Disposal Wells) and Rule 46 (Fluid Injection into Productive Reservoirs), 16 Tex. Admin. Code §§ 3.9 and 3.46.

[7]Rule 74 (Underground Hydrocarbon Storage), 16 Tex. Admin. Code § 3.71.

[8]Rule 13 (Casing, Cementing, Drilling, and Completion Requirements) and Rule 14 (Plugging), 16 Tex. Admin. Code §§ 3.13 and 3.14.

[9]Tex. Nat. Res. Code §§ 81.0531-.0534 (Vernon Supp. 1993).

and the Commission established a new Legal Enforcement Section to administer the administrative penalty program.

- In 1984, the Commission amended its rules on the storage and disposal of oil and gas wastes.[10] Almost all previously permitted pits had to be re-permitted under new, more stringent standards. Several types of pits and disposal methods were regulated by rule or permit for the first time.

- In 1985, the Commission adopted a new rule concerning discharges of oil and gas wastes to surface waters.[11] This rule contains provisions necessary for the Commission to administer the federal National Pollutant Discharge Elimination System (NPDES) permitting program for these discharges and will become effective upon EPA approval of the Commission's NPDES program.

- In 1990, the Commission amended its rule on the reclamation of tank bottoms and other crude oil wastes[12] to require reclamation plant operators to file bonds to ensure that their plants are operated and closed in accordance with Commission rules. The amendments also expanded the permitting requirements for the disposal of tank bottoms.

- In 1991, the Commission sought additional funding and authority to address the problem of abandoned oil field sites. The Texas Legislature enacted S.B. 1103,[13] which created the Oil Field Cleanup Fund and also established new financial responsibility requirements for oil and gas operators.

- Also in 1991, the Commission adopted a new rule requiring oil and gas operators to take measures to protect migratory birds at oil field tanks and pits.[14]

---

[10]Rule 8 (Water Protection), 16 Tex. Admin. Code § 3.8.

[11]Rule 77 (Discharges to Waters of the State), 16 Tex. Admin. Code § 3.75.

[12]Rule 57 (Reclaiming Tank Bottoms, Other Hydrocarbon Wastes, and Other Waste Materials), 16 Tex. Admin. Code § 3.57.

[13]72nd Leg., R.S., ch. 603, 1991 Tex. Gen. Laws 2186. See Part II below.

[14]Rule 22 (Protection of Birds), 16 Tex. Admin. Code § 3.22.

- In 1992, the Commission amended its plugging rule[15] to place additional conditions on the granting of an extension of time to plug a well and to establish requirements for monitoring and testing of older, inactive wells. The Commission also adopted new rules for plugging seismic and core holes and for completing cathodic protection wells.[16]

C. Current Organization and Activities

Most recently, the Railroad Commission reorganized its Oil and Gas Division. A key factor in this reorganization was the increasing emphasis on the environment in the Commission's regulatory programs for oil and gas operations.

David Garlick, Director of the Oil and Gas Division, now has two assistant directors. One of them, Jerry Mullican, oversees the activities of the division's Regulatory Enforcement (field operations), Oil Field Cleanup, and Environmental Services (formerly Underground Injection Control) Sections. Mr. Mullican directed the Underground Injection Control Section from its inception in 1980, and has been recognized nationally as a leader among state environmental regulators of oil and gas exploration and production operations. He is now responsible for the bulk of the environmental activities of the Oil and Gas Division.

The Commission also renamed the Underground Injection Control Section. This section was originally created to administer the Commission's Class II Underground Injection Control Program. Over the years, the Commission assigned additional responsibilities to the section, including processing permit applications for pits and surface disposal facilities, providing technical support to field personnel, and coordinating with other state and federal agencies. The section's new name, Environmental Services, reflects the nature and extent of its current duties. The author of this paper now serves as Director of Environmental Services.

Within this new structure, the Railroad Commission is continuing its efforts to enhance its environmental programs for oil and gas exploration and production operations. The remainder of this paper gives an update on the Commission's initiatives in four separate although related areas.

---

[15]Rule 14 (Plugging), 16 Tex. Admin. Code § 3.14.

[16]Rule 99 (Cathodic Protection Wells) and Rule 100 (Seismic Holes and Core Holes), 16 Tex. Admin. Code §§ 3.99 and 3.100.

First, with the enactment of S.B. 1103 in 1991, the Railroad Commission's environmental programs took a giant step forward. Part II of this paper summarizes this new legislation and reports on its implementation.

Second, several of the Railroad Commission's current environmental activities relate to the upcoming reauthorization of the federal Resource Conservation and Recovery Act (RCRA). Congress has been debating whether and how to regulate wastes associated with oil and gas exploration and production operations under RCRA. Since 1980, most oil and gas wastes have been exempt from regulation as hazardous wastes under Subtitle C of RCRA. Some environmental groups and commercial hazardous waste firms are urging Congress to lift or limit this exemption. The oil and gas industry and the oil and gas producing states are cautioning Congress about the potentially disastrous economic consequences of imposing unnecessary federal regulations on the management of oil and gas wastes. Part III of this paper discusses the issues and activities surrounding the debate about exempt oil and gas wastes.

Third, in a related effort, the Railroad Commission is developing a program for hazardous oil and gas wastes. The Commission regulates non-exempt, as well as exempt, oil and gas wastes. Some of the non-exempt oil and gas wastes are hazardous wastes as defined by EPA. Senate Bill 1103 added a new Subchapter N to Chapter 91 of the Texas Natural Resources Code to give the Commission the authority it needs to develop a RCRA Subtitle C program for hazardous oil and gas wastes. Part IV of this paper describes this new authority and how the Commission plans to implement it.

And fourth, the Commission is now in the process of formalizing its standards and procedures for cleanup of crude oil spills. The Commission has long required oil and gas operators to clean up a crude oil spill by removing all free oil and working the contaminated soil to the extent necessary to prevent runoff or release of oil. For spills in sensitive areas, additional requirements have been imposed on a case-by-case basis. Recently, however, operators, landowners, other state and federal agencies, and the Commission's own field staff have expressed a need for more definitive standards and procedures for cleanup of crude oil spills. Part V of this paper reports on the Commission's interim guidelines and pending rulemaking on this issue.

II. S.B. 1103

S.B. 1103 replaced the old well plugging fund with a larger, more comprehensive oil field cleanup fund. It created new sources of

revenue for the fund and authorized the Railroad Commission to use the monies in the fund for several specific environmental purposes. It also established new financial responsibility requirements for oil and gas operators and authorized the Commission to regulate haulers of oil and gas waste and hazardous oil and gas waste.

A. The Oil Field Cleanup Fund

S.B. 1103 authorizes the Railroad Commission to use the monies in the oil field cleanup fund to plug abandoned wells and clean up pits and other oil field sites when the responsible operators have failed to do so.[17] The Commission may seek reimbursement from the responsible operators for these expenditures.[18]

The oil field cleanup fund established by S.B. 1103 is supported entirely by fees, penalties, and other payments collected from the oil and gas industry.[19] Annual deposits to the fund are anticipated to exceed $10 million.

Drilling permit fees, which were the principal source of revenue for the well plugging fund, were transferred to the new oil field cleanup fund.[20] In place of the flat $100 fee for a drilling permit, an applicant now pays a fee ranging from $100 to $200 depending on the depth of the well.[21] Also for deposit in the fund, the Commission continues to collect an annual fee of $100 for each unplugged well that has been inactive for more than one year and is not covered by a bond.[22]

Another major source of revenue for the fund is regulatory fees on the production of oil and gas: 5/16¢ per barrel of oil and 1/30¢ per thousand cubic feet of gas.[23] These fees will be collected by the comptroller for deposit in the fund until the

---

[17]Tex. Nat. Res. Code § 91.112(a) (Vernon Supp. 1993).

[18]Id. §§ 89.083 and 91.113(f).

[19]Id. § 91.111(c). See also Rule 78 (Fees, Performance Bonds and Alternate Forms of Financial Security Required To Be Filed), 16 Tex. Admin. Code § 3.76.

[20]Id. § 85.2021(d).

[21]Id. § 85.2021(a).

[22]Id. § 85.2021(c). See Part II.B. below.

[23]Id. §§ 81.116-.117.

balance in the fund reaches $10 million, and they will then be suspended unless the balance in the fund drops below $6 million.[24]

In addition, S.B. 1103 created the following new fees:

- Pipeline severance fees.[25]
- Fees submitted as an alternative to a bond.[26]
- Discharge permit application fees.[27]
- Hazardous oil and gas waste generation fees.[28]
- Oil and gas waste hauler permit application fees.[29]

During fiscal year 1992, a total of $9,221,149 was deposited in the oil field cleanup fund. And the Commission used monies from the fund to plug 1,324 wells, which is three times as many wells as were plugged with state funds the year before. Also in fiscal year 1992, the Commission used monies from the fund to take pollution abatement actions at more than 50 sites.

The Commission currently has an inventory of about 1800 wells that have been approved for plugging with state funds. Wells are continually added to this inventory and are addressed in priority order based on the level of risk to human health and the

---

[24]Id. § 91.111(b).

[25]Id. § 85.167. A pipeline severance is a highly effective enforcement mechanism authorized by sections 85.161-.166 of the Texas Natural Resources Code. If an oil and gas operator fails to correct a violation upon notice from the Commission, the Commission issues a pipeline severance by directing the person who gathers oil off the lease to disconnect the pipeline or other carrier connection to the lease. No oil may be moved off the lease until the Commission lifts the severance. And, under S.B. 1103, the Commission may not lift the severance until the operator not only corrects the violation, but also pays a $100 reconnection fee.

[26]Id. §§ 91.104(b) and 91.111(c)(9). See Part II.B. below.

[27]Id. § 91.1013(b).

[28]Id. § 91.605. See Part IV.A. below.

[29]Tex. Water Code § 29.015 (Vernon Supp. 1993).

environment. In addition, the Commission is studying about 70 contaminated oil field sites as candidates for state-funded remediation.

B. Financial Responsibility Requirements

In order to slow the growth in the numbers of abandoned wells and other oil field sites that must be addressed with state funds, S.B. 1103 established new financial responsibility requirements for oil and gas operators.[30] Anyone conducting oil and gas operations regulated by the Railroad Commission must file an annual organization report (Form P-5)[31] and, at the same time, must submit a bond or alternate form of financial security.[32] This financial security covers all of the operator's oil and gas operations regulated by the Commission.[33]

S.B. 1103 gives an operator the choice of several methods of satisfying this requirement.[34] These options are:

(1) if the operator's only operations are wells, a bond in an amount equal to $2 per foot of the aggregate total depth of all of the operator's wells;

(2) a blanket bond in an amount equal to:

(a) $25,000 if the operator has 10 or fewer wells or has no wells but performs other operations;

(b) $50,000 if the operator has 11 to 99 wells; or

(c) $250,000 if the operator has 100 or more wells;

---

[30]Tex. Nat. Res. Code §§ 91.103-.1091 (Vernon Supp. 1993). See also Rule 78 (Fees, Performance Bonds and Alternate Forms of Financial Security Required To Be Filed), 16 Tex. Admin. Code § 3.76.

[31]Id. § 91.142.

[32]Id. § 91.103. The Commission also has authority to require a bond or other form of financial security to assure the proper operation and closure of reclamation plants and commercial disposal sites for oil and gas wastes. Id. § 91.109. A bonding program for these facilities is under development.

[33]Id. § 91.105.

[34]Id. § 91.104.

(3) if the operator can demonstrate an acceptable record of compliance with Commission safety and pollution prevention rules during the previous 48 months, an annual fee of $100;

(4) an annual fee of 3% of the amount of the bond that would otherwise be required; or

(5) a first lien on oil field equipment with a salvage value equal to the amount of the bond that would otherwise be required.

Note, though, that if an operator chooses to pay a fee or file a lien, rather than file a bond, the operator must also pay an annual fee of $100 for each unplugged well that has been inactive more than one year.[35]

As further incentive for compliance, S.B. 1103 prohibits the Commission from accepting a drilling permit application if the applicant or any other organization under common ownership or control has outstanding, finally determined violations of safety or pollution prevention rules that occurred within the preceding five years.[36] A finally determined violation is considered outstanding unless the conditions that constituted the violation have been corrected and all associated penalties and costs have been paid.

C. Haulers of Oil and Gas Waste

As originally enacted in 1967, the Salt Water Haulers Act required a salt water hauler to obtain a permit from the Railroad Commission and to renew that permit annually. S.B. 1103 amended the Act to expand the scope of the permit requirement to cover the hauling of other types of waste generated in the exploration, development, or production of oil and gas. The Act is now entitled the Oil and Gas Waste Haulers Act,[37] and a hauler of salt water, drilling fluid, or other oil and gas waste must obtain a permit. In addition, S.B. 1103 replaced the old $5000 hauler's bond with a new $100 application fee for permit

---

[35]Id. § 85.2021(c).

[36]Id. § 91.110. See also Rule 5 (Application to Drill, Deepen, Reenter, or Plug Back), 16 Tex. Admin. Code § 3.5.

[37]Tex. Water Code ch. 29.

issuance, renewal, or amendment.[38] This fee is deposited in the oil field cleanup fund.[39]

The Commission amended its rules effective January 28, 1992, to incorporate the expanded permitting requirements for oil and gas waste haulers.[40] The amended rules generally require anyone who hauls oil and gas waste for hire from the lease or other oil and gas property where it is generated to a disposal facility to have an oil and gas waste hauler permit.[41] The amendments also expanded the recordkeeping requirements for generators and haulers of oil and gas waste. Both the generator and the hauler of oil and gas waste that is hauled off site for disposal must keep records of the volume, type, source, and disposition of the waste.[42]

S.B. 1103 authorized the Commission to make exceptions by rule to the permit requirement for the hauling of certain types of oil and gas waste other than salt water.[43] The Commission exercised this authority to exclude the hauling of the following wastes from the permit requirement:[44] (1) inert wastes; (2) asbestos-containing materials regulated under the federal Clean Air Act[45]; and (3) polychlorinated biphenyls (PCBs) regulated under the federal Toxic Substances Control Act.[46] Inert wastes were excluded because they do not pose a serious risk of harm to the environment, and asbestos-containing materials and PCBs were excluded because they are already comprehensively regulated under other federal and state authorities. The Commission also clarified the scope of the permit requirement by specifying that a permit is not required to haul oil and gas waste for recycling,

---

[38]Id. § 29.015.

[39]Id. Note that oil and gas waste haulers must also comply with the new P-5 financial security requirements of S.B. 1103. See Part II.B. above.

[40]Rule 8(f), 16 Tex. Admin. Code § 3.8(f).

[41]Id. § 3.8(f)(1).

[42]Id. § 3.8(f)(2) and (g).

[43]Tex. Water Code § 29.042(b) (Vernon Supp. 1993).

[44]Rule 8(f)(1), 16 Tex. Admin. Code § 3.8(f)(1).

[45]42 U.S.C. §§ 7401-7671q.

[46]15 U.S.C. §§ 2601-2671.

but that injection to enhance recovery of oil and gas is not recycling for purposes of this provision.[47]

The main thrust of the rules for oil and gas waste haulers is to ensure that their vehicles are maintained and operated to prevent spillage, leakage, or escape of oil and gas wastes and that the wastes are disposed of at properly permitted facilities. The application requirements and permit conditions for oil and gas waste haulers reflect these objectives.

D. Hazardous Oil and Gas Waste

S.B. 1103 authorizes the Railroad Commission to develop a regulatory program for those oil and gas wastes that have recently been classified as hazardous wastes under federal law.[48] This program must be consistent with the federal hazardous waste regulations.[49] To support the program, the Commission will collect a fee from oil and gas operators based on the volume of hazardous oil and gas waste generated.[50] This fee will be will be deposited in the oil field cleanup fund. Part IV of this paper covers the topic of hazardous oil and gas waste in more detail.

III. Status of the Oil and Gas Exemption

A. History of RCRA and the Oil and Gas Exemption

The federal Resource Conservation and Recovery Act (RCRA),[51] which was originally enacted in 1976, authorizes EPA to regulate the management of wastes resulting from industrial, commercial, mining, agricultural, and community activities. Subtitle C of RCRA contains a comprehensive program for the regulation of hazardous wastes. Nonhazardous wastes are subject to regulation under Subtitle D of the Act. Produced waters, drilling fluids, and other wastes associated with the exploration, development, or production of oil and gas are exempt from regulation as hazardous wastes under Subtitle C.[52]

---

[47]Rule 8(f)(1), 16 Tex. Admin. Code § 3.8(f)(1).

[48]Tex. Nat. Res. Code §§ 91.601-.605 (Vernon Supp. 1993).

[49]Id. § 91.602(b).

[50]Id. § 91.605.

[51]42 U.S.C. §§ 6901-6992k.

[52]RCRA § 3001(b)(2); 42 U.S.C. § 6921(b)(2).

The oil and gas wastes that are exempt from regulation as hazardous wastes under Subtitle C of RCRA fall into three major categories:

- Produced waters--mineralized waters produced with and then separated from oil and gas.
- Drilling fluids--mixtures of water, clay, barite, and other additives used in drilling wells.
- Associated wastes--other wastes uniquely associated with drilling and production operations, such as crude oil tank bottoms (oil, sediment, and water).

Produced waters make up about 98% of all oil and gas wastes. In Texas, we estimate that 98% of these produced waters are injected in wells regulated under a federally approved underground injection control program administered by the Railroad Commission. Drilling fluids and associated wastes make up about 1.6% and .4% of oil and gas wastes, respectively. Each year, Texas oil and gas operations generate roughly 7.8 billion barrels of produced waters, 130 million barrels of drilling fluids, and 32 million barrels of associated wastes.[53]

The exempt oil and gas wastes are unique. They are high in volume, but relatively low in toxicity. They are generated by a large number of individual oil and gas operations--around 250,000 wells and 12,500 operators in Texas. And most of these operations are extremely sensitive to environmental compliance costs--close to 75% of all active wells in Texas are marginally productive. Also, oil and gas wastes are generated in diverse operational and environmental settings--compare the Gulf Coast to Prudhoe Bay, or the Permian Basin to the East Texas Field. Exempt oil and gas wastes are regulated under state and federal programs that have evolved over the years to address these special circumstances. They are not amenable to overly prescriptive, inflexible regulation.

Recognizing the unique characteristics of oil and gas wastes, Congress in 1980 specifically exempted most oil and gas wastes from regulation as hazardous wastes under Subtitle C pending

---

[53]U.S. Environmental Protection Agency, Report to Congress: Management of Wastes from the Exploration, Development, and Production of Crude Oil, Natural Gas, and Geothermal Energy II-28 and -29 (1987).

further study by EPA.[54] Subsequently, as directed by Congress, EPA conducted a study, submitted a report to Congress,[55] and held public hearings. Ultimately, on July 6, 1988, EPA published a regulatory determination on the issue of whether the exempt oil and gas wastes should be subject to regulation as hazardous wastes.[56]

In its regulatory determination, EPA concluded that the exempt oil and gas wastes should not be regulated as hazardous wastes because such regulation:

- is unnecessary;
- would have a severe economic impact on the industry and the nation;
- would not allow the flexibility necessary to address the wide range of complex problems and management practices in different parts of the nation; and
- would disrupt and duplicate existing federal and state regulatory programs.

EPA found that exempt oil and gas wastes pose no significant threat to public health or the environment when managed in accordance with existing federal and state programs. EPA determined that these existing programs are generally adequate for exempt oil and gas wastes and that any necessary improvements should begin with them.[57]

---

[54]RCRA §§ 3001(b)(2), 8002(m); 42 U.S.C. §§ 6921(b)(2), 6982(m).

[55]U.S. Environmental Protection Agency, supra note 53.

[56]U.S. Environmental Protection Agency, "Regulatory Determination for Oil and Gas and Geothermal Exploration, Development and Production Wastes," 53 Fed. Reg. 25446-25459 (July 6, 1988).

[57]A couple of Alaskan environmental groups challenged EPA's regulatory determination by filing a petition for review in the D.C. Circuit Court of Appeals. However, the Court granted a motion to dismiss filed by an intervenor, the American Petroleum Institute. Alaska Center for the Environment v. Thomas, No. 88-1715 (D.C. Cir. April 27, 1989) (order granting motion to dismiss). The Court agreed with API that EPA's determination not to promulgate hazardous waste regulations for the exempt oil and gas wastes was not judicially reviewable. Congress had reserved

EPA did identify some areas where it perceived "gaps" in existing federal or state regulations. For example, EPA noted that some states--like Texas--have regulations for associated wastes, but others do not.

In the regulatory determination, EPA announced its plan to adopt a three-pronged approach to filling these gaps. First, EPA intends to improve the federal programs under the existing authorities in Subtitle D of RCRA and other federal environmental laws. We understand that EPA is now gathering additional data on oil and gas wastes, although it has no immediate plans to propose regulations for oil and gas wastes under Subtitle D. Second, EPA proposes to work with the states to strengthen state regulations and enforcement. Much progress has already been made in this area through the joint efforts of EPA and the Interstate Oil and Gas Compact Commission (IOGCC). These efforts are described below. Finally, EPA will ask Congress for additional authority if necessary. To date, EPA has not asked for any new statutory authority.

In the process of making its regulatory determination, EPA also made its first attempt to define the scope of the exemption. EPA reviewed both the statutory language and the legislative history and determined that the exemption for wastes associated with the exploration, development, and production of oil and gas covers only those wastes **uniquely** associated with **primary field operations**. The regulatory determination contains lists of exempt and non-exempt wastes. In addition, on March 11, 1993, EPA issued a notice clarifying the scope of the exemption.[58] This clarification addresses commonly asked questions about the status of wastes generated by crude oil reclaimers, service companies, gas plants and feeder pipelines, and crude oil pipelines.

B. State Efforts

Following EPA's regulatory determination, the Railroad Commission participated in a joint effort of EPA and IOGCC to develop administrative and technical criteria for effective state regulatory programs for the management of exempt oil and gas wastes. These criteria were developed by a specially appointed

---

to itself the final decision whether to regulate these wastes as hazardous wastes by providing that any hazardous waste regulations promulgated by EPA for these wastes would take effect only when authorized by Act of Congress. RCRA § 3001(b)(2)(C); 42 U.S.C. § 6921(b)(2)(C).

[58] 58 Fed. Reg. 15284-15287 (March 22, 1993).

IOGCC Council on Regulatory Needs, which consisted of representatives of state environmental and oil and gas agencies and was advised by representatives of environmental groups and industry. EPA funded the project. IOGCC issued a report on the criteria in December 1990.[59]

Since then, the Railroad Commission, like regulatory agencies in many other states, has been evaluating its programs under the IOGCC criteria. We have already made some changes and are working on more. For example:

- In 1991 we asked the Texas Legislature to expand our authority to regulate commercial haulers of oil and gas wastes. The oil and gas waste hauler provisions of S.B. 1103 were the result.[60]

- In addition, we have improved our permitting process for the disposal of oil and gas wastes by requiring additional notice of permit applications and limiting the terms of some permits. We have also strengthened the testing and monitoring requirements for activities requiring permits. For example, we have expanded the requirements for performing chemical analyses of associated wastes for constituents such as heavy metals, total petroleum hydrocarbons, and benzene.

- We have also worked with the Texas Department of Health and subsequently the Texas Water Commission to clarify the restrictions on and requirements for disposal of oil and gas wastes in municipal landfills. The agencies have jointly prepared guidelines for this method of disposal.

- With funding from EPA, we have initiated a waste minimization program specifically designed for oil field operations. By providing information, training, and technical assistance, this program encourages oil and gas operators to take advantage of waste minimization opportunities.

- We are now drafting amendments to our rules to address a couple of other issues raised by the IOGCC criteria. First, we are considering placing additional limitations and conditions on the use of certain pits and disposal methods

---

[59]Interstate Oil and Gas Compact Commission, "EPA/IOCC Study of State Regulation of Oil and Gas Exploration and Production Waste" (December 1990).

[60]See Part II.C. above.

that are authorized by rule (e.g., reserve pits, completion/workover pits, and basic sediment pits). Second, we are attempting to develop a waste tracking system for oil and gas wastes that are hauled off site for disposal.

- Over the last several years, we have worked closely with the Bureau of Radiation Control at the Texas Department of Health and with the Texas Water Commission as they have been developing regulations concerning the management of naturally occurring radioactive material (NORM). On June 18, 1993, the Governor signed H.B. 2623, which transfers the authority to regulate the disposal of oil field NORM from the Texas Water Commission to the Railroad Commission effective August 30, 1993. We will soon begin the process of developing rules for the disposal of oil field NORM, which must be adopted by January 1, 1995. We will be consulting with both the Texas Department of Health and the new Texas Natural Resource Conservation Commission in developing these rules.[61]

- And we have been working to develop more formal standards and procedures for cleanup of spills as discussed in Part V of this paper.

To support the states' efforts to strengthen their programs, the IOGCC is conducting a state review project. Review teams are visiting the various oil and gas producing states and measuring the state programs against the IOGCC criteria. The review teams consist of representatives from other states, industry, and environmental groups. So far, reviews have been completed in six states: Wyoming, Pennsylvania, Oklahoma, Alaska, Texas, and California. Reviews are currently underway in several other states, including Kansas.

The Railroad Commission is now considering the recommendations of the Texas review team, which were published in April 1993. The review team identified many of the same issues that the Commission identified in its own evaluation of its programs under the IOGCC criteria.

---

[61]Although responsibility for regulating the disposal of oil field NORM now lies with the Railroad Commission, the Texas Department of Health continues to be responsible for regulating other NORM management activities. The Department recently adopted rules for the possession, use, storage, transfer, transport, and recycling of NORM. Texas Regulations for Control of Radiation Part 46, "Licensing of Naturally Occurring Radioactive Material (NORM)," 18 Tex. Reg. 3516 (June 1, 1993). These rules took effect July 1, 1993.

C. Status of the RCRA Reauthorization Process

The regulation of exempt oil and gas wastes has been one key issue in the Congressional debate on RCRA reauthorization. Therefore, the Railroad Commission has been keenly interested and actively participating in the RCRA reauthorization process.

The Commission has asserted that another layer of bureaucratic oversight, especially from people in Washington, simply isn't necessary because the states are already effectively regulating exempt oil and gas wastes and are taking the initiative to strengthen their own programs. Moreover, the states, not the federal government, are in the best position to strike the proper balance between energy production and environmental protection within their borders. Unnecessarily stringent and inflexible federal regulation could be economically devastating. Both EPA and the industry have estimated the economic consequences of various regulatory scenarios. For example, an industry study has estimated that 78% of the oil wells and 59% of the gas wells in the nation would be shut in if associated wastes were subject to regulation as hazardous wastes.[62] Although the actual costs to the industry and the national economy are being debated, it is no exaggeration to say that domestic oil and gas production would decline precipitously if exempt oil and gas wastes were subject to regulation as hazardous wastes.

During the last congress, much debate centered around the question of how, not whether, to regulate exempt oil and gas wastes under RCRA. Various options were discussed.

One proposal involved lifting the exemption for associated wastes and requiring state programs for produced waters and drilling fluids to meet stringent standards similar to hazardous waste management standards. In addition, this proposal would have required the states to develop state-funded cleanup programs for abandoned oil field sites, with strict deadlines for identifying, evaluating, and remediating the sites.

Another proposal attempted to provide for some federal oversight without disrupting existing state programs or impeding domestic oil and gas production. Basically, this proposal retained the

---

[62]Testimony on behalf of the American Petroleum Institute at hearings on S. 976 before the Subcommittee on Environmental Protection of the Senate Committee on Environment and Public Works, 102nd Cong., 1st Sess. (September 11, 1991); see also Gruy Engineering Corporation, Estimates of RCRA Reauthorization Economic Impacts on the Petroleum Extraction Industry (July 20, 1991) (prepared for the American Petroleum Institute).

exemption for oil and gas wastes and adopted the IOGCC criteria as federal standards for state programs. Under this proposal, the states would have certified compliance with those standards, and EPA would have audited the states to verify compliance. EPA would have stepped in to fill any gap in a state program that the state failed to fill.

The last congress did not attempt to resolve the extremely controversial oil and gas waste issue, nor did it pass any RCRA reauthorization legislation. The debate on oil and gas wastes may continue when the RCRA reauthorization process resumes.

IV. Hazardous Oil and Gas Waste

A. S.B. 1103 Provisions

S.B. 1103 authorizes the Railroad Commission to develop a regulatory program for those oil and gas wastes that have recently been classified as hazardous wastes through the combined effects of EPA's decisions about the scope of the oil and gas exemption[63] and EPA's subsequent revision of the toxicity characteristic rule.[64] The new Subchapter N added to Chapter 91 of the Texas Natural Resources Code by S.B. 1103 establishes the framework for development of a Railroad Commission RCRA program for hazardous oil and gas wastes.[65] The new subchapter addresses the Commission's regulatory and enforcement authorities and also creates a funding mechanism.

Section 91.601 of the new subchapter defines a hazardous oil and gas waste as a waste that is both an oil and gas waste as defined by section 91.1011, Texas Natural Resources Code, and a hazardous waste as defined by EPA under Subtitle C of RCRA. In other words, a hazardous oil and gas waste is an oil and gas waste regulated by the Railroad Commission that is both: (1) non-exempt; and (2) identified or listed as a hazardous waste.[66]

---

[63]See Part III.A. above.

[64]55 Fed. Reg. 11798-11877 (March 29, 1990).

[65]Tex. Nat. Res. Code §§ 91.601-.605 (Vernon Supp. 1993).

[66]Note that hazardous waste generated at a natural gas processing plant will be considered a hazardous oil and gas waste only upon approval of the Railroad Commission's hazardous waste program by EPA. This one category of hazardous waste generated by oil and gas exploration and production operations will be regulated under the Texas Water Commission's hazardous waste program until then. Compare the text of Tex. Nat. Res. Code

The Railroad Commission regulates both exempt and non-exempt oil and gas wastes.[67] The non-exempt oil and gas wastes regulated by the Commission include some wastes that are generated by primary field operations but are not considered by EPA to be uniquely associated with these operations. A couple of examples are waste solvents used to clean equipment and painting wastes. Other non-exempt oil and gas wastes regulated by the Commission are wastes generated by operations that EPA does not consider to be primary field operations, such as wastes generated along crude oil and natural gas transmission pipelines.

Some of these non-exempt oil and gas wastes are hazardous wastes. EPA designates hazardous waste in two ways. First, EPA has identified four characteristics of hazardous waste: corrosivity; ignitability; reactivity; and toxicity.[68] A non-exempt waste is a hazardous waste if it exhibits one or more of these four characteristics. Second, EPA has specifically listed some wastes as hazardous wastes--certain spent solvents, for example.[69]

Section 91.602 of the new Subchapter N requires the Railroad Commission to adopt rules relating to the generation, transportation, treatment, storage, and disposal of hazardous oil and gas waste. These rules must be consistent with EPA's hazardous waste regulations. The purpose of this provision is to ensure that the Commission's program for hazardous oil and gas waste will be approved by EPA under RCRA. The Commission's rules may be more stringent than EPA's hazardous waste regulations if necessary to protect human health. Also, section 91.602 authorizes the Commission to issue permits for hazardous oil and gas waste management activities; however, as discussed further below, the Commission does not expect to issue permits for hazardous waste treatment, storage, or disposal facilities.

New sections 91.603 and 91.604 provide special inspection and criminal enforcement authorities for the hazardous oil and gas waste program. In combination with the Railroad Commission's other enforcement authorities under the Texas Natural Resources

---

§ 91.1011 effective until delegation of RCRA authority to the Commission with the text of the same section effective upon delegation of RCRA authority to the Commission.

[67]Compare Tex. Nat. Res. Code §§ 91.101 and 91.1011 with EPA's list of exempt and non-exempt wastes in the regulatory determination, supra note 56.

[68]40 C.F.R. Part 261, Subpart C (1991).

[69]Id. Subpart D.

Code, these new sections should give the Commission adequate enforcement authority to obtain approval of its program from EPA.

The Railroad Commission will collect fees under section 91.605 to support its program for hazardous oil and gas waste. Each oil and gas operator will pay an annual fee based on the volume of hazardous oil and gas waste the operator generates, except that an operator who qualifies as a conditionally exempt small quantity generator at all facilities in the state (i.e., generates no more than 100 kg/month of hazardous waste or 1 kg/month of acutely hazardous waste at each facility) will not be subject to the fee. The Commission will establish the fees and the accounting and payment procedures by rule. These fees will be deposited in the oil field cleanup fund for use by the Commission in implementing and enforcing its hazardous oil and gas waste program.

B. The Hazardous Waste Questionnaire

Before beginning to draft rules for hazardous oil and gas wastes, the Railroad Commission needed more information about the types and volumes of these wastes and who generates them. The Commission sent out a hazardous waste questionnaire to all oil and gas operators in October 1991 and asked them to respond by December 31, 1991.

The questionnaire asked the operators to provide estimates of the volumes of hazardous oil and gas waste, by type, generated from September 1990 through August 1991 at facilities where they qualified as small quantity generators (i.e., where they generated more than 100 kg/month but no more than 1000 kg/month of hazardous waste) or large quantity generators (i.e., where they generated more than 1000 kg/month of hazardous waste or 1 kg/month of acutely hazardous waste). Operators that were not small or large quantity generators at any of their facilities were asked to indicate either that they did not generate any hazardous oil and gas waste or that they qualified as conditionally exempt small quantity generators (i.e., they generated no more than 100 kg/month of hazardous waste or 1 kg/month of acutely hazardous waste at each facility). The operators were advised that their response to the questionnaire was not a legally binding or enforceable declaration of their generation of hazardous waste.

The responses to the questionnaire indicate that most oil and gas operators either generate no hazardous oil and gas waste or are conditionally exempt small quantity generators. More than 58% of the 12,500 oil and gas operators who received questionnaires responded. Of those who responded, 2% are no longer in business, 74% reported that they do not generate any hazardous oil and gas

waste, and 23% reported that they qualify as conditionally exempt small quantity generators. Only 1% of the respondents indicated that they qualify as small or large quantity generators. Many of the respondents noted that, although they are normally conditionally exempt small quantity generators, spill events or major equipment maintenance projects may cause them to become small or large quantity generators for short periods of time.

The questionnaire provided the Railroad Commission with some general information that has been useful in developing a program for hazardous oil and gas wastes. However, the responses show that many oil and gas operators are still confused about the concept of hazardous oil and gas waste. As a result, some over reported and others under reported. For example, a number of respondents reported exempt oil and gas wastes, such as produced waters. Others did not include certain wastes generated by crude oil and natural gas transmission pipelines, such as hydrostatic test waters and spill contaminated soils, because they considered these wastes to be exempt. Some stated that they did not include wastes resulting from equipment maintenance by a third party contractor. Also, some operators who did not return the questionnaire or who responded that they do not generate hazardous waste regulated by the Railroad Commission have reported to the Texas Water Commission that they generate hazardous waste that would qualify as hazardous oil and gas waste. As a result, we are having to be careful in drawing conclusions from the results of the questionnaire about how the hazardous oil and gas waste program, especially the fee component, should be structured.

C. Hazardous Waste Program Development

The Railroad Commission is now in the process of developing its rules for hazardous oil and gas wastes. A major task in this process has been to determine how the complex hazardous waste regulations that have been promulgated by EPA[70] apply to hazardous oil and gas wastes. The management of hazardous oil and gas wastes presents some special challenges because these wastes are generated in small volumes at a large number of widely distributed oil and gas facilities. The Commission is attempting to tailor its hazardous waste rules accordingly.

The Commission's hazardous waste rules will undoubtedly track certain parts of EPA's hazardous waste regulations. The

---

[70]Id. Parts 260-272.

standards applicable to generators and transporters of hazardous waste[71] are a prime example.

Other parts of EPA's hazardous waste regulations will not be applicable. For example, the permitting requirements included in the standards for owners and operators of hazardous waste treatment, storage, and disposal (TSD) facilities[72] do not appear to apply to oil and gas exploration and production operations from a practical or economic standpoint.

The requirements for issuance of a hazardous waste TSD facility permit are extensive, and the process lengthy. Hazardous oil and gas wastes are generated in limited quantities. We do not anticipate that a generator of hazardous oil and gas wastes would be willing to go to the trouble and expense of obtaining a permit to treat, store, or dispose of the limited quantities of these wastes on site. Furthermore, we believe that any person who would propose to operate a commercial hazardous waste TSD facility would want to have the flexibility to handle a variety of hazardous wastes, not just hazardous oil and gas wastes, which constitute only a small percentage of the hazardous wastes generated in the State of Texas. In order to accept other hazardous wastes, the commercial TSD facility operator would have to obtain a permit from the Texas Water Commission. We presently see no need for the Railroad Commission to duplicate this permitting effort. Therefore, we are considering requiring small and large quantity generators of hazardous oil and gas wastes to segregate these wastes and recycle them or move them to a TSD facility permitted by the Texas Water Commission, EPA, or another state in the time and manner necessary to avoid permitting requirements.

We do foresee that hazardous oil and gas wastes may need to be treated, stored, or disposed of on site during the closure of old or non-compliant oil and gas waste management units, such as pits, that have received hazardous wastes. Similarly, the cleanup of spills from crude oil transmission pipelines may involve on-site treatment, storage, or disposal of hazardous wastes as discussed in Part V.C. of this paper. However, we are exploring the possibility of handling these types of situations through emergency permits and enforcement orders rather than TSD facility permits.

The Commission has circulated a draft of its rules for hazardous oil and gas wastes to interested persons for preliminary review

---

[71] Id. Parts 262-263.

[72] Id. Part 264.

and comment.[73] After making revisions to address the comments received on the draft, the Commission will seek public comment on its proposed rules by publishing them in the Texas Register. This publication will occur in the fall of 1993.

The Commission will be working closely with both the Texas Water Commission and EPA throughout the process of developing and implementing the hazardous oil and gas waste program. Close coordination with these agencies will be necessary to ensure that the program is consistent with EPA's hazardous waste regulations and fully coordinated with the Texas Water Commission's hazardous waste management program.

V. Oil Spill Cleanup Standards

In April of 1992, the Railroad Commission issued interim guidelines for the cleanup of crude oil spills. The guidelines contain numerical standards and step-by-step procedures to promote consistency in cleanups across the state, but give a responsible operator the flexibility to chose an appropriate cleanup method for a specific spill site.

These guidelines are interim. The Commission has begun the process of adopting standards and procedures for oil spill cleanup by rule by redrafting the interim guidelines into the form of a proposed rule. The proposed rule was published in the Texas Register for public comment on March 30, 1993. The Commission is currently reviewing the comments received and will take final action on the rule within the next two months.

A. Scope

The interim guidelines apply to the cleanup of soil contaminated by spills from exploration and production operations, including pipelines. There are two key limitations on the scope of these guidelines.

First, they apply only to spills of **crude oil**. The Commission will address the cleanup of produced water spills separately.

Second, they apply only to spills into soils **in non-sensitive areas**. They do not apply to spills in sensitive areas, such as spills into surface water bodies, in areas with shallow groundwater, or in parks, wildlife refuges, or residential areas. Spills in these sensitive areas may require more extensive

---

[73]Draft Proposed Rule 98 (Standards for Management of Hazardous Oil and Gas Waste), to be codified at 16 Tex. Admin. Code § 3.98.

cleanup. The Commission will determine cleanup requirements for spills in sensitive areas on a case-by-case basis.

B. Standards and Procedures

The interim guidelines outline the following steps for the cleanup of a crude oil spill into soil:

1. Remove all free oil immediately.

2. Delineate the affected area, both horizontally and vertically.

3. Bring all soil containing over one percent by weight (10,000 parts per million (ppm)) total petroleum hydrocarbons (TPH) to the surface for remediation or disposal.

4. Handle all soil containing over five percent by weight (50,000 ppm) TPH using special procedures to prevent stormwater contamination.

5. Achieve a final cleanup level of one percent by weight TPH as soon as technically feasible, but not later than one year after the spill. The operator may select any technically sound cleanup method that will achieve the final cleanup level.

The guidelines also outline reporting requirements for cleanup activities. The reporting requirements build upon the reporting requirements under the Commission's current rules[74] and vary depending on the size of the spill. For spills over 10 barrels, the operator must submit to the Commission analyses of samples representative of the spill site to verify that the final cleanup level has been achieved.

The Commission used the one weight percent TPH cleanup level in the interim guidelines after studying the constituents of crude oils, reviewing the scientific literature on spill cleanup, and considering the cleanup standards of other agencies and states. It varies from the cleanup standard established by the Texas Water Commission for underground storage tank cleanups because of the different risk factors presented by crude oil spills, such as the lower benzene content of crude oil as compared to gasoline. The cleanup level of one weight percent TPH after one year is

---

[74]Rule 20 (Notification of Fire, Breaks, Leaks, or Blow-outs), 16 Tex. Admin. Code § 3.20.

consistent with the landspreading criteria in IOGCC's guidelines for state oil and gas waste management programs.

C. Relation to RCRA

Although most crude oil spills are exempt from regulation under the RCRA hazardous waste management program, spills from crude oil transmission pipelines are not. EPA's hazardous waste regulations may apply to the cleanup of spills from these pipelines if the contaminated soils fail the toxicity characteristic test for benzene or other toxic constituents.

EPA has received requests from several states, including Texas, to suspend application of the new toxicity characteristic rule[75] to petroleum-contaminated soils and other media. The states are concerned that applying hazardous waste regulations to the cleanup of soils and other media contaminated by petroleum product spills will hinder cleanup efforts by creating delays, increasing costs, and straining the existing hazardous waste disposal capacity. EPA deferred application of the toxicity characteristic rule to wastes from underground storage tank (UST) cleanups for much the same reason.

EPA recognized this problem and has proposed to suspend the toxicity characteristic rule for media contaminated by non-UST petroleum products for three years.[76] In the proposal, the term "petroleum product" is defined to include crude oil. The proposed suspension would be effective only in those states that certify to EPA that they have programs in place to effectively manage the cleanup of petroleum product spills.

---

[75]55 Fed. Reg. 11798-11877 (March 29, 1990).

[76]57 Fed. Reg. 61542-61556 (December 24, 1992).

Mexican Environmental Law and NAFTA

"Let's Make a Deal"

Bob Jones

Hector Villa

Gregg Cooke

ROBERT S. JONES, P.E.

As President and CEO of Jones and Neuse, Inc., (JN), Mr. Jones has been involved with essentially all operations of the firm since its inception in 1982. This has included overall responsibility for project management, financial management, quality control, and the company's policies and direction. Prior to forming JN, Mr. Jones worked for over eight years at the Texas Department of Water Resources. His last position there was as Chief Engineer of the Construction Grants and Water Quality Management Division.

Mr. Jones is currently a member of the Texas Water Commission (TWC) Task Force 21, selected to provide input on the implementation of Senate Bill 1099 and other waste management issues. He also serves as the Chairman of the Permit Processing Subcommittee of Task Force 21 which is responsible for assisting the TWC in the review of current permit processing procedures. In 1991, Mr. Jones was appointed by Governor Richards to the Texas Natural Resource Conservation Commission's Transition Task Force.

Recently, Mr. Jones has become involved in Mexico's environmental industry, having assisted in developing preliminary design and disposal strategies for solid and hazardous waste disposal for Mexico's petrochemical industry. He is also involved in the conceptual design for industrial wastewater treatment facilities for Mexico's textile, food, and petrochemical industries.

Mr. Jones is a registered professional engineer in the states of Minnesota and Texas and holds a Bachelor of Science degree of Civil Engineering from Lamar University and a Master of Science degree in Engineering from the University of Texas at Austin.

Mexican Environmental Law and NAFTA
"Let's Make a Deal"

infrastructure
business reloc
laws/reg
enforcement

I. Introduction

A. Approval of a NAFTA will have repercussions in the emerging environmental field in Mexico.

B. The environmental regulations are in a state of evolution in Mexico, and are paralleling U.S. regulations for the most part. The greatest distinction is how non-compliance is handled by the regulatory agencies.

C. Although enforcement of the Mexican environmental laws is growing, it is still hampered by manpower and financial constraints. For example, SEDUE's budget in 1991 was only $39 million compared with the EPA budget of about $5 billion. Texas has over 700 inspectors in enforcement and field operations compared with only a couple of hundred inspectors for the entire country of Mexico.

II. Implications of NAFTA and Mexican Environmental law.

A. Different Views

1. NAFTA opponents argue that an agreement would spur rapid and uncontrolled industrial relocations to Mexico. U.S. firms would relocate to take advantage of lower wages and benefits and to escape stricter U.S. enforcement of pollution and work place health and safety standards.

2. NAFTA proponents counter that Mexico can improve it's environment only if economic growth generates new revenues that can be implemented to enforce tighter environmental and workplace standards and to provide a growing market for U.S. goods.

For NAFTA to have a significant potential effect on the location of investment for environmental reasons, the following conditions must apply.

a. Environmental compliance costs must represent a significant portion of total operating costs.
b. Existing trade barriers must be significant;
c. Costs associated with relocating an industry or creating new capacity must not exceed compliance cost gains; and

d. Environmental compliance costs must be sufficiently different in the alternative sites to encourage investment based on these differences.

3. Whether a NAFTA works for or against either country will depend, among other factors, on how economic integration is managed.

B. Trend toward global economy

1. Unknown factor - whether competition in the world economy will translate into external pressure to comply with environmental issues or reduce environmental protection investments (competitive disadvantages).

2. Possible continental policy options for determining environmental needs and priorities and arranging financing.

a. One option for funding - issuing bonds backed by both governments to be repaid by a mutually agreeable method.

b. Other options for funding include World Bank loans, privatization or funding soley by the Mexican government.

c. Additional option for funding - debt-for-nature swap which entails forgiveness of debt in exchange for investment and commitment to safeguard or improve the environment. (This option appears to have a fairly successful track record in other countries such as Costa Rica.)

C. Mexico has announced that they plan to address environmental degradation.

1. The regulations are in a state of evolution. For example, more than 50 regulations will be published this year.

2. Although Mexico has relatively strict standards on the books, the salient questions concern enforcement and financing rather than the letter of laws and regulations. Mexico lacks (or has not committed) the manpower and financial capabilities for enforcement. The regulatory inspectors' consistency in enforcing these regulations and industries' awareness of the environmental regulations are at an early stage of development.

3. The existing Integrated Environmental Plan for the U.S. - Mexico border area is short on funding, vague on enforcement and lacks

deadlines. Estimates of the sums needed to clean up the region far exceed what either government has committed.

4. Stricter controls and enforcement should accompany industrial development in Mexico. If Mexico was something of a haven for polluters in the past, that should change with the implementation of appropriate enforcement measures.

   a. Mexico is only beginning to attack it's environmental problems and lacks technical expertise, resources, infrastructure, enforcement, etc.

   b. In many cases there is not even baseline information on the severity of existing pollution problems and pollution sources.

5. For example, in the border area:

   a. Air quality - The limited data available from monitoring stations on the U.S. side indicate that several of the larger U.S. border communities, including San Diego and El Paso fail to meet one or more national air quality standards. Mexico is the source of much of the air pollution in the Border Area as a whole.

   b. Water Quality - Threats to the quality of Border Area water supplies and to the marine environment come both from industrial pollution and from inadequate sewage treatment. For example, the common ground water aquifer serving the town of Nograles in Mexico and in Arizona has been contaminated with industrial solvents from maquiladora plants. The International Boundary and Water Commission is also addressing issues created by the contamination of water shared by Texas and Mexico.

   c. Municipal Solid Waste - Mexico border cities generate about 3,500 tons of garbage each day. Only about half of this is collected and about two-thirds of the collected garbage goes to open air dumps.

   d. Hazardous Waste - Mexico's environmental regulations require that hazardous waste generated in maquiladora plants from raw materials imported from the U.S. either be returned to the U.S. or recycled in Mexico. Compliance with these requirements is low - roughly 30% of the waste is returned to the U.S. The remainder of the hazardous

waste is either disposed of clandestinely or placed (illegally) in municipal dumps which are not designed to handle hazardous waste.

III. Concluding Comments

A. Financial issues may play a key role in the relationship between Mexican environmental law and NAFTA.

1. Financial constraints/funding options will impact environmental compliance/enforcement.

2. Competition in a global economy may translate into external pressure to comply with environmental issues.

B. The plausibility of the argument that differences in environmental enforcement standards would lead to reallocations of investment and shifts in industry cannot be well substantiated based on studies by the interagency task force of the office of the U.S. Trade Representative. However, the relocation of firms for factors not involving environmental issues, will result in an increase in industrial activity and associated population growth. This, in turn, will impact the available infrastructures and the environment.

BIOGRAPHY
HECTOR VILLA III
Director of Border Affairs
Texas Water Commission
El Paso, Texas
(915) 778-9634

Hector Villa III, a second generation El Pasoan, is the District 15 Manager and Director of Border Affairs for the Texas Water Commission (TWC), located in El Paso. Mr. Villa has been with the TWC for eight years, previously serving as assistant district manager and field investigator, with four years prior experience in environmental health working for the Texas Department of Health. He was recently named by Chairman Hall to head the Texas Water Commission's Office of Border Affairs because of his breadth of knowledge and interest in environmental issues along the border.

Mr. Villa is responsible for the day to day management of the TWC El Paso Office, which consists of three counties. He is also involved in various environmental issues affecting the border region. These issues include the colonias, water quality, proper disposal of hazardous waste, and infrastructure needs. Recently, Mr. Villa testified before the Federal Legislative Subcommittee on Regulation and Small Business on environmental issues along the border.

Mr. Villa attended Cathedral High School and is a graduate of the University of Texas at El Paso where he received a Bachelor of Science degree in biology and is working towards a Masters degree in public administration.

Mr. Villa served as past Chairman of the West Texas State Agencies Roundtable, the Mayor's Environmental Roundtable, and Board Member of the Border Waste Management Society. He is also a member of the Rio Grande Council of Governments Environmental Issues Committee and EPA Water Policy Council.

Mr. Villa has been an involved board member of the City Parks and Recreation Department and a current member of the YMCA and the American Heart Association's Board of Directors. Mr. Villa is a current member of the Hispanic Chamber of Commerce, El Paso Chamber of Commerce, Sun Carnival Basketball Committee, and *El Paso Times* Editorial Board.

Mr. Villa also gives speeches and presentations on a range of environmental and border issues to organizations throughout the State.

Conditions Along the Texas-Mexico Border

These are exciting and challenging times for the area along the border between Mexico and the United States. It is exciting that the maquiladora program has spurred tremendous growth along the border. About 250,000 new jobs have been created just in Mexico in border cities along the Rio Grande River. Tens of thousands of additional jobs have been created in Texas as a result. These jobs are badly needed by citizens of both countries. Hopefully a free trade agreement can be reached between our two countries that will build on this record of economic growth.

Unfortunately, some of the challenges associated with this dynamic growth have gone largely unmet. This is most dramatically illustrated by looking at the impact we are having on shared water resources. Simply stated, the water resources along the Texas-Mexico border are under severe stress. Unless an aggressive program is implemented these limited resources will be damaged or depleted to the point that further growth is impeded. That is a result neither country wants, or can afford.

Groundwater

The mutual dependence on these resources is illustrated very graphically by the groundwater situation in El Paso and Juarez. These two cities, with over a million residents between them, share two aquifers that supply the vast majority of their water, the Hueco Bolson and the Mesilla Bolson. Over 325,000 acre-feet per year of water is being pumped from the bolsons, while the recharge is only 25,000 acre-feet per year. This 300,000 acre-foot deficit each year is obviously not sustainable. The groundwater level has already dropped more than 100 feet in some places from the pumping. It is equally clear that the fate of the two cities is bound together by this shared resource. Their common interest would best be served by developing a joint plan for managing this critical water supply. The recent announcement by Juarez that it intends to drill 20 wells in the Mesilla Bolson for additional water supply underscores this point.

The cities also share a concern about the quality of the water in the bolsons. According to an analysis conducted by the TWC, the greatest threat to the quality of water in these aquifers is probably from a toxic chemical spill that reaches the Rio Grande. A significant amount of the recharge to the bolsons comes from the river. A toxic spill reaching the river from either side of the border could threaten the drinking water supply for hundreds of thousands of people. In light of the large quantities of chemicals transported back and forth across the border, the possibility of such a spill is very real. Once polluted, it could take decades to clean up the aquifers.

Surface Water

In other parts of the basin the water use shifts from groundwater to surface water. Again the situation is serious from both a quantity and quality perspective. Surface water quality conditions in the Rio Grande vary widely. International Amistad Reservoir and the Devils River exhibit among the best water quality conditions in the state. This contrasts with conditions below the major cities on the Rio Grande, where nonpoint pollution sources and discharge of untreated sewage from Mexico result in persistently elevated levels of indicators of disease organisms. Residents along the Rio Grande are concerned about the health risk associated with ingesting toxic substances and fish from the river. The existing database of toxic substances is not adequate to assess the risk to aquatic life and human health.

Wastewater Disposal

Data collected by the TWC and the International Boundary Water Commission (IBWC) clearly document the water quality impact of the tens of millions of gallons of untreated sewage pouring into the river every day. A project is under way to provide wastewater treatment facilities for Nuevo Laredo, which is putting up to 25 million gallons a day of sewage into the river. Unfortunately there are no current plans to address the numerous other sources of sewage being discharged to the Rio Grande. Water Quality standards, particularly fecal coliform, are being violated downstream of virtually every pair of sister cities on the river. Wastewater treatment plants are needed for Juarez, Matamoros, Reynosa and other cities. This problem is obvious and merits immediate action, not further planning.

Texas has its share of wastewater problems as well. A recent study conducted by the Texas Water Development Board estimates that 279,000 people live in colonias. Most colonia homes have owner-built on-site sewage facilities, many discharging directly into irrigation ditches, resacas, or arroyos. Since many of these people also rely on shallow groundwater the threat to human health is obvious.

In recent months the potential impact of both countries' failure to address wastewater disposal has been driven home by the spread of cholera from South and Central America into Mexico. Health officials now say that it is not a question of whether cholera will reach the border, but when. Both countries must acknowledge responsibility for a program that has succeeded in stimulating economic growth but failed to provide the infrastructure needed to support such growth.

The Texas Water Development Board has $250 million which was approved by the voters of Texas and as well as $50 million from EPA to begin to provide appropriate water and wastewater service to the colonias. The TWDB has addressed that effort in detail in its comments. While $300 million is a good start, it is not much more than a start. The U.S. government must commit significant levels of funding to help correct this problem.

Hazardous Wastes

Hazardous waste is another problem not being handled effectively. Large quantities of chemicals are required at many of the maquiladoras. Most of the chemicals needed are shipped from the U.S. We do not know where most of the resulting wastes are ultimately disposed. Legally they are to be returned to the U.S. How much ends up in the Rio Grande? How much is poured into a pit and allowed to seep into the soil and the groundwater? How long will it take to contaminate the groundwater in El Paso and Juarez?

Unfortunately there is not good water quality data to document the magnitude or severity of this problem. Samples of fish tissue taken from the Rio Grande show accumulations of various toxic chemicals. Whether their source is industrial or agricultural is not known. The TWC will conduct an intensive study of the Rio Grande over the next 12 months to provide further information on toxic and hazardous materials in the river.

Salinity

Salinity has been an issue on the Rio Grande for decades. It is primarily a problem in the Lower Rio Grande Valley, at least on the U.S. side of the border. While there are some natural sources of salinity impacting the river, the problem is primarily a result of agricultural practices. Millions of gallons of water are pumped out of the river to irrigate crops. Typically only about one-third of that water finds its way back to the river or to an arroyo as return flow. When it does, the salinity has been increased by at least a factor of two, and sometimes by as much as a factor of 10. Salinity levels continue to rise in spite of projects such as the Morillo Drain.

Since 1970 this 75 mile long canal has routed about 280,000 tons of salt per year directly to the Gulf of Mexico in order to avoid its return to the Rio Grande, with the attendant increase in salinity of the river which would otherwise occur.

Steadily increasing salinity will ultimately impact the way river water can be used. Some salt-sensitive vegetables such as spinach have already been damaged on occasions when salinity levels rose.

The productivity of many crops is currently reduced when the salt level in the soil builds up due to frequent irrigation. Normal productivities are recovered only after rainfall has been sufficient to leach the salt out of the soil.

If salinity levels continue to rise at some point it will become economically unattractive for industry to treat the water to the quality needed for their processing. The jobs created by the maquiladoras will then begin to shift to locations where the water quality is better. Municipalities will also be faced with much higher water treatment costs to meet drinking water standards. It may become necessary to assist the agricultural community in the transition to more efficient irrigation equipment and techniques to curtail the trend of rising salinity.

Water Quantity

Although groundwater is used extensively in the El Paso/Ciudad Juarez area and along much of the border, including the Del Rio/Ciudad Acuna area, in the Lower Rio Grande Valley groundwater is generally of such poor quality that it is not acceptable for most uses. Consequently the Rio Grande and its tributaries bear most of the burden of meeting the water needs of the border area. As a result the Rio Grande is over appropriated. In other words, people have been awarded the rights to more water than is available from the river.

About 300,000 acre-feet per year of water from the Rio Grande is reserved for municipal and industrial uses in the U.S. Nearly ten times as much, 2.8 million acre-feet is allocated for agricultural uses. In a typical year only about half the agricultural allocation is used because that is all that is available. Municipal and industrial uses are rapidly approaching their maximum allocations as well. Further growth will require shifting water rights from agricultural uses to municipal and industrial uses. The important point is that the quantity of water available from the river is a limiting factor for further economic development. That places a heavy responsibility on those of us involved in resource protection and allocation.

Gulf of Mexico

The Rio Grande ultimately empties its load of water, salinity, pesticides, nutrients and sewage into the Gulf of Mexico. The Gulf is as much a shared resource between the two countries as the river. The river also serves a valuable function in supplying fresh water to the Laguna Madre during periods of high flow. This fresh water is critical to maintaining the salinity balance essential to the productivity of any bay and estuary system.

This system has already been impacted by many activities. The total flow of fresh water entering the Gulf has been greatly reduced. The salinity and polluted load of the river has increased. A study should determine the optimum conditions to maintain this fishery resource, and the impacts which may result from deviating from those conditions. The livelihoods of thousands of commercial shrimpers and fisherman can easily be impacted if this issue is ignored.

GREGG A. COOKE

Born Abilene, Texas, June 14, 1955; admitted to bar, 1982, Texas; admitted to practice before U.S. District Court, Northern District of Texas, Supreme Court of the United States. Preparatory education, Baylor University (B.A., 1977); University of Virginia (M.A.F.A., 1981); legal education, Baylor University (J.D., 1982). Fraternities: Omicron Delta Kappa; Phi Alpha Theta; National Order of Barristers; Mortar Board. Briefing Attorney for Hon. Ted Akin, Dallas Court of Appeals, 1982-83. Legislative Assistant to Governor Mark White, 1983-84. Member, Credit Union Commission of Texas, 1986-87.

Appointed as Assistant Attorney General, Chief of the Environmental Protection Division, Office of the Attorney General of Texas. Former shareholder, law offices of Geary, Glast & Middleton, P.C., Dallas, Texas, practicing trial, appellate, and environmental law.

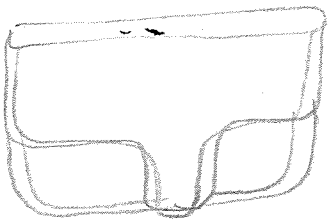
Member: Dallas and American Bar Associations; State Bar of Texas (Public Affairs Committee; Executive Committee, Environmental and Natural Resources Law Section); Board of Directors, Texas Lyceum Association; member of Dallas Assembly.

GAC:11

Q: trade sanc. or fines for failure to enforce its laws

Office of the Attorney General
State of Texas

DAN MORALES
ATTORNEY GENERAL



SB 2049 prosecutor on colonias

March 31, 1993

The Honorable Mickey Kantor
United States Trade Representative
Office of the United States Trade Representative
600 Seventeenth Street, N.W.
Washington, D.C. 20506

Dear Ambassador Kantor:

As you may know, my office has undertaken a review of the North American Free Trade Agreement (NAFTA) to determine the effect of the proposed agreement upon Texas state law. As a supporter of NAFTA and as Texas' chief legal officer, I believe it to be my responsibility to fairly evaluate the impact of the anticipated approval of NAFTA by Congress.

The complete result of our research regarding the impact of NAFTA upon Texas will be presented at a later date. However, in light of the opening of negotiations for side-agreements to protect the fragile border environment, among other topics, I wish to share with you some preliminary analysis and suggestions that could be included in the proposed side-agreements to ensure the ability of the border states, such as Texas, to maintain environmental standards.

Broadly speaking, this office has two primary areas of interest regarding NAFTA. First, I believe it is essential that states have formal opportunities to participate in the actual implementation of NAFTA, including the interpretation of specific provisions, and their application or inapplication to the states, and potential impact upon state law. This issue could be addressed in the implementing legislation, and as a result, is not the focus of this letter.

The second area of focus of our analysis involves the inadvertent impact upon environmental regulation within the states. Certain provisions of NAFTA are ambiguous and such ambiguities, although not intended to do so, could have unanticipated interpretations which could adversely affect environmental regulations.

Below are several recommendations which I believe, if incorporated into the proposed side-agreements, will strengthen NAFTA. Of course, your office has more expertise in international trade matters. Therefore, you may determine that these following suggestions can be addressed primarily in implementing legislation.

512/463-2100 P.O. BOX 12548 AUSTIN, TEXAS 78711-2548

I. Chapter 9 should be clarified to ensure that it is not misconstrued to nullify states' abilities to enact and maintain strict environmental protection standards

Chapter 9 of NAFTA applies to standards-related measures, which would include the vast majority of traditional environmental protection legislation, as well as auto emissions standards, air quality standards, recycling laws, and bans on substances such as asbestos. NAFTA art. 915. While Chapter 9 takes the position that a country has the right to establish the level of protection it considers appropriate, it has ambiguous provisions that could be interpreted to constrain that right to establish an appropriate level of protection.

> ***Recommendation*: Explain that a Party need not conduct an assessment of risk when establishing an appropriate level of protection**

Article 904(2) provides that while each country may, "in pursuing its legitimate objectives of safety or the protection of human, animal or plant life,...establish the level of protection it considers appropriate," this establishment must be done "in accordance with Article 907.2." Article 907.2 provides that "where a Party establishes the level of protection that it considers appropriate ***and*** conducts an assessment of risk, it should avoid arbitrary or unjustifiable distinctions between similar goods or services" [emphasis added]. The inclusion of the ***and*** could be interpreted to mean that a country will have to conduct a risk assessment before it can establish a level of protection.

This ambiguity could have negative effects on the states and greatly increase the costs of implementing better environmental protection. For example, the *La Farge*[1] case in Texas which ratified Texas' right to establish more protective standards for placement of waste-burning incinerators than the federal standards, even though Texas' standards were not based upon strictly scientific considerations, could be challenged and overturned if Chapter 9 is interpreted to require risk assessments prior to establishment of a level of protection or of standards. *This ambiguity could be addressed by a provision in a side-agreement that makes it clear that when a Party establishes a level of protection it considers appropriate, it need not conduct an assessment of risk; it need only avoid arbitrary or unjustifiable distinctions between similar goods or services.*

> ***Recommendation*: Communicate that distinctions between goods or services are not arbitrary or unjustifiable if there is some scientific or non-discriminatory policy reason for the distinction**

---

1 *La Farge Corp. v. William R. Campbell, et al,* A-92-CA-079, slip op. (W.D. Tex. Dec. 23, 1992).

NAFTA article 907.2(c)'s definition of "arbitrary or unjustifiable distinctions" as distinctions that "discriminate between similar goods or services for the same use under the same conditions that pose the same level of risk and provide similar benefits," could be interpreted to allow challenges to a Party's policy choices to provide the best possible protection. For example, if the United States Environmental Protection Agency determined to ban articles containing a substance such as asbestos due to the health risks associated with that substance, while allowing articles containing a different, but also dangerous, substance to continue to be used for the same purpose, it could be argued that such a policy decision is discriminatory and thus subject to challenge. *Language in the proposed side-agreement could address this ambiguity by providing that if a Party can show a non-discriminatory reason, such as public outcry, public policy, or a history of litigation surrounding the good or services, for distinguishing between similarly dangerous goods or services which could be used for similar purposes, then the distinction does not violate Article 907.2.*

> ***Recommendation*: Specify that standards which are more protective than international standards are presumed to be consistent with NAFTA**

NAFTA Article 905.1 requires that international standards be used as the basis for standards-related measures "unless such standards would be an ineffective or inappropriate means to fulfill its legitimate objectives." In conjunction with Article 905.3, this could be interpreted to leave a Party's standards, if the standards are higher than international standards, potentially subject to challenges that (1) the standards are an "unnecessary obstacle to trade" or (2) the standards discriminate against the goods or services of another Party. In contrast, standards that conform to an international standard are presumed to be consistent with Articles 904.3 and 904.4[2] and are thus protected from such challenges. NAFTA art. 905.2. *We suggest that language in the proposed side-agreement clarify that standards higher than accepted international standards are presumed to be consistent with Articles 904.3 and 904.4, unless the complaining Party can prove that there is no scientific basis for the challenged standard. Such language should also provide that a standard does have a scientific basis, even if that scientific basis is controversial or disputed by other scientific groups.*

II. Subchapter 7B needs to be clarified to ensure protection of states' rights to establish protective health and safety measures

NAFTA provides in subchapter 7B that Canada, Mexico, and the United States each ensure that a sanitary or phytosanitary measure that it adopts or maintains "is applied only to the extent

---

[2] The prohibitions against unnecessary obstacles to trade and discriminatory treatment of goods and services of another Party.

necessary to achieve its appropriate level of protection, taking into account technical and economic feasibility." NAFTA art. 712.5 Since sanitary and phytosanitary measures could include state regulations such as pesticide tolerance requirements, prohibitions on carcinogens in food and labeling requirements for goods, including wastes, the application of NAFTA to such measures is of concern to me. One example of a state statute that could be affected by Subchapter 7 is California's Proposition 65, which requires labelling disclosure of carcinogenic and reproductive toxic substances. NAFTA should not be construed to invalidate attempts to adopt such stricter state standards.

***Recommendation*: Define "necessary"**

NAFTA's use of "necessary" is distinguishable from the use of the word "necessary" in Article XX(b) in the General Agreement on Tariffs and Trade (GATT), but it still could be interpreted to mean that if a measure is not presently technically or economically feasible, or if the measure is not the least NAFTA-inconsistent, or if the measure is not the least-trade-restrictive measure possible, the measure may be subject to challenge under the agreement. Despite the drafters' attempt to distinguish the use of "necessary" under NAFTA from its use in the GATT, there is no explicit language in NAFTA to suggest that the GATT jurisprudence of "necessary" should not be applied in the NAFTA context. *Thus, I would request that "necessary" be further clarified in a side agreement to ensure that existing GATT jurisprudence of "necessary" will not be applied in the context of NAFTA, and that any sanitary or phytosanitary measure adopted or maintained by a Party is "necessary" if such measure is related to that Party's established appropriate level of protection.*

***Recommendation*: Specify that risk assessments are not required when a Party is establishing sanitary and phytosanitary measures**

Another area of ambiguity concerns NAFTA's explicit requirement that Canada, Mexico and the United States each ensure that any sanitary and phytosanitary measure that it adopts, maintains or applies is: (a) based on scientific principles...; (b) not maintained where there is no longer a scientific basis for it; ***and*** (c) based on a risk assessment, as appropriate to the circumstances. NAFTA art. 712(3) [emphasis added] The ***and*** in Article 712(3) creates the impression that NAFTA requires that all sanitary and phytosanitary measures meet all three requirements, including the requirement that such measures be based on a risk assessment.

The phrase "as appropriate to the circumstances" implies that perhaps risk assessments are not always required, but does not offer any guidance or clear indications of <u>when</u> risk assessments might not be appropriate and therefore not required. *In the proposed side-agreement, this could be clarified by providing that risk assessments are not "appropriate to the circumstances" of*

adoption, maintenance, or application of sanitary and phytosanitary measures unless a Party can offer no scientific basis, even if the scientific basis for such a measure is controversial or disputed by other scientific groups.

> ***Recommendation*: Confirm that policy considerations are relevant factors for consideration when conducting a risk assessment**

NAFTA Article 715 lists factors that a country "shall take into account" when conducting a risk assessment. While it is beneficial that "relevant ecological and other environmental conditions" are included in the list, the absence of relevant *policy considerations*, in conjunction with the requirement that risk assessments consider *economic factors* including "the relevant cost-effectiveness of alternative approaches to limiting risks," creates an ambiguity. This ambiguity leaves open the possibility that carefully crafted regulations passed by state legislatures based on policy choices to minimize risks could fall to the charge that they failed to consider the relative cost-effectiveness of the chosen approach. *This ambiguity, again, could be easily addressed in the side-agreements by language providing that risk assessments shall consider state policy considerations.*

These suggestions are offered for inclusion into the proposed side agreements to ensure that NAFTA's lasting impact on Texas and the United States is as beneficial as it is intended to be. NAFTA holds great promise for the people of the United States and I look forward to its implementation as a trade agreement which recognizes that a healthy environment is essential for a strong economy and a prosperous citizenry.

Very best wishes.

Sincerely,

Dan Morales

Dan Morales
Attorney General

DCM/gac

May 4, 1993

Ambassador Mickey Kantor
U.S. Trade Representative
600 17th Street, N.W.
Washington, D.C. 20506

Re: NAFTA -- Supplemental Agreements

Dear Ambassador Kantor:

As you are aware, the undersigned environmental groups have each consulted with your office about and made recommendations concerning the North American Free Trade Agreement (NAFTA) supplemental agreements on the environment. In order to clarify the positions that we believe are critical to the supplemental agreement negotiations and to help the President achieve his objectives on NAFTA, we have come together to define those provisions which if included in the supplemental agreements would secure the support of all of our organizations for the NAFTA.

In developing the positions set forth below, we were guided by several key principles: (a) that the supplemental agreements must establish a North American Commission on the Environment (NACE) which is given meaningful responsibility and the resources to undertake its role; (b) that the Signatories must give NACE the power to play an important role in helping ensure that the Signatories enforce their environmental laws; (c) that the NACE have the ability to discuss, evaluate and report on important environmental and conservation issues; (d) that the Signatories agree to a dedicated source of funding for the NACE, border infrastructure and cleanup, and conservation programs; (e) that there be meaningful public participation in the environmental aspects of the NAFTA, including the NACE; and (f) that ambiguities in certain provisions of the NAFTA text, particularly the standards provisions, be clarified.

Based on these principles, we have agreed that the undersigned groups will support the NAFTA if the supplemental agreements include the following provisions:

I. The NACE.

A. Structure. The Signatories would establish a North American Commission on the Environment (NACE) that, in addition to Commissioners, is staffed by a permanent

Secretariat headed by a Secretary General who has the independent power to prepare reports and conduct investigations, and which is advised by a Citizens Advisory Board that includes representatives of nongovernmental organizations from each Signatory.

B. **Power to Prepare Reports.** The NACE would have the responsibility for preparing specific reports set forth in the supplemental agreements. The NACE would also have the power to act as a policy forum to debate and report on environmental and conservation issues.

C. **Power to Investigate.** The NACE would have the power to conduct investigations on its own initiative or in response to citizen petitions in a manner consistent with priorities set by the supplemental agreements and the Secretary General. It would also prepare reports on the results of such investigations.

D. **Contents of Reports and Follow-up.** The reports of the NACE would include suggested action plans; the Signatories involved would respond in writing to such action plans; the NACE agreement would require the Secretary General at regular intervals to follow up and report on the status of the implementation of an action plan; and the Secretary General would make all its reports and responses public.

II. **Enforcement.**

A. **Gathering Information.** To gather information, the Secretary General would have the power to hold public hearings and request that the relevant Signatory government gather information that the Secretary General finds is necessary. A Signatory responding to a request from the Secretary General for information would seek to obtain such information pursuant to and consistent with the Signatory's laws and regulations. The Secretary General would have the power to request verification of data by visits by its staff to the relevant facilities accompanied by enforcement personnel of the Signatory. The visits would be conducted consistent with the laws and regulations of the Signatory and be of sufficient scope to meet the information objectives of the Secretary General. All denials of requests for information or verification would be made public unless the Signatory certifies that this would interfere with an ongoing civil or criminal investigation.

B. **Individual Facilities and Operations.** The Secretary General would have the power to gather information about individual facilities and operations, and be able to use such information to evaluate enforcement of law by the Signatories.

C. **Sanctions.** The Signatories agree that any Signatory who believes that another Signatory has engaged in a pattern of failing to comply with NACE recommendations embodied in an action plan or with requests for information and verification by the Secretary General could initiate a dispute settlement proceeding under Chapter 20 of NAFTA on the basis that such repeated failures nullify and impair the concessions granted in the NAFTA. Article 2019 sanctions would be implemented where a dispute panel finds a pattern of a Signatory failing to comply with NACE recommendations embodied in an action plan and/or a pattern of failing to respond to NACE requests for information and verification.

D. **Domestic Law Enforcement.** The Signatories would agree to make available to their own citizens under their domestic laws enforcement procedures similar to those in Article 1714 of NAFTA so as to permit effective enforcement of environmental laws.

III. **Funding.**

A. **Funding for NACE and Border Projects.** The supplemental agreements would provide for a secure source of funds in an amount sufficient to enable the NACE to undertake each of its responsibilities and functions, as well as for cleanup and infrastructure programs on the U.S/Mexican and U.S./ Canadian borders.

B. **Funding for Conservation Programs.** The supplemental agreements would provide for a secure source of funds for conservation, biodiversity and ecosystem protection programs.

IV. **Standards.**

A. **Negotiation of Process Standards.** The Signatories would agree to enter into negotiations within six months of the implementation of the NAFTA to discuss criteria for setting process standards. In addition, the Signatories would agree to place a moratorium on bringing cases to dispute settlement panels if the law at issue is designed to protect fish, animals or wildlife outside the territorial land of the Signatories until these negotiations develop applicable criteria for process standards. The implementing legislation would include a provision specifying that arbitral panel decisions adverse to a U.S. fish, animal or wildlife law or regulation would not result in the repeal or amendment of any such law or regulation.

B. **Chapter 9.** The Signatories would clarify that Chapter 9 was intended to allow challenges to an environmental standard-related measure only on the ground that it is discriminatory or was designed as a disguised barrier to trade, not on the ground that it is too strict.

C. **Chapter 7.** The parties would either agree on language clarifying certain key terms in Chapter 7 that remain ambiguous, including but not limited to the term "necessary," or agree that they will not bring cases under Chapter 20 challenging a sanitary or phytosanitary standard for pesticide residues or contaminants in food under Chapter 7 except on the ground that the standard is discriminatory or was designed as a disguised barrier to trade.

D. **Challenges to State Laws.** The Administration would agree that it will seek in the U.S. implementing process a provision preventing the preemption of or interference with states' or other subnational entities' laws or policies on the basis of Articles 105 or 902.

V. **Dispute Settlement.**

A. **Dispute Settlement Protocol.** The Signatories would enter into a protocol which clarifies the procedures of arbitral panels; which sets forth the deference such panels will give to a Signatory's agency and judicial decisions and a Signatory's laws concerning the setting of standards; which increases the transparency of arbitral panel proceedings by providing, consistent with criteria set in the supplemental agreement, documents to the public and the opportunity for interested persons to file amicus briefs; and which specifies the opportunity for public participation and the use of environmental experts in such proceedings.

B. **Input Into U.S. Positions During Dispute Settlement Proceedings.** The implementing legislation would provide for public input (and, where appropriate, input from state and local governments) into U.S. government decisions relating to: (i) the defense of cases before arbitral panels challenging environmental laws, and (ii) decisions whether to bring a dispute settlement proceeding alleging that a Signatory has not complied with NACE recommendations or requests.

VI. **Public Participation.** In addition to the public participation provisions described above, the Signatories would agree to enact "community right-to-know" laws consistent with Principle 10 of the Rio Declaration.

VII. **International Environmental Agreements.**

The Signatories would add additional environmental and conservation agreements to Annex 104:1 and list automatically on that annex all amendments to the agreements on that annex and in Article 104. Dispute resolution panels would give deference to a Signatory's decision that it has properly interpreted the relationship between the NAFTA and another international environmental agreement. We will provide a list of the Agreements that we believe should be added to Annex 104:1.

VIII. Supplemental Agreements.

The Signatories would agree, consistent with their domestic law, to take actions that give the supplemental agreements on the environment the same status and effect as the NAFTA itself.

The provisions described in this letter are elaborated and amplified in the attached back-up memorandum. Taken together, we believe that they would be either consistent with historical practice in the international area or reflective of the trend towards greater transparency in international deliberations, that they would be consistent with the preamble to NAFTA and the Rio Declaration, that they would not unduly interfere with the sovereignty of the Signatories, that they would not require a rewrite of the NAFTA text, that they would increase protection of the environment throughout North America and that they would lead to significantly better protection of the environment than would result if the NAFTA were defeated.

Please note that neither this letter nor the back-up memorandum addresses a number of important issues that affect the borders of the Signatories, including the relationship between the NAFTA and other border agreements and institutions and the need for establishing national environmental management districts. These issues will be addressed in another letter we are preparing. In addition, we are preparing and will provide a letter analyzing funding options.

We deeply appreciate your careful consideration of the matters set forth in this letter and look forward to meeting with you to discuss them further.

Sincerely,

Roger Schlickeisen
Defenders of Wildlife

Jay D. Hair
National Wildlife Federation

Fred Krupp
Environmental Defense Fund

John Sawhill
Nature Conservancy

Peter A.A. Berle
National Audubon Society

Kathryn Fuller
World Wildlife Fund

John Adams
Natural Resources Defense Council

BACK UP MEMORANDUM

This memorandum sets forth a more detailed description of each of the points referenced in the letter to Ambassador Mickey Kantor dated May 4, 1993. The organizations that signed the letter believe that these points, if achieved, would successfully implement the broader provisions set forth in the letter.

I. The NACE.

A. The Structure of NACE.

1. Organization.

The NACE structure would include: (a) as Commissioners the chief environmental officers of each of the Signatories; (b) a Secretariat headed by a Secretary General with a permanent staff; and (c) a permanent Citizens Advisory Board.

2. The Secretary General.

The supplemental agreement would provide criteria for the choice of the Secretary General, including a requirement that the Secretary General have trade and environmental experience, management experience and sufficient stature. The supplemental agreement would provide term limits for the Secretary General as well as criteria for the removal of the Secretary General, including, but not limited to, a requirement that the Secretary General be subject to removal only for cause.

3. The Citizens Advisory Board

The Citizens Advisory Board would be made up of six representatives from each Signatory and one representative selected by the Secretary General. The six U.S. representatives would be picked by the President and would include at least two representatives from non-profit environmental, conservation, health and safety groups and one representative from a non-profit border group.

4. The Commissioners.

Each Signatory would appoint its senior environmental official as one of the three NACE Commissioners.

5. Role of Commissioners and Secretary General.

The Commissioners would oversee the operation of the NACE by setting policy guidelines for the Secretary General and by reviewing annual work plans prepared by the Secretary General. The Secretary General would have the power to propose the annual work plans, to implement independently the work plans reviewed by the Commissioners, to issue the reports described below, to

include in those reports recommendations to the Signatories, and to respond to citizen petitions as described below.

B. The Powers and Responsibilities of the NACE.

1. Initial Reports.

No later than two years after the NAFTA becomes effective, the Secretary General would issue separate reports that evaluate and make recommendations concerning the enforcement of environmental laws by the Signatories; the implementation of NAFTA and the side agreements; the relationship of natural resources, biodiversity, agriculture and energy to trade and sustainable development; the status of environmental protection on the borders of the Signatories; and the status of upward harmonization of the environmental laws of the Signatories. An example of a specific description of what would be included in the initial reports is annexed as Exhibit A.

2. Annual Reports.

After the issuance of these initial reports, the Secretary General would issue an annual report on enforcement of environmental laws by the Signatories, the status of the environment of the Signatories, and the implementation of NAFTA and the supplemental agreements, as well as any other reports consistent with the work plans for the NACE proposed by the Secretary General.

3. Investigations.

The Secretary General would investigate, report on the results of investigations, and make recommendations based on investigations he or she initiates or undertakes in response to public petitions. The Secretary General would grant priority to petitions that allege significant harm to the environment and that relate to transboundary pollution, the global commons and failure to enforce the law against facilities or industries that are involved in the import or export of goods among Signatories. The Secretary General may in his annual work plans set forth additional criteria for setting priorities for conducting investigations and responding to public petitions.

4. Policy Fora.

In addition to preparing reports and conducting investigations, the NACE would act as a policy fora to debate and report on environment and conservation issues. To advise these fora, the Secretary General may form ad hoc groups of policy experts and would consult with the Citizens Advisory Board.

C. Citizen Access.

Any person or organization may petition the Secretary General to undertake investigation of allegations that a Signatory's law is not being enforced, to hold policy fora and to

investigate allegations of damage to the environment or biodiversity as a result of trade.

II. Enforcement.

A. Information Gathering.

To gather information necessary to prepare any of the above reports or to evaluate citizen petitions, the NACE would have the power to request that the relevant Signatory government gather information that the Secretary General finds necessary. The Signatories would agree in the supplemental agreements to cooperate fully with these requests and a Signatory responding to a request from the Secretary General for information would seek to obtain such information pursuant to and consistent with the Signatory's laws and regulations. A signatory would notify the Secretary General in writing if the Signatory refuses to or cannot provide the information, with an explanation for its decision.

B. Verification

If the Secretary General finds that the information it receives about an enforcement of law issue is inadequate, the Signatories agree that they would permit the NACE staff to verify the data by visiting, accompanied by enforcement personnel of the Signatory, the relevant facilities, operations or government officials. The visits would be conducted consistent with the laws and regulations of the Signatory and be of sufficient scope to meet the information objectives of the Secretary General. If a Signatory does not permit such verification, it would notify the Secretary General in writing and provide an explanation for its decision.

C. Confidentiality

The Signatories and the Secretary General would provide confidential treatment to business records in accord with the law of the relevant Signatory. All notices required by this section would be made public unless the Signatory certifies that making the notice public would interfere with an ongoing criminal or civil investigation.

D. Public Hearings.

The Secretary General is authorized to hold public hearings in connection with the preparation of reports or the investigation of citizen petitions.

E. Individual Facility Information.

In preparing general reports and in responding to petitions, the NACE would be able to gather information about individual facilities, and be able to use such information to evaluate enforcement of law by the Signatories.

F. Recommendations in Reports and Follow-up.

The recommendations in the reports prepared by the NACE would include an action plan for addressing the issues raised in the report. No later than six months after submitting an action plan to a Signatory (or sooner if so recommended in the action plan) and at regular intervals thereafter until the Secretary General finds that the Signatory has implemented the action plan or a plan that the Secretary General finds would achieve a similar result, the Secretary General would request information on the implementation of the action plan, conduct verification if necessary, and would issue a publicly available report on the status of the implementation of the plan.

G. Response to Reports.

The Signatories would respond in writing to the recommendations and fact findings in each report issued by the NACE, and the Secretary General would make public all reports produced by NACE and all responses from Signatories denying the NACE information or verification requested by the Secretary General.

H. Chapter 20 Proceedings.

The Signatories would agree that any Signatory who believes that another Signatory has engaged in a pattern of failing to comply with NACE recommendations embodied in an action plan or requests for information and verification by the Secretary General could initiate a dispute settlement proceeding under Chapter 20 of the NAFTA on the basis that such repeated failures nullify and impair the concessions granted in the NAFTA. The parties would agree that Article 2004 of NAFTA provides recourse to the dispute settlement process for these proceedings. Article 2019 sanctions would be implemented where a dispute arbitral panel finds a pattern of a Signatory's failing to comply with NACE recommendations embodied in an action plan and/or failing to respond to NACE requests for information or verification. The supplemental agreements would set forth the factors the arbitral panel would consider in determining whether a pattern of noncompliance had occurred, including but not limited to, the frequency of the failures of the Signatory to comply, the severity of the harm to the environment resulting from the failures, and the time period within which the failures occurred.

I. Domestic Law Enforcement.

The Signatories would agree to make available to their own citizens enforcement procedures under their domestic law similar to those in Article 1714 of the NAFTA so as to permit effective enforcement of environmental laws. A sample set of such provisions is annexed as Exhibit B.

III. Funding.

A. Funding for NACE and Border Projects.

The supplemental agreements would provide for a secure source of funds in an amount sufficient to enable the NACE to undertake each of its responsibilities and functions, as well as for infrastructure and cleanup programs on the U.S./Mexican U.S./Canadian borders. In determining border infrastructure and cleanup program needs and priorities, procedures would be established to ensure input from local communities that are affected by the program.

B. Funding for Conservation Programs.

In addition to funding the NACE and border infrastructure and cleanup programs, the supplemental agreements would provide a secure source of funds for conservation, biodiversity and ecosystem protection programs.

IV. Standards.

A. Negotiation of Process Standards.

The Signatories would agree to enter into negotiations within six months of the implementation of the NAFTA to discuss criteria for the use of process standards. In addition, the Signatories agree to place a moratorium on bringing cases to dispute settlement panels if the law at issue is designed to protect fish, animals or wildlife outside the territorial land of the Signatories until these negotiations develop applicable criteria for process standards. The implementing legislation would include a provision specifying that arbitral panel decisions adverse to a U.S. fish, animal or wildlife law or regulation would not result in the repeal or amendment of any such law or regulation.

B. Dolphin Conservation Act.

The U.S. negotiators would formally request the Mexican government to agree to the International Dolphin Conservation Act moratorium on the practice of setting nets on dolphin to harvest tuna.

C. Chapter 9.

The Signatories would clarify that Chapter 9 was intended to allow challenges to an environmental standard-related measure only on the ground that it is discriminatory or was designed as a disguised barrier to trade, not on the ground that it is too strict.

D. Chapter 7.

The parties either would agree on language clarifying certain key terms in Chapter 7 that remain ambiguous, including

but not limited to the term "necessary," or would agree that they would not bring cases under Chapter 20 challenging a sanitary or phytosanitary standard for pesticide residues or contaminants in food under Chapter 7 except on the ground that the standard is discriminatory or was designed as a disguised barrier to trade. Sample language clarifying the terms of Chapter 7 is annexed as Exhibit C.

E. Challenges to State Laws.

The Administration agrees that it would seek in the U.S. implementing legislation a provision preventing the preemption or interference with states' or other subnational entities' laws or policies on the basis of Articles 105 or 902.

V. Dispute Settlement.

A. Dispute Settlement Procedure Protocol.

The Signatories would agree to enter into a protocol setting dispute settlement procedure guidelines for arbitral panels, including but not limited to provisions that: (1) ensure that the burden of proof by a preponderance of the evidence is on the challenging party in a dispute over standards and on a Signatory in a case in which the Signatory is defending an allegation that it failed to comply with NACE recommendations or request for information or verification; (2) provide deference to agency and judicial decisions (except to the extent they conflict with NACE recommendations) and to the laws and regulations of the Signatories concerning the setting of standards; (3) provide that at least one environmental expert would sit on arbitral panels when the dispute involves environmental issues and that the expert would be chosen from a panel of such experts established by the NACE; (4) provide access to all briefs filed before arbitral panels in environmentally-related cases with appropriate protection for national secrets and security interests and confidential business information; (5) make arbitral panels decisions available to the public except when the panel finds it is necessary to redact the decision to protect confidential business information or national secrets and security interests; (6) permit interested persons or organizations to petition an arbitral panel for permission to file amicus briefs and set guidelines for the arbitral panel as to when to accept such petitions; and (7) open hearings on environmentally-related cases to the public with appropriate protection for national secrets and security interests and confidential business information.

B. Input Into U.S. Positions During Dispute Settlement Proceedings.

The implementing legislation would provide for public input (and, where appropriate, for input from state and local governments) into decisions relating to: (1) the defense of cases in the dispute settlement process of Chapter 20 of NAFTA challenging environmental laws; and (2) whether to bring dispute

settlement proceedings alleging that a Signatory has not complied with NACE action plans or requests.

VI. Public Participation.

In addition to the public participation provisions set forth above, the Signatories would agree to enact "community right-to-know laws" consistent with principle 10 of the Rio Declaration.

VII. Relation to other environmental and Conservation Agreements.

The parties agree pursuant to Article 104:2 to add to Annex 104:1 additional environmental and conservation agreements, and to list automatically on Annex 104.1 all amendments to the environmental and conservation agreements listed in that annex or in Article 104. Dispute resolution panels would give deference to a Signatories' decision that it has properly interpreted the relationship between the NAFTA and another international environmental agreement. A list of the Agreements that we would like to see added will be supplied in the near future.

VIII. Supplemental Agreement.

The Signatories would agree consistent with their domestic law, to take actions that give the supplemental agreements on the environment the same status and effect as the NAFTA itself.

Exhibit A

INITIAL REPORTS

1. Compliance with Law Report - This report will generally analyze enforcement of environmental law within each Signatory. The first report shall for each Signatory: (a) describe the resources available for enforcement of environmental laws; (b) describe the permit programs for discharge of substances into the air and water and the disposal of substances on the land; (c) determine whether enforcement resources are adequate and what steps can be taken to improve enforcement; (d) determine, after review of a sample of facilities, whether and how the permit program is being implemented and suggest measures to improve implementation; and (e) reach preliminary conclusions as to whether and how well environmental laws are being enforced and recommend steps that can be taken to improve enforcement.

2. Crossborder Report - The crossborder report shall analyze generally the status of crossborder pollution, environmental compliance by maquiladora facilities, the need for additional waste water treatment facilities, and the adequacy of existing agreements relating to crossborder pollution among the Signatory nations. The report shall make recommendations with respect to each of these matters.

3. The Transborder Investment Report - This report shall include (a) a review of compliance with environmental law by firms that are partially or fully-owned by persons (including ultimate parent corporations, partnerships and individual investors) from another Signatory [alternatively, another "nation"] and have industrial, agricultural, mining or natural resource operations or facilities in the territory of a Signatory (except for operations by maquiladora facilities which will be covered by the crossborder report) and (b) an analysis of whether any additional steps need to be taken to ensure that foreign-owned facilities come into compliance with or stay in compliance with the environmental laws of the Signatory.

4. Natural Resources, Biodiversity Energy and Agriculture Report - This report shall analyze the effect of increased trade and development on natural resources, energy and agriculture and species diversity beginning with a general analysis of the status of natural resource protection and the threats to biodiversity as of the date of the first report. It shall consider the effect of NAFTA on natural resources and species and make recommendations to alleviate any significant adverse effects it finds.

5. The Side-Agreement Report - This report will monitor compliance with side agreements, including any agreements requiring that the legal systems of the Signatories give citizens effective rights to enforce environmental laws.

6. The Harmonization of Standards Report - This report would analyze whether the Signatories are making progress in achieving upward harmonization of their standards.

EXHIBIT B

Environmental Enforcement

(Prepared by Justin Ward, Natural Resources Defense Council)

DRAFT 4/7/93

PREAMBLE

The Governments of Canada, the United Mexican States and the United States of America (the Parties),

Reaffirming Principle 10 of the Rio Declaration on Environment and Development as agreed to by the Parties, and that it is the right of every citizen to take part in decisions that will affect their personal health and welfare;

Convinced that citizen participation is essential to development and enforcement of environmental laws is essential to sound environmental policy making; and

Deciding to provide for an effective and enduring mechanism that will permanently ensure the rights of citizens to participate in environmental decisions and enforcement of environmental laws;

Have agreed as follows:

Article I: Enforcement of Environmental Laws and Regulations: General Provisions

1. Each Party shall ensure that enforcement procedures, as specified in this Article and Articles II through IV, are available under its domestic law so as to permit effective action to be taken against any act that violates national environmental laws and regulations, including expeditious remedies to prevent imminent environmental degradation and remedies to deter further infringements. Such enforcement procedures shall be applied so as to avoid the creation of barriers to legitimate trade and to provide for safeguards against abuse of the procedures.

2. Each Party shall ensure that its procedures for the enforcement of environmental laws and regulations are fair and equitable, are not unnecessarily complicated or costly, and do not entail unreasonable time-limits or unwarranted delays.

3. Each Party shall provide that decisions on the merits of a case in judicial or administrative enforcement proceedings shall:

(a) preferably be in writing and preferably state the reasons on which the decisions are based;

(b) be made available at least to the parties in a proceeding without undue delay; and

(c) be based only on evidence in respect of which such parties were offered the opportunity to be heard.

4. Each Party shall ensure that parties in a proceeding have an opportunity to have final administrative decisions reviewed by a

judicial authority of that Party and, subject to jurisdictional provisions in its domestic laws concerning the importance of a case, to have reviewed at least the legal aspects of initial judicial decisions on the merits of a case. Notwithstanding the above, no Party shall be required to provide for judicial review of acquittals in criminal cases.

5. Nothing in this Article or Articles II through IV shall be construed to require a Party to establish a judicial system for the enforcement of environmental laws and regulations distinct from that Party's system for the enforcement of laws in general.

6. For the purposes of Articles II through IV, the term "right holder" includes but is not limited to individuals, federations, associations, and non-governmental organizations that are deemed to have legal standing to assert a right of action to enforce environmental laws and regulations in a representative capacity or on their own behalf.

Article II: Specific Procedural and Remedial Aspects of Civil and Administrative Procedures

1. Each Party shall make available to right holders civil judicial procedures for the enforcement of any national environmental law or regulation. Each Party shall provide that:

(a) defendants have the right to written notice that is timely and contains sufficient detail, including the basis of the claims;

(b) parties in a proceeding are allowed to be represented by independent legal counsel;

(c) the procedures do not include imposition of overly burdensome requirements concerning mandatory personal appearances;

(d) all parties in a proceeding are duly entitled to substantiate their claims and to present relevant evidence; and

(e) the procedures include a means to identify and protect confidential information.

2. Each Party shall provide that its judicial authorities shall have the authority:

(a) where a party in a proceeding has presented reasonably available evidence sufficient to support its claims and has specified evidence relevant to the substantiation of its claims that is within the control of the opposing party, to order the opposing party to produce such

evidence, subject in appropriate cases to conditions that ensure the protection of confidential information;

(b) where a party in a proceeding voluntarily and without good reason refuses access to, or otherwise does not provide relevant evidence under that party's control within a reasonable period, or significantly impedes a proceeding relating to an enforcement action, to make preliminary and final determinations, affirmative or negative, on the basis of the evidence presented, including the complaint or the allegation presented by the party adversely affected by the denial of access to evidence, subject to providing the parties an opportunity to be heard on the allegations or evidence;

(c) to order a party in a proceeding to desist from a violation of environmental laws and regulations;

(d) to order the violator of national environmental laws and regulations to pay the right holder damages adequate to compensate for the injury the right holder or community at-large has suffered because of the violation where the violator knew or had reasonable grounds to know that it was engaged in a violative activity;

(e) to order a violator of national environmental laws and regulations to pay the right holder's expenses, which may include appropriate attorney's fees; and

(f) to order a party in a proceeding at whose request measures were taken and who has abused enforcement procedures to provide adequate compensation to any party wrongfully enjoined or restrained in the proceeding for the injury suffered because of such abuse and to pay that party's expenses, which may include appropriate attorney's fees.

3. With respect to the authority referred to in subparagraph 2(c), no Party shall be obliged to provide such authority in respect of subject matter that is acquired by a person before that person knew or had reasonable grounds to know that the production of subject matter would entail the violation of environmental laws and regulations.

4. With respect to the authority referred to in subparagraph 2(d), a Party may, at least with respect to pollution clean-up, authorize the judicial authorities to order recovery of profits or payment of pre-established damages, or both, even where the violator did not know or had no reasonable grounds to know that it was engaged in a violative activity.

5. In respect of the administration of any law or regulation pertaining to environmental protection or enforcement, each Party shall only exempt both public authorities and officials from liability for appropriate remedial measures where actions are taken or intended in good faith in the course of the administration of such laws.

6. Each Party shall provide that, where a civil remedy can be ordered as a result of administrative procedures on the merits of a case, such procedures shall conform to principles equivalent in substance to those set out in this Article.

Article III: Provisional Measures

1. Each Party shall provide that its judicial authorities shall have the authority to order prompt and effective provisional measures:

(a) to prevent environmental degradation due to the alleged violation of a national environmental law or regulation; and

(b) to preserve relevant evidence in regard to the alleged infringement.

2. Each Party shall provide that its judicial authorities shall have the authority to require any applicant for provisional measures to provide to the judicial authorities any evidence reasonably available to that applicant that the judicial authorities consider necessary to enable them to determine with a sufficient degree of certainty whether:

(a) the applicant is the right holder;

(b) a national environmental law or regulation is being violated or such violation is imminent; and

(c) any delay in the issuance of such measures is likely to cause irreparable harm to the right holder (or the community at-large), or there is a demonstrable risk of evidence being destroyed.

Each Party shall provide that its judicial authorities shall have the authority to require the applicant to provide a security or equivalent assurance sufficient to protect the interests of the defendant and to prevent abuse.

3. Each Party shall provide that its judicial authorities shall have the authority to order provisional measures on an ex parte basis, in particular where any delay is likely to cause irreparable harm to the right holder (or the community at-large), or where there is a demonstrable risk of evidence being destroyed.

4. Each Party shall provide that where provisional measures are adopted by that Party's judicial authorities on an ex parte basis:

(a) a person affected shall be given notice of those measures without delay but in any event no later than immediately after the execution of the measures;

(b) a defendant shall, on request, have those measures reviewed by that Party's judicial authorities for the purpose of deciding, within a reasonable period after notice of those measures is given, whether the measures shall be modified, revoked or confirmed, and shall be given an opportunity to be heard in the review proceedings.

6. Without prejudice to paragraph 4, each Party shall provide that, on the request of the defendant, the Party's judicial authorities shall revoke or otherwise cease to apply the provisional measures taken on the basis of paragraphs 1 and 3 if proceedings leading to a decision on the merits are not initiated:

(a) without a reasonable period as determined by the judicial authority ordering the measures where the Party's domestic law so permits; or

(b) in the absence of such a determination, within a period of no more than 20 working days or 31 calendar days, whichever is longer.

7. Each Party shall provide that, where the provisional measures are revoked or where they lapse due to any act or omission by the applicant, or where the judicial authorities subsequently find that there has been no violation or threat of a violation of an environmental law or regulation, the judicial authorities shall have the authority to order the applicant, on request of the defendant, to provide the defendant appropriate compensation for any injury caused by these measures.

8. Each Party shall provide that, where a provisional measure can be ordered as a result of administrative procedures, such procedures shall conform to principles equivalent in substance to those set out in this Article.

Article IV: Criminal Procedures and Penalties

1. Each Party shall provide criminal procedures and penalties to be applied at least in cases of willful violation of an environmental law or regulation for a commercial purpose. Each Party shall provide that penalties available include imprisonment or monetary fines, or both, sufficient to provide a deterrent,

Exhibit C

(Prepared by Justin Ward, Natural Resources Defense Council)

III. CLARIFICATION OF NAFTA PROVISIONS AFFECTING HEALTH AND ENVIRONMENTAL STANDARDS

Throughout the NAFTA process, we have repeatedly expressed concern that the trade agreement not become a vehicle for undercutting the ability of our society to protect public health and the environment. We accept the concept in NAFTA that environmental and health standards should neither unjustifiably discriminate against imported goods nor create disguised trade restrictions. We also recognize that it may be very difficult to document and prove intent on the part of a country to misuse health and environmental standards to restrict trade.

Chapter 7 of NAFTA attempts to address this problem by establishing a more objective test of the validity of "sanitary and phytosanitary" (S & P) measures, including standards to protect human health from pesticides and other food contaminants. Unfortunately, the current NAFTA text, although improved over earlier versions and proposed GATT language, still goes too far. It would allow NAFTA dispute panels to second guess the democratic decisions made at the federal, state, or local levels in our country as to 1) the existence and acceptability of environmental and health risks, and 2) the choice of appropriate protective measures. Administrative agencies most often make such "risk assessments," but legislatures, courts and the electorate have both legal rights and important roles to play in making these choices.

Language in the NAFTA side agreements should make it clear that health and environmental decisions are not subject to full reconsideration under NAFTA, but can only be challenged as lacking a rational basis or as "arbitrary or capricious" resulting from an unfair or unreasonable decisionmaking process. U.S. standards adopted in conformity with the Administrative Procedure Act or similar laws would be free from such scrutiny. We also must recognize the inevitable uncertainty associated with health and environmental risks, and nonetheless act to prevent injury to health and the environment -- the so-called "precautionary principle."

As currently drafted, NAFTA fails to recognize fully that food safety standards involve judgments about both technical evidence and social policy. Instead, NAFTA treats them as solely within the province of "science," a term that is not defined in the text, and the result of administrative "risk assessment," a term that is defined in detail (Articles 715, 724). Our concern is that NAFTA might be interpreted by dispute panels as requiring that health and environmental measures rest upon the kind of certainty

generally associated in many people's minds with scientific experiments or as requiring the support of all or most scientific opinion.

In a side agreement, the NAFTA Parties should explicitly recognize the entire range of governmental institutions at the national and subnational levels that may be involved in the adoption and application of health and environmental measures and in carrying out "risk assessments." These include administrative agencies, legislatures, the courts, and electoral referenda. The side agreement should also adopt a "dictionary" definition of "science" such as the "systematic pursuit of knowledge through observation and experimentation." These definitions would permit challenges to measures only in those cases where there is simply no supporting analyses, where supporting analyses can be shown to have no factual basis or to be fundamentally flawed, or where the decision-making process is totally unfair. The clarifications we are proposing would be consistent with the way NAFTA's intent has been interpreted by trade and environmental officials in each country.

We are well aware and indeed share some of the concerns regarding the closed nature of the dispute settlement procedures under NAFTA. We should first recognize that these panels are not like federal courts. They do not now have the power to overturn or preempt domestic standards. Instead the panels are mechanisms for trying to resolve diplomatic disputes when negotiations fail. Nonetheless, a finding that a health or environmental measure is an unfair trade barrier could have significant legal and political impacts in national fora.

We do not favor turning the NAFTA panels into trinational courts.[1] Instead, we should sharply limit the scope of their review with respect to health and environmental standards. As suggested above, the panels should consider only whether the decision-making process and basis underlying a contested measure were rational with some factual basis and not arbitrary and capricious, and, of course, whether the measure discriminates unjustifiably against international trade.

The Parties should also adopt provisions to assure the opportunity for meaningful participation in trade disputes by concerned citizens, non-governmental organizations, and state and local government bodies. This would include public access to submissions, decisions, and proceedings of panels, and rights to make written and oral submissions to dispute panels.

---

[1] As discussed above in our recommendations on the NACE, we support moving toward new disciplines that would treat unmitigated environmental enforcement lapses as actionable trade violations. Such violations could be addressed within the NAFTA dispute regime with environmental expertise furnished by NACE.

We have proposed to USTR the following specific clarifications to the NAFTA disciplines governing S & P measures:

Clarifications of Article 712

The Parties recognize that the adoption, maintenance, and application of sanitary and phytosanitary measures may involve actions by regulatory agencies, legislatures, courts, electoral referenda, and private standard-setting bodies at both the national and subnational levels. The Parties further recognize that these actions may take place in circumstances where risk assessments, as required in Article 712.3 (c) and prescribed in Article 715, may not be appropriate or feasible.

Additional language for Article 712.3

(d) is not arbitrary or capricious, but based upon a fair and open process in which there is consideration of scientific evidence and opinion, and policy options and preferences.

This subsection would be added to an Article establishing the conditions under which a Party may adopt, maintain, or apply S & P standards. This language much more accurately reflects the reality of S & P standards decision-making than the current formulation in NAFTA. It would insulate from NAFTA challenge U.S. measures, which by law must be established and carried out with due process. At the same time, this formulation would protect the interests of American exporters against "midnight" or "off-the-wall" regulations. Where there are significant procedural failures or lapses, Parties would be able to question the validity of resulting standards.

Additions to Article 724 Definitions

"necessary" means reasonably required

Articles 712.1 and 712.5 use the term "necessary" in regard to S & P measures, which Parties are free to adopt and apply. There is concern based upon earlier GATT practice that the term "necessary" might be construed to mean "least trade restrictive."[2] (To the negotiators' credit, Chapter 9 of NAFTA governing "Technical Barriers to Trade" omits the troubling "necessary/least trade restrictive" test.) NAFTA trade panels should not be empowered to second guess the judgment made by domestic authorities as to the

---

[2] Testimony of David A. Wirth, Assistant Professor of Law, Washington and Lee University, before the House Committee on Science, Space and Technology, September 30, 1992; S. Charnovitz, "NAFTA: An Analysis of its Environmental Provisions," 23 Environmental Law Reporter, p. 10068 (February 1993).

best means to protect life and health. With the proposed clarification, a Party challenging such a measure under NAFTA would have to prove that there was no reasonable nexus between the measure and the accomplishment of its specific objective to protect life and health. A measure could not be viewed in violation of NAFTA just because there was theoretically an equally effective, but less trade restrictive, alternative.

"Scientific" refers to the systematic pursuit of acquiring knowledge through study or practice

"Basis" refers to any factual support, theory or opinion that is neither irrational nor arbitrary or capricious.

Article 712.3(a) states that Parties must establish S & P measures based upon "scientific principles." Article 712.3(b) obligates the Parties not to maintain S & P measures where there is no longer a "scientific basis," defined in Article 724 as "a reason based on data or information derived using scientific methods." However, the term "scientific" or "science" is never defined.

Our proposal is to adopt the "dictionary" definition for the term, which refers to the reasoned process by which knowledge is gained through observation or experimentation. Under this definition, NAFTA panels would not be able to substitute their own judgment for those of national authorities as to whether the "science" underlying the measure were "good" or "adequate." Instead, such measures could be successfully challenged only if it could be shown that there were no supporting analyses.

Addition to Article 105

The Parties agree that measures taken to secure observance by state, provincial and local governments of provisions of this Agreement shall not diminish nor impair the constitutional and legal rights of state, provincial and local governments to adopt, maintain, or apply measures to protect public health and the environment.

This language would recognize the rights of states (granted in the U.S. Constitution and by federal statute) to adopt more exacting health and environmental standards than those of the federal government. It is critical that the NAFTA side agreements and implementing legislation make clear that the U.S. Federal Government will not be required or expected to preempt state or local requirements in any manner that is inconsistent with existing law.

Clarification of Article 2012

The Parties agree in advance that in any dispute involving environmental or health issues, the rules of procedure must require the prior publication of written submissions to the panel, permit sub-federal governmental bodies and nongovernmental organizations to present written and oral submissions to the panel, and assure public access to panel proceedings and initial and final panel reports.

It is critical that the public have an opportunity to participate meaningfully in disputes that go beyond purely commercial matters to raise health and environmental concerns. Our proposed language would not upset the general assumption that dispute panel deliberations would be confidential. Instead, the Parties would agree, as permitted by Article 2012.2, to treat health and environmental disputes more openly.

Natural Resources Defense Council

1350 New York Ave., N.W.
Washington, DC 20005
202 783-7800
Fax 202 783-5917

June 9, 1993

Ambassador Mickey Kantor
United States Trade Representative
600 17th Street, N.W.
Washington, D.C. 20506

Re: NAFTA Supplemental Negotiations

Dear Ambassador Kantor:

With the NAFTA supplemental negotiations continuing this month, I am writing to comment on the United States' environmental negotiating position. Notwithstanding positive features, the proposals now on the table fall well short of ensuring NRDC support for NAFTA. We are eager to work with you and your staff on steps to cure the principal deficiencies, and enable our organization to endorse the treaty.

As an initial matter, we remain concerned by the apparent lack of progress on several recommendations NRDC has made in various submissions to your office and to Congress. Without repeating our previous arguments, we note that the scope of the current negotiations omits clarification of NAFTA language affecting health, environmental and energy standards set by federal and sub-federal governments;[1] legal and institutional reforms to protect the U.S.-Mexico border environment; funding of environmental infrastructure and enforcement programs; public participation in trade dispute settlement; and protection of international environmental agreements that employ trade restrictions.

We understand that some of these issues -- the funding question, in particular -- are under consideration within the inter-agency process. Without judging the outcome prematurely, we wanted to reiterate the importance of having these matters addressed satisfactorily in the final NAFTA package.

---

[1] See NRDC testimony before the Senate Committee on Environment and Public Works, March 16, 1993. Among other issues, we believe NAFTA language requiring that human health standards be based on "risk assessment" must be clarified to ensure that the Parties are free to adopt "zero risk" policies, e.g., the Delaney Clause of the Federal Food, Drug and Cosmetic Act.

The following discussion suggests additional ways to strengthen the NAFTA environmental supplemental agreement, using the Parties' recent draft texts as reference points. All three proposals focus heavily on creation of a North American Commission on the Environment (NACE). The Parties have proposed different versions of a tripartite structure that includes (in the U.S. terminology used throughout this letter), a ministerial Council, a Secretariat, and a Public Advisory Committee.

STRUCTURE AND FUNCTIONS OF THE NACE

Composition and Operation

To its credit, the U.S. has proposed that the NACE Secretariat be independent of the national governments. The U.S. draft's Public Advisory Committee would comprise citizens from all three countries. These features are far preferable to the institutional arrangements offered by the other Parties. The Administration should resist measures that would hinder the cohesion of the Secretariat (such as national sections) or limit the Secretariat's independence, objectivity and international character. Article 11 of the U.S. draft is essentially adequate, although it may be preferable to let the Council, rather than the Executive Director, have final say in appointing Secretariat staff.

Reports and Recommendations

The Canadian draft would delegate most reporting responsibilities directly to the Council. This may tend to politicize issues that are best handled, at least initially, at the technical level. The Mexican draft gives the Secretariat no express reporting functions.

In contrast, the U.S. draft strikes approximately the right balance between the reporting responsibilities of the Council and those of the Secretariat. However, the specifically enumerated responsibilities of the Secretariat should be expanded to include:

> (a) recommending measures and reporting on the Parties' progress toward removing natural resource extraction subsidies that conflict with the agreement's conservation objectives (U.S. Art. 1), and toward improving the valuation of natural resources to account for the real environmental costs of their exploitation and future availability;
>
> (b) in cases where significant gaps or deficiencies are identified, recommending specific proposals and timetables

for seeking "greater compatibility of standards without reducing the level of protection in any Party" (U.S. Art. 10 and Can. Art. 4.4(b));

(c) overseeing standards harmonization activities under Chapters 7 and 9 of the NAFTA;

(d) reporting annually on the level and effectiveness of the environmental enforcement activities of the Parties, as well as the quality and timeliness of information supplied to the Secretariat by the Parties, with particular attention to activities and investigations involving traded goods or services, transboundary pollution, or exploitation of the global commons;

(e) reporting on the impact of the Parties' trade and investment policies on environmental values in the fields of energy, agriculture, forestry and biodiversity; and

(f) identifying and promoting specific applications of the "polluter pays" and "user pays" principles to ensure that private investment revenues are leveraged for environmental infrastructure and enforcement capacity.

It is imperative that the United States hold firm in defending the investigative powers of an independent Secretariat, as set forth in the current U.S. draft (Art. 12.5). The supplemental agreement should explicitly include public and occupational health protection within the definition of environmental laws, and within the overall mandate of NACE.

Funding of NACE Operations

While equal payments by the parties (U.S. Art. 15) may seem egalitarian at first glance, such an arrangement would, in fact, be unfair to the much smaller economies of Mexico and Canada. Moreover, any such arrangement could result in funding shortfalls for the NACE for reasons outside the control of the United States. A failure within the environmental agreement to provide a reliable, obligatory level of funding for the Secretariat and the Council would be unacceptable.

The U.S. proposal should be modified to require equal contributions expressed as a percentage of GNP. Unlike the situation in the World Bank and IMF, voting power in the NACE would be equal for all parties, so the United States would not dominate its North American trading partners in the NACE on the basis of financial leverage. Assigning equal votes for equal proportional contribution is a more equitable approach.

Expressing funding obligations in proportional terms also will ensure that the environment, as well as the economies of the three countries, shares in the gains from economic growth or trade.

Public Access

The Mexican draft provides only that the Council "may ... seek the advice of non-governmental persons or groups" (Mex. Art. 5.3). The Canadian draft likewise provides for NGO access only to the Council, and then only with respect to "transboundary environmental concerns, where no other forum is available to consider the matter" (Can. Art. 4.6).

Thus, neither the Mexican nor the Canadian draft provides for direct access of non-governmental persons or organizations to the Secretariat. Yet the Secretariat is the logical point of contact between the NACE and the public, because the Council is not a standing body in any of the drafts. The United States should stick by its proposal for direct public access to the Secretariat, which is essential to an effective role by citizens and NGOs.

Criteria for Evaluating Public Submissions

Annex 1 of the U.S. proposal is deficient in three respects. First, the criteria list should be expanded to include preliminary assessments of the magnitude of regional or global environmental effects, as well as the importance of specific cases as precedent for other circumstances. This is important for setting priorities. The Public Advisory Committee should specifically be granted a screening, or "peer review," role in the evaluation of public submissions.

Second, although not binding on the Secretariat, the exhaustion of remedies criterion may prove overly burdensome unless reasonable time limits are placed on the duration of the local remedy process. For example, U.S. firms seeking U.S. government intervention in expropriation claims (where local exhaustion is also required) are often forced to endure years of delay and substantial expense before the government will consider the exhaustion requirement satisfied.

Third, clarification is needed to ensure that "harm" in criterion (4) is defined broadly to include prospective injury to human health, natural resources or environmental quality. As drafted, the criterion could be construed narrowly to refer to economic harm; such an interpretation could limit participation by many important non-governmental participants.

DOMESTIC LAW ENFORCEMENT OBLIGATIONS

The United States should persevere in seeking to ensure effective enforcement of domestic environmental laws. First, the supplemental agreement should state an obligation for each party to enforce its environmental statutes and regulations effectively (See U.S. Art. 7 and Can. Arts. 12 and 13).

Second, the Agreement must clarify who has standing to invoke judicial or administrative procedures for enforcement. The U.S. formulation, "Each Party shall ensure that persons with a legally cognizable interest in the particular matter have appropriate access" is circular. It begs the question of who has a "legally cognizable interest" and what is "appropriate access." Because these concepts are vague and easily manipulated, they provide no assurance that there will be effective access to judicial procedures.

The Canadian proposal (Can. Arts. 13 and 14) is preferable to the U.S. version to the extent it clearly grants a private right of action to a definite set of persons, i.e., those persons under the jurisdiction of the forum state who suffer "direct loss or damage" from conduct contrary to environmental laws (Can. Art 13) and, in the case of transboundary pollution, persons of another Party who have suffered damage. This is a useful starting point, but it does not go far enough.

Private rights of action are particularly useful where government enforcement funds are limited. The reason is that private litigants develop the facts and shoulder the burden of bringing the action. This could be particularly important in Mexico, which faces extraordinary budget constraints for environmental enforcement.

In this light, the Canadian proposal to limit standing to those likely to suffer "direct loss or damage" would improperly exclude environmental groups who lack direct economic interest in the litigation. This is unfortunate because such groups are often well qualified litigants with resources, expertise, and absence of ulterior, commercial motive. Such groups should be assured access to the judicial process in each party. Appropriate safeguards can be applied to prevent frivolous, inexpert, or fraudulent litigation.

Third, there is no reason to limit standing to nationals of the forum state or those asserting transboundary pollution. At a minimum, full, reciprocal standing in the tribunals of any Party should be conferred on those having an economic interest in the litigation, on persons credibly alleging transboundary pollution, and on persons alleging harm to the global commons, including

threatened, endangered or migratory species. Local and national groups, of course, must additionally have full rights to litigate local and national issues.

DISPUTE SETTLEMENT

The issue of trade sanctions is obviously a major point of contention in the negotiations. The U.S. proposal envisions a new dispute settlement regime and withdrawal of NAFTA benefits to address chronic, unmitigated enforcement failures. Effective dispute settlement with the possibility of sanctions is essential to any NAFTA supplemental agreement, to address situations where enforcement failure harms the global commons, worsens transboundary pollution, or relates to goods involved in cross-border trade or investment.

We understand that some Mexican environmental organizations are developing alternative proposals to deal with the dispute settlement and penalty questions. These proposals may provide sound ideas on how to break the impasse in the negotiations while ensuring that the supplemental agreements have real teeth.

We disagree with critics who have suggested that any possibility of sanctions for environmental non-compliance would frustrate free trade objectives. As you know, under existing trade rules, companies face close scrutiny and sanctions whenever they are found to have benefitted from a countervailable cash subsidy or to have engaged in commercial dumping. We see no reason why those same companies should expect to engage in persistent, flagrant environmental subsidies and dumping with impunity. Nor can we discern why intellectual property rights should be more strongly backed by threat of sanctions under NAFTA than environmental values.

Where one party's interests, environmental or economic, are adversely affected by another party's practices, there ought to be a remedy. Providing dispute settlement backed by sanctions under these circumstances would not infringe on the sovereignty of the offending party; on the contrary, absence of remedy would infringe on the sovereignty of the injured party.

The Mexican draft (Mex. Art. 9) implicitly acknowledges the validity of this concept when it concedes that dispute settlement is appropriate in response to persistent "failure to enforce domestic environmental law in order to attract or retain investment." Having gone this far, however, Mexico has no principled basis to refrain from developing the point to its logical conclusion. Desire to send pollution across national boundaries, to exploit and waste the global commons, or to secure

unfair advantages from existing investments, are equally inappropriate purposes. All have the effect of shifting costs and burdens unfairly onto another party. There is no logical basis for singling out an investment-enhancing motive for special opprobrium.

Moreover, Mexico's preoccupation with establishing motive is misplaced and unworkable as an evidentiary matter. Any inquiry into government motives for non-enforcement would surely bring an intrusion into government decision-making that is far more offensive to sovereignty than anything found in the U.S. or Canadian drafts. As a practical matter, motive is almost always impossible to establish. We understand that the dumping law, for instance, was created precisely to avoid the intent requirements of the predatory pricing statutes.

We recognize and sympathize with Mexico's concern that available, national enforcement resources may simply be inadequate to ensure compliance in every case. That is all the more reason for the supplemental investigatory and remedial function provided by private attorney general statutes (recommended above) and NAFTA dispute settlement. These supplementary procedures should be regarded as aids to each party's enforcement activities, rather than as accusations of national bad faith.

In this regard, the language of the U.S. Art. 16.1 ("persistent and unjustifiable pattern of non-enforcement") is too stigmatizing and vague. A focus on "a need for supplemental enforcement actions" may be a more appropriate trigger for initiating panel investigations. This would reflect, for example, situations where there is material non-compliance with national environmental laws over a significant period of time by particular companies or industrial categories.

At this preliminary stage in any dispute proceeding, only one party's motion, with concurrence of the Secretariat, should be required as the basis for going forward. In cases where a party does not dispute the possibility of persistent infractions, but believes that national enforcement would be prohibitively expensive, that party may wish not to invoke formal dispute settlement, but simply let the Secretariat investigate the allegations on its own or for an arbitral panel. Of course, the Secretariat's findings would not be self-executing; it would be up to the forum state to impose any appropriate sanctions and/or injunctive relief against environmental violations under its national laws.

Once the panel has issued its report (assuming the panel finds a need for enforcement assistance), the party with jurisdiction over the offending practice or companies should be allowed to

allege before the Council that the panel erred in interpreting or applying that party's environmental law. Article 10.11 of the U.S. draft makes sufficient provision for such a showing. However, if a party chooses not to contest a panel report, or its objection is overruled by the Council, then that party should be expected to comply with the panel's recommendations. Few if any resources are needed to furnish an injunction or impose money damages or fines on polluting sources.

Required judicial proceedings needed for enforcement could in many cases be delegated to private attorneys general with standing as described above, with instructions to the forum state's courts to take judicial notice of the relevant panel decision. Only a party's persistent refusal to comply with the panel decision would give grounds for sanctions, as is currently the case in GATT. Normally, sanctions would be imposed against imports from the offending company or industry if traded goods are involved. Only in extreme cases would sanctions against "innocent" goods be invoked. One hopes such sanctions would never be applied.

It may be appropriate, once the panel report is issued, to require concurrence of two-thirds of the Council as a precondition of any sanctions. Again, a requirement for a two-thirds Council vote merely to convene the panel seems unduly burdensome.

TRANSPARENCY

The U.S. draft makes a good start in providing for openness and transparency in the treatment of environmental issues under the supplemental agreement. See U.S. Arts. 1, 4, 6(b), 9.1, 11.10-13, 16.4(c), 16.5. However, the parties should give serious consideration to publishing the initial report of the panel, on a no-names basis, as well as the final report.

While we recognize the slight risk that a panel might be influenced by adverse publicity arising from an initial report, we believe this risk is outweighed by the benefits of a better-informed government response to the preliminary report. See U.S. Art. 16.4, incorporating NAFTA Art. 2016.4. We also reiterate our previous recommendations concerning greater public participation and disclosure in dispute settlement under the trade agreement (See, e.g., March 16 NRDC Senate Testimony, p. 13).

PROVISIONS AFFECTING TOXIC SUBSTANCES

The supplemental agreement should obligate the Parties to adopt and strengthen community "right-to-know" requirements for toxic use and release disclosure. The current drafts' references to this issue are overly oblique and discretionary (See U.S. Art. 10.9).

In addition, the agreement should require that the parties restrict exports of banned or severely restricted toxic substances. We note that the Canadian proposal (Can. Art 8(3)) moves in this direction. Related to this, we note that the Canadian proposal (Can. Art. 8(2)(a), Annex 1) moves toward a regional phase-out of persistent and bio-accumulative substances (DDT, Mirex). The Parties should broaden this proposal.

SAFEGUARDS AGAINST ROLLBACK OF EXISTING ENVIRONMENTAL LAWS

The environment is equally damaged whether environmental laws and regulations are deficient or simply not enforced. Therefore, a focus on ensuring effective enforcement of laws must be supplemented by strong checks against improper weakening of the laws and regulations themselves.

In this regard, we commend as a good starting point, the provision in U.S. Art. 3, stipulating that each party "shall ensure that its laws continue to provide for high levels of environmental protection and shall strive to improve these laws." Another partial safeguard may be found in the Canadian draft (Can. Art. 9), which calls for advance notification to the other parties of any proposed modification of an environmental law at the federal level, with an opportunity for comments to follow such notice. However, significant damage to human health and the environment could flow from relaxation of individual regulations, in the context of generally "high" levels of protection.

Additional discussions are needed to establish some conceptual baseline -- or some procedure for reviewing and evaluating -- any national proposal to modify environmentally significant, individual regulations in the "downward" direction. Based on further analysis of this issue, we will provide specific recommendations to you shortly.

I hope these thoughts are useful to you as negotiations move forward, and the Congressional debate on NAFTA approaches. We have greatly appreciated USTR's efforts to keep us informed of developments in the process, and the regular opportunities to offer advice.

Sincerely,

Justin Ward

Justin Ward
Senior Resource Specialist

Mock Trial With Jury Deliberations

"The Verdict is Yours"

Mary Kathryn Sahs

Frederick W. Addison, III

Frank Craig

Ron T. Luke, J.D., Ph.D

Frederick W. Addison, III, is a Shareholder in the Dallas, Texas law firm of Locke Purnell Rain Harrell, A Professional Corporation, where he is engaged primarily in a practice emphasizing litigation with federal and state governments, and private parties on environmental, safety, and health issues. In addition to managing an active trial practice, Mr. Addison is a noted lecturer on environmental, safety, and health laws and their effect on employers and private industry. He was awarded a Bachelor of Business Administration Degree, cum laude, from Southern Methodist University and a Juris Doctor Degree from the University of Texas at Austin. Mr. Addison is a member of the Dallas, American, and U.S. Supreme Court Bar Association.

He resides in Dallas with his wife, daughter, and son.

FRANK S. CRAIG, III

Biographical Sketch

Frank S. Craig, III is a partner in the Environmental Law Section of Gardere & Wynne. From 1975 to 1977 he was a trial attorney with the Land and Natural Resources Division of the United States Department of Justice in Washington, D.C. In 1977-78, he was Senior Research Associate for the Sea Grant Legal Program at Louisiana State University. In 1978-1980 he served as Counsel to the Louisiana Coastal Management Program. From 1980 to 1992 he was a partner with the law firm of Breazeale, Sachse & Wilson in Baton Rouge, Louisiana, practicing primarily in the area of environmental law, including CERCLA-Superfund, hazardous waste, air and water matters, solid waste and underground storage tanks. His practice involves representation of clients before both the state and federal environmental administrative agencies and extensive litigation in state and federal courts. He is a frequent speaker and author on environmental topics. He is a 1975 graduate of Louisiana State University Law School and is admitted to practice in the States of Louisiana and Texas and the District of Columbia.

RONALD T. LUKE, J.D., Ph.D.
Research and Planning Consultants, Inc.
7600 Chevy Chase Drive, Suite 500
Austin, Texas 78752
(512) 371-8100 - Fax (512) 371-8448

AREAS OF EXPERTISE

Administrative law, including tax, environmental permitting, public policy and health care

Commercial and environmental litigation

Case theory

EDUCATION

Doctor of Philosophy in Public Policy, John F. Kennedy School of Government, Harvard University, 1975.

Doctor of Jurisprudence, The University of Texas School of Law, 1974.

Master of Public Policy, John F. Kennedy School of Government, Harvard University, 1972.

Bachelor of Arts in Social Studies, Harvard University, 1970.

PROFESSIONAL EXPERIENCE

In 1976 Dr. Ronald Luke joined Research and Planning Consultants. In 1979 he became the owner and CEO of the firm. Since that time, Dr. Luke has performed health planning and feasibility studies in over twenty states on projects ranging from ambulatory facilities to specialty hospitals to legislative policy studies. He has also prepared economic studies of health care practices for use in anti-trust and commercial litigation. Dr. Luke has been accepted as an expert in economics, health planning, market research, demography, socioeconomic impact analysis, land use planning, and financial analysis. He has worked as an economist, planner, and policy analyst since completing undergraduate studies in 1970.

Dr. Luke has conducted planning and policy studies in most of the United States. The studies include water resources planning, socioeconomic impact analysis, economic and demographic forecasting, environmental permitting, development of coastal zone management policies, development of programs for management of state-owned lands, public facilities and services planning, housing market analysis, health policy analysis, financial feasibility studies, damage calculations, opinion research, development of marketing programs for energy conservation, facility siting studies and land use compatibility analysis. Many of these studies have formed the basis for testimony before courts, administrative agencies and legislative committees.

Dr. Luke's clients include major corporations in the healthcare, energy, real estate and waste management industries.

How to Select an Environmental Consultant

"Who Do You Trust"

Debra Baker

Dennis Caputo

MAYOR, DAY, CALDWELL & KEETON, L.L.P.
700 LOUISIANA, SUITE 1900
HOUSTON, TEXAS 77002-2778
(713) 225-7000

DEBRA L. BAKER
PARTNER
225-7369

TELECOPY (713) 225-7047
TELEX 382813

5th Annual

TEXAS ENVIRONMENTAL SUPERCONFERENCE

HOW TO SELECT AN ENVIRONMENTAL CONSULTANT— "WHO DO YOU TRUST"

By: Debra L. Baker, Partner
Mayor, Day, Caldwell & Keeton, L.L.P.
700 Louisiana, Suite 1900
Houston, Texas 77002
(713) 225-7000

August 5-6, 1993
Austin, Texas

MAYOR, DAY, CALDWELL & KEETON, L.L.P.

700 LOUISIANA, SUITE 1900
HOUSTON, TEXAS 77002-2778
(713) 225-7000

TELECOPY (713) 225-7047
TELEX 382813

DEBRA L. BAKER
PARTNER
225-7369

DEBRA L. BAKER

BIOGRAPHY

Ms. Baker is a partner with the 70 attorney law firm of Mayor, Day, Caldwell & Keeton, L.L.P. in Houston, Texas, where she is head of the Firm's Regulatory Environmental Practice. She obtained her law degree from the Georgetown University Law Center in 1984 where she received the Magoichi Kato Scholarship Award for Academic Excellence for Japanese American students and obtained a Bachelor of Science degree, Summa Cum Laude, from the University of Maryland in 1981. Ms. Baker is an author and editor of the First and Second Editions of the Texas Environmental Law Handbook, published in January 1989 and October 1990 and is a co-author of two other environmental treatises. She has spoken and published in a wide variety of environmental areas, including issues pertaining to criminal liability, enforcement actions, Superfund, corporate and real estate transactions, and she is an adjunct Professor of Environmental Law at the South Texas College of Law. She is currently serving as Chair of the American Bar Association's new Environmental Group for the ABA Section of Real Property, Probate and Trust Law. Ms. Baker is also co-founder and Chair of the Houston Bar Association's Environmental Law Section and is admitted to practice in Texas and the District of Columbia.

0102529.01
079313/1635

TABLE OF CONTENTS

Page

I. Indemnity Issues 2

A. Avoid executing a consultant's standard contract for work 2

1. Avoid Limitation of Liability to Fee 2

2. Avoid Releasing Consultant from Negligence 3

3. Standard of Care Issues. 4

4. Direct Liability of Contractors Under CERCLA and Other Environmental Laws. 7

B. Develop a Standard Agreement for Services 10

C. Include an indemnity clause that specifically refers to environmental liabilities 10

D. The indemnity should be drafted to ensure that the consultant remains responsible for environmental impairment (at least to his degree of fault) arising from his acts, regardless of whether the damage was caused by consultant in whole or in part 10

E. Draft the indemnity to cover "acts and omissions" or similar language; do not limit it to "negligent acts or omissions" unless absolutely necessary . . 10

F. Be aware that CERCLA liability can be shifted between private parties by indemnity agreements, but that a responsible party's liability to the government is not extinguished by the existence of an indemnity 11

G. Ensure Indemnitor has sufficient financial strength to support indemnity . . 11

1. Obtain a guarantee by a parent company or other financially healthy affiliate 12

2. Establish bonding requirements or an escrow account to cover environmental indemnity obligations 12

3. Before executing an indemnity with a consultant, identify present and potential future liabilities that may affect consultant's capacity to service the indemnity 13

H. Tie Indemnity Provision to Representations and Warranties in Contract . . 13

I. Ensure that Consultants are assuming liabilities for their subcontractors . . 14

J. The indemnity should survive the termination of the contract 15

K. The indemnity should be drafted using defined terms for environmental coverage 15

L. Obtain a release and covenant not to sue from consultant 15

II. Insurance Issues Relating to Environmental Consultants and Indemnity Obligations 15

A. Make the contract with the consultant contingent upon the consultant's procurement of required insurance 16

B. Types of insurance to consider 16

1. Comprehensive General Liability Insurance 16

2. Automobile Liability Insurance 16

3. Worker's Compensation Insurance 16

4. Umbrella Liability Coverage 16

5. General/Professional Liability Insurance 17

C. Client should be named as an additional insured on all of the consultant's policies 17

D. Client should specify the minimum coverages required for each policy . . . 17

E. If consultants cannot or will not obtain insurance of the types and amounts required, client may wish to consider assisting them with the procurement of policies or assist in paying premiums 17

F. In addition to relying on consultant's insurance, client should review its own policies to ensure maximum coverage in the event that the

consultant's insurance company goes into receivership or otherwise refuses to pay a claim 17

G. The consultant's insurance should be made primary to any insurance held by client 18

H. Require coverage to be in effect throughout the term of the contract 18

I. Require the consultant to obtain coverage from an insurance company that is acceptable to client 18

J. If possible, have the consultant's policies contain provisions stating that the insurance companies will have no right of recovery or subrogation against client 18

K. Specify that any and all deductibles on the consultant's policies shall be paid by the consultant and that client (as an additional insured) is not responsible for any deductibles 18

L. Client can also require the consultant to ensure that all subcontractors obtain the same insurance as the consultant. 18

MAYOR, DAY, CALDWELL & KEETON, L.L.P.

700 LOUISIANA, SUITE 1900
HOUSTON, TEXAS 77002-2778
(713) 225-7000

DEBRA L. BAKER
PARTNER
225-7369

TELECOPY (713) 225-7047
TELEX 382813

HOW TO SELECT AN ENVIRONMENTAL CONSULTANT— "WHO DO YOU TRUST"

By: Debra L. Baker, Partner
Mayor, Day, Caldwell & Keeton, L.L.P.
700 Louisiana, Suite 1900
Houston, Texas 77002
(713) 225-7000

Consultants now offer a variety of environmentally-related services. Many property owners, buyers, sellers, lenders, and others, have retained consultants to perform environmental audits of real property. Consultants are routinely hired to remove underground and above-ground storage tanks and to remediate any hydrocarbon or other contamination that may result. If other contamination is found on property, consultants may be retained to design a remedy and/or remediate the contamination.

One common thread exists in the consultant's performance of all of these services: if the consultant misses something or makes a mistake that exacerbates the problem, the client who retained the consultant may suffer increased damages as a result. For example, if a consultant is retained to perform an environmental audit and does not identify existing subsurface contamination, persons relying on the report to make a decision to purchase property could be inadvertently assuming a serious liability. Consultants that are on-site to remediate existing contamination could cause the contamination to be further released or spread if they conduct their remedial activities in a negligent fashion. A consultant removing an underground storage tank could puncture the tank and cause a release where no contamination previously existed.

If these problems occur, who is liable for the damages or consequences -- the client/property owner or the consultant? Although common law remedies exist, prudent clients address these issues before work is initiated by a consultant. This is most effectively handled in the contract pursuant to which the consultant is retained in the form of a provision addressing indemnities.

This outline identifies contractual and risk-assessment type issues that may arise when a client contracts for environmental services and discusses developments in case law addressing consultant liability.

I. Indemnity Issues.

A. Avoid executing a consultant's standard contract for work.

Consultants often furnish clients with their own standard contracts or agreements governing work to be performed for environmental services. Such contracts are generally not drafted for the benefit of the client receiving the consultant's services; rather, they are usually drafted to protect the consultant from liability. In executing such a form contract, a client might inadvertently narrow the scope of protection that might otherwise be available.

1. Avoid Limitation of Liability to Fee.

Consultant form contracts often attempt to limit the consultant's liability to the fee received for their services. The problem with agreeing to such a limitation is that liabilities, particularly when chemicals or hazardous substances are being used in performing the services or are being remediated, are highly likely to exceed the amount of the consultant's fee. By way of example, a consultant may charge a fee of $5,000 to perform a relatively simple environmental audit. If the consultant is negligent and fails to identify contamination that a reasonably prudent consultant would have discovered, the liability to a person acquiring the property based upon the consultant's environmental audit report could obviously result in cleanup costs well in excess of the $5,000 fee.[1] Clearly, agreeing to limit all liability to the fee could well result in serious problems for a client. Similarly, suppose a consultant is hired to remove underground storage tanks for a fee of $16,000. During the removal process, the consultant negligently pierces the tank wall and causes a major product spill. If the cleanup costs exceed $16,000, a client who has agreed to

[1]In addition, there is authority that third parties, in addition to the client, might have a claim against a contractor in such a situation. In Howell v. Fisher, 272 S.W.2d 19, 20-21 (N.C. App. 1980), shareholders sued a geological engineering firm for the negligent preparation of a geological feasibility study that had induced the shareholders to invest in a corporation which later became insolvent. The final report prepared by the firm was found to have grossly exaggerated and overstated the mineral content in the tracts mined by the corporation. Id. at 22. The Court in Howell looked to "sound reason" to state that negligence liability may be imposed to protect the foreseeable interest of third parties not in privity of contract. Id. at 23. The court further reasoned that "[a]n action for negligent misrepresentation by third persons lacking privity to recover economic loss has only recently gained acceptance, but it now appears to be the prevailing American law." Id. at 24. The court concluded that the action may be brought by the shareholders, even though they had not directly hired the engineering firm, since the consultant should have reasonably foreseen the damages to the shareholders and since the shareholders suffered injuries distinct from damages suffered by the corporation as a whole. Id. at 24-26.

limit the consultant's liability to the fee will be forced to pay for the cleanup costs. Clearly, property damage or personal injuries caused by the consultant's work and/or use of hazardous substances can easily exceed the fees paid to consultants. Accordingly, one way in which clients can ensure that they are not inadvertently agreeing to limit liability is to avoid executing consultant form contracts.

2. Avoid Releasing Consultant from Negligence.

Form contracts also often include language to the effect that the consultant is not liable for its own negligence or the negligence of its subcontractors. Executing a contract containing such a provision could obviously limit the client's remedies against the consultant and is not desirable.

Whether or not an indemnity provision released a consultant from its own negligence was addressed in Ganton Technologies, Inc. v. Quadion Corp., 755 F. Supp. 203 (N.D. Ill. 1990). In Ganton, a property owner brought a third-party action against an engineer, alleging that the Engineer failed to provide engineering observation services in a reasonable and prudent manner in connection with an environmental cleanup.

> The contractual indemnity provision at issue stated that:
> "OWNER agrees to indemnify, save harmless and defend ENGINEER from and against any and all costs, expenses, fees, losses, claims, demands, liabilities, suits, actions, and damages whatsoever arising out of or related to the PROJECT or this Agreement."
>
> Id. at 206.

The Engineer argued that the Owner's claims for negligence in the performance of the Engineer's work was barred by the indemnity provision. The court looked to Nebraska law to interpret the contract and noted that state law provided that a party could not be indemnified for its own negligence unless the contract contained express language clearly indicating that this was the intent of the parties. [This is often referred to as the "express negligence rule" and persons negotiating contracts should determine if the state whose law is to govern their contract is an "express negligence" state.]

The court found the intent behind the indemnity provision to be ambiguous and did not believe that the parties intended the result argued by the Engineer. Rather, the court stated that in the situation of the Engineer's negligence, the interpretation that the language would bar the Owner from suing the Engineer would render the duty of care clause meaningless and leave the Owner

remediless. The court instead read the indemnity provision as protecting the Engineer against suits from third parties and the indemnity provision did not protect the Engineer from its own negligence.[2] See also, Danella Southwest, Inc. v. Southwestern Bell Tel. Co., 775 F. Supp. 1227 (E.D. Mo. 1991), aff'd 978 F.2d 1263 (8th Cir. 1992) (Company did not in clear, unambiguous and unequivocal terms make contractor liable for negligence of company so as to shift liability for containment costs of dioxin-contaminated dirt removed from construction site to contractor, where excavation of dioxin-contaminated dirt was caused by Company's negligence.)

3. Standard of Care Issues.

The standard of care to which the Consultant should be held is also an issue that should be considered. See, e.g. Milau Associates, Inc. v. North Avenue Development Corp., 368 N.E. 2d 1247 (N.Y. Ct. Ap. 1977) (where court held that where expert is retained primarily for his services, the standard of care will be that generally used by practitioners in that field, unless the expert has contractually bound himself to a higher standard); Vitol Trading S.A., Inc. v. SGS Control Services, Inc., 680 F. Supp. 559 (S.D.N.Y. 1987), rev'd on other grounds, 874 F.2d 76 (2nd Cir. 1989) (where court found for plaintiffs alleging that consultant failed to reveal the limitations on gas chromatography testing on naphtha as well as failing to reveal that the testing was subcontracted out, based on the duty of care owed, noting that plaintiffs could not expect perfection but could expect the consultant to use the "most accurate and up-to-date methods available").

In United States Fidelity & Guaranty Co. v. United States, 638 F. Supp. 1068 (N.D. Pa. 1986), rev'd on other grounds, 837 F.2d 116 (3rd Cir. 1989), the duty owed to the public by the EPA and its consultant in undertaking an emergency action was at issue.

The United States Environmental Protection Agency ("USEPA") undertook an emergency removal action at the Drake Chemicals Site due to an imminent threat of fire, explosion or public contact with hazardous materials. The USEPA hired O.H. Materials ("OHM") as the primary contractor for the emergency response at the Site. According to the contract between USEPA and OHM, all decisions regarding what work would be done and the methods and manner in which the work would be done were to be made by the EPA representative on the site. One of the most hazardous cleanup activities at the site involved the

[2]Note, however, that the Owner was barred from recovering damages from the Engineer because the Owner's complaint did not allege that the Engineer's negligence was the cause of any personal injury or property damage, but only alleged damages due to economic losses arising from defeated expectations of a commercial bargain and state law barred recovery of purely economic losses in a negligence claim.

neutralization of a partially filled oleum tank where the neutralization process could result in the evolution of a cloud containing hazardous materials. Consequently, a hydrogeologist employed by the state suggested that the more dangerous activities be conducted when the wind conditions were such that they would blow any hazardous clouds away from nearby populated areas. Despite this report and one incident in which a small hazardous cloud evolved, the EPA and OHM allegedly continued to conduct the neutralization of the oleum tank without regard to wind conditions. During a procedure to unclog a drainage valve on the tank, several strong explosions occurred and a large acid cloud emanated from the tank. The acid cloud spread to populated areas and was alleged to have caused extensive property damage. OHM's insurer sought reimbursement from the government for payments it made to those alleging damage from the acid cloud, alleging that the USEPA had a duty of care and that the USEPA was negligent for failing to consider the wind conditions during the oleum neutralization. In holding both OHM and the USEPA negligent and liable for the damages, the court noted that "the entities responsible for the cleanup have the duty to take all reasonable precautions so as to protect the public." The court noted that even if the EPA had not been aware of the hydrogeologist's report, it should have considered wind directions, and specifically that the EPA "should have done everything within its power to minimize the risk of harm to the public." (emphasis added).

In addition to issues surrounding the standard of the duty of care that environmental professionals owe to their clients, courts have also addressed questions concerning to whom that duty is owed. For instance, the court in U.S. Ecology, Inc. v. Carlson, 638 F.Supp. 513, 515 (C.D. Ill. 1986), analyzed the claim of an owner of a chemical waste disposal site who sued an engineering firm for negligently evaluating its site. EPA had contracted with the engineering firm to evaluate the site for possible inclusion on the NPL. Id. After the site was placed on the NPL, the owner sued the engineering firm claiming that the firm owed it a duty to exercise due care in evaluating and scoring the site. The owner alleged that the engineering firm had breached this duty by relying on obsolete and inaccurate data and by failing to visit the site. Id. at 520. In addressing whether the engineering firm owed a duty to the landowner, the court analyzed the factors of foreseeability, the likelihood of injury from the firm's actions, the magnitude of the burden of guarding against those actions, the consequences of placing the burden on the firm, and the desirability for the extension of the duty in terms of social policy. Id. From analyzing the factors, the district court upheld the magistrate's dismissal of the action, holding that the engineering firm did not owe a duty of care to the owner, U.S. Ecology, because U.S. Ecology's alleged injury to its business reputation was not reasonably foreseeable to the engineering firm. Id. at 521.

Another case addressing the duty owed to third parties is Sykes v. Propane Power Corp., 541 A.2d 271 (N.J. Super. A.D. 1988). In that case, the court held that an engineer who was hired to prepare drawings of a chemical recovery plant owed no duty to a plant employee who was fatally injured when a chemical distillation unit in the plant exploded. Id. at 274-75. The environmental engineer had been hired by the owner of the plant to develop detailed drawings relating to layout and location of plant facilities involved in the chemical recovery process. The owner was legally required to submit the drawings to the State Department of Environmental Protection (DEP). Id. at 272. After the explosion occurred, the plaintiff argued that the consultant breached a duty of care owed to the employee when the consultant placed his seal on documents reflecting an unsafe and negligently developed chemical processing system. Id. at 274. In holding that the environmental consultant owed no duty to the employee, the court reasoned:

> Although all engineers have a professional obligation to see that the work they do is accurate and in conformance with accepted standards of care, the duty to foresee and prevent a particular risk of harm from materializing should be commensurate with the degree of responsibility which the engineer has agreed to undertake. An environmental engineer may in certain circumstances be called upon to evaluate the safety of a chemical processing plant. However, [the consultant] was not retained to do that here. He was only retained to prepare a basic graphical layout of the existing processing systems for the DEP.
>
> Id. at 275.

In other contexts, however, courts have held that environmental contractors owe duties of care to third parties. For instance, in Caldwell v. Bechtel, Inc., 631 F.2d 989, 997-1003 (D.C. Cir. 1980), the court held that a consultant engineering firm providing safety engineering services to a metropolitan transit authority owned a duty to protect third parties working for the authority from personal injury. In reasoning that the engineering firm owed a duty to third parties, the court looked beyond the specific contract language to state:

> Unlike contractual duties, which are imposed by agreement of the parties to a contract, a duty of due care under tort law is based primarily upon social policy. The law imposes upon individuals certain expectations of conduct, such as the expectancy that their actions will not cause foreseeable injury to another. . . .
>
> While in contract law, only one to whom the contract specifies that a duty be rendered will have a cause of action for its breach, in tort law, society, not the contract, specifies to whom the

duty is owed, and this has traditionally been the foreseeable plaintiff.

Id. at 997-98. Environmental consultants may thus owe duties to third parties depending both on their scope of contractual obligations and on societal expectations that their actions may foreseeably cause injury to third parties.

4. Direct Liability of Contractors Under CERCLA and Other Environmental Laws.

In a more recent Ninth Circuit case, a contractor/excavator was even held directly liable as a responsible party under CERCLA. In Kaiser Aluminum & Chemical Corporation v. Catellus Development Corporation, 976 F.2d 1338 (9th Cir. 1992), a contractor/excavator who was hired to excavate and grade a portion of land for a proposed housing development was found liable as an "operator" and a "transporter" under CERCLA when it spread displaced contaminated soil from the property over other parts of the property. The City of Richmond, California hired the contractor to excavate and grade a portion of land owned by the City and, in conducting the work, the contractor spread displaced soil containing allegedly hazardous chemical compounds over other parts of the property. The City sued the Catellus Development Corporation, whose predecessor had sold the land to the City. Catellus filed a third-party complaint for contribution against the contractor under CERCLA, alleging that the contractor had exacerbated the extent of the contamination by extracting the contaminated soil from the excavation site and spreading it over uncontaminated areas of the property.

Although the lower court had dismissed the third party complaints against the contractor because it "was not a person who could be held liable under CERCLA section 9607(a)." The Appeals Court reversed and remanded, finding that the contractor's activity which produced the contamination (the excavation and grading) occurred during the construction process and that the contractor had exercised sufficient control to be an operator under CERCLA. The Appeals Court also concluded that the contractor could be a transporter under CERCLA for transporting hazardous material to an uncontaminated area of the property.[3]

[3]In what would appear to be a unique and more attenuated application of the CERCLA liability theory espoused is Kaiser, a swimming pool company (Sylvan Pools, Inc.) was found liable under CERCLA as having "disposed" of "hazardous substances" when Sylvan's excavation for a swimming pool resulted in piles of contaminated dirt being placed in a residential yard. Price v. U.S. Navy, 818 F.Supp. 1326 (S.D. Cal. 1992). Sylvan was found to be liable for 4% of the response costs incurred by the plaintiffs, with the U.S. Navy (who originally deposited the contaminants into the ground) being held 95% liable. Id.

Similarly in Tanglewood East Homeowners v. Charles-Thomas, Inc., 849 F.2d 1568 (5th Cir. 1988), the court suggested that a construction contractor may be strictly liable for contamination on a site under CERCLA as an arranger or transporter of hazardous material.

These types of contractor liability findings are likely to have an impact upon the environmental consulting industry. At a minimum, contractors are likely to be even more insistent that they be provided with indemnity protection for CERCLA liability -- a protection that the client retaining the consultant is already generally unwilling to extend. Clearly, the issue of who is to bear the burden for problems that arise during remediation or construction activities is one that will continue to be a primary focus of the consultant/client relationship in contracting for and conducting work in the environmental area and the applicability of liability principles under the law is less than clear.

Although in Kaiser, a contractor who merely excavated and graded contaminated soil was regarded as a operator and transporter under CERCLA, an earlier case where a contractor had taken contaminated fill from a chrome processing plant to fill other buildings and basements as part of a demolition was handled differently. In Jersey City Redevelopment Authority v. PPG Industries, Inc., 18 Envtl. L. Rep. 20,364 (D.N.J. 1987), a complicated factual scenario arose in which the contractor faced alternative theories of liability, including strict liability from CERCLA, strict liability from abnormally dangerous activity, and negligence. Specifically, the court analyzed the liability of a contractor that utilized contaminated fill taken from another's property to fill basements and buildings as part of a demolition. The court found that although the contractor was aware that the property had been used as a chrome processing plant, it had no reason to believe that the residue was a danger either to health or the environment. In addressing the liability of the contractor, the court cited CERCLA, which holds liable a transporter of hazardous waste only if that waste is transported to a disposal facility, a treatment facility, or a site selected by the transporter. In this case, the contractor accepted the hazardous substances for transportation to a location that satisfied none of these three categories. Interestingly, the court imposed strict liability upon the previous and current owners of the hazardous fill for engaging in the abnormally dangerous activity of distributing the mercury and other toxic substances. At the same time, the court concluded that the contracting transporter did not engage in an abnormally dangerous activity for which it could be held responsible. Finally, the court concluded that the contractor was not negligent in transporting the fill since it had no knowledge that the fill contained chromium residue and since the knowledge that the fill came from property that at one time was a chrome processing plant created no independent duty to test the fill for potential chromium contamination. The court also concluded that the contractor was not liable under theories of breach of contract, fraud, misrepresentation, and indemnification.

Although most typical site assessments avoid the abnormally dangerous activities confronted in the above cases, contracting parties may argue that soil boring or other subsurface testing that causes the release of hazardous wastes is an abnormally dangerous activity, especially in circumstances where the environmental consultant knew or reasonably should have known that the property was contaminated.

The Southern District of Texas recently considered the liability of both a landowner and his independent contractor under the Clean Water Act and the Rivers and Harbors Act for their actions in filling of wetlands in violation of the wetlands permit program. In United States v. Van Leuzen, 816 F.Supp. 1171 (S.D. Tex. 1993), the defendant landowner, Mr. Van Leuzen, hired defendant construction hauler, Mr. Hornbeck, to move approximately 36 truckloads of dirt onto the defendant landowner's property. The property was wetlands and Mr. Hornbeck testified that he asked the landowner if the latter had all of the permits necessary for him to do fill work on the property. The landowner reportedly told Mr. Hornbeck that he had "all the permits he needed," and "don't worry about it." The court found however that:

> "....[o]n the other hand, Defendant Hornbeck had had two prior experiences with the Corps of Engineers, regarding permitting problems of his own, and he knew full well...what the permit requirements were....He was cavalier and irresponsible in the manner in which he made inquiry about the applicable permit in this case, never asking to actually see it, and never pressing the matter beyond a few vague conversations. Consequently, it is the Court's perception that he was deficient in his exercise of reasonable care in determining the propriety of the permit covering this actual project, and that his profits of $1,800.00, or $50.00 per each of 36 loads, was received improperly. (emphasis added.)"
>
> Id. at 1175

Despite the Court's finding that the independent contractor was deficient in the exercise of reasonable care, the Court considered the totality of the circumstances and found that the independent contractor had no control over the landowner and would not be required to participate in the restoration of the property. However, the contractor was required to forfeit one-half of his profits as a result of his failure to exercise reasonable care.

B. Develop a Standard Agreement for Services.

Client should work with an attorney to develop a standard "Agreement for Services" that is drafted to protect client from environmental liabilities and to include a

strong indemnity and representations and warranties to be executed by consultants hired by client. Such a standard Agreement can be revised (i.e., by inserting different consultant names, price terms and scopes of work) as needed for use with virtually all types of consultants, contractors, etc. By utilizing a standard Agreement, client can ensure that all of its divisions, branches, offices, etc. are equally protected while avoiding expenses incurred by continually drafting new contracts from scratch or spending lawyer time reviewing and revising the consultant form contracts.

C. Include an indemnity clause that specifically refers to environmental liabilities.

If a problem arises, a court will not have to go back and address the issue of whether environmental liabilities were intended to be covered. This is necessary because indemnitors often argue that the indemnity they executed was not sufficiently broad to cover environmental liabilities.

D. The indemnity should be drafted to ensure that the consultant remains responsible for environmental impairment (at least to his degree of fault) arising from his acts, regardless of whether the damage was caused by consultant in whole or in part.

The indemnity should be clear that some degree of fault by another party does not in itself render the consultant's indemnity obligation void. Under the environmental laws, it is common to have parties who are jointly and severally liable; accordingly, no one party should get off the hook merely because it was not the sole cause of the problem.

E. Draft the indemnity to cover "acts and omissions" or similar language; do not limit it to "negligent acts or omissions" unless absolutely necessary.

It is easier to prove that a consultant did or did not do a particular act that caused an environmental problem than it is to prove that the consultant's actions were negligent. Ideally, the client would want to be indemnified for whatever losses it incurred due to the acts or omissions of the consultant. If the negotiating strength of parties is not sufficient to obtain an indemnity for "acts or omissions," the client may fall back to obtaining an indemnity for the consultant's negligence. If at all possible, avoid agreeing to an indemnity that merely covers "gross negligence" or "willful misconduct." These standards should be used in addition to simple negligence and not in place of it. The standard of proof between negligence and gross negligence may be difficult and expensive to prove and a client would not want to have indemnity protection from a consultant only for the consultant's gross negligence, when the client is likely to suffer significant losses caused by the consultant's simple negligence.

F. Be aware that CERCLA liability can be shifted between private parties by indemnity agreements, but that a responsible party's liability to the government is not extinguished by the existence of an indemnity.

Section 107(e)(1) of the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. Section 9601 *et. seq.* ("CERCLA") allows private indemnity agreements for CERCLA response costs. This merely means that as between potentially responsible parties ("PRPs"), the parties may designate among themselves who is responsible for such CERCLA costs. However, the government's abilities to pursue any or all PRPs (present facility owners or operators, former owners or operators at the time of disposal, generators and transporters who selected the site) are not affected by the existence of such private indemnity agreements. See, e.g., Mardan Corp. v. CGC Music, Ltd., 804 F.2d 1454 (9th Cir. 1986); Chemical Waste Management v. Armstrong World Indus., 669 F. Supp. 1285 (E.D. Pa. 1987); Smith Land & Imp. Corp. v. Celotex Corp., 851 F.2d 86 (3d Cir. 1988); Channel Master Satellite Sys. v. JFD Electronics, 702 F. Supp. 1229 (E.D.N.C. 1988); Southland Corp. v. Ashland Oil, Inc., 696 F. Supp. 994 (D.N.J. 1988).

By way of example, suppose the government found client to be jointly and severally liable with a consultant for costs under CERCLA because contamination occurred on property owned by client (the "owner") as a result of a consultant's (the "operator's") use of chemicals on that property. Client has an indemnity agreement with the consultant for environmental liabilities such as CERCLA response costs. The government may still legally pursue client for cleanup costs. It does not have to look to the consultant even though the consultant has agreed to indemnify client. Of course, once approached by the government for cleanup costs, client may exercise the indemnity provision and demand that the consultant pay the costs requested of client by the government. The government does not care where client gets the money to pay for the cleanup. Accordingly, if client has an indemnity agreement, it may seek to obtain the money from the consultant. However, the indemnity provided by the consultant is only as strong as the consultant's financial strength. If the consultant is unwilling or unable to pay client for cleanup costs it may have caused as an operator, client would still be liable to the government for cleanup costs due to its ownership status, even though it did not cause the contamination. Obviously, that is why ensuring the financial strength of client's indemnitor is a prerequisite to entering into any indemnity agreement, however well drafted.

G. Ensure Indemnitor has sufficient financial strength to support indemnity.

The most well-drafted indemnity will be rendered meaningless if the indemnitor does not have sufficient funds to support the indemnity obligation. In addition, merely because an indemnitor may presently have what appear to be sufficient funds available to cover reasonably anticipated liabilities, client should consider the possibility that, by the time that an environmental problem is found to exist or the amount of money necessary to remediate it is quantified, the indemnitor may well be in a different financial position. In many cases, particularly with smaller companies, the indemnitor may not

even be in business when it comes time to make a claim on the indemnity obligation. For those reasons, many companies who are being indemnified are also requiring some type of security up front to ensure that at least some funds for remedial actions that may be covered by the indemnity are available in the future. Considerations that can be explored in addressing the indemnitor's financial strength include:

1. Obtain a guarantee by a parent company or other financially healthy affiliate.

If a stronger entity is affiliated with or owns the consultant's business, it may be possible to pursue a guarantee from that entity in the event that the consultant's business fails or its money is otherwise unavailable to service the indemnity.

2. Establish bonding requirements or an escrow account to cover environmental indemnity obligations.

These avenues of protecting against a certain amount of environmental liability are becoming increasingly common in business transactions. Performance or construction bonds can be obtained to ensure performance by the consultant. In some instances, depending upon the circumstances, parties may agree that a specific sum will be set aside in an escrow account by the indemnitor for the benefit of the indemnitee for a period of time deemed sufficient to provide at least some degree of protection to the indemnitee. The indemnitor continues to earn interest on the money, which is returned after the agreed-upon period expires and the parties have not had to resort to the account for remedial costs. If, during the active term of the escrow account, the indemnitee makes a demand upon the indemnitor pursuant to the indemnity provision and the indemnitor is unwilling or unable to pay, the indemnitee can utilize the money in the escrow account to cover remedial costs. This scenario is sometimes difficult to arrange with an indemnitor who would probably prefer to have the use of his money rather than obligating it to an inactive account. However, if client's bargaining position is strong, it may be able to negotiate the establishment of such an escrow account.

3. Before executing an indemnity with a consultant, identify present and potential future liabilities that may affect consultant's capacity to service the indemnity.

Many contingent or potential liabilities that may be almost sure to affect the consultant's financial strength in some way can easily be identified.

- Is the consultant on EPA's contractor black list for any reason and why? This may be an indication of former environmental problems or of

environmental violations involved in the performance of the consultant's work which could result in his being pursued for damages. Even the EPA has retained consultants who are found guilty of negligence and even criminal behavior, and generally publishes a list of contractors who should not be hired by the government--a good reference source for private parties seeking to gain information about potential consultants. In United States v. Ewing, 957 F.2d 115 (4th Cir. 1992), the defendant was the sole owner and operator of a company awarded a contract by the USEPA to clean up hazardous waste sites. The defendant was charged with presenting two false claims for payment to the USEPA; one claimed expenses related to a quality assurance program which was not conducted and the second was for insurance premiums for pollution liability insurance which the defendant never acquired. The defendant pled guilty in accordance with a plea agreement but attempted to change his plea before he was sentenced. The court refused to allow the defendant to change his plea and the defendant appealed that decision. The appellate court held that the District Court acted within the guilty plea rule and the sentencing guidelines and that there were sufficient facts to sustain the guilty plea.

- Is the consultant a potentially responsible party in connection with any state or federal Superfund list? Has he received a section 104(e) letter from the EPA requesting information? If so, the potential exists that he may be found to have future liability to the EPA for cleanup costs on other sites which could affect his ability to service the indemnity.

- Are any lawsuits (government or private party) or state or federal enforcement actions pending against the consultant? Does he have any reason to suspect that any such actions may be filed in the future?

H. Tie Indemnity Provision to Representations and Warranties in Contract.

In addition to merely having an indemnity provision in place to cover environmental liabilities, the indemnity should also be tied together with various representations and warranties that require the consultant to affirmatively represent that he is in compliance with environmental and health and safety laws, that he will obtain all necessary permits and authorizations, etc. This merely makes it easier to pursue the consultant on a breach of contract or warranty claim when the indemnity provision is triggered by the violation of one of the reps and warranties.

I. Ensure that Consultants are assuming liabilities for their subcontractors.

As previously noted, an indemnitee occasionally finds itself in the awkward position of having incurred environmental liability from the actions of a consultant's

subcontractor, but the indemnity provision/agreement with the consultant does not specifically address who is responsible for problems caused by third parties. While there is certainly a strong argument that a consultant's subcontractor is not an unrelated third party and that his actions are the responsibility of the consultant, the entire issue can be avoided by ensuring that the contract documents clearly provide that actions of subcontractors are covered by the consultant's indemnity.

Ensuring that the consultants provide an indemnification for subcontractors that they hire to perform work for the client is an extremely important precaution that should be taken by the client. Because the consultants generally hire the subcontractors, the client does not usually have an opportunity to review the subcontractor's qualifications or financial stability; nor does the client have any privity of contract with a subcontractor retained by the consultant, and the client has no contractually remedy against the subcontractor for that party's negligence that results in harm to the client.

An example of subcontractor-related problems is illustrated in Metal Finishing Technologies, Inc. v. Fuss and O'Neill, Inc., No. 390560, 1991 WL 172833 (Conn. Super. Ct., Aug. 30, 1991), where the plaintiff entered into a consent decree with the USEPA. In order to comply with the terms of the consent decree, the plaintiff hired the defendant-environmental consultant, Fuss and O'Neill. Fuss and O'Neill then hired defendant Nanco Laboratories to test sludge samples. After receiving Nanco's test results, the USEPA required additional tests and cleanup restrictions. The plaintiff then had the sludge retested by another laboratory which indicated that Nanco's results were faulty. Plaintiff sued both Fuss and O'Neill and Nanco for negligence, breach of contract, and negligent misrepresentation. Additionally, the plaintiff claimed that Fuss and O'Neill breached a fiduciary duty to the plaintiff by failing to disclose the terms of their agreement with Nanco to the plaintiff and by failing to protect the plaintiff's interests. The environmental consultant, Fuss and O'Neill moved to dismiss the claims based on breach of fiduciary duty and negligent misrepresentation. The court found that the relationship between the plaintiff and Fuss and O'Neill was a simple commercial contractual relationship and that there was "no unique degree of trust and confidence" between them. Consequently, the court dismissed the claim for breach of fiduciary duty, but retained the negligent misrepresentation claim.

J. The indemnity should survive the termination of the contract.

The indemnity should ideally not be limited by a time period or cap on the amount. In many cases, the negligence or problem caused by a consultant may not be discovered until some time after the work has been performed and completed by the consultant. To ensure the highest degree of protection, the indemnity should expressly state that it will survive the termination of the contract.

K. The indemnity should be drafted using defined terms for environmental coverage.

If the indemnity refers to "hazardous substances," "pollution," the "environment," "environmental liabilities," etc., these should all be included in the contract as defined terms so that there is no question about the intended scope of coverage. For example, the term "hazardous substances" might need to be tightly defined to ensure that the indemnity is intended to cover materials in addition to those identified as "hazardous substances" in CERCLA. There are many other constituents that a client would want included in the coverage of an indemnity provision than merely those listed under CERCLA, and care should be taken that inartful drafting does not result in an inadvertent limitation of the scope of the indemnity.

L. Obtain a release and covenant not to sue from consultant.

Client may request the consultant to release and covenant not to sue client for matters arising out of the consultant's performance of the work, unless client is negligent or is guilty of wilful misconduct. Such a release may state that the consultant is aware of and acknowledges that environmental conditions or hazardous substances and chemicals may be present on the property or will need to be utilized in the performance of the work, and that he assumes full risk and responsibility for any liabilities arising out of, resulting from, or in connection with his presence on client's property, utilizing materials supplied by client, or working on equipment owned by client.

II. Insurance Issues Relating to Environmental Consultants and Indemnity Obligations.

An indemnity provision is only as good as the financial strength of the person providing the indemnity. In addition to undertaking the steps set forth above to determine the financial strength of the indemnitor, a second layer of protection to the indemnity obligation may be the procurement of insurance. Prior to entering into a contract with a consultant, client should ensure that the consultant has sufficient insurance to cover at least reasonably foreseeable costs. There are many problems with relying on insurance protection solely for indemnity coverage, however, not the least of which is the fact that most policies today exclude coverage for environmental impairment, at least to some degree. Specific environmental impairment policies designed to cover pollution-type injuries, while available from some carriers, tend to be expensive and consultants may balk at purchasing this type of insurance. Accordingly, insurance should be considered to be another layer of protection in addition to obtaining the strongest possible indemnity as discussed in Section I above.

Additional factors that client should consider in reference to insurance coverage are set forth as follows:

A. Make the contract with the consultant contingent upon the consultant's procurement of required insurance.

Include a section on insurance coverage in your consultant contract and make the contract contingent upon the consultant's ability to obtain and show proof of the requested coverage and to provide copies of the policies. This will enable client to determine what is covered and what exclusions might apply.

B. Types of insurance to consider.

1. Comprehensive General Liability Insurance. This insurance may include premises and operations coverage, independent contractors coverage, products and completed operations coverage, coverage for explosion, collapse and underground resources property damage, contractual liability coverage, broad form property damage liability, personal injury liability, territorial extensions to cover all work areas, as well as other specific coverages.

2. Automobile Liability Insurance. This insurance may include bodily injury and property damage coverage for the consultant's owned automobiles, non-owned automobiles and hired automobiles. If solid or hazardous wastes are transported, obtaining a MCS-90 Endorsement should be considered.

3. Worker's Compensation Insurance. This insurance should include compensation in the statutory amount required in the state in which the work is being performed and/or where the employees reside.

4. Umbrella Liability Coverage. This insurance may also be written broadly to include explosion, hazard, collapse hazard, underground property damage hazard, personal injury, broad form property damage and blanket contractual liability.

5. General/Professional Liability Insurance. When appropriate, this insurance covers errors and omissions. This is often procured by consultants and engineers who are exercising professional judgment.

C. Client should be named as an additional insured on all of the consultant's policies.

Being designated as an additional insured on the consultant's policy is beneficial to ensure the broadest protection possible by extending the consultant's insurance to the client. The client should also require that it be furnished with certificates from the insurer reflecting client's additional insured status.

D. Client should specify the minimum coverages required for each policy.

The amounts that are set will vary depending upon the type of work that is being performed. It is not unusual to see at least $1 to $2 million of coverage in place for most of the above policies, with an even higher limit on the umbrella coverage. This is because environmental cleanups can be extremely expensive. In addition, the type of liability that might arise is difficult to quantify prior to its occurrence. Accordingly, many companies elect to ensure that high limits are in place at all times.

E. If consultants cannot or will not obtain insurance of the types and amounts required, client may wish to consider assisting them with the procurement of policies or assist in paying premiums.

In some cases, the insurance premiums are prohibitive to small companies who find that they cannot be competitive and still carry large amounts of insurance. Some companies assist their contractors/consultants with the payment of premiums to ensure that coverage is in place.

F. In addition to relying on consultant's insurance, client should review its own policies to ensure maximum coverage in the event that the consultant's insurance company goes into receivership or otherwise refuses to pay a claim.

A review of current policies in place may indicate areas where limits need to be raised or additional coverages obtained, depending upon the type of activities being conducted on the property.

G. The consultant's insurance should be made primary to any insurance held by client.

H. Require coverage to be in effect throughout the term of the contract.

It is desirable to make the contract terminable upon the expiration or cancellation of the consultant's insurance coverage. Failure to maintain insurance as required could also be written to be a default under the contract for which the consultant should bear liability for costs, liabilities, etc. incurred by client as a result of such termination. Also, as an additional insured and certificate holder, client should require that the insurance certificates contain language certifying that the policies of insurance described have been issued to the insured for whom the certificate is executed and state that the insurance is in force. The certificate should also include a statement by the insurance company that, in the event of cancellation or material change in a policy affecting the certificate holder, the insurance company will furnish adequate prior written notice (no less than thirty (30) days) to the certificate holder.

I. Require the consultant to obtain coverage from an insurance company that is acceptable to client.

Client can ensure that the insurance company is stable and can check its Best rating.

J. If possible, have the consultant's policies contain provisions stating that the insurance companies will have no right of recovery or subrogation against client.

K. Specify that any and all deductibles on the consultant's policies shall be paid by the consultant and that client (as an additional insured) is not responsible for any deductibles.

L. Client can also require the consultant to ensure that all subcontractors obtain the same insurance as the consultant.

If this is done, proof of such subcontractor insurance should be furnished to client. The consultant's insurance may cover subcontractors and client should make sure that either the consultant's insurance covers subcontractors or that subcontractors are required to show client proof of insurance.

0099739.01
079313/1629

HOW TO SELECT AN ENVIRONMENTAL CONSULTANT

or

"WHO DO YOU TRUST?"

By: Dennis L. Caputo, C.E.P., R.E.M., C.H.M.M.
Vice President Environmental & Safety Compliance
Proler International Corp.
4265 San Felipe, Suite 900
Houston, TX 77027
(713) 627-3737

INTRODUCTION

Environmental laws and regulations have become increasingly more complex in the last two decades. Fifteen years ago it was possible for an individual to be generally knowledgeable about environmental laws and regulations. Today individuals develop careers around such specialties as modeling air emissions or permitting non-hazardous waste landfills and transfer stations.

As the environmental arena has become increasingly more complex, the outside consultant has come to play an increasingly more important role for industry. At the same time, it has become more difficult to select knowledgeable consultants in the area or areas critical to the client.

The objective of this paper is to assist the potential client in selecting the best consultant. The task at hand is recognizing that no one consultant can be "all things to all people."

I. ESTABLISHING CLEAR WANTS AND NEEDS.

The first step in hiring a consultant lies not with the selection process, but rather with the client. It is important that the client be clear in his or her wants, needs, and expectations from any consultant. Fuzzy or poorly communicated expectations will yield fuzzy and undesired results. Prior to selecting a consultant, it is important that the client be clear on what it is he or she wants the consultant to do, and just as important what the consultant is not to do. In order to select the best consultant for the job, you must first decide what the job will entail. Only after the expectations are clear, should the selection process for a consultant begin.

As an example, the consultant best suited to design a waste water treatment system may not be the best to assist in negotiating a waste water permit or a non-compliance issue with a regulatory agency. Although each of these issues deal with waste water, the first requires a consulting firm with good design engineering capabilities. Negotiating a waste water permit on the other hand entails a lot more than designing a waste water treatment system. It also includes a thorough understanding of the regulations, as well as the permitting process. In contrast, negotiating a non-compliance issue may involve more regulatory interpretation than actual technical skills. While it is possible that a single consulting firm may offer expertise in all three areas, it is unlikely in today's complex environmental setting that an individual consultant would be able to adequately address these three divergent situations.

II. MATCHING CAPABILITIES AND NEEDS

This is perhaps the most complex part involved in selecting and hiring a consultant. As a client, once you have decided on the task, you must then evaluate what consultants (individuals and/or firms) are capable of best accomplishing that task. Given the fact that there are hundreds of environmental consultants throughout the United States and only limited information is available in marketing brochures and related documents, narrowing the field is not easy. This is where networking becomes important.

The Texas Environmental Super Fund Conference presents an excellent opportunity for participants and attendees to expand their contacts in the field. Confronted with the complex task of selecting the best consultant for an individual task, there is little substitute for the experience of your peers. Some of the best kept secrets in the world are who are the best consultants for different types of tasks.

Contacting the environmental managers in other firms will give you the opportunity to learn from their experiences both good and bad. During this discussion about your peer's experience with consultants, it is important to keep several issues in mind. First, when did this experience take place? A positive or negative experience that is more than two or three years old in a rapidly changing arena may not be representative of the capability of that firm or individual today. Second, a poor experience with an individual does not necessarily mean that the firm is not capable of properly handling your work. It may mean that individual should be

avoided or that there was a personality conflict which sometimes may exist between consultant and client. Third, be sure that the situations are somewhat similar.

Some specific questions to keep in mind are:

- Were the desired results achieved?
- Was the task completed on time and at or under budget?
- Would they hire this consultant/company in the future for a similar job?

Once you have gotten the answers to these questions, you are on the road to narrowing the selection.

III. CHEAPEST IS NOT NECESSARILY THE BEST

Few people when faced with legal difficulties race to hire the cheapest attorney. Often however, the same individual will send out a Request for Proposal ("RFP") and select the lowest bidding consultant firm. The lowest cost firm is not always the best qualified and may not be the least expensive in the long run.

The more experienced consultant may not appear to be the most cost effective when evaluated on an hourly basis. However, generally the more knowledgeable and experienced consultant can accomplish the desired task in less time than the less experienced consultant because of that experience. As result, the overall billing may be comparable even though hourly rates may differ significantly. Even more important an experienced consultant may be able to identify potential situations and correct them before they become problematic.

One case in particular exemplifies this situation. A technical consultant was hired to assist in preparing an air permit for a facility undergoing major modifications. The consultant relying upon manufactures quoted emission data prepared and submitted the application on behalf of the client. It was only when stack testing was conducted for the operating permit that the client realized that the permit levels could not be obtained with the manufactures equipment. A second review by a more experienced consultant immediately pointed to the problem. Only under optimum conditions could the manufactures pollution control equipment meet the permit conditions. Under typical running conditions, permit emissions level could not be achieved. A more experienced consultant, although initially perhaps expensive, could have recognized this and save the client the cost of an amended permit, equipment modifications and a second series of emissions tests.

IV. REQUEST FOR PROPOSALS ("RFP")

Interestingly, many individuals - particularly attorneys - have no problems submitting RFP's to half a dozen or more consulting firms for a small to medium size consulting job. Yet the same attorneys would object if the client were to submit RFP's to half a dozen or more law firms requesting competitive bids for their legal needs.

Request for Proposals clearly have their place. They offer some significant advantages particularly a clear understanding of the client's expectations and needs. If properly written they also establish a level playing field for all the consultants that will bid on a project. However, drafting and responding to an RFP is not inexpensive. It is still not uncommon today to have a lawyer spend a $1,000 or more preparing an RFP which will be distributed to as many as six or twelve consulting firms. These consulting firms in turn will spend up to $2,000 each in responding to the RFP. Finally, the client and counsel will spend hours (and dollars) in reviewing the proposals. All of this work for a task which may cost the client only $5,000.

Preparing an RFP and reviewing bids is expensive and time consuming for the attorney and the client. On smaller jobs it is frequently more economical to select a consulting firm or individual that has demonstrated the experience to cost effectively solve similar problems.

Obviously, an RFP is appropriate for complex and expensive tasks. However, frequently soliciting bids on a small job through the RFP process is not in the client's best financial interest.

V. LIABILITY AND INDEMNIFICATION

Another paper at this conference will deal with the issues of liability and indemnifications. However, there are several issues that should be considered. If you feel it is important to demand insurance and indemnities above the norm, you must consider the cost. Although the overall cost of a particular project should not necessarily be the limiting factor on indemnity, the scope of the project certainly should be. More than once as a consultant I was asked to bid on a project wherein the firm that I worked for was asked to completely indemnify a client for a due diligence where the client limited the scope of the investigation. The client in this case was seeking what amounted to environmental impairment liability insurance from the consultant, while at the same time restricting the investigation for potential contaminants on the property. In a similar manner, it's generally inappropriate to ask a consulting firm, to offer up as protection for the client, the entire net worth of the firm for a project whose total fees are only a few thousand dollars.

On the other hand, the indemnity requested should reflect the task or project at hand. Interpreting data or assisting in regulatory negotiations do not require the indemnity that a phase two or three investigation or corrective action would require. Since indemnity negotiations are

becoming increasingly more complex and expensive in terms of attorney's time, it is prudent to request indemnities appropriate to the task at hand.

Conversely, it is becoming increasingly common for consultants to request indemnification from clients. Recently, a consulting firm here in Houston was identified as potentially responsible party at a site merely because they evaluated on behalf of a client, the risk represented by that site. It's also not uncommon for a consultant to request indemnification when on behalf of a client, investigating a site that contains unknown hazard.

VI. CHECK FOR CONFLICTS EARLY ON

Just as lawyers, when being engaged by a client, conduct a check for conflicts, clients should also ask consultants to conduct a similar check before revealing any information that might be confidential. This should be done before any other negotiations regarding contract issues are initiated. Several years ago, a law firm in another state after spending nearly $4,000 negotiating the terms of a contract, revealed to their client that there was an apparent conflict with the use of that consultant. Had a proper conflict investigation been conducted initially, the client could have been saved the $4,000 legal fee associated with negotiating the contract.

VII. KNOW WHO WILL DO THE WORK

Frequently, a proposal in response to an RFP will contain impressive resumes of consultants. However, an important question to ask is whom of these people will be working on this particular project. As a client I have seen proposals which listed people who work in an entirely different part of the country and although well qualified, the cost of transportation and lodging to have those people work on the project would have been prohibitive.

It is also not at all uncommon to see a proposal with resumes of senior consultants but to have only junior staff work on smaller projects. It is important that the client and consultant are clear on not only the qualifications of the individuals who will be working on the project but also the availability of the people listed in the proposal. If the work is to be done at a lower level but directed by a senior consultant, it should be clearly noted in the proposal, otherwise the client should expect and even demand that the people identified in the proposal will take an active role on the project team.

VIII. MEGA VS. MINI

Over the years there has been much debate over the issue of the size of the consulting firm. The larger (mega) firms obviously have more depth of expertise and talent which can be brought to bear on a client's project. On the other hand, smaller (mini) firms may be more responsive to clients needs or have better knowledge of regulatory requirements and agency idiosyncrasies in a particular geographic area.

Don't be overly impressed with the massive representative project list that Mega Company may have in their statement of qualification. It's more important to know what projects the individuals proposed for your project have successfully completed. Independent of the size of the consulting firm, the important thing to recognize is that you hire knowledgeable individuals and not the firm. The consultant company does not have a corporate knowledge but rather employs individuals who have knowledge in particular areas. Unlike industry, a consulting company's inventory goes home every night and may not come back the next day.

VIV. THE SELECTION PROCESS

A. "THE RFP"

The Request for Proposal ("RFP") is an important document which if properly prepared accomplishes a variety of objectives:

- Defines the task.
- Defines client's expectations from the consultant.
- Defines the time frame for the task.
- Clearly delineates how the client will weight different factors in the selection process.
- Establishes a level playing field amongst the respondents.

A properly prepared RFP need not be lengthy, but it must be thorough. Fuzzy expectations combined with a unclear or poorly worded RFP will result in confusion in the mind of the recipient and worst in a waste of time on the part of both the client, as well as the consultants.

B. PROPOSAL EVALUATION

Reviewing responses to even the best RFP is a time consuming and laborious task. At Proler, we have developed a proposal evaluation form to assist us in evaluating responses to RFP's and selecting the consultant. Because I am an engineer, the form is designed to incorporate not only comments, but also scoring and weighing factors. The proposal evaluation form is attached.

In evaluating proposals in response to an RFP, we weight six factors in each proposal. These factors included:

- The consultant's understanding of the situation.
- Their proposed strategy and the innovativeness of their approach.
- Related project experience.
- Strength of the project team.
- Schedule.
- Cost.

Each responding consulting firm is rated in each of these categories using a scoring from 1 to 5. 1 being the lowest score and 5 being the best possible score, or alternatively the lowest cost. These scores are then multiplied by a weigh factor ranging from 0.1 to 0.9. It is important to note that all weight factors for a single firm, when added must total 1.0. For example, a responding consulting firm could have a score of 4 on understanding the situation. You may have assigned a weighing factor for the understanding of the situation of .2. Their understanding of the situation would be the score times the weight factor, that is 4 x 0.2 for a total of 0.8 for the understanding of the situation.

Other elements such as strategy and innovative approach may have a different weighing factor which could be higher or lower. However all weighing factors must total 1.0. When these weighing factors are multiplied times the individual scores given for each element and the sum are added, you obtain a total weighted score for that firm. The firm with the highest sum score would be considered first.

It is clear that a firm does not understand the situation or provides no strategy or innovative approach, it is appropriate to give a weighing factor of zero, which generally means the contract will not be awarded to that firm.

While this technique provides a quantitative approach, there are quality factors which you may wish to consider. Room is also provided on the evaluation form for comments. Often times, it is difficult to quantify important decisions making factors. These issues should be delineated under the comment section and the score, as well as the comments, should be considered in selecting the winning firm. Generally, the firm with the highest sum score and the most positive comments will be awarded the contract.

X. SUMMARY

Selecting an environmental consultant is not an easy task. However once the proper consultant is matched with the client and the task, work products should flow smoothly with a minimum of difficulty to all involved. However keep in mind one thing, we are all human. And in dealing with others, there is always potential for conflict. The successful client and consultant will, when conflicts arise, seek to develop a "win-win" situation so both can walk away feeling that they have accomplished successfully the task.

REFERENCES

Friedman, Frank B., Practical Guide to Environmental Management, Environmental Law Institute, Washington, D.C., 1991.

"Hiring a Contractor", L.U.S.T.LINE, New England Interstate Water Pollution Control Commission, Boston, MA., October 1992.

O'Mara, Lisa K. "Consultants, Clients: Sharing Expectations", ENVIRONMENTAL PROTECTION, Stevens Publishing Corp., Waco, TX., October 1992.

Testa, Stephen "How to Shop for a Consultant", SOILS, Group III Communications, Inc., Independence, MO, April 1993.

"Choosing a Consultant", RECYCLING TODAY, GIE, Inc., Cleveland, OH, May 1993.

"Choosing Consultants - No Simple Task for Potential Clients", HAZ MAT WORLD, Advanstar Communications, Inc., Glen Elyn, IL, July 1993.

PROPOSAL EVALUATION FORM

FIRM	UNDERSTANDING OF SITUATION		STRATEGY & INNOVATIVE APPROACH		RELATED PROJ. EXPERIENCE		STRENGTH OF PROJECT TEAM		SCHEDULE		COST		COMMENTS
	score x WT.F =												Total
	Comments												
	Score x WT.F =												
	Score x WT.F =												
	Score x WT.F =												
	Score x WT.F =												

SCORE (S_1, S_2, S_3, S_4, S_5)

5 Best (eg. best approach, lowest cost)

4

3

2

1 Poorest

WEIGHT FACTOR (W_1, W_2, W_3, W_4, W_5)

0.1 Lowest

0.9 Higher

1.0 - All weight factors emission must total 1.0 for

Total = $(S_1 \times W_1) + (S_2 \times W_2) \ldots (S_5 \times W_5)$

Environmental Ethics

"To Tell the Truth"

John Slavich

TO TELL THE TRUTH: ENVIRONMENTAL DISCLOSURE DUTIES OF ATTORNEYS AND CONSULTANTS IN TEXAS

JOHN SLAVICH

GUIDA & ASSOCIATES
A PROFESSIONAL CORPORATION
DALLAS, TEXAS

Fifth Annual
Texas Environmental Superconference

Austin, Texas

August 1993

Copyright 1993 by John Slavich
All rights reserved.

JOHN SLAVICH
GUIDA & ASSOCIATES
A PROFESSIONAL CORPORATION
8235 DOUGLAS AVENUE
SUITE 710
DALLAS, TEXAS 75225
TEL: (214) 692-0009
FAX: (214) 692-6610

John Slavich is a shareholder in the law firm of Guida & Associates, A Professional Corporation. His diversified environmental law practice focuses on environmental issues arising in corporate, real estate and lending transactions and on counseling with regard to environmental compliance issues involving a broad range of industries. His environmental practice is complemented by over a decade of experience in corporate, finance, securities and real estate law. Prior to joining Guida & Associates, Mr. Slavich was a partner in the Dallas office of Andrews & Kurth L.L.P., a national law firm based in Texas.

Mr. Slavich received his law degree from Washington University School of Law, where he was a member of the Board of Editors of the *Washington University Law Quarterly*. He earned his master of business administration degree at Southern Methodist University and his undergraduate degree at Earlham College. Mr. Slavich is admitted to the Bar in Texas. He has regularly lectured on environmental law topics at University of Texas at Dallas and at various continuing legal education programs. Recent publications include "Environmental Issues in the Acquisition of a Going Concern," in *What Every Business Lawyer Needs to Know about Environmental Law* (State Bar of Texas, 1991) and "Environmental Disclosure Under Securities and Exchange Commission Disclosure Requirements," in *The Impact of Environmental Regulations on Business Transactions* (Practicing Law Institute, 1989). He is also the co-author of "Contractual Efforts to Allocate the Risk of Environmental Liability: Is There A Way To Make Indemnities Worth More Than The Paper They Are Written On?," 44 *Southwestern Law Journal* 1349 (1991). He is a member of the Environmental Law Section of the Dallas Bar Association, the Environmental and Natural Resources Law Section and the Business Law Section of the State Bar of Texas, and the Section of Natural Resources, Energy and Environmental Law and Section of Business Law of the American Bar Association.

TABLE OF CONTENTS

I. Introduction 1

II. Statutory Disclosure Requirements 2

A. Reporting With Respect to Contaminated Borings 3
B. Reporting With Respect to Predevelopment Soil Testing 3
C. Reporting With Respect to Asbestos Violations 4

III. Ethical Disclosure Duties 4

A. Attorneys' Ethical Duty of Disclosure 5
B. Consultants' Ethical Duty of Disclosure 9

IV. Conclusion 13

V. Appendices

Excerpts from Texas Disciplinary Rules of Professional Conduct (State Bar of Texas) . . . . . Appendix A

Rules of Professional Conduct and Ethics (Texas State Board of Registration for Professional Engineers) . . . . . Appendix B

Code of Ethics for Engineers (National Society of Professional Engineers) . . . . . Appendix C

TO TELL THE TRUTH: ENVIRONMENTAL DISCLOSURE DUTIES OF ATTORNEYS AND CONSULTANTS IN TEXAS

JOHN SLAVICH

Some of the most challenging issues facing attorneys and consultants practicing in the environmental field involve the potential disclosure of a client's environmental liabilities.[1] By the nature of their professional duties, attorneys and consultants are many times privy to highly sensitive and confidential information regarding their clients. The information may deal with compliance (or non-compliance) with applicable laws or the presence of contamination at property owned, leased or operated by clients. In many instances environmental professionals will have developed that information on behalf of a client, or will have been provided that information by a client, in connection with rendering professional advice.

Traditionally, such a professional relationship has been recognized as creating special responsibilities to the client, particularly with respect to attorneys. One of the hallmarks of that relationship has been the professional's duty of confidentiality. Ethical codes addressing an attorney's client confidentiality responsibilities have been in place for some time, although environmental regulatory developments over the past two decades have brought new debate to the traditional balancing of, on the one hand, the duty of confidentiality with, on the other hand, the need to protect the public health and safety.[2] No comparable ethics codes exist for environmental consultants, although professional engineers are governed by ethics codes that deal with the same balancing of issues addressed in the rules of professional conduct that apply to attorneys, albeit in a less detailed fashion.

Disclosure requirements regarding environmental matters arise from two sources in Texas. Statutes and regulations can impose disclosure requirements on environmental professionals under certain circumstances. Additionally, ethical obligations may suggest disclosure of client information held in confidence by environmental professionals.

---

[1] Numerous environmental professionals made themselves available to discuss their views concerning the disclosure issues addressed in this paper. Although they shall remain unidentified to preserve the confidentiality of those discussions, I want to convey my gratitude for their assistance.

[2] *See generally* Walker, *Ethical Problems in the Solid and Hazardous Waste Management Practice*, 22 St. B. Tex. Envtl. L.J., 1-9 (Summer 1991).

This paper will consider disclosure issues affecting attorneys and consultants in Texas. It focuses particularly on the differing ethical standards to which attorneys and consultants may look for guidance in determining whether to provide disclosure.

STATUTORY DISCLOSURE REQUIREMENTS

In Texas, there are various statutory and regulatory notification, reporting and other disclosure obligations imposed upon owners or operators of property or facilities that cause or may cause pollution. The obligations of greatest concern are undoubtedly those with respect to unplanned releases, such as spills. Almost without exception in Texas, such disclosure obligations are directed to "owners," "operators" or other "responsible parties."

Examples of such reporting obligations, and the persons charged with reporting, include the following: notification of accidental discharges and spills (Tex. Water Code § 26.039) ("individual operating, in charge of, or responsible for an activity or facility"); notification of unauthorized discharge of oil (Tex. Nat. Res. Code § 40.101) (person responsible for discharge or person in charge of vessel or terminal facility); notification of a release or suspected release from an underground storage tank (31 Tex. Admin. Code § 334.72) ("owners and operators of underground storage tank systems"); notification of any release of a reportable quantity of a hazardous substance (42 U.S.C. § 9603(a)) ("any person in charge of a . . . facility"); notice of release from a facility at which hazardous chemical is produced, used or stored (42 U.S.C. § 11004(a)) (owner or operator of facility); notification of discharge of harmful quantity of oil or hazardous substance into or upon navigable waters (40 C.F.R. § 110.10 and § 117.21) ("person in charge of a . . . facility").[3] Attorneys and consultants generally do not qualify for such status.[4] There are, however, at least

---

[3] *See also, e.g.*, 29 C.F.R. § 1910.1200 (notification of chemical hazards in the workplace by employers under Occupational Safety and Health Act); 17 C.F.R. §§ 229.101, .103 and .303 (Securities and Exchange Commission line item environmental disclosure obligations of registrants).

[4] Other states impose disclosure obligations upon a wider range of persons in certain instances. *See, e.g.*, 33 La. Admin. Code § 707 ("all persons having notice of [release or suspected release] shall notify the Department within 24 hours after becoming aware of the occurrence"); N.J. Admin. Code § 7:14B-7.3 ("any person" shall, upon confirming a release, immediately report the release); N.Y. Comp. Codes R. & Regs. tit. 6, § 595.2 ("[A]ny person who is the owner of, or in actual or constructive possession or control of, a hazardous substance, or any agent or employee thereof, or any person in a contractual relationship therewith who inspects, tests or repairs any portion of a storage facility which is or was used for the storage of hazardous substances, who has knowledge of a release of a reportable quantity or of an unknown quantity of a hazardous substance from such facility, must report such release . . . .").

HB 2537

three provisions in Texas that may require particular disclosure from an environmental professional.

Reporting With Respect to Contaminated Borings. Pursuant to 31 Tex. Admin. Code §§ 338.31-32, licensed well drillers are required to provide certain reports concerning their drilling activities to the Texas Water Commission (soon to be the Texas Natural Resource Conservation Commission, "*TNRCC*"). Reporting requirements concerning "monitoring wells" are broadly interpreted by the TNRCC to cover not only temporary wells utilized to sample groundwater, but also any borings performed for environmental testing. Consequently, the TNRCC expects licensed well drillers to report boring results indicating not only "undesirable water," which is the reporting standard set forth in the cited regulations, but also "undesirable constituents."

Consultants would appear to be impacted only indirectly by these reporting obligations. In many cases a consultant will hire a drilling rig operator as an independent contractor to do borings for subsurface investigation. Unless subsurface contamination is obvious (*e.g.*, through visual indication or odor), the driller will not be privy to the results of testing of soil or groundwater performed by the consultant. Usually the contract between the consultant and the driller will address this issue and make it clear that the driller will have no access to testing data. In this manner, the consultant can avoid breaching its confidentiality obligations to its client as a consequence of turning over data to the driller who is obligated to report.

Additionally, consultants may conduct certain limited subsurface investigation themselves using hand augers. It would appear that unless such activities are required to be licensed, the consultant will not be required to report the results of tests performed in connection with such borings under the cited regulations.

Reporting With Respect to Predevelopment Soil Testing. H.B. No. 2537 signed by Governor Richards on June 18, 1993 creates subchapter R under Chapter 361 of the Texas Health and Safety Code. Pursuant to new § 361.538, development of a tract of land greater than one acre will require soil tests conducted by a registered professional engineer. The purpose for the testing is "to determine whether any part of the tract overlies a closed municipal solid waste landfill facility." In the event that an affirmative determination is made, the engineer is required to notify not only the owner and each lessee of the tract, but also the TNRCC and any local governmental official with the authority to disapprove an application for development. This statutory provision contemplates that the TNRCC will promulgate rules, which will

presumably clarify the scope of such testing and the related content and timing of the notice required of the engineer.

Reporting With Respect to Asbestos Violations. The Texas Department of Health ("*TDH*") adopted new rules effective October 1, 1992, governing individuals and organizations engaged in the removal, encapsulation or enclosure of, or other activities that involve the disturbance of, asbestos containing materials within public buildings. Among the conditions for issuance of one of the numerous asbestos-related licenses is a condition set forth in 25 Tex. Admin. Code § 295.35(f), which provides that "[l]icensees who become aware of violations of these sections must report those violations to the department if the violations are not immediately corrected by the responsible party."

The phrase "violations of those sections" presumably relates to the various regulatory requirements established by the TDH's rules and, as such, do not primarily concern environmental matters. These rules do, however, set forth work practices for operations and maintenance activities (25 Tex. Admin. Code § 295.59(b)), work practices for abatement projects (25 Tex. Admin. Code § 295.60) and building owner notification requirements relating to the intent to engage in asbestos abatement, demolition or operations and maintenance activities (25 Tex. Admin. Code § 295.61). As such, the cited reporting requirement may require disclosure of environmentally-related non-compliance involving a client.

ETHICAL DISCLOSURE DUTIES

Where a client has a statutory disclosure duty, and does not, for whatever reason, satisfy that duty, its attorneys and consultants will be faced with the issues as to whether they themselves are to provide disclosure pursuant to professional ethical considerations. Those disclosure duties, because they arise under the ethical codes applicable to the respective professional, will differ between attorneys and consultants. Those differences can be illustrated by considering the following hypothetical:[5]

> Pat Professional's client is a public utility that operates a coal-fired facility whose electrostatic precipitator does not function properly. As

---

[5] The facts of the hypothetical are adopted from Case Study No. 5 in Rubin, ed., *Ethics and Environmental Law: Case Studies* (New York State Bar Association Environmental Law Section Task Force on Legal Ethics, 1991).

a result, operation of the facility would violate client's air permits or applicable emission standards. While Pat is visiting the facility, the facility manager informs Pat that, unbeknownst to Pat, the malfunctioning facility was used in the past to meet load requirements and will be used for a discrete period in the immediate future to meet load requirements caused by a developing heat wave. Such use could constitute a criminal offense under 42 U.S.C. § 7413(c).

Attorneys' Ethical Duty of Disclosure. The Texas Disciplinary Rules of Professional Conduct ("*Disciplinary Rules*") address attorneys' ethical duty of disclosure in the context of an attorney's duty to protect a client's confidential information.

The application of the Disciplinary Rules to the above hypothetical situation, where Pat Professional is an attorney representing the public utility, has been suggested by Fred Moss at Southern Methodist University Law School to be as follows:[6]

1. The information provided to Pat is "confidential" regardless of whether it is privileged.[7] As a general rule, an attorney may not disclose confidential information.[8]

2. Without the client's consent, Pat may not disclose past wrongdoing to anyone outside the client's organization.[9] In the event that the appropriate members of the utility's management are not aware of the malfunctioning facility, Pat should inform management of the problem so future penalties can be avoided.

3. With respect to potential future violations, Pat has no *mandatory* duty to disclose *except* where such disclosure reasonably appears necessary to prevent the client from committing a criminal or fraudulent act that is

---

[6] Moss, *Case Study of the Ethical Duty of Disclosure in the Practice of Environmental Law, in Environmental Law: The Next Generation* (SMU School of Law 1991).

[7] Disciplinary Rule 1.05(a).

[8] Disciplinary Rule 1.05(b).

[9] Disciplinary Rule 1.05(b)(1).

ABA - imminent death or subst. bodily harm

likely to result in death or substantial bodily harm to a person.[10] In this case, if it is reasonable to conclude that the future use of the malfunctioning facility in the manner anticipated by the manager will not cause death or substantial bodily harm, then there is no mandatory disclosure requirement imposed upon Pat. Nevertheless, Pat retains the *discretion* to make disclosure outside the client's organization when the attorney has "reason to believe it is necessary to do so in order to prevent the client from committing a criminal or fraudulent act."[11] To the extent that knowingly causing emissions in excess of clean air standards or the plant permit limits could be a criminal violation, Pat has the discretion whether or not to disclose future client wrongdoings.

who do you disclose to?

4. Additional ethical duties arise where an attorney is aware that certain members of the client's organization know of past violations or the potential for future violations, but are not planning to deal with the matters underlying such violations. Because the utility company itself is the client, except where prior disclosure to persons outside the organization is required by law or by other Disciplinary Rules, Pat is to first attempt to resolve a violation by taking measures "within the organization."[12] An attorney *must* "take reasonable remedial actions" whenever the attorney learns or knows that: (i) a person associated with the client organization has committed or intends to commit a violation of a legal obligation to the organization or a violation of law which reasonably might be imputed to the organization, (ii) the violation is likely to result in substantial injury to the organization, and (iii) the violation is related to a matter within the scope of the attorney's representation of the organization. The methods suggested in the Disciplinary Rules for resolving a violation within the organization may include, but are not limited to, asking for reconsideration of the matter, asking that a separate legal opinion on the matter be sought for presentation to appropriate authority in the organization, and referring the matter to higher authority in the organization. The ethical requirement to continue up the organization ladder in an effort to stop the future illegality and protect the organization depends upon the

---

[10] Disciplinary Rule 1.05(e).

[11] Disciplinary Rule 1.05(c)(7).

[12] Disciplinary Rule 1.12(c).

potential seriousness of the future harm. According to Moss, it is doubtful that, after appealing to the highest level of organizational authority, the attorney is ethically bound to "save the client from itself" by reporting planned future illegality to outside authorities. He suggests that the combined potential harm to the organization and the public would have to be very serious before the attorney should proceed with outside disclosure.

5. If the attorney, as opposed to the client, has an obligation to report, the disclosure duty required by law overrides the ethical duty to maintain client confidences.[13]

6. The attorney *may* withdraw from the representation if the client insists on pursuing an objective that the attorney considers "repugnant or imprudent," or with which the attorney has a "fundamental disagreement."[14] The attorney *may* additionally withdraw if the client persists in a course of action involving the attorney's services that the attorney "reasonably believes may be criminal or fraudulent" or if the client uses the attorney's services to perpetrate a crime or fraud.[15] If the client expects the attorney to assist or be involved in the illegality in any way in the future, the attorney *must* inform the client that future representation must be restricted to exclude actions connected with wrongdoing.[16] If the client expects the attorney to facilitate the wrong as a basis of the attorney's representation of the client, the attorney *must* withdraw from the representation.[17]

7. After withdrawal, the attorney is precluded from revealing confidential information concerning the former client.[18] The attorney retains the

---

[13] Disciplinary Rule 1.05(c)(4), which does not prevent disclosure where confidential information must be disclosed to comply with law.

[14] Disciplinary Rule 1.15(b)(4).

[15] Disciplinary Rule 1.15(b)(2) and (3).

[16] Disciplinary Rule 1.02(f).

[17] Disciplinary Rule 1.15(a)(1).

[18] Disciplinary Rule 1.05(b)(1).

> discretion not to disclose future illegalities provided that those acts are not likely to result in death or substantial bodily harm to a person. Once an attorney withdraws, however, the attorney has no further ethical duties to protect the client.[19]

Excerpts of the Disciplinary Rules noted above are attached as Appendix A.

The principle of confidentiality is given effect not only in the Disciplinary Rules but also in the law of evidence, through the attorney-client privilege, and in the law of agency.

> The attorney-client privilege, developed through many decades, provides the client a right to prevent certain confidential communications from being revealed by compulsion of law. Several sound exceptions to confidentiality have been developed in the evidence law of privilege. Exceptions exist in evidence law where the services of the lawyer were sought or used by client in planning or committing a crime or fraud as well as where issues have arisen as to breach of duty by the lawyer or by the client to the other. Rule 1.05 reinforces the principles of evidence law relating to the attorney-client privilege. Rule 1.05 also furnishes considerable protection to other information falling outside the scope of the privilege. Rule 1.05 extends ethical protection generally to unprivileged information relating to the client or furnished by the client during the course of or by reason of the representation of the client. In this respect Rule 1.05 accords with general fiduciary principles of agency.[20]

The Disciplinary Rules are strictly rules of ethics defining the proper conduct of attorneys for purposes of professional discipline. They do not undertake to define standards of civil liability of attorneys for professional conduct.[21] The Disciplinary Rules contemplate a fairly narrow range of circumstances where an attorney may be charged with a duty to make disclosure of client confidences. Recent developments, such as the 1992 settlement by the Kaye, Scholer law firm with the federal

---

[19] Disciplinary Rule 1.12(d).

[20] Comments 3 and 4 to Disciplinary Rule 1.05.

[21] Violation of a rule does not give rise to a private cause of action, nor does it create any prescription that a legal duty to a client has been breached. *See* paras. 10 and 15 of the Preamble to the Disciplinary Rules.

government's Office of Thrift Supervision based on claims that the law firm failed to disclose information harmful to the firm's savings and loan client, have, however, indicated that attorneys may be faced with civil or criminal liability concerns based on disclosure obligations arising out of ethical duties created by federal regulatory law. Any such duties are unrelated to, and differ from, the obligations arising under attorneys' state disciplinary rules and may result in additional tension in the balancing of client confidences against disclosure in the public interest.[22]

Consultants' Ethical Duty of Disclosure. Consultants do not have a set of detailed ethical guidelines comparable to those set forth in the Disciplinary Rules. Various organizations currently offer "credentialing" to environmental professionals,[23] and some of the credentialing organizations have adopted ethical codes for their members. Those codes that I have reviewed may be characterized as being apple pie and motherhood pronouncements, recognizing that there are ethical matters that may need to be addressed, but providing no real guidance to the professional.

Those environmental professionals that are registered professional engineers are subject to codes of ethics that set forth broad standards of ethical behavior. In Texas the two guiding standards are the Rules of Professional Conduct and Ethics[24] promulgated by the Texas State Board of Registration for Professional Engineers ("*Board Rules*") pursuant to the Texas Engineering Practice Act and the Code of Ethics for Engineers ("*NSPE Code*") promulgated by the National Society of Professional Engineers ("*NSPE*").[25] Excerpts of the Board Rules and the NSPE Code are attached to this paper as Appendix B and Appendix C, respectively. These ethical standards, although not as detailed as the attorneys' Disciplinary Rules, may be applied to the hypothetical situation, where Pat Professional is a registered professional engineer and the public utility is a client, in the following manner:

---

[22] *See* Gillers, *After Kaye, Scholer: The Risks of Regulatory and Corporate Lawyers, in Counsel's Duty to Disclose Environmental Risks* (Practising L. Inst. Teleconference, 1992); Skove, *Doing Too Much For Your Client Can Hurt You*, 25 SONREEL News 5 (July/August 1993).

[23] A recent survey identified more than 90 types of professional environmental credentials offered by 60 distinct providers. Gant, *Survey: Multiple Credentials Dilute Environmental Professionals' Status*, HazMat World, Jun. 1993, at 55.

[24] 22 Tex. Admin. Code §§ 131.151-.157.

[25] National Society of Professional Engineers, Publication No. 1102, as revised January 1990.

1. The client's past violations will undoubtedly constitute "a confidence or private information." Pat is restricted from knowing disclosure of such a confidence regarding the client except in two circumstances: (i) Pat has obtained the organization's consent to such disclosure, or (ii) the engineer is required to make such disclosure by law or court order.[26]

2. A countervailing consideration is the professional responsibility mandate that applies to an engineer. Pursuant thereto, an engineer is not to ". . . in any manner participate in any engineering practice, judgment, or decisions which, when measured by generally accepted engineering standards or procedures, is reasonably likely to result in any utility, . . . equipment, process, product, device, work, or project endangering the property, lives, safety, health, or welfare of the general public."[27] Even if the professional responsibility provision were determined to control over the confidentiality duty, there is not a specific provision under the Board Rules that would indicate that Pat would have an ethical duty to provide disclose.

3. Pat may, however, identify a discretionary obligation to disclose a past or present threat to public health. The NSPE Code presents an engineer with conflicting duties to preserve, on one hand, the confidences of a client or employer and to protect, on the other hand, the public health, safety and welfare. Two provisions of the NSPE Code address confidential information issues. The provision entitled Rules of Practice pronibits an engineer from revealing facts, data or information obtained in a professional capacity without the client's consent "except as authorized or required by law or this Code."[28] The provision entitled Professional Obligations, has a related nondisclosure provision that is similar to the provisions of the Board Rules.[29] It prohibits an engineer from disclosing "confidential information concerning the business affairs or technical process of any present or former client or employer" without consent. Unlike the provision in Rules of Practice, which is not restricted

---

[26] Board Rule § 131.154(a) and (b).

[27] Board Rule § 131.151.

[28] NSPE Code § II(1)(c).

[29] NSPE Code § III(4).

to confidential information, there is no exception for requirements of law or court orders.

4. Concurrently, the Fundamental Cannons set forth in the NSPE Code provide that engineers shall "hold paramount the safety, health and welfare of the public in the performance of their professional duties."[30] In explanation, another provision states:

> Engineers shall at all times recognize that their primary obligation is to protect the safety, health, property and welfare of the public. If their professional judgement is overruled under circumstances where the safety, health, property or welfare of the public are endangered, they shall notify their employer or client and such other authority as may be appropriate.[31]

These provisions emphasize the apparent primacy of safety, health and welfare concerns over the duty of confidentiality. In contrast to the Disciplinary Rules, the NSPE Code does not clarify the degree of endangerment, or the certainty, that must exist before disclosure is ethically permissible. Neither does it specify what would constitute the overruling of an engineer's professional judgement.

One commentator has noted that the NSPE Code, by imposing a duty of confidentiality, scarcely encourages the indiscriminate disclosure of confidential information. Professional and personal considerations (such as a potential threat to an engineer's job or reputation) make disclosure a last resort, made with advice of legal counsel and upon facts that would cause a reasonable engineer to believe that disclosure is necessary to prevent a serious harm to the public health, safety or welfare.[32]

The conflicting duties of an engineer lend credence to the situations I have heard of, but not encountered first hand, where an engineer considering technical

---

[30] NSPE Code § I.

[31] NSPE Code § II(1)(a).

[32] Richman and Bauer, *Lawyers' and Engineers' Conflicting Duty to Report Hazards and Maintain Client Confidences*, Toxics Law Daily (BNA, April 29, 1991).

issues contends that he or she has an "ethical duty" to make disclosure irrespective of any statutory or regulatory duty of disclosure imposed upon the client. Environmental consultants that are not registered professional engineers are not subject to the Board Rules or the NSPE Code and have no such basis for making a similar contention with respect to an ethical duty to disclose. The environmental consultant may, as a result, have to grapple with more difficult ethical considerations than does the engineer, due to the higher degree of uncertainty that attaches to environmental investigations and to the arguability higher potential for health and safety risks arising out of environmental conditions. Additionally, because of the relative youth of the environmental consulting industry, consistent answers to ethical questions have not had the opportunity to evolve with respect to many issues.

The consultants that I talked to in preparing this paper confirmed that they are not aware of any set of professional standards that would impose upon them an ethical duty of disclosure. Consultants generally recognize that they are performing their services under an agency relationship, and that any disclosure obligations would be that of the principal, rather than of the agent. In acting as an agent of the client (or of the client's attorney where the parties attempt to maximize the protections of attorney-client privilege), they recognize an obligation to make a forceful case for disclosure by their client where, in the consultant's opinion, such disclosure by the client was warranted.

Most consultants will establish their confidentiality obligations to their clients by addressing the matter in their engagement agreement. A carefully drafted confidentiality clause is one of the contractual provisions that a prudent consultant will utilize in its engagement agreement with the client in an attempt to minimize the potential liabilities arising in the normal course of performance of its duties.[33] Prevailing practice appears to be for the consultant to inform the client that instances of non-compliance or contaminated property conditions have been noted and that reporting may be necessary. Because reporting obligations generally involve a mixed question of law and technical matters, the consultant generally finds it advisable to have the client seek an attorney's assistance to confirm whether the client has a legal reporting obligation. The consultant will thereby avoid any contention that it is engaged in the unauthorized practice of law.

The consultant's willingness to push its client to recognize reporting obligations will depend upon the consultant's organizational ethical guidelines or philosophy, as

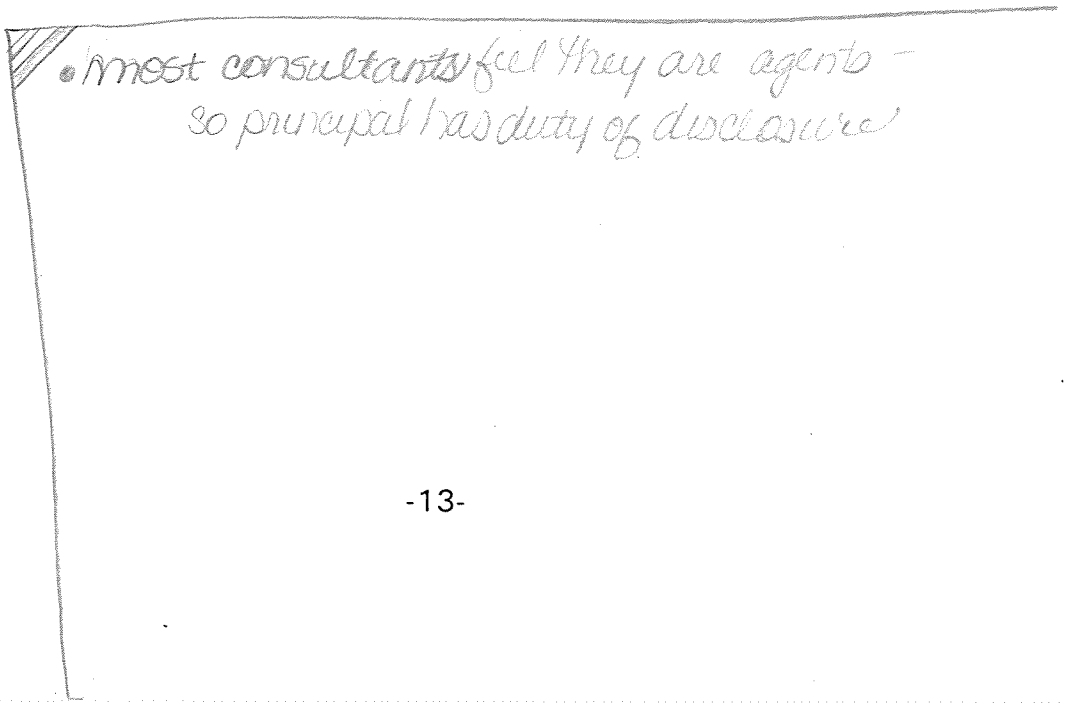
---

[33] *See* Jensen, *The Risk in Defining Risk: Potential Liability of Environmental Consultants and Engineers*, 23 Env't Rep. at 1954 (BNA, December 4, 1992).

well as its perception of the nature of the risks to the public posed by nondisclosure. All the consultants I spoke with anticipated that they would "paper their files" to note the matters discovered and their advice to the client. Most noted a willingness to resign the engagement — "fire the client" — if the client did not follow their advice. Some expected that they themselves might undertake disclosure under certain circumstances, where the client declined to make disclosure, although they would be guided by an ad hoc application of corporate philosophy or internal policy, rather than any specific ethical guidelines, in making that decision. The touchstone against which any set of facts may be evaluated was characterized variously as "doing the right thing," "recognizing overriding ethical values," and "passing the smell test." Those same consultants confirmed that they had never been faced with the situation of making disclosure where the client has initially balked at doing so since clients will generally conclude that they should make any required disclosure.

CONCLUSION

Attorneys and consultants may, from time to time, need to consider whether they are required to provide disclosure concerning environmental matters that relate to their clients. Statutory mandates in Texas are fairly straightforward. Less certain are the ethical disclosure obligations. Attorneys and professional engineers consult ethical codes that were developed in connection with professional licensing standards in making their decisions. To date, environmental consultants have not had such ethical codes to guide their decision-making. As the consulting industry matures, formalized ethical standards will undoubtedly be developed, presumably by one of the credentialing organizations that eventually emerges from the myriad of present organizations. In the interim, environmental consultants will need to look to their firms' internally developed standards to make decisions with respect to disclosure of clients' environmental matters.



EXCERPTS FROM TEXAS DISCIPLINARY RULES OF PROFESSIONAL CONDUCT (STATE BAR OF TEXAS)

Rule 1.05 Confidentiality of Information

(a) "Confidential information" includes both "privileged information" and "unprivileged client information." "Privileged information" refers to the information of a client protected by the lawyer-client privilege of Rule 503 of the Texas Rules of Evidence or of Rule 503 of the Texas Rules of Criminal Evidence or by the principles of attorney-client privilege governed by Rule 501 of the Federal Rules of Evidence for United States Courts and Magistrates. "Unprivileged client information" means all information relating to a client or furnished by the client, other than privileged information, acquired by the lawyer during the course of or by reason of the representation of the client.

(b) Except as permitted by paragraphs (c) and (d), or as required by paragraphs (e), and (h), a lawyer shall not knowingly:

(1) Reveal confidential information of a client or a former client to:

(i) a person that the client has instructed is not to receive the information, or

(ii) anyone else, other than the client, the client's representatives, or the members, associates, or employees of the lawyer's law firm.

(2) Use confidential information of a client to the disadvantage of the client unless the client consents after consultation.

(3) Use confidential information of a former client to the disadvantage of the former client after the representation is concluded unless the former client consents after consultation or the confidential information has become generally known.

(4) Use privileged information of a client for the advantage of the lawyer or of a third person, unless the client consents after consultation.

(c) A lawyer may reveal confidential information:

(1) When the lawyer has been expressly authorized to do so in order to carry out the representation.

(2) When the client consents after consultation.

(3) To the client, the client's representatives, or the members, associates, and employees of the lawyer's firm, except when otherwise instructed by the client.

(4) When the lawyer has reason to believe it is necessary to do so in order to comply with a court order, a Texas Rule of Professional Conduct, or other law.

(5) To the extent reasonably necessary to enforce a claim or establish a defense on behalf of the lawyer in a controversy between the lawyer and the client

(6) To establish a defense to a criminal charge, civil claim or disciplinary complaint against the lawyer or the lawyer's associates based upon conduct involving the client or the representation of the client.

(7) When the lawyer has reason to believe it is necessary to do so in order to prevent the client from committing a criminal or fraudulent act.

(8) To the extent revelation reasonably appears necessary to rectify the consequences of a client's criminal or fraudulent act in the commission of which the lawyer's services had been used.

(d) A lawyer also may reveal unprivileged client information:

(1) When impliedly authorized to do so in order to carry out the representation.

(2) When the lawyer has reason to believe it is necessary to do so in order to:

(i) carry out the representation effectively;

(ii) defend the lawyer or the lawyer's employees or associates against a claim of wrongful conduct;

(iii) respond to allegations in any proceeding concerning the lawyer's representation of the client, or

(iv) prove the services rendered to a client, or the reasonable value thereof, or both, in an action against another person or organization responsible for the payment of the fee for services rendered to the client.

(e) When a lawyer has confidential information clearly establishing that a client is likely to commit a criminal or fraudulent act that is likely to result in death or substantial bodily harm to a person, the lawyer shall reveal confidential information to the extent revelation reasonably appears necessary to prevent the client from committing the criminal or fraudulent act.

(f) A lawyer shall reveal confidential information when required to do so by Rule 3.03(a)(2), 3.03(b), or by Rule 4.01(b).

Rule 1.12 Organization as a Client

(a) A lawyer employed or retained by an organization represents the entity. While the lawyer in the ordinary course of working relationships may report to, and accept direction from, an entity's duly authorized constituents, in the situations described in paragraph (b) the lawyer shall proceed as reasonably necessary in the best interest of the organization without involving unreasonable risks of disrupting the organization and of revealing information relating to the representation to persons outside the organization.

(b) A lawyer representing an organization must take reasonable remedial actions whenever the lawyer learns or knows that:

(1) an officer, employee, or other person associated with the organization has committed or intends to commit a violation of a legal obligation to the organization or a violation of law which reasonably might be imputed to the organization;

(2) the violation is likely to result in substantial injury to the organization; and

(3) the violation is related to a matter within the scope of the lawyer's representation of the organization.

(c) Except where prior disclosure to persons outside the organization is required by law or other Rules, a lawyer shall first attempt to resolve a violation by taking measures within the organization. In determining the internal procedures, actions or measures that are reasonably necessary in order to comply with paragraphs (a) and (b), a lawyer shall give due consideration to the seriousness of the violation and its consequences, the scope and nature of the lawyer's representation, the responsibility in the organization and the apparent motivation of the person involved, the policies of the organization concerning such matters, and any other relevant considerations. Such procedures, actions and measures may include, but are not limited to, the following:

(1) asking reconsideration of the matter;

(2) advising that a separate legal opinion on the matter be sought for presentation to appropriate authority in the organization; and

(3) referring the matter to higher authority in the organization, including, if warranted by the seriousness of the matter, referral to the highest authority that can act in behalf of the organization as determined by applicable law.

(d) Upon a lawyer's resignation or termination of the relationship in compliance with Rule 1.15, a lawyer is excused from further proceeding as required by paragraphs (a), (b) and (c), and any further obligations of the lawyer are determined by Rule 1.05.

(e) In dealing with an organization's directors, officers, employees, members, shareholders or other constituents, a lawyer shall explain the identity of the client when it is apparent that the organization's interests are adverse to those of the constituents with whom the lawyer is dealing or when explanation appears reasonably necessary to avoid misunderstanding on their part.

Rule 1.02 Scope and Objectives of Representation

(a) Subject to paragraphs (b), (c), (d), and (e), (f), and (g), a lawyer shall abide by a client's decisions:

(1) concerning the objectives and general methods of representation;

(2) whether to accept an offer of settlement of a matter, except as otherwise authorized by law;

(3) In a criminal case, after consultation with the lawyer, as to a plea to be entered, whether to waive jury trial, and whether the client will testify.

(b) A lawyer may limit the scope, objectives and general methods of the representation if the client consents after consultation.

(c) A lawyer shall not assist or counsel a client to engage in conduct that the lawyer knows is criminal or fraudulent. A lawyer may discuss the legal consequences of any proposed course of conduct with a client and may counsel and represent a client in connection with the making of a good faith effort to determine the validity, scope, meaning or application of the law.

(d) When a lawyer has confidential information clearly establishing that a client is likely to commit a criminal or fraudulent act that is likely to result in substantial injury to the financial interests or property of another, the lawyer shall promptly make reasonable efforts under the circumstances to dissuade the client from committing the crime or fraud.

(e) When a lawyer has confidential information clearly establishing that the lawyer's client has committed a criminal or fraudulent act in the commission of which the lawyer's services have been used, the lawyer shall make reasonable efforts under the circumstances to persuade the client to take corrective action.

(f) When a lawyer knows that a client expects representation not permitted by the rules of professional conduct or other law, the lawyer shall consult with the client regarding the relevant limitations on the lawyer's conduct.

(g) A lawyer shall take reasonable action to secure the appointment of a guardian or other legal representative for, or seek other protective orders with respect to, a client whenever the lawyer reasonably believes that the client lacks legal competence and that such action should be taken to protect the client.

Rule 1.15 Declining or Terminating Representation

(a) A lawyer shall decline to represent a client or, where representation has commenced, shall withdraw, except as stated in paragraph (c), from the representation of a client, if:

(1) the representation will result in violation of Rule 3.08, other applicable rules of professional conduct or other law;

(2) the lawyer's physical, mental or psychological condition materially impairs the lawyer's fitness to represent the client; or

(3) the lawyer is discharged, with or without good cause.

(b) Except as required by paragraph (a), a lawyer shall not withdraw from representing a client unless:

(1) withdrawal can be accomplished without material adverse effect on the interests of the client;

(2) the client persists in a course of action involving the lawyer's services that the lawyer reasonably believes may be criminal or fraudulent;

(3) the client has used the lawyer's services to perpetrate a crime or fraud;

(4) a client insists upon pursuing an objective that the lawyer considers repugnant or imprudent or with which the lawyer has fundamental disagreement;

(5) the client fails substantially to fulfill an obligation to the lawyer regarding the lawyer's services, including an obligation to pay the lawyer's fee as agreed, and has been given reasonable warning that the lawyer will withdraw unless the obligation is fulfilled;

(6) the representation will result in an unreasonable financial burden on the lawyer or has been rendered unreasonably difficult by the client; or

(7) other good cause for withdrawal exists.

(c) When ordered to do so by a tribunal, a lawyer shall continue representation notwithstanding good cause for terminating the representation.

(d) Upon termination of representation, a lawyer shall take steps to the extent reasonably practicable to protect a client's interests, such as giving reasonable notice to the client, allowing time for employment of other counsel, surrendering papers and property to which the client is entitled and refunding any advance payments of fee that has not been earned. The lawyer may retain papers relating to the client to the extent permitted by other law only if such retention will not prejudicea the client in the subject matter of the representation.

PROFESSIONAL CONDUCT AND ETHICS

§131.151. Professional Responsibility. The engineer shall not prepare, complete, revise, alter, sign, or seal any designs, plans, specifications, reports, analyses, or orders, or in any manner participate in any engineering practice, judgment, or decisions which, when measured by generally accepted engineering standards or procedures, is reasonably likely to result in any utility, structure, building, machine, equipment, process, product, device, work, or project endangering the property, lives, safety, health, or welfare of the general public.

§131.152. Independent Professional Judgment.

(a) Except with the consent of his client or employer after full disclosure, the engineer shall not accept employment when there is a reasonable probability that the exercise of his professional judgment, decisions, or practices on behalf of his client or employer may be affected by his own financial, business, property, or personal interests.

(b) The engineer shall avoid all conflicts of interest with his client or employer, but when a conflict of interest is unavoidable, the engineer shall promptly inform his employer or client of any business association, interest, or circumstances, which might tend to influence his professional judgments, decisions, or practices, or the quality of his services.

(c) The engineer shall not accept compensation, material favors, or benefits of any substantial nature, financial or otherwise, from more than one party for services on the same project or assignment, or for services pertaining to the same project or assignment, unless the circumstances are fully disclosed to all interested parties. The phrase ""benefits of any substantial nature" is defined to mean any act, article, money, or other material possession which is of such value or proportion that its acceptance creates a clandestine obligation on the part of the receiver or otherwise compromises his ability to exercise his own judgment, without regard to such benefit.

(d) The engineer shall not solicit or accept, directly or indirectly, any financial or other valuable considerations, material favors, or benefits of any substantial nature from any supplier of materials or equipment for any project on which he is performing or has contracted to perform engineering services.

(e) The engineer shall not solicit or accept any gratuity, material favor, or benefits of any substantial nature, directly or indirectly, from contractors, their agents, servants, or employees, or from any other party dealing with his client or employer in connection with any project on which he is performing or has contracted to perform engineering services.

(f) The engineer shall not solicit or accept, directly or indirectly, any engineering contract or employment from a governmental body, agency, or department in which a principal or officer of his organization serves as a member or employee.

(g) When in public service as a member or employee of a governmental body, agency, or department, the engineer shall not participate, directly or indirectly, in consideration or actions with respect to services offered or provided by him, his associates, or his organization to such governmental body, agency, or department.

(h) When in public service as a member or employee of any governmental body, agency, or department, the engineer shall not, directly or indirectly, use or make use of any property, facility, or service of such governmental body, agency, or department for the benefit of any private business or activity in which such engineer also may be engaged, unless prior, proper authority is obtained in writing.

(i) When in private practice or employment the engineer shall not, directly or indirectly, make use of any property, facility, or service of his client or employer for the benefit of said engineer, unless prior, proper authority is obtained in writing.

(j) The engineer shall submit to a client only that work (plans, specifications, reports, etc.) done by him or under his responsible supervision; however, an engineer, as a third party, may complete, correct, revise, or add to the work of another engineer when engaged to do so by a client, provided:

(1) the client furnishes the documentation of such work submitted to him by the first engineer;

(2) the first engineer is notified in writing by the second engineer of the engagement referred to in paragraph (1) of this subsection immediately upon acceptance of the engagement; and

(3) any work completed, corrected, revised, or added to shall have a seal affixed by and become the responsibility of the second engineer.

§131.153. Action Shall Be Competent.

(a) The engineer shall not accept any engineering employment or undertake any engineering assignment for which he is not qualified by education or experience to perform or carry out adequately and competently; providing and excepting, however, that an engineer may accept an assignment requiring education and experience outside his field of competence to the extent only, that his personal engineering services are restricted solely to those phases of the service or project in which he is qualified and competent, and that all other phases of such services or project shall be performed by legally qualified consultants, associates, or employees. When sealing plans or documents on which two or more engineers have worked, each engineer shall place his seal on the plan or document with a notation describing the work done under his responsible charge.

(b) The engineer shall not affix his signature or seal to any engineering plan or document dealing with subject matter on which he is not qualified by education or experience to form a dependable judgment.

(c) The engineer shall not express an engineering opinion before a court, administrative agency, or other government forum on any subject:

(1) in which he is not qualified by education or experience; or

(2) which is contrary to generally accepted scientific and engineering principles without fully disclosing the basis and rationale for his conclusion.

§131.154. Confidences and Private Information.

(a) The engineer may reveal confidences and private information under the following circumstances:

(1) when he has obtained the consent of the client or clients, employer or employers, affected, but only after full disclosure to them; or

(2) when required by law or court order; or

(3) when necessary to establish legal proof of his relationship with a client or employer in a court action to recover salaries, fees, or other compensation due him as a result of his employment or association with such client or employer; or

(4) when necessary to defend himself or his employees or associates in a legal action alleging wrongful conduct.

(b) Except as permitted by subsection (a), the engineer shall not knowingly:

(1) reveal a confidence or private information regarding or in the possession of his client or employer; or

(2) use a confidence or private information regarding or in the possession of his client or employer to the disadvantage of such client or employer; or

(3) use a confidence or private information regarding or in the possession of his client or employer for the advantage of a third person, unless the client or employer consents after full disclosure.

(c) The engineer shall exercise reasonable care to prevent his employees' and associates' unauthorized disclosure or use of private information or confidences regarding or in the possession of a client or employer.

§131.155. Professional Practice and Reputation.

(a) The engineer shall not offer or promise to pay or deliver, directly or indirectly, any commission, political contribution, gift, favor, gratuity, benefit, or reward as an inducement to secure any specific engineering work or assignment; providing and excepting, however, that an engineer may pay a duly licensed employment agency its fee or commission for securing engineering employment in a salaried position.

(b) The engineer shall not solicit professional employment by advertising which is false, misleading, or deceptive.

(c) The engineer shall not make, publish, or cause to be made or published any representation or statement concerning his professional qualifications or those of his partners, associates, firm, or organization which is in any way misleading or tends to mislead the recipient thereof, or the public, concerning his engineering education, experience, specializations, or other engineering qualifications.

(d) A registrant shall not submit or request, orally or in writing, a competitive bid to perform engineering services, whether as prime contractor, subcontractor, or consultant, under a contract subject to the provisions of the Texas Professional Services Procurement Act, Article 664-4, V.T.C.S. (which includes but is not limited to any state agency, political subdivision, county, municipality, district, authority, or publicly-owned utility of the State of Texas), or its federal counterpart, the Brooks Act, 40 U.S.C., §§541-544.

(1) For purposes of this section, the board considers competitive bidding to perform engineering services to include the submission of any monetary cost information in the initial step of selecting qualified engineers. Cost information or other information from which cost can be derived must not be submitted until the second step of negotiating a contract at a fair and reasonable cost.

(2) The engineer shall not be considered in violation of the Act in cases where his engineering services may legally be offered, furnished, or performed as an integral part of research and development programs, construction projects, manufactured products, processes, or devices, which are to be offered, performed, supplied, or obtained on the basis of competitive bids.

§131.156. Responsibility to the Engineering Profession.

(a) The engineer shall not:

(1) circumvent or attempt to circumvent any provision of the Texas Engineering Practice Act or general board rule through the actions of another;

(2) participate, directly or indirectly, in any plan, scheme, or arrangement attempting or having as its purpose the evasion of any provision of the Texas Engineering Practice Act or general board rule;

(3) fail to exercise reasonable care or diligence to prevent his partners, associates, and employees from engaging in conduct which, if done by him, would violate any provision of the Texas Engineering Practice Act or general board rule;

(4) violate any of the professional practice requirements of related state statutes and local codes and ordinances in providing engineering services;

(5) engage in any illegal conduct involving moral turpitude;

(6) engage in any conduct that discredits or tends to discredit the engineering profession;

(7) make, publish, or disseminate any statements, criticisms, or arrangements on engineering matters connected with public policy which are inspired or paid for by an interested party or parties, unless he has prefaced such statement or comment by explicitly identifying himself, disclosing the identities of the party or parties on whose behalf he is speaking and revealing the existence of any pecuniary interest he may have in such engineering matter;

(8) permit or allow himself, his professional identification, seal, firm or business name, or his services to be used or made use of, directly or indirectly, or in any manner whatsoever, so as to make possible to create the opportunity for the unauthorized practice of engineering by any person, firm, or corporation in this state;

(9) perform any acts, allow any omissions, or make any assertions or representations in the practice of engineering which are fraudulent, deceitful, or misleading, or which in any manner whatsoever tend to create a misleading impression;

(10) associate with or permit or allow the use of his name, firm name or professional identification, or seal in any business venture, project, or enterprise which he knows or should have known is engaged in professional practices which violate any provision of the Texas Engineering Practice Act or any board rule;

(11) associate with or permit the use of his name, professional identification, seal, firm or business name in connection with any venture or enterprise which he knows, or should have known, is engaging in trade, business or professional practices of a fraudulent, deceitful, or dishonest nature;

(12) maliciously injure or attempt to injure or damage the professional reputation of another by any means whatsoever; provided and except, however, that this shall not relieve an engineer of the obligation to expose unethical or illegal conduct to the proper authorities or preclude a frank but private appraisal of engineers or other persons or firms when requested by a client or prospective employer;

(13) aid or abet, directly or indirectly, any unlicensed person in connection with the unauthorized practice of engineering, or any firm or corporation in the practice of engineering unless carried on in accordance with the provisions of the Texas Engineering Practice Act, §17 and §18.

(14)directly or indirectly or in any manner whatsoever lend his license, seal, or professional identification to any unlicensed person or to any firm or corporation carrying on the practice of engineering contrary to the provisions of the Texas Engineering Practice Act, §17 and §18; or

(15) on his own authority as an employee of the State of Texas or any of its political subdivisions authorize or create any act or situation contrary to the requirements of the Texas Engineering Practice Act, §19.

(b) The engineer shall be personally and professionally responsible and accountable for the care, custody, control, and use of his engineer's seal, his professional signature, and identification. The engineer whose seal has been lost, misplaced, or stolen shall, upon discovery of its loss, report same immediately to the board, which may invalidate the stolen registration number of said seal, if it deems this necessary, and issue another registration number to said engineer.

§131.157. Prevention of Unauthorized Practice

(a) The engineer shall not practice or offer to practice engineering in any governmental jurisdiction in which to do so would be in violation of the laws regulating the practice of professional engineering in that jurisdiction.

(b) The revocation, suspension, or denial of a license to practice engineering in another jurisdiction, for reasons or causes which the board finds would constitute a violation of the Texas Engineering Practice Act or any rule, regulation, or code promulgated by the board, shall be sufficient cause for the denial, suspension, or revocation of a license to practice engineering in the State of Texas.

CODE OF ETHICS

For Engineers

PREAMBLE

Engineering is an important and learned profession. The members of the profession recognize that their work has a direct and vital impact on the quality of life for all people. Accordingly, the services provided by engineers require honesty, impartiality, fairness and equity, and must be dedicated to the protection of the public health, safety and welfare. In the practice of their profession, engineers must perform under a standard of professional behavior which requires adherence to the highest principles of ethical conduct on behalf of the public, clients, employers and the profession.

I. FUNDAMENTAL CANONS

Engineers, in the fulfillment of their professional duties, shall:

1. Hold paramount the safety, health and welfare of the public in the performance of their professional duties.
2. Perform services only in areas of their competence.
3. Issue public statements only in an objective and truthful manner.
4. Act in professional matters for each employer or client as faithful agents or trustees.
5. Avoid deceptive acts in the solicitation of professional employment.

II. RULES OF PRACTICE

1. Engineers shall hold paramount the safety, health and welfare of the public in the performance of their professional duties.
   a. Engineers shall at all times recognize that their primary obligation is to protect the safety, health, property and welfare of the public. If their professional judgment is overruled under circumstances where the safety, health, property or welfare of the public are endangered, they shall notify their employer or client and such other authority as may be appropriate.
   b. Engineers shall approve only those engineering documents which are safe for public health, property and welfare in conformity with accepted standards.
   c. Engineers shall not reveal facts, data or information obtained in a professional capacity without the prior consent of the client or employer except as authorized or required by law or this Code.
   d. Engineers shall not permit the use of their name or firm name nor associate in business ventures with any person or firm which they have reason to believe is engaging in fraudulent or dishonest business or professional practices.
   e. Engineers having knowledge of any alleged violation of this Code shall cooperate with the proper authorities in furnishing such information or assistance as may be required.
2. Engineers shall perform services only in the areas of their competence:
   a. Engineers shall undertake assignments only when qualified by education or experience in the specific technical fields involved.
   b. Engineers shall not affix their signatures to any plans or documents dealing with subject matter in which they lack competence, nor to any plan or document not prepared under their direction and control.
   c. Engineers may accept assignments and assume responsibility for coordination of an entire project and sign and seal the engineering documents for the entire project, provided that each technical segment is signed and sealed only by the qualified engineers who prepared the segment.
3. Engineers shall issue public statements only in an objective and truthful manner.
   a. Engineers shall be objective and truthful in professional reports, statements or testimony. They shall include all relevant and pertinent information in such reports, statements or testimony.
   b. Engineers may express publicly a professional opinion on technical subjects only when that opinion is founded upon adequate knowledge of the facts and competence in the subject matter.
   c. Engineers shall issue no statements, criticisms or arguments on technical matters which are inspired or paid for by interested parties, unless they have prefaced their comments by explicitly identifying the interested parties on whose behalf they are speaking, and by revealing the existence of any interest the engineers may have in the matters.
4. Engineers shall act in professional matters for each employer or client as faithful agents or trustees.
   a. Engineers shall disclose all known or potential conflicts of interest to their employers or clients by promptly informing them of any business association, interest, or other circumstances which could influence or appear to influence their judgment or the quality of their services.
   b. Engineers shall not accept compensation, financial or otherwise, from more than one party for services on the same project, or for services pertaining to the same project, unless the circumstances are fully disclosed to, and agreed to by, all interested parties.
   c. Engineers shall not solicit or accept financial or other valuable consideration, directly or indirectly, from contractors, their agents, or other parties in connection with work for employers or clients for which they are responsible.
   d. Engineers in public service as members, advisors or employees of a governmental or quasi-governmental body or department shall not participate in decisions with respect to professional services solicited or provided by them or their organizations in private or public engineering practice.
   e. Engineers shall not solicit or accept a professional contract from a governmental body on which a principal or officer of their organization serves as a member.
5. Engineers shall avoid deceptive acts in the solicitation of professional employment.
   a. Engineers shall not falsify or permit misrepresentation of their, or their associates', academic or professional qualifications. They shall not misrepresent or exaggerate their degree of responsibility in or for the subject matter of prior assignments. Brochures or other presentations incident to the solicitation of employment shall not misrepresent pertinent facts concerning employers, employees, associates, joint venturers or past accomplishments with the intent and purpose of enhancing their qualifications and their work.
   b. Engineers shall not offer, give, solicit or receive, either directly or indirectly, any political contribution in an amount intended to influence the award of a contract by public authority, or which may be reasonably construed by the public of having the effect or intent to influence the award of a contract. They shall not offer any gift, or other valuable consideration in order to secure work. They shall not pay a commission, percentage or brokerage fee in order to secure work except to a bona fide employee or bona fide established commercial or marketing agencies retained by them.

III. PROFESSIONAL OBLIGATIONS

1. Engineers shall be guided in all their professional relations by the highest standards of integrity.
   a. Engineers shall admit and accept their own errors when proven wrong and refrain from distorting or altering the facts in an attempt to justify their decisions.
   b. Engineers shall advise their clients or employers when they believe a project will not be successful.
   c. Engineers shall not accept outside employment to the detriment of their regular work or interest. Before accepting any outside employment, they will notify their employers.
   d. Engineers shall not attempt to attract an engineer from another employer by false or misleading pretenses.
   e. Engineers shall not actively participate in strikes, picket lines, or other collective coercive action.
   f. Engineers shall avoid any act tending to promote their own interest at the expense of the dignity and integrity of the profession.
2. Engineers shall at all times strive to serve the public interest.
   a. Engineers shall seek opportunities to be of constructive service in civic affairs and work for the advancement of the safety, health and well-being of their community.
   b. Engineers shall not complete, sign, or seal plans and/or specifications that are not of a design safe to the public health and welfare and in conformity with accepted engineering standards. If the client or employer insists on such unprofessional conduct, they shall notify the proper authorities and withdraw from further service on the project.
   c. Engineers shall endeavor to extend public knowledge and appreciation of engineering and its achievements and to protect the engineering profession from misrepresentation and misunderstanding.
3. Engineers shall avoid all conduct or practice which is likely to discredit the profession or deceive the public.
   a. Engineers shall avoid the use of statements containing a material misrepresentation of fact or omitting a material fact necessary to keep statements from being misleading or intended or likely to create an unjustified expectation; statements containing prediction of future success; statements containing an opinion as to the quality of the Engineers' services; or statements intended or likely to attract clients by the use of showmanship, puffery, or self-laudation, including the use of slogans, jingles, or sensational language or format.
   b. Consistent with the foregoing, Engineers may advertise for recruitment of personnel.
   c. Consistent with the foregoing, Engineers may prepare articles for the lay or technical press, but such articles shall not imply credit to the author for work performed by others.
4. Engineers shall not disclose confidential information concerning the business affairs or technical processes of any present or former client or employer without his consent.

a. Engineers in the employ of others shall not without the consent of all interested parties enter promotional efforts or negotiations for work or make arrangements for other employment as a principal or to practice in connection with a specific project for which the Engineer has gained particular and specialized knowledge.

b. Engineers shall not, without the consent of all interested parties, participate in or represent an adversary interest in connection with a specific project or proceeding in which the Engineer has gained particular specialized knowledge on behalf of a former client or employer.

5. Engineers shall not be influenced in their professional duties by conflicting interests.

a. Engineers shall not accept financial or other considerations, including free engineering designs, from material or equipment suppliers for specifying their product.

b. Engineers shall not accept commissions or allowances, directly or indirectly, from contractors or other parties dealing with clients or employers of the Engineer in connection with work for which the Engineer is responsible.

6. Engineers shall uphold the principle of appropriate and adequate compensation for those engaged in engineering work.

a. Engineers shall not accept remuneration from either an employee or employment agency for giving employment.

b. Engineers, when employing other engineers, shall offer a salary according to professional qualifications.

7. Engineers shall not attempt to obtain employment or advancement or professional engagements by untruthfully criticizing other engineers, or by other improper or questionable methods.

a. Engineers shall not request, propose, or accept a professional commission on a contingent basis under circumstances in which their professional judgment may be compromised.

b. Engineers in salaried positions shall accept part-time engineering work only to the extent consistent with policies of the employer and in accordance with ethical consideration.

c. Engineers shall not use equipment, supplies, laboratory, or office facilities of an employer to carry on outside private practice without consent.

8. Engineers shall not attempt to injure, maliciously or falsely, directly or indirectly, the professional reputation, prospects, practice or employment of other engineers, nor untruthfully criticize other engineers' work. Engineers who believe others are guilty of unethical or illegal practice shall present such information to the proper authority for action.

a. Engineers in private practice shall not review the work of another engineer for the same client, except with the knowledge of such engineer, or unless the connection of such engineer with the work has been terminated.

b. Engineers in governmental, industrial or educational employ are entitled to review and evaluate the work of other engineers when so required by their employment duties.

c. Engineers in sales or industrial employ are entitled to make engineering comparisons of represented products with products of other suppliers.

9. Engineers shall accept responsibility for their professional activities; provided, however, that Engineers may seek indemnification for professional services arising out of their practice for other than gross negligence, where the Engineer's interests cannot otherwise be protected.

a. Engineers shall conform with state registration laws in the practice of engineering.

b. Engineers shall not use association with a nonengineer, a corporation, or partnership, as a "cloak" for unethical acts, but must accept personal responsibility for all professional acts..

10. Engineers shall give credit for engineering work to those to whom credit is due, and will recognize the proprietary interests of others.

a. Engineers shall, whenever possible, name the person or persons who may be individually responsible for designs, inventions, writings, or other accomplishments.

b. Engineers using designs supplied by a client recognize that the designs remain the property of the client and may not be duplicated by the Engineer for others without express permission.

c. Engineers, before undertaking work for others in connection with which the Engineer may make improvements, plans, designs, inventions, or other records which may justify copyrights or patents, should enter into a positive agreement regarding ownership.

d. Engineers' designs, data, records, and notes referring exclusively to an employer's work are the employer's property.

11. Engineers shall cooperate in extending the effectiveness of the profession by interchanging information and experience with other engineers and students, and will endeavor to provide opportunity for the professional development and advancement of engineers under their supervision.

a. Engineers shall encourage engineering employees' efforts to improve their education.

b. Engineers shall encourage engineering employees to attend and present papers at professional and technical society meetings.

c. Engineers shall urge engineering employees to become registered at the earliest possible date.

d. Engineers shall assign a professional engineer duties of a nature to utilize full training and experience, insofar as possible, and delegate lesser functions to subprofessionals or to technicians.

e. Engineers shall provide a prospective engineering employee with complete information on working conditions and proposed status of employment, and after employment will keep employees informed of any changes.

"By order of the United States District Court for the District of Columbia, former Section 11(c) of the NSPE Code of Ethics prohibiting competitive bidding, and all policy statements, opinions, rulings or other guidelines interpreting its scope, have been rescinded as unlawfully interfering with the legal right of engineers, protected under the antitrust laws, to provide price information to prospective clients; accordingly, nothing contained in the NSPE Code of Ethics, policy statements, opinions, rulings or other guidelines prohibits the submission of price quotations or competitive bids for engineering services at any time or in any amount."

Statement by NSPE Executive Committee

In order to correct misunderstandings which have been indicated in some instances since the issuance of the Supreme Court decision and the entry of the Final Judgment, it is noted that in its decision of April 25, 1978, the Supreme Court of the United States declared: "The Sherman Act does not require competitive bidding."

It is further noted that as made clear in the Supreme Court decision:

1. Engineers and firms may individually refuse to bid for engineering services.
2. Clients are not required to seek bids for engineering services.
3. Federal, state, and local laws governing procedures to procure engineering services are not affected, and remain in full force and effect.
4. State societies and local chapters are free to actively and aggressively seek legislation for professional selection and negotiation procedures by public agencies.
5. State registration board rules of professional conduct, including rules prohibiting competitive bidding for engineering services, are not affected and remain in full force and effect. State registration boards with authority to adopt rules of professional conduct may adopt rules governing procedures to obtain engineering services.
6. As noted by the Supreme Court, "nothing in the judgment prevents NSPE and its members from attempting to influence governmental action . . . ."

Note:
In regard to the question of application of the Code to corporations vis-a-vis real persons, business form or type should not negate nor influence conformance of individuals to the Code. The Code deals with professional services, which services must be performed by real persons. Real persons in turn establish and implement policies within business structures. The Code is clearly written to apply to the Engineer and it is incumbent on a member of NSPE to endeavor to live up to its provisions. This applies to all pertinent sections of the Code.

NSPE Publication No. 1102 as revised January 1990

Risk Assessment

"You Bet Your Life"

Kathleen Kerr

RISK ASSESSMENT - "YOU BET YOUR LIFE"

Kathleen M. Kerr, Ph.D.
Associate Scientist

EnecoTech Inc.
303 Camp Craft Road, Suite 100
Austin, Texas 78746
(512) 329-5800

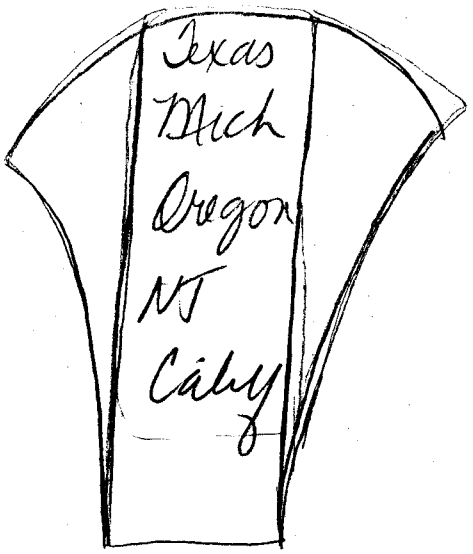
EnecoTech®
ENVIRONMENTAL CONSULTANTS

Kathleen M. Kerr, Ph.D.
EnecoTech Inc.
303 Camp Craft Road, Suite 100
Austin, Texas 78746
(512) 329-5800

Kathleen Kerr received her doctorate in pharmaceutical chemistry from the University of Texas at Austin. Presently, Dr. Kerr is an Associate Scientist with EnecoTech Inc., where she manages the Texas Region's RCRA/Hazardous Waste Program for EnecoTech's industrial, petrochemical and commercial clients. Her particular area of expertise is risk assessment.

Her previous experience includes five years on the staff of the Texas Water Commission within the agency's Industrial and Hazardous Waste Division. While at the commission, she was a RCRA permit coordinator, enforcement coordinator, and the Division's Senior Scientist for Risk Management. In her position as Senior Scientist, Dr. Kerr was one of the primary authors of the state's hazardous and industrial solid waste risk reduction regulations.

Prior to her affiliation with the Texas Water Commission, she was a staff scientist for an environmental consulting firm in Austin. In this capacity, she conducted, researched and managed projects relating to the bioremediation of subsurface soils impacted with organic chemical compounds.


Texas
Mich
Oregon
NJ
Cathy

Introduction

Since the U.S. Environmental Protection Agency (EPA) released its first guidance on risk assessment in 1986[1], the application of risk assessment and risk management to determine the appropriate course of action in environmental remediations has become commonplace. The basic methodology for risk assessment, which has been developed by the EPA and adopted by the State of Texas, is described in the sections which follow.

Nationwide, risk assessments have been employed at the federal level to establish remediation goals at federal and state Superfund, RCRA, industrial solid waste and petroleum storage tank sites. In addition, several states now allow the use of risk assessment at these types of sites either through rule or guidance. The result is a more practical approach to environmental cleanups.

In Texas, the Texas Water Commission (TWC) has recently promulgated industrial solid waste and municipal hazardous waste rules[2] which adopt a risk-based approach for determining the extent and type of closures or remediations which are necessary to protect human health and the environment. As discussed in the sections which follow, these rules set forth the criteria for determining the levels of chemical constituents which may be allowed to remain in place in soil and groundwater without posing a significant risk to human health or the environment. Previously, the TWC had adopted rules regarding baseline human health evaluations (risk assessments) at state Superfund sites.[3] In addition, the agency is presently developing guidance to allow for the use of risk assessment in setting remediation levels at petroleum storage tank sites.

Basic Steps in a Risk Assessment

The primary objective of a risk assessment is to provide a quantitative estimate of the likelihood that human exposure to a specific chemical(s) under certain conditions will lead to the manifestation of a health effect. In most cases, the risk assessor should follow the EPA methodology[5] for risk assessment which separates the process into the following steps:

- Data collection and evaluation;
- Dose-response assessment, more recently referred to as toxicity assessment;
- Exposure assessment; and,
- Risk characterization.

A preliminary strategy for the risk assessment is developed during the data collection and evaluation step. It is at this point where the risk assessor reviews available site data to identify the following items:

- The media which have been impacted;
- The potentials for exposure;
- The hazardous constituents of concern;
- The background concentration for constituents, if appropriate;
- The detection and quantitation limits for any constituents of concern; and,
- Deficiencies in the site-specific data.

If additional information is required to answer these questions, a site specific workplan should be developed. The workplan should address the need to gather data which identifies the hazardous constituents of concern in impacted media at the site, and characterizes the extent of the impacted media, as well as provide for the gathering of additional data needed to estimate exposure concentrations. This stage of the assessment is extremely critical because it provides the site data which are used in the exposure assessment and the risk characterization step.

In the exposure assessment step, the information generated by the data collection and evaluation step is employed to characterize the site, and identify potential receptors, and any completed or potential exposure pathways. At this stage, the risk assessor should identify all completed as well as any feasible potential exposure pathways which exist at the site. Once this step is completed, the magnitude of receptor exposure (the intake or dose) to specific constituents in impacted media can be estimated for completed exposure pathways and for the most significant potential exposure pathways which have been identified. The factors in the typical exposure calculation for a human health risk assessment include the following items:

- The potential exposure concentration (i.e., in milligrams per kilogram, milligrams per liter or milligrams per cubic meter) in impacted media as obtained from site-specific data and/or fate and transport modeling;

- The contact rate (ingestion rate) between the receptor and media for the specific exposure pathway. A typical rate for drinking water is 2 liters per day;

- The exposure frequency in days per year;

- The exposure duration in years; and,

- The typical body weight of the sensitive receptor.

The product of this calculation is the intake (dose) expressed as "milligrams of constituent per kilogram body weight per day."

Recent EPA guidance[4,6] has emphasized that risk assessments should include a more realistic evaluation of exposure; namely, that exposure quantification should involve a consideration of the range of exposures possible under each exposure scenario, not simply the "reasonable maximum exposure" (RME) of the sensitive receptor. For example, the RME for ingestion of drinking water, which is typically employed in exposure assessments, is 2 liters of water per day. This 2 liters per day level is at the high end (90th percentile) of the estimated distribution of intake levels for the adult population. The central tendency (average level) for adult drinking water intake is actually 1.4 liters per day. In order to more accurately represent the distribution of exposures throughout the population, the risk assessor must consider both the high end (RME) and the central tendency for drinking water ingestion rates. In this example, using the estimated average level for drinking water intake in the exposure calculation yields an intake (dose) which is 30% below the dose calculated using the RME. Consideration of these variabilities in exposure is essential in characterizing a realistic distribution of risk in the population.

In the toxicity assessment step, qualitative and quantitative toxicity information is gathered for the constituents of concern identified in impacted media in order to estimate the relationship between exposure to the constituent and adverse health or environmental effects. The data employed in this evaluation, which is usually limited, can come from a number of sources including human epidemiological studies, experimental animal studies, and other experimental studies including data from human, animal and microbial cell cultures.

When adequate data is available, the effect of the chemical is quantified based on its mechanism of toxicity and the route of exposure. For chemicals with non-carcinogenic effects, a reference dose (RFD) is used. Different RFDs are developed depending upon the duration of exposure and route of exposure. Based on duration of exposure, the following types of RFDs can be defined:

- Chronic reference dose (RFD_c), which is an estimate of a lifetime daily intake of a constituent by human populations, including sensitive individuals, that is likely to be without an appreciable risk for adverse health effects over the individual's lifetime. The RFD_c has been specifically developed to be protective for long-term exposures;

- Subchronic reference dose (RFD_s), which is an estimate of a daily intake of a constituent by human populations, including sensitive individuals, that is likely to be without an appreciable risk for adverse health effects during a portion of a lifetime. The RFD_s has been specifically developed to be protective for short-term exposures, typically from several weeks to seven years; and,

- Developmental reference dose (RFD_{dt}), which is an estimate of an intake of a constituent by human populations, including sensitive individuals, that is likely to be without an appreciable risk for developmental effects. The RFD_{dt} has been specifically developed to be protective for a single exposure event.

For each of the RFDs described above, oral or inhalation RFDs can be developed. In addition, it is important to remember that the RFD has an uncertainty which spans at least one order of magnitude. Typically, the RFD_c (either oral or inhalation exposure route) is the preferred measure of toxicity for use in the risk characterization.

For chemicals with carcinogenic effects, a carcinogenic slope factor (CSF) and the EPA's weight-of-evidence determination are used as measures of toxicity. The CSF, which describes the slope of the dose-response curve, and the EPA's weight of evidence determination, can be defined as follows:

- The CSF is a plausible upper-bound estimate of the probability of a response (cancer) per unit intake of a chemical over a lifetime. Oral and inhalation CSFs can be developed; and

- The EPA weight-of-evidence determination is a system for classifying human carcinogenic risk based upon the available human and animal data on carcinogenesis. Briefly, the data from human and animal studies is combined to reflect the strength (or weight) of the evidence concerning a chemical's potential as a human carcinogen. Chemicals can be classified as Group A (Known Human Carcinogen), Group B1 or B2 (Probable Human Carcinogens), Group C (Possible Human Carcinogens), Group D (Not Classifiable) and Group E (Evidence of Noncarcinogenicity).

One source for RFD and CSF toxicity values is the EPA's Integrated Risk Information System (IRIS), which is available to the public for a fee. If possible, the agency-derived toxicity values should be used in the risk assessment. In addition, it is important that the toxicity value representing the appropriate route of exposure and, for noncarcinogenic effects, the appropriate duration of exposure, be used in the toxicity assessment and risk characterization. When appropriate RFDs and CSFs are unavailable, they can often be derived using agency guidelines.

The last step of the risk assessment combines the information gathered from all previous steps to characterize the risk. The risk characterization step can involve either the comparison of site-specific impacts to available standards and criteria or the actual calculation of the excess human health risk posed by exposure to the site.

When promulgated standards and criteria are available, a direct comparison using the estimated exposure concentration (i.e., milligrams per liter) is the appropriate procedure. When these standards are unavailable, the risk must be calculated. The methodology for expressing risks which are calculated are described as follows:

- Noncarcinogenic risk is expressed as a Hazard Index (HI). The HI is the sum of individual Hazard Quotients (HQs) for specific chemicals and exposure pathways at a site.

- A HQ is the ratio of the estimated intake (dose) of a chemical to the RFD for that chemical. The intake and RFD should be derived using

the same time period. When the HQ exceeds 1, the dose exceeds the RFD; and

- Carcinogenic risks are expressed as an upper-bound estimate of the excess probability that an individual in the population will develop cancer over a lifetime.

The risk characterization is the final step of the risk assessment, and provides the interface between risk assessment and risk management.

Although the concepts encompassed in these steps are well accepted, specific practices have recently received much criticism from the scientific community, industry and the concerned public. These criticisms have centered primarily on the toxicity and exposure assessment steps, and the overall uncertainty in the risk assessment process. The highly conservative nature of the EPA risk assessment approach has also been criticized by many sources.[11] As described above, these concerns have prompted the EPA to release new guidelines and policies for exposure assessment[6] and for risk characterization[4] which emphasize a full characterization of exposure and uncertainty. The EPA is also reevaluating its methodology for toxicity assessment, but changes in this area will take more time. Despite these criticisms, risk assessment remains a valuable tool in determining the appropriate course of action at environmentally impacted sites based upon a more practical consideration of site-specific factors.

Role of Risk Management

The purpose of risk management is to identify the risks, and subsequently determine the appropriate steps necessary to abate any risk deemed unacceptable. A risk manager may also consider costs, social, and other factors when making their determination.

The EPA and individuals in the regulated and scientific community have emphasized that risk assessment, which is technically-oriented, and risk management, which is policy-oriented, are distinct processes which need to remain separate in order for reasonable solutions to be implemented at environmentally impacted sites.[4]

General Examples - Applicability of Risk Assessment at the Federal and State Levels

To date, the primary application for risk assessment has been in the remedial investigation/feasibility study (RI/FS) portion of Superfund site assessments. There are final federal rules, however, which allow for risk assessment to be applied to the closure of RCRA units[7] and to the determination of alternate concentration limits (ACLs) for constituents in groundwater impacted by releases from RCRA units.[8] The EPA has also proposed Corrective Action Rules for solid waste management units which rely upon risk assessment to set remediation goals at facilities implementing corrective actions through a permit[9].

Risk assessment also has an important role in the EPA's new "Hazardous Waste Reduction and Combustion Strategy" which was announced in May of this year.[10] At that time, the EPA Administrator issued a directive to the EPA Regional Offices which outlined a series of actions which are to be taken over the next 18 months with regard to the permitting of hazardous waste incinerators and boilers and industrial furnaces (BIFs). These actions include the requirement for a comprehensive risk assessment, including a consideration of indirect exposures, to be conducted for each incinerator and BIF undergoing permitting, and that more stringent dioxin/furan and particulate matter emission limits be included in new permits in order to protect human health and the environment.

Risk assessment is also in use in several state regulatory programs. For example, the states of Texas, Michigan, New Jersey, Oregon and California have either proposed or final rules or guidance in place which allow for the use of risk assessment. In addition, the EPA is working with the states to develop either national "soil action levels" or "soil standards" for hazardous constituents which would trigger further actions or investigations at solid waste sites.

At both the state and federal level, employing risk assessment and risk management processes at an impacted site can ultimately allow for certain levels of constituents to remain in place, provided that groundwater and surface water are protected and that there is not an unacceptable risk to the public health. The economic advantages of this approach are obvious.

Risk Assessment in Texas - State Risk Reduction Rules

The TWC recently promulgated risk reduction rules[2] for industrial solid waste and municipal hazardous waste sites. These rules, which became effective on June 28, 1993, set forth the commission's approach for determining the extent and type of closures or remediations which are necessary to protect human health and the environment.

These Risk Reduction Rules are a departure from the agency's historical policy toward remediation. Previously, remediation to background or nondetectable levels was required for constituents of concern in contaminated media. The new rules now set forth the criteria for determining the levels of constituents which can remain in place in soil and groundwater without posing an unacceptable risk to human health or the environment.

As described in 31 Texas Administrative Code (TAC) Chapter 335.8(b)(2) of the new rules, persons have an obligation to close or remediate sites to conditions which meet one of the three risk reduction standards which are described as follows:

- Risk Reduction Standard Number 1 (Closure/remediation to background), involves the removal and/or decontamination of all wastes, waste residues, leachate, and contaminated media to background levels unaffected by waste management or industrial activities;

- Risk Reduction Standard Number 2 (Closure/remediation to health-based standards and criteria), involves the removal and/or decontamination of all waste, waste residues, leachate, and contaminated media to the standards and criteria presented in the rule such that any substantial or present threat to human health and the environment is eliminated; and,

- Risk Reduction Standard Number 3 (Closure/remediation with controls), involves the removal, decontamination and/or control of all waste, waste residues, leachate, and contaminated media to levels and in manner such that any substantial or present threat to human health or the environment is eliminated or reduced to the maximum extent possible.

These rules are intended to be applied to the industrial and hazardous waste, Superfund and spill response programs at the agency. The administrative requirements for the application of closures and remediations carried out under the risk reduction rules are outlined in the rule itself. In addition, specific criteria for achieving each standard are contained in 31 TAC Chapter 335 Subchapter S (Risk Reduction Standards). Many companies may find it advantageous (i.e., economical) to amend an already approved closure plan, permit, or administrative order to complete closures or remediations under these new rules.

The attainment of each of the three risk reduction standards is briefly described in the following paragraphs:

- The criteria for Standard Number 1 are based on achieving either the background concentration or the practical quantitation limit for all constituents of concern in impacted media and wastes;

- The criteria for Standard Number 2 are based in part upon risk assessment. This standard has promulgated a number of different medium specific concentrations (MSCs) for constituents of concern in groundwater and soil which are considered to be protective of human health and the environment, including considerations of cross-media contamination and potential health effects due to ingestion and inhalation of the contaminated medium.

  The individual MSCs are not standards per se, since they must be employed with other MSCs and specific requirements of the rule in order to set the appropriate remediation level. The MSCs for soil and groundwater which consider potential health effects due to exposure (i.e., GW and SAI MSCs), however, were derived using the basic risk assessment methodology described above. For the purpose of closures and remediations under Standard Number 2, these GW and SAI MSCs are the uppermost acceptable concentration level for the constituent in the environment; and,

- The criteria for deriving remediation goals under Standard Number 3 are based upon the basic risk assessment methodology which was described previously. The derivation of these levels will be site-specific. These criteria are described in the rule.

For hazardous waste management units or spills of hazardous waste, all waste, waste residues and contaminated design and operating system components must be removed from the unit or area of discharge in order to achieve compliance with Standard Numbers 1 and 2. In these situations, the criteria of the standard apply only to contaminated media. Nonhazardous industrial solid waste management units or spills of nonhazardous waste, wastes, waste residues, and contaminated design and operating system components may remain in place provided that the constituents of concern in these materials achieve the criteria set forth in Standard Numbers 1 or 2. Contaminated media must also meet the criteria set forth in Standard Numbers 1 or 2 to achieve compliance with the standard.

The risk reduction rules have set forth deed recordation and post-closure care responsibilities which are dependent upon the degree of risk reduction. Sites which achieve the criteria set forth for Standard Number 1 are released from all deed recordation and post-closure care requirements. Sites which achieve the criteria set forth for Standard Number 2 must have a certification placed in the deed, but no post-closure care is required. The increased flexibility of the deed certification language allows for a description of site-specific conditions. Sites which achieve the criteria for set forth for Standard Number 3 are subject to deed recordation requirements and appropriate post-closure care.

Conclusions

Risk assessment provides a reasonable and economic approach toward the closure and remediation of industrial solid waste and hazardous waste sites and areas where wastes or products have been spilled or discharged. In Texas, the new Risk Reduction Rules is expected to foster the application of risk assessment toward these types of activities. It is also expected that, as facilities reevaluate their existing closure plans and permits, and as closures and remediations are conducted in the future, risk-based activities will become commonplace.

Environmental professionals acting as risk assessors or risk managers should always remember the following points:

- Risk assessment should not be used as a means to avoid site investigations and/or determinations of the extent of impacts at a site;
- Potential for cross-media contamination should always be considered;
- Exposure assessments should always include more reasonable evaluations of exposure in addition to the EPA's "reasonable maximum exposure" concept;

- There is uncertainty in the process, and more comprehensive data, particularly in the area of toxicity assessment, is needed;

- Risk characterizations should not be performed unless present or reasonable future exposure pathways can be completed; and

- Complex evaluations of exposure and toxicity (e.g., Monte Carlo analyses) should not be incorporated into the initial risk assessment. Although the uncertainties and conservatism in the process should never be overlooked, this methodology should be reserved for cases that warrant its use.

Risk assessment is still in its infancy. Over the next decade, however, we expect to see improvements in the process as the science of risk assessment continues to advance, and as its application in providing a more practical approach to environmental cleanups becomes accepted.

REFERENCES

1. U.S. Environmental Protection Agency, The Risk Assessment Guidelines of 1986 (Office of Health and Environmental Assessment, EPA/600/8-87/045, August 1987).

2. 18 Texas Register 3814 (June 15, 1993).

3. 31 Texas Administrative Code Chapter 335 Subchapter K - Hazardous Substance Facilities Assessment and Remediation.

4. U.S. Environmental Protection Agency, Guidance on Risk Characterization for Risk Managers and Risk Assessors (Office of the Administrator, HWEP-00278.F-1&2, February 26, 1992).

5. U.S. Environmental Protection Agency, Risk Assessment Guidance for Superfund, Volume 1, Human Health Evaluation Manual (Part A), Interim Final (Office of Emergency and Remedial Response, EPA/540/1-89/002, December 1989).

6. 57 Federal Register 22888 (May 29, 1992).

7. 52 Federal Register 8704 (March 19, 1992).

8. 40 Code of Federal Regulations Part 264 Subpart F - Releases From Solid Waste Management Units.

9. 55 Federal Register 30798 (July 27, 1990).

10. U.S. Environmental Protection Agency, EPA Administrator Announces a New hazardous Waste Reduction and Combustion Strategy (Office of Communication, Education and Public Affairs, EPA/530/F-93-012, May 18, 1993).

11. D. E. Burmaster and R. H. Harris, Perspective - The Magnitude of Compounding Conservatisms in Superfund Risk Assessments, Risk Analysis 13(2): 131 (1993).

Discovery Issues in Environmental Cases

"I've Got a Secret"

Kathy Tullos

Kathryn J. Tullos
Associate

Kelly, Hart & Hallman

301 Congress, Suite 2000
Austin, Texas 78701
(512) 495-6440

Kathy Tullos received a B.A. from the University of Texas in 1980 and a J.D. from the University of Texas School of Law in 1983 where she was a member of the Order of the Coif and Chancellors Honor Society. She specializes in environmental litigation matters. Kathy is an adjunct professor at St. Mary's University School of Law in San Antonio. Before joining Kelly, Hart & Hallman in 1992, Kathy served as General Counsel to the Women's Advocacy Project in Austin. While at the law firm of Vinson & Elkins, she worked extensively on environmental and complex litigation matters. From 1983 through 1986, Kathy was a law clerk to Judge Gabrielle K. McDonald in the U.S. District Court for the Southern District of Texas.

SELECTED ISSUES REGARDING DISCOVERY IN PERMIT PROCEEDINGS

Discovery in environmental cases is an extremely important phase of a case. In discovery, the parties establish both the issues and the tone of the case. Both components are important.

I. Dealing with Pro Se Parties During Discovery

A. Before you start, consider what happens if you draw pro se opposition.

1. Prepare your client.

2. Consider what the presence of pro se parties may do to your costs.

Dealing with pro se parties will make cost calculations more difficult. Because pro se parties typically are not well-acquainted with the rules governing a proceeding, you may find yourself responding to issues that a lawyer would not raise. On the other hand, the pro se party may not utilize all forms of discovery, especially depositions, thus cutting your costs.

3. Set your attitude and draw lines for yourself.

You must treat your unrepresented opponents with courtesy and take them seriously. Do not patronize, do not be arrogant or rude.

Conversely, do not try to "help" them with advice along the way if they are floundering. That is not your job, and you cannot wear two hats in this proceeding. Pro se parties will often ask for advice from opposing counsel, and you should decide up front that you are going to refer them to the rules, or the PIC, or the Examiner, or wherever.

4. Realize that your options are limited.

The Examiner is not going to expect or demand a lawyer's level of performance from a lay person. The best that you can do is to anticipate as many problems as possible.

B. Use the notice phase of the case to begin educating potential pro se opponents about discovery.

Although no one takes discovery during the notice phase of a proceeding, an Applicant uses the public notice to initiate potential parties into the mysterious ways of discovery. If a party so requests, the Commission will include, in the language of the notice, a clause advising potential parties that they are to participate fully in discovery if they are named as parties, and that a meeting will be held immediately after the initial public

hearing to set a discovery schedule. Such a notice allows everyone to participate in setting the schedule and makes for fewer surprises in the process.

C. At the public meeting, keep your eyes and ears open.

No formal discovery takes place at the public meeting. But perceptive persons can learn a lot at this stage of the permitting process. Some of the tasks for this stage are obvious: noting who speaks and what information they reveal about themselves and their concerns, for example, is an important task. But one can also visit with local residents, note who is sitting with whom, learn who will be dealing with the media for potential opponents, and the like.

Perhaps the most important discovery function the public meeting can serve is to allow you a preliminary look at your opponents as witnesses. How a person delivers a statement at the public meeting tells you a great deal about how that person will do on the stand at the hearing, so that you can begin to develop the themes and strategies that will work best in your case.

D. At the preliminary phase of the public hearing, set the appropriate tone - and a schedule.

1. Ask the Examiner to explain the discovery processes to the parties at the outset. Inevitably, the more everyone knows, the better. Topics for explanation include:

a. Forms of discovery (document requests, site visits, interrogatories, depositions) - thus avoiding the situation where the witness has a fit on the record because they don't get a turn to ask you questions in the deposition.

b. Where to find the rules pertaining to the proceeding.

c. Where to find the Commission's copies of documents.

d. Service of documents.

e. ADR, if applicable.

f. General information about ex parte contacts.

g. Protective orders.

h. Prefiled testimony (we had one party file a deposition as her prefiled testimony).

i. Privileges, including a short description of the attorney-client privilege and work product doctrine. At this point, the parties should seek a determination on whether the Examiner will require a list of privileged documents.

2. Consider alignment of parties for purposes of discovery.

3. Establish a discovery schedule, by agreement if possible.

The scheduling of a case is critical, and it has an enormous impact on discovery. The parties need to understand what is expected of them , and when; the schedule sets it out in black and white.

An agreed schedule also has two salutary benefits in terms of setting the tone for a case. It allows each party to exercise the maximum amount of control over his or her time and gives the parties a common problem to solve straight out of the chute. Each party is firm but reasonable at the outset, a foundation is laid for relationships along the way.

4. Agree on how parties will be served.

Particularly in rural areas, getting overnight delivery may be problematic.

5. Discuss how parties will copy documents.

a. Talk up front about copying costs.

b. Explain that persons who want copies of documents may not remove them from the place in which they are produced.

6. Encourage other parties to call you and try to work out questions or concerns, instead of going to the Examiner on every issue.

E. During discovery, use special care in dealing with pro se parties.

1. Draft requests and answers that account for both the requirement under the rules to respond completely to discovery requests and the ability of your opponents to absorb the information you are giving them. Of course, when in doubt, making a good record must prevail.

2. Use technology to your advantage.

a. If consultations with the Examiner are necessary, consider teleconferencing instead of having a live hearing.

b. Get depositions on disks from the court reporter.

c. Faxes can often deliver documents to persons who live in relatively isolated areas.

d. Encourage early exchanges of materials that may be relatively difficult to copy, such as videotapes and photographs.

e. For your own internal purposes, you may want to number your opponents' documents even if the documents come to you without labels.

f. Keep logs of documents produced in sufficient detail to be able to access the information quickly and efficiently.

g. Watch out for developing technologies that may save your client money.

3. Encourage contemporaneous document productions on the part of the pro se parties.

4. Ask relatively specific interrogatories. Broad queries may get answers that tell you little or nothing of use.

5. Do not assume that deposing a pro se party will take less time than deposing a party who is represented by counsel. While no arguments between counsel occur, meandering through a deposition is more likely when there is not an opposing counsel to prepare or guide the witness.

6. Reading, correcting, and signing a deposition sometimes confuses witnesses who do not have counsel to assist them. An explanation by the court reporter of the process may help prevent last-minute alterations to a deposition on which you had planned to rely at hearing.

F. Deal with problems as they arise.

Try to work out what you can without recourse to the Examiner. This rule works with even greater force in pro se situations than in circumstances where all of the parties are represented. Keep a written record of your efforts to settle disputes.

1. Any motions to compel.

a. Tread lightly, and file only when all alternatives have been exhausted and you absolutely must have whatever it is that you are seeking.

b. Obviously, the Examiner will not expect a pro se party to live up to the standard of a party who is represented by counsel. On the other hand, pro se parties have obligations under the rules like everyone else, and it is important to remind the Examiner of that fact.

c. If you must take a dispute to the Examiner, getting written rulings is of paramount importance.

II. Proposed Reforms Affecting Discovery

The Discovery/Sanctions Subcommittee of the Permit Hearings Task Force is considering a number of reforms in the permitting process that will affect the discovery process. These rules would replace existing permit hearing rules, including the complex hearing rules.

A. Most discovery will commence after the agency issues a draft decision.

One of the main reforms proposed is to commence the hearing process in earnest only after there is a draft decision from the TWC. This move is designed to increase the efficiency of the permitting process, because the Applicant's proposal in theory will not alter substantially after this point. Notice will come after the issuance of the decision, and the Examiner will take jurisdiction thereafter.

B. The new discovery schedule will establish discrete periods within which specified discovery tasks will occur.

1. Preliminary tasks.

Theoretically, discovery is to be divided into three periods. However, there really are four periods, because the Subcommittee's proposal would create two obligations to be performed before the public hearing commences. Voluntary discovery may be taken at any time.

a. The new procedures would obligate the staff to take action on what are essentially discovery tasks before the Examiner takes jurisdiction over a case. Before jurisdiction is taken, the agency must review its files and remove any privileged documents and assert those privileges at the time jurisdiction is taken. After jurisdiction is taken, the agency files are to be open to all parties for examination and copying.

b. The new procedures would also obligate the staff and the Applicant to provide witness lists at the time that the Examiner takes jurisdiction over the case.

c. At the preliminary phase of the public hearing, the Examiner will set the discovery schedule and group the parties for purposes of discovery. "Grouping" is used as the term preferred to "alignment," but it has some of the same effect in that it means that people with like interests must work together in discovery.

2. First discovery period.

a. A Protestant may take discovery from the Applicant. This period is the big initial push for the Protestant, as they may not take discovery in the second period, and will be limited in the scope of discovery at they can take in the third period. All discovery forms will be available to the Protestant.

b. What discovery an Applicant may take from the Protestant is limited in scope, but no one is sure how limited.

(1) The Subcommittee seems to lean towards allowing the following scope of discovery:

An Applicant may do discovery relating to the nature and funding of the Protestant. For example, the Applicant may discover information such as whether a group Protestant is incorporated and, if so, obtain corporate documents; whether the Protestant is affiliated with or cooperating with any organization in its opposition to the permit application; and the Protestant's source of funding. (This list is meant to be illustrative, not exclusive.) A full range of discovery tools shall be available to the Applicant. This limited discovery by the Applicant during the first discovery period may proceed while the Protestant is taking its discovery.

(2) One member of the subcommittee has suggested that first period discovery on the Protestant be limited to:

An Applicant should be allowed to do discovery during the first discovery period only on the nature and funding of the Protestant, and only to the extent such inquiries are allowed by Commission rule, as follows:

> Discovery into the nature and funding of the Protestant in any contested case shall not invade individual rights of privacy, and rights to assemble and join in citizen organizations. The Protestant may hold, as confidential, any names of members or sources of funding where the names and sources are not otherwise

public, and (a) there is a claim that the release of the name could adversely affect the member or the relationship with the source of funding; (b) where there is no need shown for the release of the name; or (c) where the person is not a competitor to the Applicant.

The Protestant must generally release the names of any officers and board members, and the nature of the source of funding.

Under this proposal, an Applicant could only file requests for information and document production requests, and could not take depositions.

(3) An Applicant who file interrogatories during this first period will have that number subtracted from the number that they may file in the second period.

(4) Interrogatories are available here and in the second round as provided in the Texas Rules of Civil Procedure 168(5).

c. Staff is neither giving nor taking discovery at this time.

Note: There is a new step here which, although not directly discovery itself, has a big impact on discovery. After the end of the first round of discovery, the Protestant is required to list its issues. This list becomes the basis for further discovery.

3. Second Period.

a. Who may take discovery.

(1) An Applicant takes much of its discovery now. The Applicant takes full discovery from the Protestant and the staff at this point.

(2) Protestant may only take discovery from the staff during this period.

(3) Staff now may take discovery from the Applicant and the Protestant.

b. All forms of discovery will be available to all parties during this period. Depositions and documents shall be done in Texas. Depositions on the staff are limited to four hours each, with ten days advance notice and no more than ten days before the prehearing meeting. All deposition of staff are to be taken in TWC buildings.

4. Third period.

a. Any discovery from the Applicant or the Protestant during this period is limited to the staff's position regarding the Applicant's response to the Protestant's issue list.

b. Depositions on staff are to be taken in accordance with the limitations found in the second period.

c. Everybody gets a set of 20 interrogatories in this round.

C. Sanctions will continue to be available in a form close to what is currently in use.

1. The sanctions rules probably will survive the transition to the new procedures.

The Subcommittee has recommended that sanctions rules currently found in 31 T.A.C. Sections 274.71 through 274.76 be retained. The hierarchy of sanctions includes docking time for presentation and imposition of costs as the sanctions of choice. More drastic sanctions, such as striking substantive testimony, would be available for egregious situations.

2. Two questions have arisen with regard to sanctions against particular parties.

a. Against the staff and the Public Interest Counsel.

Questions have arisen about the imposition of sanctions against the staff and the public interest counsel. Everyone agrees that the Examiner has the authority to impose sanctions other than awards of costs, but there is disagreement whether the Examiner may use the remaining sanctions against the staff and the PIC.

b. Against pro se parties.

The other question regarding sanctions involves the use of sanctions against pro se parties. For obvious reasons, no Examiner is going to hold pro se parties to the standards to which lawyers are held; but there is also a consensus that pro se parties should not be exempt across the board from sanctions. The Subcommittee advocate is educating pro se parties in order to level the playing field.

MEMORANDUM FROM

GARDERE & WYNNE

A Registered Limited Liability Partnership
ATTORNEYS AND COUNSELORS
1601 Elm Street, Suite 3000
Dallas, Texas 75201
(214) 999-3000

TO: Members of the Texas Water Commission Permit Hearings Process Task Force

FROM: Mary Sahs

DATE: May 21, 1993

RE: Final Report of the Discovery/Sanctions Subcommittee of the Permit Hearings Process Task Force

****

At the April 2, 1993 Permit Hearings Task Force meeting, Chairman Hall created the Discovery/Sanctions Subcommittee. The members are Jeff Civins, Lydia Gonzalez-Gromatzky, Cynthia Hayes, Mary Ruth Holder, Rick Lowerre, David Mears, Mary Sahs, and Kerry Sullivan. The Subcommittee was asked to consider discovery issues such as witness lists, identification of issues, interrogatories, document production, entry upon land, admissions, stipulations, identification of and access to the application, sanctions, discovery disputes and orders, prehearing orders, protective orders, and certification of discovery issues to the Commission on interlocutory appeal.

The Subcommittee has met almost weekly since the April 2 Task Force meeting. This Report represents the Subcommittee's consensus recommendations, except where indicated. Several of the alternate recommendations made by Rick Lowerre have not been discussed by the Subcommittee. It may be that a consensus could be reached on those also. In the interest of brevity, we have not attempted to provide the detailed reasoning behind these recommendations. Task Force members will have the opportunity to ask questions at the May 27 meeting when the Subcommittee gives its verbal report.

Table of Contents

I. Scope of Discovery

A. General

B. Discovery on the Staff

1. First Discovery Period

2. Second Discovery Period

3. Third Discovery Period

C. Sanctions

1. General

2. Against the Staff and Public Interest Counsel

3. For Pro Se Parties

II. Types of Discovery

A. Interrogatories

B. Document Production

C. Depositions

III. Discovery Disputes

A. Motions to Compel

B. Certification of Discovery Issues to the Commission

C. Protective Orders

D. Agreement for Entry Upon Land

IV. The "Freezing" Concept and Narrowing the Scope of the Hearing

A. Proposed Findings of Fact

B. Identifying Issues

1. Protestant

2. Staff

3. Public Interest Counsel

C. Stipulations and Freezing the Process

D. Prehearing Meeting

E. Prehearing Conference and Order

V. Other Methods for Expediting the Process

A. Witness Lists

B. Identification of and Access to the Permit Application

C. Prefiled Testimony

D. Service

E. Rebuttal

VI. Additional Issues of Concern

A. Jettison of Complex Hearing Rules

B. The Hearings Examiner's Discretion Regarding Timelines

C. Summary Disposition

Attachments

A. Permit Hearing Process

B. Narrowing Issues at the Prehearing Conference

C. Agreed Protective Order

D. Agreement for Entry

I. Scope of Discovery

A. General

The proposed permit hearing process envisions three separate discovery periods. See Attachment A. It was suggested that the determining factor in limiting who would do discovery during each of these periods should be whether the staff's proposed permit decision was to issue a permit or to deny a permit. After lengthy consideration the Subcommittee decided that the staff's decision whether to recommend denial or issuance of the permit should not control the parameters of the three discovery periods. The Subcommittee recommends as follows.

1. First Discovery Period. The first discovery period is reserved for the protestant's discovery from the applicant and limited discovery by the applicant on the protestant. An applicant may do discovery relating to the nature and funding of the protestant. For example, the applicant may discover information such as whether a group protestant is incorporated and, if so, obtain corporate documents; whether the protestant is affiliated with or cooperating with any organization in its opposition to the permit application; and the protestant's source of funding. (This list is meant to be illustrative, not exclusive). A full range of discovery tools shall be available to the applicant. This limited discovery by the applicant during the first discovery period may proceed while the protestant is taking its discovery.

Rick Lowerre has made the following alternative suggestion: An applicant should be allowed to do discovery during the first discovery period only on the nature and funding of the protestant, and only to the extent such inquiries are allowed by Commission rule, as follows:

> Discovery into the nature and funding of the protestant in any contested case shall not invade individual rights of privacy and rights to assemble and join in citizen organizations. The protestant may hold as confidential any names of members or sources of funding where the names and sources are not otherwise public and
>
> > (1) there is a claim that the release of the name could adversely affect the member or the relationship with the source of funding;
> >
> > (2) where there is no need shown for the release of the name; or
> >
> > (3) where the person is not a competitor to the applicant.

The protestant must generally release the names of any officers, and board members, and the nature of the source of funding.

Mr. Lowerre further suggests that the range of the applicant's allowed discovery should be limited to requests for information and production, and not include depositions during the first discovery period. An applicant could totally disrupt the protestant's ability to its 1) initially review the application and project; 2) hire experts; 3) proceed with discovery, etc., all of which must be done during the first discovery period, by taking a large number of deposition of members of a citizen group.

2. Second Discovery Period. During the second discovery period, the protestant may discover from the staff; the staff may discover from the protestant and the applicant; and the applicant may discover from the protestant and the staff.

3. Third Discovery Period. During the third discovery period, any discovery by the protestant or the applicant from the staff shall be limited to the staff's position regarding the applicant's response. Discovery from the applicant and the protestant shall be limited to the scope of the listed issues, and will necessarily be limited due to time constraints and limits on numbers of interrogatories. The hearings examiner shall have discretion to limit further in the interest of fairness.

Voluntary discovery may be sought at any time by any party.

B. Discovery on the Staff

Beginning at the time jurisdiction is taken, all parties shall have access to all unprivileged documents in the agency's files without the necessity of submitting an Open Records request or a request for production. It shall be the agency's responsibility to ensure that documents protected from discovery as provided for under law are removed from agency public files and that all assertions of privilege by the staff relating to those agency files are made at the time jurisdiction is taken. This procedure will allow open access of agency files without revealing protected documents. It will also alert parties to privileges being asserted thereby enabling those parties to seek review by the hearings examiner if so desired. As in all Commission contested case proceedings, the scope of discovery shall be governed by the Texas Rules of Civil Procedure, the Texas Rules of Evidence, the Administrative Procedure and Texas Register Act, Texas Water Commission rules, and all relevant case law.

The staff agrees to be subject to depositions during the second and third discovery periods. Each deposition of a staff witness shall be limited to a total of four hours. Any party desiring to depose a staff witness shall attempt to set the time

and date of the deposition through agreement with the staff. The staff shall make a reasonable effort to agree on a time and date for the deposition. The staff shall not be required to agree to a date for the deposition less than ten days from the date of the request. The staff shall not be required to agree to a date for the deposition any later than a date ten days prior to the prehearing meeting. All depositions of staff witnesses shall be taken in Austin in one of the TWC office buildings. All of these requirements may be waived by agreement of the staff or by the hearings examiner on a showing of good cause.

Interrogatories and requests for production on the staff shall be allowed during the second and third discovery periods.

C. Sanctions

1. General. The Subcommittee recommends that the Commission retain 31 T.A.C. §§ 274.71 through 274.76, which authorize the hearings examiner to impose sanctions for discovery abuse. The hearings examiner shall be encouraged to impose sanctions as necessary and the Commission shall support the hearings examiner's imposition of sanctions. A hierarchy of sanctions shall be established in which docking time for case presentation and the awarding of costs, shall be the sanctions of choice. The Commission shall support the hearings examiner's imposition of issue determinative sanctions because such sanctions shall be imposed only if the hearings examiner determines that the discovery abuse is so egregious as to warrant drastic sanctions. An example of a issue determinative sanction is striking substantive testimony.

2. Against the Staff and Public Interest Counsel. The Subcommittee believes that the hearings examiner has the authority to impose sanctions against the staff and the Public Interest Counsel. The Subcommittee has not, however, reached a consensus on the extent of that authority. Several members recommend sanctions be encouraged within agency divisions and that the hearings examiner's authority be limited. Others recommend granting the hearings examiner authority to impose any of the specified sanctions against the staff or PIC except awarding costs.

3. For Pro Se Parties. The Subcommittee recommends that the hearings examiner be allowed discretion to be more lenient in imposing sanctions against pro se parties because Commission rules are hard to find and to understand. It seems unfair to sanction persons who have little chance of figuring the process out, even for grievous errors, and it seems unlikely that examiners will use sanctions against pro se parties except in the most extreme cases. On the other hand, it is difficult to understand what restraint sanctions afford when they are only applied to some parties in the case.

The Subcommittee recommends that the Commission develop a packet of materials or videotape designed to give parties a basic understanding of the TWC rules and procedures. Giving this packet to pro se parties at least ensures that all pro se parties start with a baseline knowledge of the proceeding in which they are participating thus leveling the playing field to some extent. The videotape or other training material could probably be developed with the assistance of the State Bar of Texas Environmental and Natural Resources Law Section pro bono project.

II. Types of Discovery

A. Interrogatories

The Subcommittee agrees that interrogatories may be used during any of the three discovery periods. Interrogatories shall be compellable discovery. Interrogatories shall be allowed, one set according to Rule 168(5), for each party during either the first or second discovery period within the constraints of the Scope of Discovery described above. Each party shall also be allowed a second set of 20 interrogatories during the third discovery period.

If the applicant has used interrogatories during the first discovery period, the interrogatories shall be considered as part of the total number of interrogatories the applicant is allowed during the second discovery period.

The hearings examiner shall be encouraged to group parties specifically for discovery purposes, in order to limit the number of questions that must be answered by any party. In the event that parties are grouped, the hearings examiner shall have the discretion to increase the allowable number of interrogatories beyond that specified in Rule 168(5), but only to the extent fairness requires.

When a party serves interrogatories, a copy shall be sent to every other party. When a party responds to interrogatories, a copy of the response shall be sent to every other party.

B. Document Production

The Subcommittee agrees that document production may be used in any of the three discovery periods, within the constraints of the Scope of Discovery described above. It shall be compellable discovery. The hearings examiner shall be encouraged to group parties for the purposes of document production in order to limit the number of document requests to avoid duplication. A party receiving a document production request shall make the documents available in Texas.

The hearings examiner may determine on a case by case basis a reasonable allocation of costs associated with document production. Rick Lowerre recommends that each party should pay for its costs.

The Subcommittee recommends that the hearings examiner be allowed to require all documents to be produced in usable form, which may require production of computer disks. The hearings examiner may also require a party to provide reasonable indices to its documents or computerized information produced in response to discovery requests, and to maintain a log of documents produced, including those produced in supplemental production. The hearings examiner shall assure that all parties are required to participate in a timely fashion, and that the burden of producing information needed by the examiner or the parties is placed on the party controlling the information.

When a party serves a request for documents, a copy of the request shall be sent to every other party. When a party responds to a request for documents, a copy of the response shall be provided to every other party.

C. Depositions

The Subcommittee recommends that the types of depositions be expanded according to Rule 202 of the Texas Rules of Civil Procedure. The type of deposition shall be at the option of the deposing party, but in all cases a recording shall be made. When a party seeks a deposition that is not transcribed by a court reporter, any other party may, at its own cost, provide for a court reporter.

All deposition witnesses shall be made available in Texas. The Subcommittee recommends that at the time of a deposition, the witness shall be prepared to testify about those issues and opinions for which the witness is identified. Rick Lowerre disagrees, and recommends that there should be no rule requiring that experts be prepared to state all their final opinions early on. He believes that in many cases, during the second discovery period, both the staff and the protestant's experts will still be refining and possibly changing preliminary opinions.

III. Discovery Disputes

All members of the Subcommittee agree that there are specific issues that arise on a regular basis during discovery. An example is the issue of whether a protesting group's membership is discoverable. Jeff Civins believes that the names and addresses of members, as well as the location of their residences in relation to the facility is generally relevant and should be discoverable. Cynthia Hayes believes that the number of members, how the group is funded, when it was formed, and the purpose of the group is always discoverable, but that the relevance and discoverability of the

names and addresses should be done on a case by case basis. Kerry Sullivan did not suggest a position regarding relevance, but does recommend a set policy so that the decision as to discoverability is not made on a case by case basis. David Mears suggested setting up a presumption to assist in determining discoverability.

The Subcommittee members agreed that substantive rules on the following issues will help alleviate discovery disputes.

- The extent of discoverable compliance history. Q: Does this include all agencies, all subsidiaries or related entities, all locations?

- The extent of discoverable financial assurance.

- The extent of discoverable financial assurance to prove ability to operate.

A. Motions to Compel

Whenever a discovery dispute arises, the disputing party shall file a motion to compel. Any response shall be filed within five working days. The response may be a showing of good cause for extra time to respond. The hearings examiner shall rule within five working days of the response.

B. Certification of Discovery Issues to the Commission

The Subcommittee recommends that no discovery issues shall be allowed to be certified to the Commission on interlocutory appeal. Rick Lowerre does not agree and believes that Rule 267.15, which provides that interlocutory appeals can only be taken if the hearings examiner allows, is sufficient protection. He further believes that some discovery issues may need to be taken to the Commission to avoid major problems.

C. Protective Orders

In so far as the applicant is claiming confidentiality of any part of the permit application, the applicant shall request a protective order at the time that jurisdiction is taken. All other claims of confidentiality shall be handled as they arise, according to the timelines recommended under Motions to Compel above. The Subcommittee recommends development of a standard protective order, which shall be used unless modified at the hearings examiner's discretion. For discussion purposes, an example of such a protective order is included as Attachment C.

D. Agreement for Entry Upon Land

The protestant's request for entry upon land shall be filed during the first discovery period. The Subcommittee recommends development of a standard Agreement for Entry Upon Land, including a Release and Indemnification, which shall be used when any party requests permission for entry upon land unless modified at the hearings examiner's discretion. For discussion purposes, an example is included as Attachment D.

The Subcommittee suggests that the form release include provisions that all parties are allowed to split samples, that the applicant shall allow entry within seven days of the request, the applicant's right to accompany the party entering the property, and the applicant's right of entry upon a protestant's land. Other suggestions were made regarding confidentiality of information acquired during entry upon land.

IV. The "Freezing" Concept and Narrowing the Scope of the Hearing

A. Proposed Findings of Fact

The applicant shall be required to propose findings of fact at the time jurisdiction is taken. The Subcommittee feels that such a step will assist all parties in narrowing the issues early, thereby shortening the permit hearing time.

At the prehearing conference the applicant shall submit its final findings of fact. The proposed findings of fact may have changed during the course of discovery. The final proposed findings of fact shall be based upon the frozen application. These findings of fact shall encompass every issue needed in order to support the issuance of the permit. Rick Lowerre suggests that the final proposed findings of fact shall be based upon the frozen application and shall be submitted by the applicant at the time of the applicant's response.

B. Identifying Issues

1. Protestant. The protestant is required to identify issues at the end of the first discovery period. The identification of issues shall be based on the proposed findings of fact submitted by the applicant at the time jurisdiction is taken, and to the extent possible, shall include a statement as to the basis of the protestant's dispute on each issue. All issues shall be adequate to put the applicant on notice as to the nature of the protestant's concerns and to allow the applicant to appropriately discover and to adequately respond to those concerns.

The principle that the applicant shall receive notice of the protestant's concerns adequate to allow the applicant to respond underlies the applicant's requirement of freezing the application.

The Subcommittee suggests that an evaluation of whether the protestant has provided adequate notice of its issues, either in its issues list or during the applicant's discovery on the protestant during the second discovery period, may sometimes be determined only at the stage in the process when the parties discuss the ultimate narrowing of issues by way of stipulations.

2. Staff. The staff is not required to identify its issues because: (1) in the case of a draft permit, the issues will be clear from the permit provisions; and (2) in the case of a draft denial, the staff shall explain the reasons for recommending denial.

C. Stipulations and Freezing the Process

The Subcommittee began by discussing the timing and use of stipulations to narrow the issues that ultimately go to hearing. During the discussion we realized that this issue actually speaks to the heart of why the protestant is being asked to list issues early in the permit hearing process, why the applicant has agreed to freeze the application at a particular point, and what it means to say that the process will be frozen once the prehearing order is issued. The Subcommittee makes the following recommendations (see Attachment B):

(1) All parties shall be asked to stipulate to each of the applicant's final proposed findings of fact. (2) All stipulated findings of fact shall not be issues in the hearing. (3) There will be two categories of findings of fact that cannot be stipulated to.

(a) A finding of fact that has not been stipulated to, was on the protestant's issue list, and protestant has a reasonable basis for continuing to contest the issue, may be raised as an issue at hearing. The reasonableness of protestant's basis for contesting the issue may receive further inquiry by the hearings examiner during the prehearing conference.

(b) A finding of fact that has not been stipulated to and was not on the list shall receive further inquiry by the hearings examiner during the prehearing conference. The ultimate inquiry is whether the protestant's position to challenge the finding of fact acts as a surprise to the applicant. The Subcommittee agrees that the protestant's issue may be raised as an issue at the hearing, under these circumstances, upon a showing of good cause. Under these circumstances, the applicant may respond to the new issue with a minor amendment.

As an example, a lack of reasonable basis or good cause is if the party who has failed to stipulate claims they did not have time

to look at the issue. The hearings examiner will then deem that issue as being stipulated. Rick Lowerre recommends that the examiner must determine that the party had sufficient time to look at the issue, before the examiner could deem that issue as being stipulated.

D. Prehearing Meeting

A prehearing meeting of the parties, without the hearings examiner, shall take place at least one week before the prehearing conference. The purpose of the meeting is to prepare for submission of findings of fact, stipulations, and exhibits to the hearings examiner at the prehearing conference.

At hearing all objections raised to exhibits, which could have been cured if timely raised, shall be deemed waived if they were not raised during the prehearing meeting.

E. Prehearing Conference and Order

During the prehearing conference, the hearings examiner determines what issues remain, what findings of fact have been stipulated, and the finalized time limits on case presentation. Exhibits shall be submitted and marked at the prehearing conference.

The prehearing order shall be issued immediately after the prehearing conference. It shall contain all stipulated and deemed stipulated findings of fact and stipulations regarding the admissibility of exhibits. It shall list all remaining issues and designate how much time each party is allowed for its case.

Regarding the exchange of exhibits, Rick Lowerre has suggested that this exchange should be done at the prehearing conference (to the extent it can be) not at the prehearing meeting. Mr. Lowerre believes that it will not be possible for the protestants or the staff to present all of their exhibits at either time, because some exhibits may need to be prepared to respond to the applicant's testimony. Flexibility is needed.

V. Other Methods for Expediting the Process

A. Witness Lists

The applicant and the staff shall provide their witness lists at the time jurisdiction is taken by the Commission. The protestant shall list its witnesses when it lists its issues. These lists are subject to change as follows. The staff and applicant may amend their witness lists when they respond to the protestant's list of issues. The protestant shall be required to submit its final naming of witnesses within ten days of the applicant's response. Rick Lowerre suggests as follows: The

protestant will not often be able to hire new witnesses to respond to the changes made by the applicant in ten days. A provision is needed to allow the hiring of such experts during the third discovery period, but with sufficient lead time for the applicant to depose the witness.

The Subcommittee agrees that no additional witnesses shall be allowed on rebuttal absent a showing of good cause and opportunity for opposing parties to do discovery.

The Subcommittee agrees that the witness list shall not only include naming of witnesses, but a brief statement about the subject matter of the testimony. If a party files a motion for a protective order because the number of witnesses listed by another party is excessive and if the hearings examiner agrees, the hearings examiner shall request the offending party to limit its listed witnesses. If the offending party refuses to do so on an expedited basis, the examiner shall require the offending party to submit a summary of the expected testimony of each witness. The summary shall be specific enough to enable the examiner to strike witnesses to avoid unduly repetitious evidence.

The requirement to submit witness lists at the appropriate times will be by rule rather than by having the parties use one of their interrogatories for that purpose. The rule will require a continuing obligation to update the witness list and the subject of testimony until the time the application is frozen.

B. Identification of and Access to the Permit Application

The Subcommittee agrees that the applicant shall provide to the protestant two copies of the permit application at the time jurisdiction is taken. The permit application shall include all notices of deficiency and the applicant's response to those notices of deficiency. The application shall be paginated sequentially.

Rick Lowerre has raised the following concerns: Since some applicants are playing a new game of filing information with the Commission that they claim is not part of the application, but just "supporting information" there are two options:

1. Declare anything submitted by the applicant as part of the application unless superseded by new materials, or

2. Require that the applicant provide two copies of all application materials, NODs, responses to NODs and any other submissions.

Mr. Lowerre suggests that the Task Force ask the licensing staff (Minor Hibbs, etc.) about the problems these nonapplication filings are creating for the staff.

C. Prefiled Testimony

Any party shall have the option to prefile all or any part of the testimony of all or any one of its witnesses. This option allows the most efficient presentation of issues that do not necessarily need a live witness on direct examination. One party's election to prefile shall not control another party's decision regarding whether to prefile testimony. In the event that a party decides to use prefiled testimony, it shall notify the other parties and the hearings examiner at least 60 days before the evidentiary hearing begins, identifying the relevant witness(es).

It shall be within the hearings examiners discretion whether to order all parties to prefile their direct cases. In the event that all direct testimony is prefiled, whether by hearings examiner's order or by agreement of the parties, (1) no party shall be allowed to go beyond the scope of its prefiled testimony on direct examination and (2) the hearings examiner shall have the discretion to limit or prohibit friendly cross examination.

Rick Lowerre has suggested as follows: The protestant and the staff must be allowed to present testimony in addition to that prefiled to respond to 1) the direct testimony of the applicant's witnesses and 2) the cross examination of the applicant's testimony. That is, the protestant and the staff must be allowed to rebut what the applicant presents. Unless there is a phased prefiling that allows the protestant and the staff to see what the applicant's witnesses are going to say before preparing their testimony, the direct prefile of the protestant and the staff cannot be responsive. Likewise, on cross examination of the applicant's witnesses, new issues might be raised that require evidence from the protestant or the staff.

The Subcommittee recommends that the live presentation at the evidentiary hearing of prefiled testimony shall be limited to introductory material, corrections to the prefiled testimony, and a brief summary of not more than ten minutes.

The hearings examiner shall require the prefiled testimony to be filed within a reasonable time before the evidentiary hearing considering such factors as the complexity of the material, the expected length of the material, the number of witnesses or issues that are to be presented by prefiling testimony, and the acceptable method of presenting objections.

D. Service of Pleadings, Motions, and Discovery

The Subcommittee recommends that all issues regarding acceptable methods of service shall be addressed by the Hearings Examiner at the time jurisdiction is taken.

E. Rebuttal

The applicant is the only party that shall be allowed rebuttal as a matter of right. The protestant shall have the right to rebut when the staff has presented new evidence after protestant's case. The hearings examiner may grant other parties the right of rebuttal if required for fairness. Any party putting on a rebuttal case shall do so within the time limits set by the hearings examiner in the prehearing order. In all cases, the applicant shall be allowed to close with its rebuttal.

VI. Additional Issues of Concern

A. Jettison of Complex Hearing Rules

During one of its earlier meetings, the Task Force agreed to discontinue use of the agency's complex hearing rules, which are currently found at 31 T.A.C. Chapter 272. Although the Subcommittee agrees that the complex hearing scheme envisioned by those rules should no longer be used by the Commission, it believes that some of those rules are still valuable and should be incorporated into the scheme that is ultimately recommended by the Task Force. The Subcommittee has specifically recommended retaining the sanctions provisions. A review of Chapter 274 should be done to determine if other provisions should be saved.

B. The Hearings Examiner's Discretion Regarding Timelines

Rick Lowerre recommends that should the reasonable activities in discovery require time greater than initially provided by TWC rules or the hearing schedule as a result of delay or complications by any party or as a result of the need to collect information which takes significant time, the hearings examiner shall adjust the discovery or hearing schedule to assure that parties have sufficient time to prepare and to assure that the full rights of parties to participate are not denied.

C. Summary Disposition

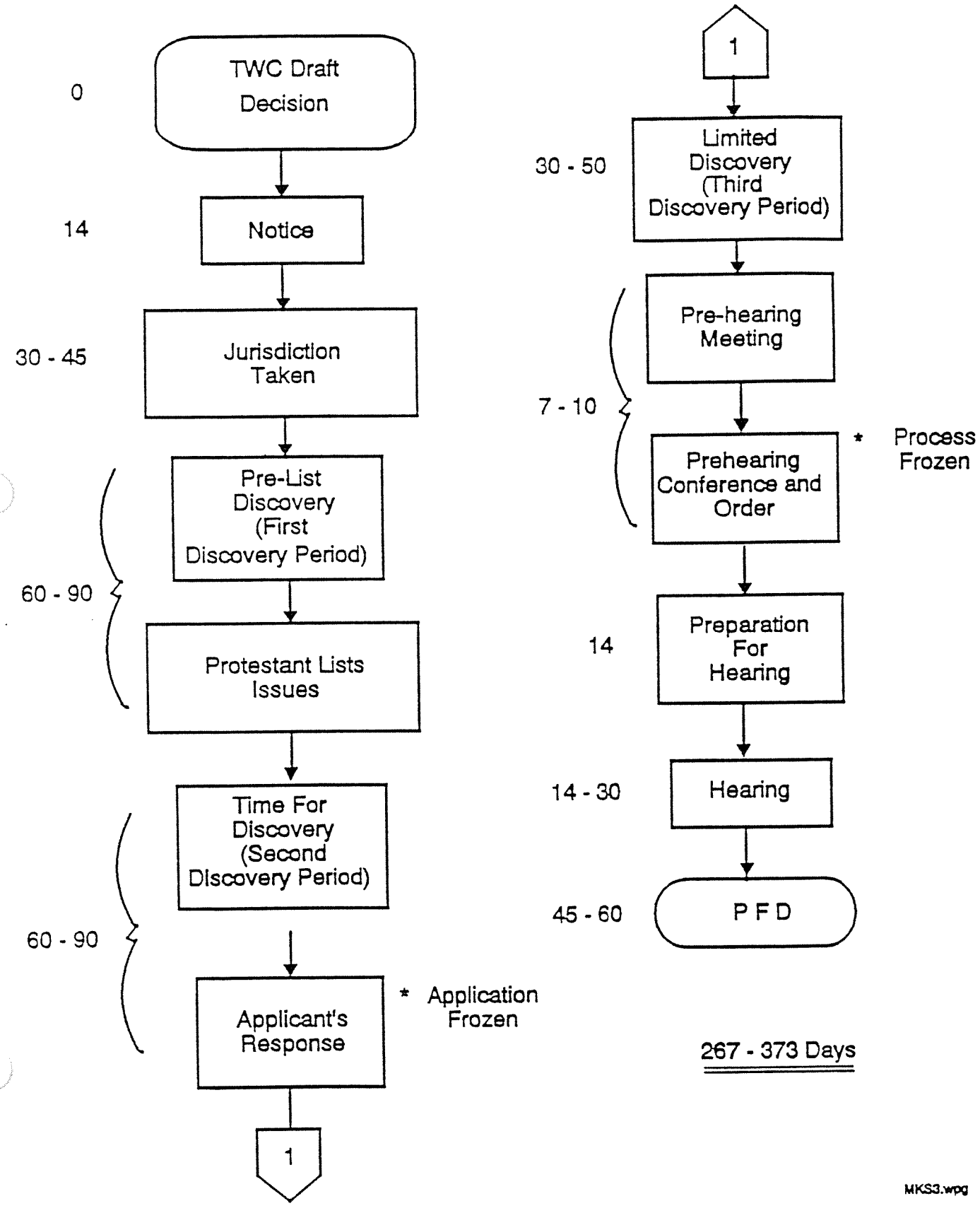
Rick Lowerre recommends that in order to reduce the unnecessary expenditures of resources of the Executive Director and any party, hearings examiners are authorized to issue recommendations that cut a hearing short of a full proceeding, including recommendation for dismissal, for summary disposition, and for directed orders. Jeff Civins recommends that summary disposition be available only in summary judgment type situations.

Rick Lowerre further recommends that in cases where such recommendations are made, the hearings examiner shall include within the recommendation two proposed orders. One shall provide for a final Commission decision based upon the recommendation. The second order shall include a summary of the status of the

proceeding, including a recommended schedule for the hearing in the event the matter is remanded back to the Office of Hearings Examiner for the remainder of the hearing.

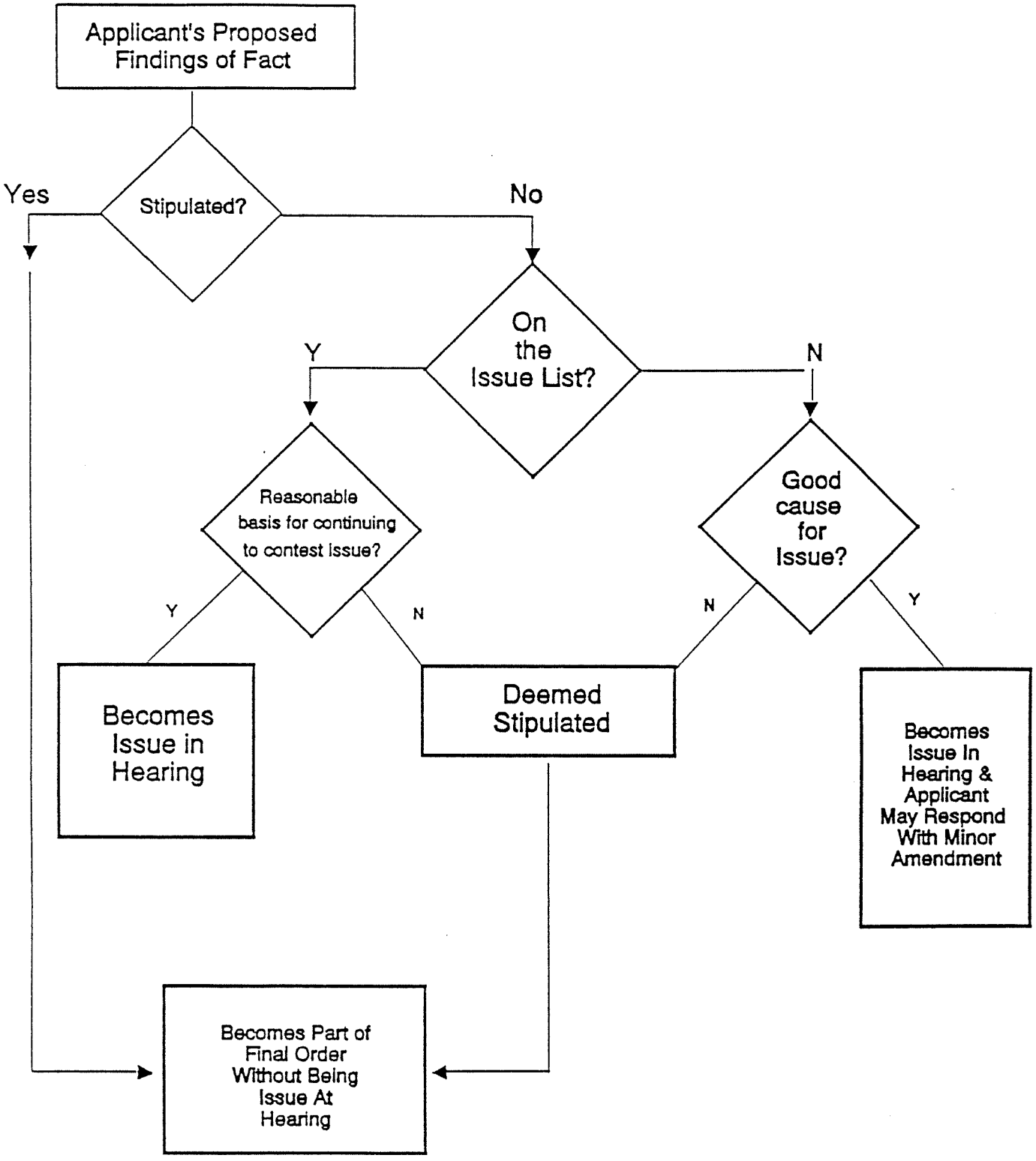
GW04:136738

Attachment A
Permit Hearing Process



ATTACHMENT B

Narrowing Issues at the Prehearing Conference



MKSCHAR2

ATTACHMENT C

IN THE MATTER	§	BEFORE THE
	§	
THE APPLICATION OF	§	
	§	
_____	§	TEXAS WATER COMMISSION

AGREED PROTECTIVE ORDER

_____ has claimed that information in documents identified on Schedule A attached hereto (hereinafter "Documents") should be protected from general release, because the information includes trade secrets or other confidential information. In order to assure all other parties have access to such information prior to a determination of the validity of _____ claims, this agreed protective order is hereby issued.

1. Any party, with the exception of the Executive Director, staff of other agencies, the Public Interest Counsel and the Office of Hearings Examiners,[1] that desires to review or obtain a copy of a Document shall be permitted access to review and copy the Document upon the signing of a copy of Schedule B to this order by its Authorized Representative;

2. The original of the signed Schedule B shall be filed with the hearings examiner, with a copy served on all parties;

3. The Authorized Representative shall be responsible for maintaining the confidentiality of the protected information in the Document, unless the Document is released by the Applicant from the claim of confidentiality or is ordered released from the claim of confidentiality by the hearings examiner, subject to Provision 9.

4. The Authorized Representative shall allow the party's representatives access to a Document only when necessary for the party's participation in this proceeding. Each person that is allowed access to a copy of a Document

[1]These entities have access to the information pursuant to Section 31 TAC 305.46, 31 TAC 261.8 and 31 TAC 261.9.

shall be required to read and acknowledge the Protective Order.

5. Each copy of a Document made for or by a party and any other document that includes confidential information derived from said document shall be identified with a unique number. A list of all such copies of documents shall be maintained by the Authorized Representative on a log and each copy or document shall be maintained as confidential in accordance with paragraph 3.

6. The contents of the confidential information in a Document shall not be disclosed to or discussed with anyone other than a representative of a party to this proceeding, the hearings examiner or the Commission. Any use of the document or the confidential information found therein at the hearing or in discovery shall be done with appropriate identification and protection by the party using the information.

7. After the final decision on this proceeding by the Commission or reviewing courts, all copies of Documents or parts thereof, and any other documents that include the confidential information derived from a Document shall promptly be delivered to _____.

8. Any claim of confidentiality for information in a Document does not extend to information contained in documents not claimed as confidential simply because the same information is also contained in confidential documents.

9. Any party seeking the release of a Document or information claimed as confidential may file a motion with the hearings examiner for a determination of the validity of the claim of confidentiality. If the hearings examiner rules that the claim is invalid, the Document or information shall not after 5 days be subject to this protective order, unless the Applicant files a notice of appeal within the 5 days and files a timely action in an appropriate court to enjoin the release of said document or information. The hearings examiner may, if justice requires, continue the hearing or any related schedule until a final determination is made in court on the confidentiality of the information.

10. Any claim of confidentiality is subject to Article 5 of the Texas Rules of Evidence.

11. Any false claim of confidentiality or any unauthorized release may be a basis for sanctions authorized by Texas

Water Commission rule against the offending party, or by enforcement action by the Executive Director.

12. In no event shall this Order be construed as limiting the Public Interest Counsel, the Executive Director, or the Texas Air Control Board access to the documents except as limited under Texas statutory restrictions applicable to disclosure of documents protected under claim of confidentiality.

_____ _____

Hearings Examiner Date

Attachment C

SCHEDULE A
LIST OF DOCUMENTS
WITH INFORMATION CLAIMED AS CONFIDENTIAL
BY _____

The information that is claimed as confidential in each document listed below shall be identified clearly on a cover page or with appropriate markings in said document.

Attachment C

SCHEDULE B

The undersigned, as Authorized Representatives, hereby agree to abide by the conditions set forth in this Protective Order.

_____ _____

Name Date

Attachment D

EXHIBIT B
RELEASE & INDEMNIFICATION

THIS RELEASE is executed by the Undersigned (the "Undersigned") in favor of the Released Parties ("B"). The Undersigned recognizes that the Property that will be entered may have inherent dangers and that the safety of the Undersigned cannot be guaranteed.

1. The Undersigned hereby releases and forever discharges (B), its contractors and subcontractors, officers, directors, shareholders, representatives, successors, assigns, agents, principals and employees from any and all claims of damages of every kind for injury to or death of any person or persons, and for damage to or loss of property which occurs during the time the Undersigned is on the Property to the extent said claim or damages are the result of the negligence, gross negligence or intentional acts of the Undersigned.

2. The Undersigned agrees to indemnify the Released Party for all injury to persons or property caused by the Undersigned's actions while entering upon the land.

3. The parties hereto understand and agree that neither this Agreement nor any part hereof shall be used or construed as an admission of liability on the part of any party, and that the releases, indemnifications and agreements contained herein are binding upon, and inure to the benefit of, the parties hereto, their respective heirs, successors and assigns, and all persons and entities claiming through such parties.

4. If any provision of this Release is held to be unenforceable, this Release shall be considered divisible and inoperative as to such provision to the extent it is deemed unenforceable, and in all other respects, this Release shall remain in full force and effect; provided, however, that to the extent a provision is found unenforceable, a provision as near in terms and effect as possible and legally enforceable shall be substituted in lieu of the unenforceable provision.

_____
Name:
Date:

ATTACHMENT D

IN THE MATTER	§	BEFORE THE
	§	
THE APPLICATION OF	§	
	§	
_____	§	TEXAS WATER COMMISSION

AGREEMENT FOR ENTRY

_____ HEREINAFTER, _____(X)_____ and _____ hereinafter _____(Y)_____, parties to this proceeding, agree as follows to the entry upon the property described in Exhibit A for purposes of discovery.

1. All representatives of _____(X)_____ shall, prior to entry, sign a copy of the Release (Attachment B and provide the signed copy to _____(Y)_____.

2. At least three working days prior to the entry, _____(X)_____ shall advise _____(Y)_____ of the general activities that shall take place upon entry and the names of all parties who shall enter.

3. At least 10 working days prior to the entry _____(X)_____ shall advise _____(Y)_____ of any plans to undertake any testing or other such activities on the property which will significantly affect the physical condition of the property, including such activities as drilling.

4. _____(Y)_____ has the right to accompany representatives of _____(X)_____, unless such division of the sample would render the sample unfit for analysis.

5. _____(X)_____ shall not take any action which damages the physical condition of the property so as to render the property inappropriate for the activities proposed by _____(Y)_____.

6. (X) shall observe all reasonable restrictions or requirements imposed by the owner of the property.

7. With regard to this entry upon land (X) shall comply with the provisions of the Protective Order issued by the hearings examiner on _____, 19__.

_____ _____

X Y

_____

Date

Attachment D

EXHIBIT A

Description of Property

MEMORANDUM FROM

GARDERE & WYNNE
A Registered Limited Liability Partnership
ATTORNEYS AND COUNSELORS
1601 Elm Street, Suite 3000
Dallas, Texas 75201
(214) 999-3000

TO: Members of the Texas Water Commission Permit Hearings Process Task Force

FROM: Mary K. Sahs

DATE: June 1, 1993

RE: Addendum to the Final Report of the Discovery/Sanctions Subcommittee

****

The Discovery/Sanctions Subcommittee presented its final report to the Permit Hearings Process Task Force at the May 27 Task Force meeting. The Task Force discussed a number of the Subcommittee recommendations, including the recommendation below. Due to time contraints, the Subcommittee, does not anticipate issuing a revised report.

During the presentation, it was noted that the Subcommittee's recommendations regarding the participation by the Public Interest Counsel in the proposed discovery and hearing process had inadvertently been left out of the final report. The Subcommittee's proposal as drafted is as follows and should be included under the headings as shown.

IV. <u>The "Freezing" Concept and Narrowing the Scope of the Hearing</u>

B. Identifying Issues

3. Public Interest Counsel

The Subcommittee believes that in the interest of fairness, the Public Interest Counsel should be required to follow the same time lines and schedules as the Protestant, even though the PIC's position is not necessarily aligned with that of the Protestant. The Subcommittee believes that before recommending that such restrictions should apply to the PIC, the Task Force should be aware of the practical consequences of those restrictions.

Requiring the PIC to submit an issues list at the time the Protestant is required to submit a list would substantially change the manner in which the PIC has traditionally prioritized its limited resources. Such a requirement would foreclose the PIC from espousing a position on an issue unless it had listed that issue. Frequently the PIC does not even enter a case until the matter is well under way and the Office is alerted by parties or members of the public, that the matter requires the attention of the PIC. Additionally, the PIC has traditionally taken a position at agenda, even when the Office has not participated in the hearing on a matter.

138007/4

TEXAS AIR CONTROL BOARD

12124 PARK 35 CIRCLE, AUSTIN, TEXAS 78753, 512/908-1000

KIRK P. WATSON
CHAIRMAN

BOB G. BAILEY
VICE CHAIRMAN

WILLIAM R. CAMPBELL
EXECUTIVE DIRECTOR

SUZANNE L. AHN, M.D.
JACK V. MATSON, Ph.D., P.E.
CALVIN B. PARNELL, JR., Ph.D., P.E.
WILLIAM H. QUORTRUP
C. H. RIVERS
WARREN H. ROBERTS
MARY ANNE WYATT

September 17, 1992

TO: Interested persons:

RE: September 14, 1992 meeting regarding Texas Water Commission hearing procedures.

Enclosed is a copy of the final version of directives adopted by the Texas Air Control Board at its last meeting. In addition, enclosed is a draft of our proposed rules for those directives, or portions thereof, which we concluded will require rulemaking.

If you have any further questions or need more information, please call me at 908-1772.

Bill Ehret

Bill Ehret
Director of Hearings

Enclosures

c:\docs\wp\be\2hrgpro.ltr

The Texas Air Control Board (TACB) proposes amendments to §103.33, concerning Initiation of Other Than Rulemaking Hearings, and §103.42 and §103.46, concerning Adjudicative Hearings. The proposed changes are in response to an initiative by the Hearings Oversight Committee to improve the hearings process and include input from the Chairman of the TACB, the general public, and the TACB staff.

The proposed changes to §103.33, concerning Action on Request for a Hearing, outlines what a requestor will be required to provide after a request for a hearing has been received by the Executive Director and the procedure for appealing the Executive Director's decision to grant a hearing. The proposed changes to §103.42, concerning Hearings Examiners, establishes the order for presenting evidence and specifies that the consequence for withdrawing a permit application solely for the purpose of obtaining a continuance is a requirement to wait at least 90 days before being allowed to refile a new application. The proposed changes to §103.46, concerning the Prehearing Conference, requires an initial prehearing conference, sets the conditions for a second prehearing conference, specifies what the applicant is required to make available to named parties or their counsel, and states that each party bears the responsibility for its own document copying costs.

Mr. Lane Hartsock, Deputy Director of Air Quality Planning, has determined that for the first five-year period the proposed sections are in effect, no additional cost is anticipated for the state government for administering the sections.

Mr. Hartsock has also determined that for the first five-year period the proposed sections are in effect, the public benefit anticipated as a result of implementing the sections will be a more equitable and efficient hearing process. Economic costs to persons and businesses required to implement the proposed change are insignificant.

A public hearing on this proposal is scheduled for _____ on _____ in the Auditorium (Room 201S) of the TACB central office, Air Quality Planning Annex, located at 12118 North IH-35, Park 35 Technology Center, Building A, Austin, Texas 78753. The hearing is structured for the receipt of oral or written comments by interested persons. Interrogation or cross-examination is not permitted; however, a TACB staff member will be available to discuss the proposal prior to the hearing at _____. Public comment, both oral and written, on the proposed new sections is invited at the hearing.

Written comments not presented at the hearing may be submitted to the TACB central office in Austin through _____. Material received by the Regulation Development Division by 4:00 p.m. on that date will be considered by the Board prior to any final action on the proposed new sections. Copies of the proposed revisions are available at the central office of the TACB located at 12124 North IH-35, Park 35 Circle, Austin, Texas 78753, and at all TACB regional offices. For further information, contact Mr. Bill Ehret at (512) 908-1772.

Persons with disabilities who have special communication or other accommodation needs who are planning to attend the hearing should contact the agency at (512) 908-1815. Requests should be made as far in advance as possible.

These amendments are proposed for adoption under §382.017 of the Texas Clean Air Act (TCAA), TEXAS HEALTH AND SAFETY CODE ANN. (VERNON 1990), which provides the TACB with the authority to adopt rules consistent with the policy and purposes of the TCAA.

INITIATION OF OTHER THAN RULEMAKING HEARINGS

§§103.31-103.32. (No change.)

§103.33. Action on Request for a Hearing.

(a) (No change.)

(1)-(2) (No change.)

(b) After receipt of a request for a hearing, the Executive Director or his designate shall require the requestor to provide in writing a brief, but specific, statement of interest and basis for challenging the application. Such statement should convey in plain language the requestor's location relative to the proposed facility, why the requestor believes he or she will be affected by emissions from the proposed facility, what the requestor's concerns are about the emissions from the proposed facility, and how the requestor believes emissions from the facility will affect him or her if permitted. This statement shall not be used as the basis for denial of party status in any contested case hearing; party status determinations will be made based on information developed at the initial prehearing conference.

(c) A decision by the Executive Director to grant a hearing request pursuant to 103.33(a)(1) or (2) may be appealed by the applicant to the Board within 30 days after notification of the

decision. Such appeal is to be taken by written notification to the Executive Director. Section 103.71 of this title (relating to Request for Action by the Board) should be consulted for the method of requesting Board action on the appeal. If a contested case hearing has already been called, the submission of an appeal by the applicant pursuant to this section stays all further actions in the hearing, until the appeal has been subject of final action by the Board.

(d) [(b)] The decision of the Executive Director to deny a request for hearing is appealable to the Board within 30 days after notification of the decision. Such appeal is to be taken by written notification to the Executive Director. Section 103.71 of this title (relating to Request for Action by the Board) should be consulted for the method of requesting Board action on the appeal.

§103.34. (No change.)

This agency hereby certifies that the proposal has been reviewed by legal counsel and found to be within the agency's authority to adopt.

Issued in Austin, Texas, on

Lane Hartsock, Director
Air Quality Planning Program
Texas Air Control Board

ADJUDICATIVE HEARINGS

§103.41. (No change.)

§103.42. Hearing Examiner.

(a) Examiners shall be designated to preside at hearings and to report to the Board on such hearings in the manner provided by law. In any adjudicative hearing, the examiner shall have no other duties concerning the hearing and shall be considered to be assisting the Board in its decision-making function. The examiners shall have no prosecuting duties with the agency and shall act independently of the staff in an impartial manner. A hearing examiner assigned to a particular proceeding or case shall have the authority to:

(1)-(4) (No change.)

(5) designate and align parties and establish the following order for presentation of evidence in hearings on permit applications and emergency orders: [;] the Texas Air Control Board Staff (Staff) will open with a simple statement of its current position on the application, and will present the Staff's draft permit including any special provisions. The applicant presents evidence to meet its burden of proof on the application, any opponents present evidence, and the Staff presents its evidence. Each party is given the opportunity for rebuttal, with the applicant's rebuttal being last in order of presentation. Nothing herein should be construed to change the burden of proof being upon the applicant;

(6)-(15) (No change.)

(b)-(c) (No change.)

(d) In the case where an applicant withdraws a permit application solely for the basis of obtaining a continuance, the application shall be withdrawn with prejudice to refiling for 90 days.

(e) [(d)] If a hearing examiner fails to complete an assigned case before a final order is rendered, the Director of Hearings may appoint another examiner on the hearings staff to complete the assigned case without the necessity of duplicating any duty or function performed by the previous examiner.

§§103.43.-103.45. (No change.)

§103.46. Prehearing Conference.

(a) The hearing examiner shall hold an initial prehearing conference at which party status is determined and a discovery schedule is set. Reasonable notice of the time and location of the conference shall be provided to all parties. A second pre- hearing conference may be scheduled at which time the examiner will determine the contested case issues and accept any stipulations as to such contested issues. [The hearing examiner may hold a prehearing conference prior to any adjudicative hearing. The examiner shall set the time and location of the conference and give reasonable notice thereof to all parties. At the discretion of the examiner, persons other than parties may attend prehearing conferences. At the discretion of the examiner, additional prehearing conferences may be scheduled.]

(b) To facilitate transfer of basic information and preparation of the parties for the hearing and without precluding further discovery by any of the parties, in all contested cases, the applicant shall make available to named parties or their counsel at a mutually agreeable time and place, which shall be determined by the hearing examiner:

(1) copies of the permit application; and

(2) any information which the applicant will rely upon in the hearing, such as facts or data upon which an expert bases an opinion or inference, including but not limited to the following:

(A) any engineering or technical studies performed in support of the application;

(B) any emissions modeling report or computer runs of air emission models for the proposed facility;

(C) any health effects assessment conducted by or for the applicant for the proposed facility; and

(D) resumes and reports of any experts who will testify for the applicant in the hearing.

(c) [(b)] The hearing examiner may direct that one or more of the following be transmitted by each party to all other parties or their representatives and to the hearing examiner by a date established by the hearing examiner:

(1)-(4) (No change.)

(d) Except for the copy of the application which the applicant shall provide to all parties, each party bears responsibility for its own document copying costs.

(e) [(c)] Witnesses and proposed written evidence may be added and narrative summaries of expected testimony amended at the hearing only upon a finding of the hearing examiner that good cause existed for failure to exchange the additional or amended material by the established date.

(f) [(d)] At any prehearing conference, or in the prehearing conference summary, the hearing examiner:

(1)-(6) (No change.)

(g) [(e)] The results of any prehearing conference shall be summarized in writing by the hearing examiner and made part of the record.

§§103.47.-103.66. (No change.)

This agency hereby certifies that the proposal has been reviewed by legal counsel and found to be within the agency's authority to adopt.

Issued in Austin, Texas, on

Lane Hartsock, Director
Air Quality Planning Program
Texas Air Control Board

PROPOSALS RELATING TO CONTESTED CASE HEARINGS

* Under current TACB rules, applicants have the right to appeal the decision of an Executive Director if the Executive Director determines that a contested case hearing should be called and the applicant believes the Executive Director has erred. Likewise, individuals have the right to appeal the decision of the Executive Director in those instances where they believe the Executive Director has wrongly denied a contested case hearing. In this regard, the TACB directs the Executive Director to make appropriate use of existing authority to deny "unreasonable" requests for hearing. This includes instances where the person's residence is too distant from the proposed facility when considered in relation to the magnitude of the emission from the proposed facility or there is a clear intent to abuse the process, e.g., where the opponent is making demands upon the applicant solely for concessions unrelated to air quality. In cases in which the Executive Director exercises his/her discretion to deny a hearing request, he/she should offer the alternative of a public meeting in the locale of the proposed facility and a period for public comment. When a public meeting is held in lieu of a hearing, citizen comments shall be considered by TACB staff for possible inclusion as additional permit provisions.

* Applicants must place notices of application in local papers with the largest general circulation. In appropriate circumstances, the notice shall be in English and Spanish or English and other dominant language.

* Amend the TACB procedural rules to require that after receiving a request for hearing, the TACB will require the requester to provide a brief but specific statement of interest and the basis for challenging an application. The document should be drafted in plain language that will help the person determine issues such as location, why the person believes they will be hurt by the proposed facility, what the person's concerns are about this facility, and how this person believes the facility will affect them or their lives. While this statement would be helpful to the TACB, it should not be the basis for a denial of party status and the person retains the right to come to a prehearing conference to prove standing or a justiciable interest.

* The Board will direct the hearing examiners to deny party status for a person who fails to appear in person or by agent at the prehearing conference absent advance, valid written justification (e.g., illness, trial conflict, etc.). Any agent must have authority and knowledge of relevant facts sufficient to bind the person or entity seeking party status. If the person requesting a hearing is not present at the prehearing conference, it does not eliminate the opportunity for other persons who appear at the prehearing conference to obtain party status.

* The Board will direct the hearing examiners to deny continuances for any party absent specific showings to rebut a presumption in favor of the current setting. In the case where an applicant withdraws a permit application solely for the basis of obtaining a continuance, the application shall be withdrawn with prejudice to refiling for 90 days and the applicant must pay the attorneys' fees and expert fees of any opponent.

* The Board will direct the examiners to align all parties upon motion and demonstration by movant that the party interest are similar.

* The Board will direct the hearing examiners to designate liaison counsel for aligned parties, where appropriate, and limit the service of copies of documents to service upon liaison counsel.

* Hearing examiners will minimize the burden of proving uncontested issues by: a) holding an initial prehearing conference at which party status is determined, a discovery schedule is set, and a second prehearing conference is scheduled to occur after discovery; and b) holding a second prehearing conference at which the parties will stipulate as to certain issues, there will be an identification of contested issues, and there will be an agreement as to the authenticity of evidence. At the first conference, a hearing will be scheduled.

* In all contested cases in which prehearing discovery is to take place, the applicant shall make available to named parties or their counsel, at a mutually agreeable time and place, copies of the application, any engineering or technical studies performed in support of the application, any emissions modeling report or computer runs of air emission models for the proposed facility, and health effects assessment conducted by or for the applicant for the proposed facility, and resumes and reports of any experts who will testify for the applicant in the contested case proceeding. This provision is not intended to preclude further discovery by any of the parties, but rather to facilitate transfer of basic information and preparation of the parties for the hearing. With the exception of the application, a copy of which the applicant shall provide to all parties, each party bears responsibility for its own document copying costs.

* Amend the TACB procedural rules to establish the following framework for case presentation: 1) staff opens hearing with a simple statement of its current position on the application; 2) applicant presents evidence to meet its burden of proof; 3) any opponents then have opportunity to present evidence; 4) staff puts on evidence; and 5) each party is given rebuttal opportunity. Applicant goes last. Nothing herein should be construed to change the burden of proof being with the applicant.

* When it will expedite the hearing, examiners are directed to encourage the use by the applicant and opponent of written direct testimony instead of oral testimony for proof of direct case. In such cases, staff may use written direct testimony at its discretion. The exception to this direction will be in instances which an applicant or opponent are pro se. The use of written direct testimony will be used only when the parties agree to it.

* The Board will direct the hearing examiners to follow the rules of evidence more strictly and allow only relevant and admissible evidence to be admitted at the hearing.

* The Board will amend the procedural rules to establish a mandatory alternative dispute resolution (ADR) procedure, with sanctions for failure to follow such procedures. The mediation or arbitration is nonbinding. However, any agreements reached during ADR are binding.

* The Board will direct hearing examiners to begin all hearings as soon as practical and fair following the second prehearing conference.

* The Board will direct the examiners to hold evidentiary hearings in Austin except under circumstances that will expedite the hearing.

* The Board will direct that prehearing conferences be held "in the field" in cases in which fairness or circumstances of the case dictate such a conference.

* The Board will direct the hearing examiners to establish and enforce discovery and other deadlines.

* The Board will direct the hearing examiners to establish and enforce reasonable time limits for direct and cross-examination of witnesses.

* The Board will direct the hearing examiners to impose procedural sanctions upon any party engaging in repetitive questioning or other dilatory tactics upon proper objection.

* The Board will direct the hearing examiners, at the close of evidence, to establish a time period in which any party may file draft Findings of Fact, Conclusions of Law, and a proposed order for submission to the Examiner and all of the parties, and consider limitations on briefing prior to the issuance of the Examiner's final Proposal for Decision. The hearing examiner should also be directed to take into consideration the flexibility of this direction in those instances where citizens do not have counsel.

* There will be a maximum period of time (e.g., 90 days) between the delivery of the hearing transcript to the hearings examiner and the parties and the presentation of the hearing examiner's Proposal for Decision to the Board.

* The scope of a remand is limited to those issues that were actually the basis of the remand.

Mailing List

Ms. Claire P. Arenson
Chief Hearings Examiner
Office of Hearings Examiners
Texas Water Commission
1700 N. Congress Avenue
Austin, Texas 78711-3087

Ms. Molly Cagle, Attorney
Vinson & Elkins
816 Congress Avenue, Suite 1700
Austin, Texas 78701-2496

Ms. Kari Bourland-Chestnut
Industrial & Hazardous Waste Permits
Texas Water Commission
P. O. Box 13087
Austin, Texas 78711-3087

Ms. LaDonna Castanuela, Attorney
Office of the Public Interest Counsel
Texas Water Commission
P. O. Box 13087
Austin, Texas 78711-3087

Mr. Jeff Civins, Attorney
Kelly, Hart & Hallman
301 S. Congress Avenue
Suite 2000
Austin, Texas 78704

Ms. Mary Ruth Holder, Director
Legal Division
Texas Water Commission
P. O. Box 13087
Austin, Texas 78711-3087

Ms. Shirley K. Holland
League of Women Voters of Texas
1212 Guadalupe, Suite 107
Austin, Texas 78701

Ms. Mary Kelly, Attorney
Henry, Kelly & Lowerre
2103 Rio Grande
Austin, Texas 78705-5512

Mr. Ken Ramirez
Deputy Executive Director
Office of Legal Services
and Compliance
Texas Water Commission
P.O. Box 13087
Austin, Texas 78711-3087

Ms. Celina Romero, General Counsel
Texas Water Commission
P. O. Box 13087
Austin, Texas 78711-3087

Mr. Mark White, Attorney
Baker & Botts
98 San Jacinto Blvd., Suite 1600
Austin, Texas 78701

Citizen Participation in Environmental Policymaking

"The People's Choice"

Stacey Abel

Pam Giblin

Erich Birch

Biographical Information

Erich M. Birch

Erich Birch is an attorney with the Austin law firm of Lloyd, Gosselink, Fowler, Blevins & Mathews, P.C. The firm specializes in the areas of environmental, water, administrative, municipal, utility, construction contract, and real estate law before federal and state agencies, in both federal and state courts, and before municipal governments. Erich was the Public Interest Counsel for the Texas Water Commission prior to joining Lloyd Gosselink. With the Water Commission he also worked as a staff attorney in the Legal Division handling matters involving hazardous waste, superfund, petroleum storage tanks, and contracts, and also served as Senior Attorney in the Legal Division with responsibility for the Petroleum Storage Tank Program. Prior to joining the Commission he was an engineer with Monsanto Chemical Company for thirteen years.

Erich is originally from Mobile, Alabama. He received his B.E. in Mechanical Engineering from Vanderbilt University in 1976, and received his Law degree from the University of Houston in 1989. He is also a Registered Professional Engineer in the state of Texas.

"Citizen Participation in Environmental Policymaking"

5th Annual

Texas Environmental Superconference

Erich M. Birch, P.E.

Lloyd, Gosselink, Fowler, Blevins & Mathews, P.C.
Austin, Texas

August 6, 1993

INTRODUCTION

This paper presents a philosophical approach for citizen participation in environmental policy making. The concepts in the paper are not necessarily new and neither are they unique to the environmental context; however they propose a model for at least one approach to effectuating change. Briefly this paper reflects the authors opinion that prior to actively engaging in the influencing process, a citizen should deliberately think though a four step analysis consisting of: 1) clearly identifying his or her ultimate goal, 2) deciding whether the required policy change will have a narrow impact or broad reaching effect, 3) targeting the specific level or levels in the entire regulatory chain which will best achieve the targeted goal, 4) developing and implementing a plan to effect change in policy.

This paper is oriented to the individual citizen attempting to influence environmental policy; however, the concepts are equally applicable to businesses, consumer groups, etc. who desire to influence change. The views expressed are the author's personal views and observations based on experience in private industry and public service. Some literature is available on this subject and cites have been provided where appropriate.

1. The Goal:

Individuals have various reasons for wanting to influence policy. These range from the entirely selfish, individualized goals to the more far-reaching, altruistic driven goals. The landowner who has just discovered a hazardous waste disposal facility will be located adjacent to his property will probably have a very narrow minded position regarding disposal facility siting policy. The landowner's entire policy position in reality is likely limited to this one particular facility. In fact the landowner may have no philosophical disagreement with the need for hazardous waste disposal or with the particular technology involved, instead it is simply a manifestation of the NIMBY ("Not In My Back Yard") syndrome. By contrast, an individual focused on the more amorphous concept of providing for the "good of the public" may have a general policy of opposing hazardous waste generation and may therefore oppose citing of hazardous waste facilities as a general principle.

Once the goal is clearly identified, the individual must face him or her self to determine whether the policy motivations are for the public good, or primarily selfish. Note that this is not a value judgement regarding the worth of the motivation, it is simply a reality which should be recognized in order to effectively focus on the required change. Once this is established, the individual is better able to determine how extensive the policy changes need to be.

2. POLICY EXTENT:

The observation regarding the cite specific versus the public good provides a scale for categorizing the goal of a policy influencing activity. An individual needs to determine whether his goal is cite specific, i.e. impacting or affecting one cite or geographic area, or whether it is an effort at far reaching statewide or national policy changes. In the example above regarding the individual landowner and the public advocate, a key difference between the two situations is the options for achieving their respective goals. The landowner has greater flexibility in approach since options ranging from local efforts to global regulatory changes can all accomplish the specific localized result of eliminating the presence of the hazardous waste facility. However, the more generic public interest advocate in the latter instance will view a localized effort only as a stepping stone to a more global goal, and additional broader reaching policy changes will be required. Establishing the desired extent of impact directly influences the type of policy change required. The landowner opposing a single installation need not change the world.

3. POLICY LEVEL AND FORUM

"Policy" can be defined as "the general principles by which a government is guided in its management of public affairs, or the legislature in its measures."[1] The public policy of a state is determined by its constitution, laws and judicial decisions.[2] The private citizen will most readily affect policy through changes in laws and judicial decisions, and of these two, this paper will focus on efforts to affect environmental policy through the legislative/rule writing process.

Environmental policy can be influenced in at least six semi-hierarchical levels. These levels start with the individual facility or operation, and then move to local government, state agency, state legislature, federal agency, and ultimately to the U.S. legislature. Each of these levels is capable of setting independent environmental policy, however to varying degrees each is subject to all the higher policy setting levels. A brief review of each of these levels will assist in discussing the options for impacting policy change.

The most basic and sometimes overlooked level involves the specific facility, generator, disposer, etc. which causes concern. Discussions with corporate officers can produce effective changes in local policy without the need to escalate to a regulatory

---

[1] Black's Law Dictionary, 5th ed.

[2] Grand Lodge Free and Accepted Masons of Texas v. Walker, 110 S.W.2d 945, 949 (Tex. Civ. App.-Dallas, 1937, no writ).

framework. These discussions can produce the additional benefit of establishing relationships and fostering goodwill between the private and corporate citizen, and thus providing the foundation for future problem resolution. An additional leverage which the citizen has in dealing with the corporate level is the knowledge that the less friendly forms of influence, i.e., government regulation or litigation, are always available.

Local government ordinances present the next level for implementing and influencing environmental policy. For instance, local governments are specifically granted certain powers for managing solid waste under the Texas Solid Waste Disposal Act[3]. The local government is normally the level of government which is closest to the problem and thus may be most receptive to working with the citizen in addressing policy issues. However, local governments are also limited in their delegated power and their attempts to effect policy change may be frustrated by a state agency.

State agency rules and regulations are probably the most visible sources of environmental policy. On September 1st., this visibility will be increased in Texas as it consolidates its primary environmental agencies into the Natural Resources Conservation Commission ("NRCC"). Agency policy is provided in codified rules and regulations, written agency policy and unwritten but (usually) readily communicated statements of policy. The state agency adoption of official policy is regulated by the Administrative Procedure and Texas Register Act ("APTRA"). APTRA defines a "rule" as "any agency statement of general applicability that implements, interprets, or prescribes law or policy..."[4] Because of this broad definition, theoretically all agency policy must comply with the provisions of APTRA which call for public notice, public comment, and various administrative and public impact statements (temporary exceptions to these requirements are provided for emergency adoption of rules). Although these are the legal requirements for policy adoption, and any policy failing to meet the requirements of APTRA could be challenged in court, as a practical matter informal policies are often in place which guide agency decisions on a daily basis. The state agency is a creature of legislation and any environmental policy setting by the agency is limited to the powers conferred by statute.

Statutes ultimately dictate environmental policy, and all policy setting within the state are subject to state law. The elected officials creating these laws are in fact implementing policy which by design is reflective of the needs and wishes of the general public. An obvious limitation of this form of policy making in

---

[3] Texas Solid Waste Disposal Act, Vernon's Texas Codes Annotated, §361 Subchapter E, Health and Safety Code, 1992.

[4] Art 6252-13a, Sec. 3(7), Volume 17½ R.C.S.A, Vernon's Supp., 1992, hereinafter, "APTRA."

Texas is that it is normally only available every two years. However, when convinced of the need, generally representatives can also be helpful in providing input to other levels of government.

In addition to the above state oriented policy generators, the federal level provides yet another access to environmental policy. Federal agencies and federal statutes provide baseline policies for the nation which must be adopted, with certain flexibilities, by each state.

Each of these six policy levels provide an access point where an individual may influence environmental policy. The reason for this discussion is to suggest that there is a "correct" place to initiate participation in policy making. This correct place is dictated by the breadth of change desired and the authority necessary to effectuate the change. Starting too low in the hierarchy is not effective, and starting too high will either result in a referral to a lower level, or will find it stagnated while "under consideration." Establishing where this correct level lies requires research regarding delegated regulatory authority.

The forum for providing policy input is closely tied to the policy setting levels described above. The "forum" as used here is the appropriate sub-level within each organization for directly providing policy input. The correct forum is important since each sub-level also has its limits of authority and much time and effort can be wasted attempting to provide input to the wrong individual or department. Review of organizational charts and calls to human resources departments may provide useful insight for initial contacts. Corporations may be accessed through local operational personnel, plant management, corporate executives and stockholders. Government bureaucracy may pose a formidable obstacle when trying to identify the correct access point, especially in a state agency. The breadth of policy change required will dictate whether contact should be initiated with individuals at the staff, mid-management or leadership level.

In addition to direct personal contact, formal forums are available for providing input for agency policy making through the rule writing process. Where new or amended rules are being proposed, public input may be provided either in writing or orally at public meetings. Also, APTRA provides for and agencies often use task forces consisting of knowledgeable and interested persons from the private sector as consultants and advisors.[5]

Some organizations also provide dedicated functions for soliciting input or representing citizenry. The Texas Water Commission (soon to be NRCC) has the Ombudsman's office which responds to citizen complaints and provides assistance to citizens attempting to work through specific issues inside the agency, and has the Office of Public Interest Counsel which provides assistance to citizens

---

[5] APTRA, Sec. 5(f).

involved in contested case proceedings, including rules and policies of the agency. Other levels of government and many private organizations have similar functions for direct citizen input.

We should also not forget that a seventh option is available when none of the above avenues provide satisfactory results. Obviously the court system provides another opportunity to dictate policy when the legislative functions fail to give relief. In fact, many environmental statutes expressly provide for citizen involvement through court action.[6]

5. ACTION PLAN

Once all of the above variables have been evaluated, the citizen should prepare a plan for providing input. This plan may be as simple as appearing at a public meeting or writing a letter, or as sophisticated as actively participating on task forces or getting involved in lobbying efforts. Where policies involve volatile issues, attention has been raised by public protests, letter writing campaigns, and in extreme cases forms of civil disobedience.

A word should be said about dealing with policy makers. It is often easy to forget, especially in highly emotional settings, that the policy makers are also people. Agency personnel especially are sometimes treated as though they are totally insensitive to the opinions expressed by an interested, but frustrated citizen. Realizing the perspective of the policy maker may help in framing opinions in terms which are more receptive and easier to understand by the individual policy maker involved.

When approaching a policy maker, the following four items should be addressed prior to requesting a change: 1) develop a clear statement of the problem or change requested, 2) establish that the requested change is clearly within the discretion and authority of the policy maker (this comes from approaching the "correct" level of policy maker as described above), 3) provide a proposal for correcting the problem, including proposed language when changing a rule or statute, and 4) present information concerning the other side of the issue, e.g., what other options are available, who will be affected and probably object if the proposed policy is adopted, and what responses are appropriate for those situations.

EXAMPLES

Some simple examples may help explain the proposed approach to

---

[6] See, e.g., 42 U.S.C. § 9659 of the Comprehensive Environmental Response, Cleanup & Liability Act, or, 15 U.S.C. § 2619 of the Toxic Substances Control Act.

influencing environmental policy as described here.

Example #1

Situation: An existing facility installs lighting for late night receipt of hazardous waste shipments. The adjacent landowner has an egg production facility, and the new lights are interfering with the laying operation.

Goal: Eliminate the lights. A local, selfish desire.

Extent of policy: Not concerned with saving the world from night lighting, but only this one site specific condition.

Policy Level options: Corporate - discuss the situation with company officials; Local - ordinance prohibiting lighting near egg facilities; Agency - rule prohibiting night receipt of hazardous waste shipments, or, prohibiting interference with agricultural operations, etc.; Legislature - statute regarding interference with agricultural operations.

Action Plan: Since this is a site specific condition, the "correct" level for the landowner to start the policy influencing process is at the facility level. If no success, the state representative should be made aware of the problem, while the landowner moves up the regulatory hierarchy in attempts to change the policy of this environmental operation.

Example #2

Situation: A concerned citizen believes all trucks carrying hazardous waste should travel on separate dedicated highways, and is convinced that this is for the public good.

Goal: Prohibit trucks carrying hazardous waste from traveling on public highways.

Extent of Policy: Primarily concerned about Texas, but would prefer adoption as national standard.

Policy Level options: Because of the broad application intended, discussions with a specific entity or with local governments will not achieve the desired results. The state agency probably lacks the authority to adopt such a broad prohibition by rule. Therefore, efforts should be focused at the legislative level. The citizen may additionally discover that federal effort is also required for trucks under federal jurisdiction traveling within the state.

Action Plan: Contact state representatives and begin lobbying efforts for new statute. Establish relationship with state regulators to gain support. Investigate authority of federal

agency to circumvent state transportation standards.

Example #3

Situation: Adjacent landowner to PST treatment facility decides that all facilities should have trucks painted green to match the local scenery, and is convinced this is for the public good.

Goal: Requirement that all trucks inside a facility hauling PST soil should be painted green.

Extent: Concerned about all facilities in Texas.

Policy Options: Because of the broad application intended, discussions with a specific entity or with local governments will not achieve the desired results. The state agency probably has the power under its general PST regulatory authority to adopt this new policy.

Action Plan: The citizen should make contacts to determine the appropriate person in the agency to discuss the change. The citizen may need to formally petition the agency to adopt rules as provided under APTRA. The citizen should provide the basis for the change and suggested language for implementing the new policy.

SUMMARY

Influencing environmental policy can be achieved in a relatively deliberate fashion. Clear goals regarding the intended results, and an understanding of where and how policy is established are essential to influencing change. Policy makers generally make better policy when given sufficient input, and a citizen with a genuine concern and a well thought through solution will find his or her ideas incorporated in statutes or codified in rules as a testimonial to the power of the individual citizen.

What to Do When an Inspector Shows Up

"Truth or Consequences"

Jim Rice

Walt James

What to do When an Inspector Shows Up

Presented at the 5th Annual
Texas Environmental Superconference
August 5-6, 1993

James A. Rice
Texas Water Commission

Biography - James A. Rice

Job Duties

Field Investigator, Texas Water Commission, Houston, Texas. Inspections, investigations, and report writing dealing with water quality, water rights, wastewater permits, and citizen complaints.

Education

M. S. Environmental Management 1988, University of Houston/Clear Lake, Houston, Texas

B.S. in Biology 1972, Akron University, Akron, Ohio

Experience

6 years working as a Field Investigator with the Texas Water Commission

Phone

(713) 457-5196 work, (713) 457-6107 fax

What to do When an Inspector Shows Up

I. Introduction.....1

II. Authority to Conduct Inspections.....1

A. The Laws.....1

B. What the Laws Mean.....3

III. What to do When an Inspector Shows Up.....3

A. Types of Facilities.....3

B. Self Audits.....4

C. Conducting Inspections.....7

D. Regulatory Relations.....8

IV. Inspections.....9

A. The Purpose of Inspections.....10

B. The Inspectors Role.....10

C. What We Look At.....11

D. The Inspection Process.....15

V. Summary.....16

What to do When an Inspector Shows Up

Since Federal and State laws and regulations provide for unannounced inspections and records reviews, preparation is the best way to handle an inspection. Self auditing can help insure that only minor problems will be encountered during an inspection. The right personnel, training programs, funding, and organizational atmosphere are also important. Knowing what to expect and what regulators look for can help make the preparation easier and the inspection process go smoother.

The Texas Water Commission (TWC) gets it's authority to conduct inspections from several laws and regulations.

- Texas Water Code, Section 26.121, Unauthorized Discharges Prohibited. Prohibits discharges of pollutants to the waters of the State except as authorized by rule, permit, or order by the Texas Water Commission.

- Texas Water Code, Section 26.014, Power to Enter Property. Entitles Texas Water Commission employees and agents of the commission to enter any public or private property to conduct inspections or investigations.

- Texas Water Code, Section 26.015, Power to Examine Records. Authorizes the TWC employees and agents of the commission to examine any records pertaining to the discharge of waste.

- Penalties for violations of the Texas Water Code, Chapter 26 or rules, permits, or orders of the commission are established in Section 26.122, Civil Penalty and Section 26.136, Administrative Penalty.

- Texas Administrative Code (TAC), Title 31, Chapter 305, Consolidated Permits. Establishes the general terms and conditions incorporated into permits, including the authority to conduct inspections at reasonable times.

- Texas Administrative Code, Title 31, Chapter 319, General Regulations Incorporated into Permits. Establishes the requirements for a permittee to perform self monitoring and reporting, etc.

Inspections under the Texas Water Code and the Texas Solid Waste Disposal Act are allowed without prior notice. This includes the inspection of records. Texas law is generally silent on other issues such as sample splitting, testing, etc., but Texas generally follows federal laws on these issues (Neil R. Mitchell, 1993). In practice the TWC splits samples if requested. There are many comparable Federal laws and regulations, but a detailed discussion

of them is beyond the scope of this paper. See Attachment A for a synopsis of Federal environmental statutes.

If you have a permit, it sets certain conditions on how you deal with a TWC inspector during a visit. In obtaining a permit you agree to allow the inspection of your facility at reasonable times, so you must show the inspector what they request. Unpermitted facilities can refuse entry, but the Texas Water Code provides for entry to conduct inspections. Denial of entry is a violation subject to a penalty of up to $10,000 a day. If necessary the inspector may secure a warrant to enter your facility, in which case the inspector may very well feel like a junkyard dog when they return (Brown, 1993). So in either case the very best approach (unless you are engaged in ongoing illegal activities) is to allow the investigator to conduct their inspection.

Most facilities seem to fall into two types: There is the facility that has a well funded environmental program staffed with the right people working on environmental problems. All their records are in order and the facility has very few obvious regulatory problems. Maybe an inspector will find a few minor problems, after all we are professional nit pickers and we get paid to find a few things wrong. Then there is the place that is clearly unprepared, even after several days notice. At this type of facility, the records are not organized and nobody is really responsible for environmental relations. The latter, if they have municipal

permits are usually small cities or towns with little or no tax base or small private developments that are mostly empty. If they have industrial permits they are generally small to medium, marginal businesses in declining industries.

There are many things an organization can do to increase the chance that in inspection will go smoothly. Hire experienced people with the right schooling and provide continued training. The rules change routinely and only continued training can keep personnel abreast of the changes. Get your paper work in order and keep it that way. Keep good records of maintenance, operations, problems, etc. Make sure the records are easy to use and in good order. It's like any kind of audit, the less the inspector has to work at reviewing your records the better off you are. If notifications are required by the facility's permit, these notifications should be up to date.

A self audit is an excellent way to spot problems and fix them before an inspection. If you find out about permit violations it's far better for you to inform the regulators than for them to discover the violations. It may also be much cheaper for a facility to fix problems that they encounter as opposed to problems noted during an environmental inspection. Make sure the information in your permits or registrations is current and accurate. This includes: the plant managers name, the address, proper ownership, all the units, etc. Any environmental audit

should include a review of the facility's laboratory whether it is onsite or offsite. The lab inspection should include some sort of check list that reviews sampling, sample handling, analytical methods, calculations, etc. The laboratory's records should be clear, organized, and easy to understand.

According to John J. Balco, (1993) self audits can:

- Provide a comprehensive picture of compliance with applicable regulations.
- Identify problems before an inspection.
- Provide time for problem correction in a controlled manner.
- Control of costs, ie. controlled vs. mandated actions are cheaper.
- Communicate the organizations commitment to environmental affairs to all employees.

Balco also lists some Department of Justice guidelines describing the elements of compliance and reporting programs that will be considered in evaluating penalties for environmental violations. Some of these guidelines are:

- There are strong internal compliance policies and procedures, clearly articulated and communicated throughout the organization.

- The audit process is objective and the integrity of an audit is maintained.
- Those overseeing a compliance program have appropriate levels of authority to control the audits.
- Prompt corrective actions are taken when a violation is detected.
- There are appropriate disciplinary actions as an element of corrective action programs. These actions should be consistently applied.
- The compliance measurement system is consistent.
- When reporting is required, is it done promptly and voluntarily?
- When possible violations are being evaluated, facilities managers cooperate with government investigators.
- The compliance program is comprehensive.
- The monitoring and audit program includes a hotline reporting system for workers.

Internal investigations often reveal that an employee had complained several times about an environmental problem to unresponsive supervisors (Krukowski, 1993). Environmental investigators say they are often tipped off to a company's violations by an employee who felt management was unresponsive to his concerns (Krukowski, 1993). People writing memos for the record documenting concerns may signal a need for prompt action. Not only may a "disgruntled employee" have something to be

disgruntled about, but documentation can establish knowledge of the violation. (Balco, 1993) An employee grievance procedure that invites environmental complaints or airs environmental concerns can help keep you out of trouble. We receive hundreds of anonymous complaints each year many of which come from such disgruntled workers. An effective environmental program depends on the involvement of employees in formulating policies and remaining vigilant for potential violations. We also receive many complaints from nearby landowners. So consideration should be given to spending time meeting and communicating with the neighbors as well. Perhaps a grievance procedure for neighbors could help to diffuse potential flash-points.

Plan how to conduct the actual inspection. What do you want to show the inspector? What route do you take through the plant? Can the inspector go anywhere in the facility? Do you have safety requirements, such as respirators, safety goggles, hard hats, safety shoes? Let the inspector know up front about these requirements. If you receive prior notice of an impending inspection advise the inspector of your requirements. If you are going to drive around the plant site on inspections make sure the environmental department has a vehicle available such as a pool vehicle. Be prepared for tough issues, like confidential information or photographing sensitive equipment. Always request to split all samples with any environmental inspector. If you don't split samples and they are noncompliant you may have no

recourse without sample results of your own.

Try not to make an inspector wait. TWC rules allow us to insist upon entry after twenty minutes, but don't let an inspector wait even five minutes if you can help it. Have a secretary or other staff member offer some hospitality, like a cup of coffee if you will be delayed. Be sure your apologies are conveyed for any necessary delays. Remember, the inspector assumes that during any delay you are probably warning everyone in the plant to cover up any problems before the tour commences.

Just a brief warning about new inspectors; they tend to concentrate more on paper work and the few plant things they understand. Try to be patient, they often learn more about inspections from you than from their supervisors.

Improve communications with regulatory agencies. Call after the inspection and ask for advice on problems, regulations, sampling, etc. Stay in touch, the inspector probably knows the name of the most important people in their agency in various areas, ie. permitting. If you are having problems, such as a plant upset or spills report these things within the required time frame. If any large scale changes are planned, like a plant expansion, keep the regulators informed. The more open you are about problems and their causes the greater the likelihood of receiving understanding and cooperation from the government.

If you are the environmental manager and you go on vacation or you're out of the office for an extended period, such as attending this seminar, leave someone else responsible in charge. Don't take the entire environmental department with you. If the TWC comes to do an inspection while you're away, they won't wait until next week. Don't leave the organization's environmental fate in the hands of an inexperienced operations person or a new employee. Have backup personnel with the proper training to handle environmental affairs in the environmental managers absence.

Always try to work out problems encountered during the inspection at the local level. If the violations or deficiencies are serious and must be handled through a central office, it is likely that there will be penalties and an administrative order will be issued. Cases that go to the central office are out of the control of the local inspector. A local inspector may be more aware of your problems and your efforts at solutions and is much more likely to be sympathetic. If you do go to any enforcement type meetings make sure the local inspector is there (that is unless you dislike each other for some reason).

Inspections

There are two basic kinds of inspection in which you might encounter a water quality field investigator: routine inspections of permitted facilities and non routine inspections, ie.

complaints, etc. A routine inspection may come every year or at longer intervals, but it usually takes several hours, generates a report and letter, and requires a response. Complaints are completely unpredictable.

Inspections serve several purposes, among these are:

- Determine compliance with Permits, Rules, Laws, etc.
- Assess the effectiveness of the permitting program in the protection of water quality.
- Evaluate the status of legal actions taken against a facility.
- Act as a deterrent to non-compliance, by making violators subject to enforcement action.

The Inspectors Role in the inspection process is to:

- Survey the facility, including sources of wastewater, treatment units, wastewater discharges, and the receiving stream.
- Review records and reports to determine compliance with permit requirements and rules.
- Inform the regulated community of the requirements of the law and relevant regulations, along with any current changes or additions.
- Document suspected and/or observed violations.
- Identify the causes of non-compliance.

- Determine the impact or potential impact of non-compliance to the environment.
- Detect imminent environmental hazards.
- Recommend corrective actions.
- Help determine compliance with Commission Orders.

When we do inspections we look at paper, people, and plant. **Paper** means records. **People** means the environmental staff. **Plant** means the facility itself, including all units both production and treatment. Plant and people are "...messy and complex. Paper, on the other hand, while boring, is simple," (Brown, 1993). The vast majority of the problems sighted by inspectors are paper problems. Prior record keeping errors are easy to spot and write up as violations and the penalties are just as high as other violations.

The paper we look at is records. Records of permit compliance, operational records, disposal records, maintenance records, sampling records, laboratory records, calibration records, quality assurance records, self monitoring records and forms, notifications of changes or noncompliance, calculation records, and sampling records. Attachment B is a list we recently compiled of the major things we need to have available to review during an inspection.

A review of self reporting records consists of a thorough evaluation of the permittee's self monitoring program. The self monitoring reports are carefully scrutinized to make sure that data

is copied and calculations are made correctly. The reports are checked to be sure they are signed by the appropriate personnel.

The values reported by the laboratory are compared to the values reported to the TWC. Calculations are checked. The lab should provide information on the analytical methods, the analyst name, the date and time of analysis, and quality assurance data. Any analyses completed onsite are reviewed for the same information as required of the outside lab. Records of analytical equipment calibrations should be available, ie. pH meter or DO meter calibrations. The sampling and sample handling is compared to the permit requirements and the regulations.

We review operations and maintenance records such as operational control records. Sludge disposal records and operators daily logs should be available for review.

The environmental department should be staffed by technical people with science or engineering degrees. The person that interfaces with the regulators should be outgoing. I pay attention to an organization's personnel choices. Important factors are: where they went to school, what professional organizations they belong to, and how much experience they have. I frequently encounter situations where the safety coordinator is also charged with environmental management or a production engineer is forced to take

over the environmental duties. It is probably worth hiring environmental specialists and trained lab analysts. I have encountered one environmental manager responsible for air, water, and hazardous waste at three different facilities. This person is spread very thin. A personal pet peeve of mine is a Fortune 500 company with an inexperienced employee in a high level environmental position. It gives the appearance that the company really doesn't care about the environment.

A review of the environmental department also looks at whether the department has the appropriate level of authority. Does upper management care about environmental problems? Does the environmental department have regular access to upper management, ie. the plant manager or the CEO? Frequently the environmental department has an inadequate budget to meet the increasing demands. With the present trends in enforcement an organization can't afford not to spend enough on compliance. If specific training is required do the onsite personnel have the training and are records kept to show it.

It is very difficult for an inspector to see everything, especially at a large facility. So, the inspector looks for housekeeping problems that might suggest poor controls over spills or for other operational and maintenance problems. I have seen many industrial facilities issued violation notices for their sewage treatment plants, because we're less baffled by them. During a tour of the

facility all plant components are evaluated and the grounds are surveyed. Questions we try to answer are:

- How is plant housekeeping?
- Is the grass cut?
- Are sludge spills cleaned up?
- Is there evidence of spills and leaks in plant ditches or in process areas?
- How are the surface impoundments operated; do they have enough freeboard?
- How are the sludges, solids, grit, scum, and other wastes handled?
- Is equipment well maintained?
- Do all plant components operate properly, ie. the chlorine fan, the blowers, the lift pumps?
- Does the plant have a preventive maintenance schedule and budget?
- What does the effluent look like?
- What does the receiving stream look like?
- What aquatic organisms if any are noted near the outfall?
- Are any effluent related problems noted, such as plastic floatables or persistent foam or excessive turbidity?

Inspectors can have a negative impression before the inspection just because of your industry or history. Did the plant formerly make creosote or arsenic compounds, was the site formerly a gas

station, or were PCB containing electrical transformers recycled.

Routine inspections consist of several steps. The first is pre-inspection preparation. This consists of a thorough review of the permit, correspondence, previous inspection reports, telephone memos, and the self monitoring reports. Next is the site visit and the opening conference and the presentation of identification. This is the introduction when the inspector tells you how they want to conduct the inspection. In addition, the opening conference allows the inspector to make sure the permit name, address and phone number are correct. The permittee has a responsibility to make sure this basic permit information is correct. Yet, in the past year, several permits have been canceled because permit expiration notices were never received because the addresses were wrong. Don't let this happen to your permit.

Then we proceed with the actual inspection. Generally the first thing I do is tour the facility, noting important information in a field log book. Then, the inspection forms and checklists are completed with the onsite representatives help. Next if there is an onsite laboratory, it is inspected. Then records are reviewed including operators logs, sludge records, lab records, sampling records, etc. Then the actual sampling and sample handling are examined, including how samples are stored, preserved and shipped. This order may vary from one inspector to another.

The last step in the site visit is the post inspection conference. This is a review of the deficiencies noted with the Plant Manager, City Manager, Director of Public Works, etc. I don't like to write anything in my final report that hasn't been discussed at the time of the inspection except noncompliant sample results.

Sometime after sample results are obtained and within thirty days of the inspection, a report is written and a letter is sent to the permittee regarding deficiencies and/or violations noted during the inspection. If there are significant problems the letter will request a response in about 30 days. Industrial and Hazardous Waste inspections are similar to Water Quality inspections Attachment C describes the process in more detail.

Both Federal and Texas State laws and regulations permit inspections of both permitted and unpermitted facilities and their records. Cooperation with the regulators is the best policy. Being prepared for an inspection is the way to handle an inspection. Preparation consists of self audits, good record keeping, and a well planned and organized environmental program. When we conduct an inspection we look at plant, people, and paper. Paper is the area most likely to be the source of violations and deficiencies. Also important are staffing and employee relations and operations and maintenance.

ATTACHMENT A

SUMMARY OF FEDERAL ENVIRONMENTAL ACTS REGARDING RIGHT OF ENTRY, INSPECTIONS, SAMPLING, TESTING, ETC.

Act/Section Inspection Authority	Notice of Inspection	Sampling Permitted	Inspection of Records	Sample Splits	Receipt for Agency's Sample	Return of Analytical Results
Clean Water Act-§ 308(a) State	Not Required	Yes (effluents which the owner is required to sample)	Yes	Not Required	Not Required	Not Required
FIFRA-§ 8(b) (Books and Records)	Written notice with reason and suspected violation note	Access and copy records	Yes	N/A	N/A	N/A
FIFRA-§ 9(a) (Inspection of Estab-lishments)	Written Notice required with reason and suspected violation note	Yes	Sec § 8	Required if requested	Required	Required, promptly
Clean Air Act-§ 114(a) (State)	Not required except notify State for SIP sources	Yes	Yes	Not Required	Not required	Not required
RCRA § 3007(a) § 9005(a) (State)	Not required	Yes	Yes	Required if requested	Required	Required, promptly
SDWA - § 1445(b) (State)	Written notice required	Yes	Yes	Not required	Not required	Not required
TSCA § 11(a,b)	Written notice required	No mention of sampling	Yes	N/A	N/A	N/A
CERCLA - § 104(e) (State)	Upon reasonable notice for information	Yes	Yes	Required	Required	Required, promptly

The following provides a detailed list of the records needed during a TWC inspection. Please note, however, that individual inspectors may request additional records particular to the facility being inspected.

Operations and Maintenance Records

- Operational or process control records, i.e. MLSS, SV30, influent sampling, etc.
- Sludge disposal records should include: Analytical; data such as TCLP, the sludge hauler, the amounts, the disposal site, information on the spreading rate, PSRP or PFRP, applicable dates.
- Operator's daily logs, which should include such things as: Date and time, operators initials, flow, chlorine residual, rainfall records, and comments about exceptions or incidents.
- Maintenance records, for equipment such as: pumps, blowers, on and off-site lift stations.
- Irrigation records, if required.

Laboratory and Sampling Records

- Sampling records: Dates, times and locations of sampling; name of individual who took sample or measurement.
- Lab reports should include: The analysts' name, the date and time of analysis, the methods reference, quality assurance data with each sample set.
- Calibration records for lab instruments, i.e. pH meter, DO meter, refrigerator temperature, etc.
- Records of analyses completed on-site.

Self-Monitoring Records

- Self-monitoring forms with copies of supporting data by month.
- Flow meter calibration records and flow charts, if required.
- Copies of noncompliance notices.
- Biomonitoring "full" report.
- Composite sample and loading calculations records.
- Operator certification records.

INSPECTIONS



INDUSTRIAL and HAZARDOUS WASTE

Texas Water Commission conducts inspections to assure that hazardous and industrial solid wastes are being managed in compliance with applicable federal and state requirements.

TWC inspectors are authorized to:

- ❑ Enter any establishment or other place where solid wastes are, or have been, generated, stored, treated, handled, transported or disposed of.
- ❑ Have access to and to copy all records related to such wastes.
- ❑ Obtain samples of wastes.
- ❑ Document observations made during inspections.

TWC inspectors may:

- ❑ Present identification.
- ❑ Enter the establishment at a reasonable time (normal business hours) and complete the inspection as promptly as possible.
- ❑ Provide a duplicate sample (split sample) if requested.
- ❑ Furnish a copy of any sample analysis.

Conducting an Inspection

Scheduling–Facilities are selected for inspection based on:

- ❑ Administrative purpose (Routine periodic assessment of RCRA compliance)
- ❑ "For Cause" (Complaint)
- ❑ Request for assistance from another agency (Facility with a history of noncompliance or who is suspected of mismanaging its wastes)

Preparation–Steps are taken by an inspector to prepare for an inspection:

- ❑ Conduct review of facility's file and other background information.
- ❑ Coordinate with other TWC sections and/or agencies.
- ❑ Identify and assemble inspection and safety equipment.

Notification Procedures–Scheduling the inspection with the facility:

- ❑ Announced Inspection (Advanced notification by correspondence or telephone)
- ❑ Unannounced Inspection (No notification of the inspection to the facility)

Safety–TWC inspector observes both the facility's and TWC's safety precautions. Inspectors have received extensive personal protection and safety training. They know what is expected of them to help prevent accidents and injury.

In general, an inspection may be conducted in the following manner:

Arrival:

- ❑ Credentials will be presented to the management or person in charge.
- ❑ The purpose of the inspection will be stated.

Consent:

- ❑ The owner or person in charge at the time of the inspection gives consent to inspect the premises. **However, a denial of entry is a violation subject to a penalty of $10,000 a day.**
- ❑ A warrant may be secured to obtain entry and conduct or complete an inspection.

Opening Conference–During the opening conference, the inspector will:

- ❑ Outline inspection objectives.
- ❑ Provide information on RCRA and TWC rules and regulations.
- ❑ Obtain a more detailed understanding of the facility's operation, waste generation, and waste management.
- ❑ Establish the order of the inspection.
- ❑ Establish meeting schedules.
- ❑ Set up an exit conference.

Types of Inspections

Compliance Evaluation–Routine inspections to determine the compliance status of hazardous and industrial solid waste handlers.

Complaint Investigation–Inspections triggered by an allegation that noncompliance exists with applicable requirements.

Case Development–Inspections conducted for the specific purpose of gathering data in support of an enforcement action.

Laboratory Audit–Inspections of an analytical laboratory to determine if proper sample handling and analysis protocols are used.

Sampling–Inspections conducted to collect solid waste, soil, surface water, and/or ground water samples.

Closure–Inspections conducted to determine if a waste management facility is closed according to an approved closure plan.

Comprehensive Monitoring Evaluations (CME)–Inspection to determine whether a facility has a ground water monitoring system which is adequately designed and operated to detect releases and to define the rate and extent of contaminant migration from a RCRA regulated unit.

Operation and Maintenance (O&M)–Inspections to determine how well the owner/operator maintains the ground water monitoring system's efficiency and operations.

Compliance Schedule Evaluation (CSE)–Scheduled inspections to determine compliance.

Use of Cameras–The ability to record events as they occur during an inspection is an essential, necessary part of the TWC inspection process.

Review of Records

The inspector will examine all records, documents, plans and reports that are required according to the type of facility that is being inspected.

The inspector will pay particular attention to:

- ❑ Shipping Manifests.
- ❑ Analytical results of Hazardous Waste determination.
- ❑ Records of hazardous and industrial solid waste activities.
- ❑ Waste Minimization.
- ❑ Annual waste summary and monthly shipping reports.
- ❑ Personnel Training Records.
- ❑ Contingency Plans.
- ❑ Waste Analysis Plans.
- ❑ Specific Operating Records.

Visual Inspection of Facility

A tour of the manufacturing, production, and processing areas gives the inspector a better understanding of how, where, and when wastes are generated.

The inspector will inspect thoroughly areas where wastes are generated or managed.

The inspection will not be limited to waste management areas, but will include other areas where products and/or materials are stored or handled.

The inspector will note the following:

- ❑ Types of wastes in storage.
- ❑ Wastes segregated according to compatibility and waste type.
- ❑ Types of storage facilities (i.e. drums, tanks, etc.).
- ❑ Integrity of containers, tanks, surface impoundments, etc.
- ❑ Secondary containment.
- ❑ Emergency equipment and its maintenance.
- ❑ Any pretreatment prior to disposal.
- ❑ Any on-site treatment.
- ❑ Any on-site disposal activity.
- ❑ Significant leaks and spills.
- ❑ The inspector will determine the need for sampling and identifying sampling points.
- ❑ The inspector may want to take photographs.
- ❑ Any other activities/conditions that the inspector deems important to note.
- ❑ Claims of confidentiality or proprietary process will be handled pursuant to agency policy.

Exit Interview–At the conclusion of the inspection the inspector will:

- ❑ Discuss preliminary inspection findings.
- ❑ Identify alleged problems and answer questions.

The inspector's function is to observe and evaluate compliance. The overall compliance or noncompliance status of the facility is not determined until after review of the inspection results by supervisory personnel and issuance of the inspection report.

For more information on inspections, contact the Texas Water Commission's Field Operations Division at 512/463-7749, or the agency's district office in your area:

Dist. 1–**Amarillo**
806/353-9251

Dist. 2–**Lubbock**
806/796-7092

Dist. 3–**Waco**
817/751-0335

Dist. 4–**Duncanville**
214/298-6171

Dist. 5–**Tyler**
903/566-0476

Dist. 6–**Beaumont**
409/842-9413

Dist. 7–**Houston**
713/457-5191

Dist. 8–**San Antonio**
512/490-3096

Dist. 9–**San Angelo**
915/655-9479

Dist. 10–**Odessa**
915/362-6997

Dist. 11–**Weslaco**
512/968-3165

Dist. 12–**Corpus Christi**
512/851-8484

Dist. 14–**Austin**
512/463-7803

Dist. 15–**El Paso**
915/778-9634

Hazardous and Solid Waste Laws

Federal

- ❑ Resource Conservation and Recovery Act, 1976 (RCRA)
- ❑ Hazardous and Solid Waste Amendments of 1984 (HSWA)

State

- ❑ Texas Solid Waste Disposal Act

Principal Objectives of these Laws

- ❑ Protect human health and the environment from the potential adverse effects of improper solid and hazardous waste management.
- ❑ Conserve material and energy resources through waste recycling and recovery.
- ❑ Reduce or eliminate the generation of hazardous waste as expeditiously as possible.

TWC Authority to Conduct Inspections

- ❑ Section 26.014 & 26.015, Texas Water Code
- ❑ Section 3007 (a) of RCRA
- ❑ Section 361.032 & 361.037, Texas Health & Safety Code

the Texas Water Commission

Field Operations Division
Office of Legal Services
and Compliance

C93-02
March 1993

The Texas Water Commission is an equal opportunity employer and does not discriminate on the basis of race, color, religion, sex, national origin, age or disability in employment or in the provision of services, programs or activities. In compliance with the Americans with Disabilities Act, this document may be requested in alternate formats by contacting Public Information & Education at (512)463-8028, Fax (512)463-0607 or 1-800-RELAY-TX (TDD), or by writing or visiting at 1700 North Congress Avenue, Austin, TX 78701.

printed on recycled paper using soy-based ink

REFERENCES

1. Balco, John J., Avoiding Environmental Audit Pitfalls. National Environmental Journal, May-June, 1993.

2. Brown, Johnine J., How to Prepare for the Environmental Inspector's Visit. Corporate Legal Times, April 1993.

3. Krukowski, John, No More Wrist Slaps. Pollution Engineering, November 15, 1992.

4. Neil R. Mitchell, Editor, Texas Environmental Law Review, Personal Correspondence, June 1993.

"AGENCY INSPECTIONS: WHAT DO YOU DO?"

by

Walter D. James III
Winstead Sechrest & Minick P.C.
5400 Renaissance Tower
1201 Elm Street
Dallas, Texas 75270

Presented at the

FIFTH ANNUAL TEXAS ENVIRONMENTAL SUPERCONFERENCE

August 5-6, 1993

WALTER D. JAMES III, Associate, Litigation Section and Environmental Practice Group, Dallas Office. Business and commercial litigation experience with emphasis on all phases of environmental law from transactional work to administrative to civil litigation and defense of criminal prosecutions (including CERCLA, RCRA, Clear Water Act and Marine Protection Research and Sanctuaries Act). General business practice includes counselling business entities in avoiding environmental liability, both civil and criminal, and minimizing any exposure through preventive measures and timely cooperation with the regulatory community. Civil litigation practice includes extensive representation of business entities in CERCLA cleanup negotiations and litigation and in personal and property damage cases related to the cleanup under CERCLA in contribution actions after cleanup is completed (toxic tort litigation). Administrative practice includes representation of business entities in adversarial administrative settings under various environmental statutes including EPCRA, TSCA, CERCLA and Federal debarment proceedings. Criminal practice includes representation of business entities as well as individuals from pre-indictment investigations, through grand jury representation, through trial and appellate proceedings. Education: University of Nebraska - Omaha (B.S. Political Science 1984); University of Nebraska - Lincoln (J.D. 1987). Member of American Bar Association, Texas Bar Association, Dallas Bar Association and Fifth Circuit Court of Appeals Bar Association; Admitted: State Bar of Texas (1987); U.S. District Courts for the Northern, Eastern, Southern and Western Districts of Texas; U.S. Court of Appeals for the Fifth Circuit. Publications: Lender Liability on Environmental Issues, 1989 Spring Conference, Texas Banking: Preparing for the '90's (1989); Financial Institutions and Hazardous Waste Litigation: Limiting Exposure to Superfund Liability, 28 Nat. Res. J. 329 (1988). Speeches: Administrative Inspections: What Do You Do?; ILTA National Operating Conference (June 18, 1991); Administrative Inspections: What Do You Do?; ILTA Southern Regional Conference (April 17, 1991); Lender Liability on Environmental Issues, 1989 Spring Conference, Texas Banking: Preparing for the '90's (1989); Financial Institutions and Hazardous Waste Litigation: Limiting Exposure to Superfund Liability, 28 Nat. Res. J. 329 (1988).

AGENCY INSPECTIONS: WHAT DO YOU DO?

I. INTRODUCTION

The 1990s will be characterized by the continued enforcement activity begun in the 1980s by the United States Environmental Protection Agency ("EPA"). In fiscal year 1990, the EPA levied fines totalling over $61.3 million, a 74% increase over fiscal year 1989, an equally record year for the EPA.[1/] The Department of Justice ("DOJ") also returned a record 134 indictments in fiscal year 1990 for environmental crimes with a 95% conviction rate.[2/] New records were again set in 1991 with 393 cases referred to the DOJ for civil enforcement, 81 cases referred for criminal charges, and 3,925 administrative actions.[3/] In 1992, the EPA is promoting its all time record increase in civil penalties and a four fold increase in criminal penalties.[4/] Since enforcement budgets for administrative bodies are determined in part by enforcement initiatives (read dollars collected in fines), the more activity, the larger the budget. As a result, the regulators are stepping up both civil and criminal enforcement activities with greater emphasis being placed on criminal enforcement. As one commentator has observed, oftentimes the only difference between a civil and a criminal investigation depends on who gets to your door first, the civil inspector or the criminal investigator.[5/]

Congress has gotten into the fray with such legislative initiatives as redefining and stengthening environmental crimes,[6/] introducing new environmental crimes bills,[7/] setting up the

---

1/ Washington Brief, 13 Nat.L.J. 5, May 27, 1991.

2/ EPA, Environmental Policy Alert, 39, Nov. 28, 1990.

3/ EPA, Enforcement Accomplishments Report, 3-1, 3-2 and 3-3 (FY 1991).

4/ Daily Environmental Report, BNA, A-8, June 21, 1993.

5/ Current Developments, BNA 1255, Nov. 2, 1990.

6/ Congress has enhanced all criminal penalties for violations of all environmental statutes and has recently approved plans to add 150 criminal investigators and to create a national training center to train enforcement personnel in federal environmental laws. EPA, Environmental Policy Alert 48 (Oct. 31, 1990)

7/ See e.g. H.R. 3641, 102st Cong., 1st Sess. (1989).

United States Sentencing Commission to establish sentencing guidelines in criminal enforcement actions,[8/] through the reauthorization of various acts (the Clean Air Act, the Resource Conservation Recovery Act, and the Comprehensive Environmental Response, Compensation and Liability Act), and through criticism of the EPA for being too lenient in negotiating reductions in civil fines. Additionally, the community is becoming more environmentally active and aware. As a result of this "greening" of the community, more questions are being asked and greater scrutiny is now being given to all operational phases which may impact the environment. All of this activity outside of the agencies is not lost on the investigators and it influences the enforcement initiatives for the EPA.

So what do you do when the inspector shows up at your facility and tells you that he is investigating a complaint by the "friends of dear Mother Earth" that your facility is pumping hundreds of thousands of pounds of pollutants into the atmosphere and that he wants to inspect your facility? What do you do when the investigator shows up at your facility at 5:00 p.m. on Friday afternoon, unannounced and without a warrant, and wants to conduct an inspection of your facility? What do you do when an investigator shows up at your facility at 3:00 p.m. on Tuesday afternoon with a search warrant and wants to seize all records of the facility? What do you do when an investigator, during an inspection, pulls out a video camera and begins making a videotape of your facility? What do you do when an investigator, during an inspection, demands to talk to all of your employees? What do you do when an investigator takes water, soil, and air samples? What do you do when an investigator has hired a company to fly over your facility to take aerial photographs as part of their investigation? What do you do when an investigator has been monitoring activity at your facility from across the street? What do you do when a private contractor appears at your door and wants to inspect your facility? What do you do?

There are steps that can be taken to protect individual and corporate rights in an agency investigation and there are steps that can be taken to minimize any inconvenience to individuals, corporate operations, and even the agency investigator. It is a fact of life in the regulated industries that inspections will occur. In order to protect individual and corporate rights and minimize any inconveniences, preparation for the inspections is absolutely necessary. Ignorance is not acceptable; knowledge of

---

8/ The Comprehensive Crime Control Act of 1984 established the United States Sentencing Commission. For an example of the harsh application of the sentencing guidelines in an environmental crimes case, see United States v. Pozsgai, 897 F.2d 524 (3d Cir.), cert. denied, ____ U.S. ____, 111 S.Ct. 48 (1990).

the policies and procedures utilized by the administrative agencies in conducting inspections and the agency perspective for the reasons behind audits and inspections is a necessity. You should know and understand the statutory authority for the inspections and the limits on that statutory authority, along with the procedures agencies use in implementing the statutory authority. Knowledge of agency policy and procedure will help minimize the risk of agency inspections through preparation and training. Knowing your rights will allow better preparation, reaction, and interaction with the inspectors during the inspection process.

II. STATUTORY AUTHORITY

A. Statutory Provisions. Several provisions allow for the administrative inspection of facilities under the federal environmental laws. The major provisions are as follows:

1. Clean Water Act ("CWA"): The CWA gives the inspector or an authorized contractor the right to enter.[9/] The CWA does not restrict entry to reasonable times but does restrict access to documents to reasonable times.[10/] Again, proper credentials must be presented.[11/]

2. Resource Conservation and Recovery Act ("RCRA"): Under RCRA, the inspector, upon presenting the requisite credentials, may enter the facility, inspect the facility, and take samples.[12/] The entry must be at a reasonable time and must be "commenced and completed with reasonable promptness."[13/] RCRA requires that the inspection be completed with reasonable promptness.[14/]

3. Clean Air Act ("CAA"): The CAA is similar to the CWA in that the inspector may enter upon presentation of his credentials but entry is not necessarily restricted to reasonable times; however, like the CWA, document access is limited to reasonable times. As a practical matter, it is

---

9/ 33 U.S.C. § 1318 (1986) and (Cum. Supp. 1993).

10/ Id.

11/ Id.

12/ 42 U.S.C. § 6927(a) (1983).

13/ Id.

14/ Id.

very likely that entry will only be requested during "reasonable times."[15/]

4. Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA"): CERCLA allows entry to facilities at reasonable times to conduct inspections and to determine if an inspection is necessary.[16/] CERCLA, like RCRA, has a reasonable promptness requirement.[17/]

5. Toxic Substance Control Act[18/] ("TSCA"): TSCA permits inspection of facilities subject to TSCA regulation.[19/] The inspector must present appropriate credentials and notice must be provided.[20/] TSCA also imposes a reasonable promptness requirement and limits access to certain types of documents.

B. Common Elements.

1. Each statute provides the agency inspector (or authorized independent contractor) the right to enter the facility upon presentation of appropriate credentials.

2. Each statute provides authority for access to records and monitoring equipment.

3. Each statute authorizes the investigator to take samples as desired.

4. Any request for entry must be at reasonable times and must be commenced and completed with reasonable promptness. The reasonable promptness standard is only set out in RCRA[21/], CERCLA[22/] and TSCA[23/]; however, the EPA policy sets out that all inspections conducted under the Clean Air Act

---

15/ 42 U.S.C. § 7414(a)(2) (1983).

16/ 42 U.S.C. § 9604(e)(3) and (4) (1983) and (Supp. 1993).

17/ Id.

18/ 15 U.S.C. § 2610(a) (Supp. 1993).

19/ Id.

20/ 15 U.S.C. § 2610(b)(2) (1982).

21/ 42 U.S.C. § 6927(a) (1983).

22/ 42 U.S.C. § 9604(e)(4) (Supp. 1983).

23/ 15 U.S.C. § 2610(a) (Supp. 1993).

and the Clean Water Act also must be commenced and completed with reasonable promptness.

III. THE INSPECTION

A. Reasons Agencies Inspect.

Inspections are performed for a number of purposes which include routine assessment of statutory and regulatory compliance, review of facility activity and status with respect to a previously filed administrative enforcement action, review of the facility's compliance with its permits and permit deadlines within the regulatory scheme, and as a response to tips from neighbors of the facility, disgruntled employees at the facility, or even former employees.

B. Preparation for the Inspection.

Since most, if not all, inspections are unannounced, preparation is paramount.[24/] There should be policy and procedure covering corporate protocol as to the inspection. For instance, what type of identification process should be in place, who should be involved in the inspection, should access be denied, should the company require opening and closing conferences, and should the company require search warrants and subpoenas. All of this should be determined well in advance of any inspection.

C. Conduct During the Inspection.

1. Upon arrival at the facility, the inspector should not be allowed to just enter and begin the inspection. Upon arrival, proper identification must be presented by the inspector, the proper corporate people responding should be located and notified, and the date, time, name, and title of the inspector written down in a log book.

2. You may request the inspector to sign a log, passbook, or other form prior to entering a facility. Inspectors may sign logs or passbooks, as facilities keep record of visitors to the facility and they are useful in the event

---

24/ Prior notification of the inspection will depend upon several factors including its purpose, agency, policy, type of investigation (criminal or civil), and the depth of the inspection. Prior notification may also depend upon the past compliance history of the facility and agency experiences gained from previous inspections.

of a fire or other emergency. Inspectors will not sign waivers.[25/]

3. After presentation of proper identification and credentials, the inspector will seek consent to enter the facility to conduct the inspection.

(a) The appropriate company official should be designated in advance for purposes of consenting to the inspection of the premises.

(b) The consent to inspect may be withdrawn at any time. Any segment of the inspection completed before such withdrawal remains valid. Withdrawal of consent is equivalent to a refused entry.[26/]

(c) Under the "Open Field" doctrine, consent to inspect the facility is not required for an inspector to observe and report on things in plain view and includes observations made while on private property in areas not closed to the public such as parts of the facility observed while the inspector presents identification.[27/]

4. After presentation of credentials have the inspector give you a statement regarding what he wants to accomplish, whom he wishes to talk with, and what he wants to obtain in regard to records and documents.

5. Agreement should be reached covering:

(a) Witness interview schedules;

(b) Documents to be produced;

(c) Sampling protocols;

(d) Confidentiality issues;

25/ See United States Environmental Protection Agency Memorandum, Visitors Release and Hold Harmless Agreements as a Condition to Entry of EPA Employees on Industrial Facilities, (Nov. 8, 1972).

26/ United States Environmental Protection Agency Memorandum, Conduct of Inspections After the Barlow's Decision, (April 11, 1979) ("Barlow's Memorandum").

27/ Air Pollution Variance Board v. Western Alfalfa Corp., 416 U.S. 861 (1974).

(e) Return of documents; and

(f) The Agreement should then be reduced to writing and provided to the inspector.

6. Should you deny access? This issue must be decided in advance of the inspection. You are well within your rights to require a warrant for all inspections. If the refusal to allow entry is solely based on the lack of a warrant, and it is not an emergency situation, the refusal to allow entry will not generally result in civil or criminal penalties.[28/] You should deny access only for valid reasons such as:

(a) The inspector does not have the safety equipment required by the facility under OSHA or NIOSH requirements.

(b) The inspection is not taking place during working hours.

(c) Remember -- Not many valid reasons exist for not allowing access. Make sure you let them know access will be permitted upon compliance.

(d) You should not deny access if the inspector is serving a valid search warrant. If you do deny access, you may end up in jail.

(e) Invalid reasons for denying access include the inspectors' use of camera or videorecorder (they can do that), strikes or plant shutdowns, and the inspector's refusal to sign a waiver restricting liability or obligations of the owner/operator.[29/]

7. If access is denied, the inspector will get a search warrant. If a warrant is presented, get a copy of it.[30/]

(a) Read it.

28/ Barlow's Memorandum, at 4.

29/ United States Environmental Protection Agency, Resource Conservation & Recovery Act Inspection Manual, § 4.1 (January 1989 Gov't Inst. 2d ed.).

30/ For an excellent synopsis for search protocol, see Aufhuaser, Search - What Do You Do When They Don't Bother to Knock, ABA SONREEL News at 4 (January/February 1993) ("Sonreel News").

(b) Ascertain the scope or limits of the warrant as the investigator is bound to the warrant.

(c) Make sure the warrant has been signed by a magistrate or judge.

(d) Ask for copies of affidavits filed in support of the warrant. You do not have an absolute right to the affidavits; however, your privacy is being violated, you do not have to be shy.[31/]

(e) The warrant will also determine what records can be seized.

(f) Call your lawyer.

8. The inspection process itself requires preparation. While each investigation/inspection is unique, the inspector will probably:

(a) Walk the facility;

(b) Ask lots of questions;[32/]

(c) Take lots of notes;

(d) Take formal statements;[33/]

(e) Take samples;

(f) Review documents/permits;

(g) Take photographs/videotape;

(h) Prepare inspection checklist; and

31/ Sonreel News.

32/ The inspector is trained to think of himself as an investigative reporter.

33/ Since the inspection is not a custodial situation, when taking statements the investigator does not have to give you the requisite warnings regarding Fifth Amendment rights against self-incrimination. See United States v. Mitchell, 966 F.2d 92 (2d Cir. 1992).

(i) Tape record statements.[34/]

9. You should do the same. During the inspection:

(a) Accompany the investigator at all times;

(b) Employee (witness) interviews:

(i) Insist on being present.

(ii) If you are denied the right to be present, schedule separate interviews, if possible, preferably before the investigator speaks to them -- then find out what was discussed.

(c) Civil inspectors do not have to be given free access to talk with employees. Criminal investigators, when serving a search warrant, have no right to interview employees; however, both civil inspectors and criminal investigators frequently push the issue and succeed in talking to employees. Criminal investigators will usually have a specific agenda for witness or employee interviews. You cannot prevent employees from talking to the investigators. Do not forbid employees from talking to investigators or you may be charged under 18 U.S.C. section 1512 for obstruction of justice; however, employees do not have to talk to investigators. Alternative -- give employees the rest of the day off.

(d) Take notes during the inspection.

(e) If possible, videotape the entire inspection and the investigator. If the inspector takes videotapes or pictures you are entitled to copies; ask for them.

(f) If samples are collected make sure that they are collected properly. You should even take your own samples.

(g) Always request a sample split and have your own analysis done. You do not have an absolute right to split samples; however, agency policy is to provide a split sample when a request is made. Specifically, ask for the following:

34/ One EPA civil inspector has testified under oath that he had not been trained by the EPA on the proper use of a tape recorder to record statements.

(i) A split sample equal in weight and volume;

(ii) Written receipts describing the sample;

(iii) A description of the tests to be performed on the sample; and

(iv) The test results.

(h) If documents are requested by the inspector, request a written list of documents sought as you can provide documents at a later date after they have been reviewed for privilege and/or confidentiality. If documents are seized pursuant to a search warrant, you are entitled to an inventory.

(i) At the close of the inspection, the investigator should:

(1) Give receipts for samples.

(2) Provide receipts for documents seized.

(3) Discuss preliminary findings (however, he may not).

(4) Advise of the availability of the sample analysis.

(j) Investigator <u>will not</u>:

(1) Discuss compliance status.

(2) Discuss legal effects.

(3) Discuss enforcement consequences.

(4) Recommend consultants.

(5) Advise of the availability of the follow-up report.

(k) Inspection may result in the investigator issuing a deficiency notice or notice of violation.

(l) Investigator will then take information and samples and fill out their report, analyze samples, and follow-up as necessary with any coordinating agencies.

IV. INSPECTION FOLLOW-UP

A. Make a written request for copies of:

1. Photographs;

2. Videotapes;

3. Sample analysis;

4. Field report filed by investigator; and

5. If necessary, a return of seized documents.

B. Be persistent in getting copies.

C. Review the field report carefully.

1. If major or even minor problems are found seek legal assistance.

2. Move to correct the problems.

D. If there is no evidence of non-compliance you will probably not hear a thing; however, if you do not hear a thing do not assume no action is being taken.

E. If a search warrant was served, call the prosecutor to find out what you can.

V. AVOIDING INSPECTIONS OR MINIMIZING EXPOSURE

A. Avoid RCRA (easier said than done) through waste reduction and/or recycling.

B. Report non-compliance promptly; however, do not volunteer extraneous information.

C. Train your employees; environmental and safety training must include all personnel with special emphasis on operations personnel.

D. Hire help, including lawyers and consulting firms.

E. Get to know the regulators.

F. Conduct your own audits.

1. Problems may arise in funding the audit, securing the right people or consultants or the right mix of people, and even with securing internal authority to conduct the audit.

2. Follow-up on the audit. Reviewing an audit and documenting the decision to do nothing is better than doing nothing.

3. Designate responsibility within the company.

4. Make the necessary financial commitment.

5. Doing nothing can and will get you in trouble and may result in criminal action.

G. Prepare for inspections.

1. Make sure facility records are in order.

2. Establish procedures for:

(a) Document retention; and

(b) Facility access by agency personnel.

3. Make sure personnel know how to react:

(a) Security guards;

(b) Environmental compliance personnel;

(c) Facility managers; and

(d) Field/operations personnel.

4. Buy a handheld video camera and videotape all inspections.

H. Limit, as best you can, opportunities for investigators to talk to employees. An ingenious investigator will obtain subpoenas prior to arriving.[35/]

I. Institute a confidential suggestion box for environmental compliance and follow-up on each suggestion.

J. Make sure the facility has a firm environmental employee compliance policy; follow it and enforce it.

K. Designate a point person for inspections. That person should be:

1. Knowledgeable;

35/ See Bailey v. Secretary of Labor, 14 OSHR 1534, 19 OSHR 2083, cert denied S. Ct. No. 90-1218 (April 22, 1991).

2. Low key;

3. Unflappable;

4. Congenial; and

5. Should also attempt to establish a continuing relation with the agency personnel.

VI. CONCLUSION

Remember, the only difference between a criminal and civil offense depends on who discovers the problem first. With proper preparation, training and follow-up, you should find yourself on the right side of the law.

261:D930422A.00
070993nbg1
WDJ Z9995 26100

Civil Enforcement

"Gimme a Break"

Nancy Lynch

Chris Amandes

ENVIRONMENTAL ENFORCEMENT

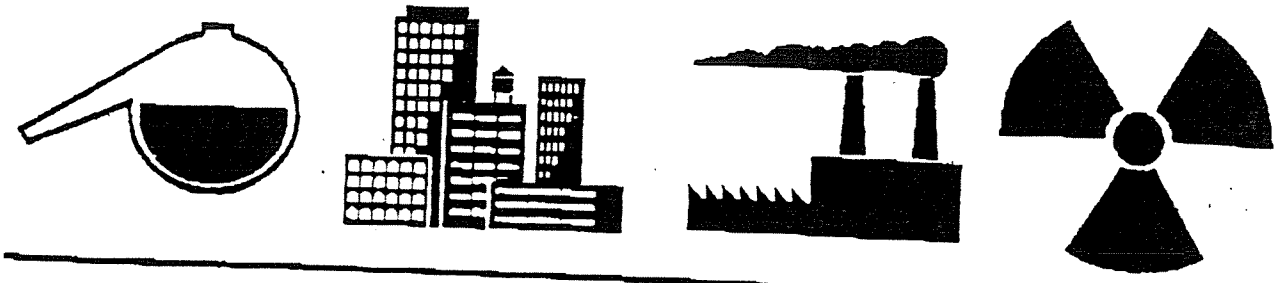
by

Nancy N. Lynch

Director of Enforcement Policy

Texas Water Commission

July 1993



NANCY N. LYNCH

NANCY N. LYNCH is the Director of Enforcement Policy for the Texas Water Commission. Ms. Lynch was Chief of the Environmental Protection Division of the Texas Attorney General's Office from June 1985 to June 1992. She previously was Assistant Attorney General in the Environmental Protection Division and in the General Litigation Division of the Attorney General's Office. Prior to that she was Briefing Attorney for the Texas Supreme Court. She received her B.A. from the University of Missouri in 1968 and her J.D. from the University of Houston in 1977. She is board certified by the Texas Board of Legal Specialization in Administrative Law and is licensed to practice before the United States Supreme Court, the United States Court of Appeals (Fifth Circuit), the United States District Courts (Western and Northern Divisions) and the State Bar of Texas.

ENVIRONMENTAL ENFORCEMENT

by Nancy N. Lynch[1]

> In 1941, Chester Bowles, of the wartime Office of Price Administration suggested the view that there will always be 5% of individuals who will violate no matter what, 20% who will comply no matter what, and 75% who will comply only if the violators are punished and/or the requirements are perceived as nonarbitrary.[2]

I. INTRODUCTION

Compliance with governmental laws, regulations, and permits is essential to any regulatory program which aims to achieve environmental improvement. It is also necessary to maintain the government's credibility. Laws that are put in force by the will of the people must be taken seriously.

Governmental efforts designed to protect our environment and natural resources evolve through an interlinking -- and sometimes, overlapping -- chain of processes. First, there is legislation, which establishes public policy; sets broad guidelines for the protection of our air, earth and water; and creates agencies which are charged to carry out those policies. Second, those agencies set specific standards designed to meet the public policy goals of

---

[1]The opinions expressed herein are those of the author and do not necessarily reflect those of the Texas Water Commission.

[2]Wasserman, C.E., "Overview of Compliance and Enforcement in the United States: Philosophy, Strategies and Management Tools," International Enforcement Workshop, 1990, p. 9-10.

the legislature. Third, agencies issue permits which, in theory, are designed to allow the limited emission of pollutants into our common environment without overtaxing those resources. Fourth, and lastly, enforcement ensures that the promises embodied in those environmental laws, regulations, and permits are actually fulfilled.

II. ENFORCEMENT THEORY

There are a variety of ways to look at enforcement. A purely economic analysis argues that each entity will weigh the relative benefits of compliance against non-compliance and the price to be paid if one is caught. If the non-compliance yields considerable cost savings, and there is little expectation of enforcement occurring or, if it occurs, of it 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.

In 1984, the United States Environmental Protection Agency (EPA) attempted to remove the attraction of this approach by requiring that the economic benefit of noncompliance be factored into every penalty calculation. The more traditional criteria such as severity of the violation, its potential harm, and the compliance history of the violator are also used in calculating the

total penalty.[3] EPA concluded that penalties must at least exceed the costs saved by a company operating in violation of environmental laws before any real deterrent effect would be achieved.

EPA began implementing this policy in 1985. Before the policy was implemented, total penalty assessments had averaged about $6,000,000 per year between 1981 and 1984. In 1985, after the policy was implemented, penalty assessments went up to $23,000,000.[4] Over the next four years, penalty assessments averaged $26,000,000 per year.[5] In FY 1990, civil penalties rose again to $61,300,000 ($38,500,000 in civil judicial; $22,800,000 in civil administrative -- both were all-time records.)[6] EPA is now encouraging the states to adopt this approach.

There is an alternative theory of enforcement that attributes most noncompliance to a lack of knowledge about the regulatory system and how to comply with it. Without a doubt, given the regulatory schemes in effect today, this is sometimes absolute reality. This condition most likely prevails when a complex regulatory system is initially being imposed upon small businesses or small governmental units. At such a time, regulatory entities

---

[3]United States Environmental Protection Agency, Policy on Civil Penalties, EPA General Enforcement Policy #GM-21, February 16, 1984.

[4]Libber, Jonathan D., "Penalty Assessment at the Environmental Protection Agency: A View From Inside, "National Environmental Enforcement Journal, April 1991, P. 5.

[5]Id.

[6]U.S. EPA, Enforcement Accomplishments Report, FY1990, p. 3-4.

may stress technical assistance leading to voluntary compliance without imposing penalties until it is clear that noncompliance is not caused by a lack of knowledge or technical assistance.

These two views of enforcement can be harmonized. Voluntary compliance has been highly encouraged by the environmental agencies in Texas. Typically, before formal enforcement action proceeds against a violator, that violator has been contacted by the Regional Offices of the environmental agencies and given an opportunity to comply. Immediate, satisfactory compliance often results in no further formal enforcement action.

III. GOALS OF ENFORCEMENT

The first goal of enforcement is to protect the public's health and the environment. To do this, efforts are first directed toward the correction of the violation, including any underlying causes and the cleanup of any resulting pollution.

Enforcement actions are also intended to achieve both specific and general deterrence. Specific deterrence means that the targeted regulatee will be motivated to not violate the law again. General deterrence means that other similarly situated regulatees will take instruction from the enforcement action against the targeted regulatee and will cease any similar violations.

Enforcement must also proceed in an even-handed manner. Equity requires that violators not come out ahead economically to the disadvantage of those entities that spend substantial amounts to comply with the law. There should also be some similarity of

enforcement options for similar violations and attitudes. Equity also requires that the enforcement of environmental laws protect the public health, welfare, and environment with a special view to the protection of those members of our society that have difficulty protecting themselves.

IV. ENFORCEMENT SANCTIONS

A. Administrative Penalties and Compliance Orders

1. The Authority

The Texas Legislature, in 1985, followed the long time practice of EPA and the growing trend in other states, and empowered the Texas Water Commission (TWC) and the Texas Air Control Board (TACB) to assess civil monetary penalties for violations for the Texas Water Code, the Texas Solid Waste Disposal Act, and the Texas Clean Air Act. This authorization indicated a new commitment on the part of the State of Texas to increase enforcement of its environmental laws. Agency assessment of penalties was expected to be a more efficient and less costly way to obtain enforcement against a greater universe of environmental violators.

Section 26.136 of the Texas Water Code authorizes the TWC to assess an administrative civil penalty not to exceed $10,000 per day for a person who violates Chapter 26, or a TWC rule, order, or permit issued pursuant to the Chapter. Each day a violation continues may be considered a separate violation for purposes of penalty assessment. The Texas Solid Waste Disposal Act, Chapter

361 of the Texas Health and Safety Code, provides for similar penalties. The TACB was given similar power in the Texas Clean Air Act, Chapter 382 of the Texas Health and Safety Code. The use of administrative penalties has been broadened to apply to other regulatory programs as well.

These statutes circumscribe the agencies' authority by setting forth certain factors that the agency must consider in assessing the administrative penalty. The following factors are common to most of the statutes:

(1) the nature, circumstances, extent, and gravity of the prohibited acts with special emphasis on the hazard or potential hazard created to the health or safety of the public;

(2) the impact of the violation on a receiving stream or underground water reservoir, on the property owners along a receiving stream or underground water reservoir, and on water users of a receiving stream or underground water reservoir;

(3) with respect to the alleged violator:

(a) the history and extent of previous violations;

(b) the degree of culpability, including whether the violation was attributable to mechanical or electrical failures and whether the violation could have been reasonably anticipated and avoided;

(c) the demonstrated good faith, including actions taken by the alleged violator to rectify the cause of the violation;

(d) the economic benefit gained by the violation;

(e) the amount necessary to deter future violations;

(f) any other matter that justice may require.

The statutes require consideration of all these factors in making penalty determinations. They do not, however, establish the relative significance or weight to be given to any one of the factors.

An Executive Director's Report ("EDR") will be issued before the agency proceeds to a contested enforcement hearing. The EDR states the facts on which the Executive Director concluded that a violation of law occurred and recommends an appropriate administrative penalty for those violations. Written notice of the EDR is given to the alleged violator no later than 10 days after the report is issued. The notice includes a brief summary of the violations alleged, a statement of the recommended penalty, and a statement of the right of the alleged violator to a hearing on the occurrence of the violation and/or the amount of the penalty.

The person charged may, within 20 days after the date notice is received, give written consent to the Executive Director's report, including the administrative penalty, or may make a written request for a hearing. Ultimately, the agency may enter an order assessing penalties. It must notify the violator of the agency's

findings, the amount of the penalty and the right to judicial review of the agency's order.

Judicial review of the agency's order assessing administrative civil penalties is under Section 19 of the Texas Administrative Procedures and Texas Register Act, TEX.REV.CIV.STAT. 6252-13a, and is conducted pursuant to the substantial evidence rule. Administrative penalties are deposited to the State's general revenue fund.

2. Supreme Court Upholds Agency Authority to Assess Penalties

The Texas Air Control Board's and the Texas Water Commission's authority to assess administrative penalties was challenged by the Texas Association of Business (TAB) in 1987. The trial court ruled in favor of the State in October 1989. Although it was appealed directly to the Texas Supreme Court, the opinion upholding the State's authority to assess administrative penalties was not issued until March 3, 1993. Texas Association of Business v. Texas Air Control Board and Texas Water Commission, League of Women Voters and Lone Star Chapter of the Sierra Club, 852 S.W.2d 440 (Tex. 1993).[7]

---

[7]A major portion of the Supreme Court opinion discussed whether TAB had standing to bring this lawsuit. After one round of special exceptions and repleading, the State did not further challenge TAB's standing in the trial court or on appeal. Both the State and TAB took the position that the State had waived its standing challenge pursuant to Texas Industrial Traffic League v. Railroad Commission, 633 S.W.2d 821, 823 (Tex.1983)(per curiam). The Supreme Court overruled that case and "disapprove of all cases relying on it to the extent that they conflict with this opinion." 852 S.W.2d at 446. The Court proceeded to decide that standing is a component of subject matter jurisdiction and that it could be raised for the first time on appeal and could be raised by the Court sua sponte. The Court then adopted the United States Supreme Court's standard for

TAB argued on appeal that the Texas Constitution's right to trial by jury, as provided by article 1, section 15, prohibited the assessment of such penalties by an agency.

That section of the Texas Constitution preserves the right of trial by jury as it existed at common law or by statute at the time of the adoption of the Constitution in 1876.

TAB relied heavily on the holding of State v. Credit Bureau of Laredo. Inc., 530 S.W. 2d 288, 291 (Tex. 1975) that the right to jury trial was violated in an action brought in district court to recover civil penalties for violations of an injunction issued pursuant to the Deceptive Trade Practices Act. TAB argued that the civil penalties involved in that case were analogous to the civil penalties assessed by agencies and that, therefore, a right to jury trial attached to the assessment of administrative penalties.

The Court first focused on its observation in Credit Bureau that jury trial was unavailable for many types of adversary proceedings, including the appeal of administrative decisions. 852 S.W.2d at 450. It then concluded that these agencies' assessments of administrative penalties were not analogous to any cases tried to a jury in 1876. Id. at 451. It noted the development of the modern administrative state and its impact on our legal and social order. 852 S.W.2d at 451. The increase in

---

associational standing: (a) would the members have standing to sue in their own right; (b) are the interests the association seeks to preserve germane to the organization's purpose; and (c) does the claim asserted or the relief requested require the participation of individual members in the lawsuit? Id. at 447. Applying the test, the Court concluded that TAB had standing to bring this lawsuit and proceeded to the merits.

population, the concentrated industrial activity with wide-spread emission of pollutants with potential for significant damage to natural resources, and the complex regulatory schemes that have been developed to balance environmental concerns with our state's economy have all occurred since 1876. Id. Therefore, the Court found that no right to jury trial attached to appeals from agency assessment of administrative civil penalties. Id.

Although not specifically raised by TAB in the Supreme Court, the Court also held that the fact-finding function delegated by the legislature to the two agencies was constitutional. Id. at 451. This decision was based in part on article XVI, section 59(a), the Conservation Amendment of the Texas Constitution, as construed in Corzelius v. Harrell, 143 Tex. 509, 186 S.W.2d 961 (1945). 852 S.W.2d at 451. In that case, the Supreme Court concluded that certain judicial functions, including fact finding, may be constitutionally delegated by the legislature to administrative agencies in furtherance of the preservation and conservation of the state's natural resources. Id. The delegation in the statutes in issue was held to be "a manifestation of the public's interest in preserving and conserving the state's air and water resources." Id.

TAB also challenged the portion of the statutes that required that the penalties either be paid into an escrow account or that the violator post a supersedeas bond with the agencies in order to be able to appeal the agency's order. TAB claimed a violation of the Texas Constitution's Open Courts provision of article 1,

section 13, asserting that the statutes created an impermissible financial barrier to judicial review.

The Supreme Court agreed with TAB and struck the portions of the statutes which conditioned the right of appeal on the payment of the penalty. 852 S.W.2d at 452. It also specifically stated that requiring immediate payment of the penalty was not the problem; it was only the provision specifying the forfeiture of the right to appeal because of non-payment that was unconstitutional. 852 S.W.2d at 449.

3. Agency Action under the Authority

Since obtaining the authority to assess administrative penalties in September 1985, the Texas Water Commission has issued orders containing approximately $21,000,000 in administrative penalties. During the same period of time, the Texas Air Control Board has issued orders containing approximately $11,000,000 in administrative penalties.

The highest administrative penalty yet assessed in an environmental enforcement action in Texas was in a multi-media water quality and solid waste enforcement action against Elf Atochem, related to its Bryan pesticide manufacturing plant. Elf Atochem agreed to pay $2,500,000 in administrative penalties; another $1,500,000 in deferred penalties contingent on performance over the first three years of the order; $1,500,000 to fund supplemental environmental projects; and another $6,600,000 in a property value protection plan for the neighborhood around the plant.

Other notable TWC agreed enforcement orders include hazardous waste orders against Oxy-tech Metal Finishing for $142,000 and against Precise Hard Chrome for $123,736, plus an additional $19,304 deferred, pending satisfactory completion of the technical requirements of the order. Examples of significant water quality enforcement orders include one against Anheuser-Busch for $700,000; Union Pacific for $132,400; and another against Javelina Company in the amount of $115,000 with an additional $23,800, deferred pending satisfactory compliance with the technical requirements of the order.

4. Remedial Relief and Compliance Orders

Most orders issued by agencies include technical recommendations for remediation of any harm to the environment caused by the violations. The orders may also require changes in practices or additional pollution control equipment to prevent the violations from recurring. These technical requirements often require the expenditure of funds far in excess of the administrative penalty imposed. Whether the funds are spent for cleanup of polluted areas or for prevention of pollution in the future, they constitute an indirect benefit to the citizens of the state.

Even before Texas agencies received authority to assess monetary penalties, they had the authority to order entities to remediate the consequences of illegal polluting activity. To enforce these orders, however, the agencies have to call upon the

judicial system which has the power to fine or put defendants in jail for violating court orders.

B. Judicial Civil Action

1. The Authority

State agencies have long had the authority to ask the attorney general to go to district court on their behalf and seek monetary civil penalties and appropriate injunctive relief. See, e.g., Chapter 361, Texas Health and Safety Code (Texas Solid Waste Disposal Act); Chapter 382, Texas Health and Safety Code (Texas Clean Air Act); and Chapter 26, Texas Water Code (Texas Water Quality Act).

Monetary penalties of not less than $50 nor more than $10,000 are available for each act and each day of violation under section 26.122 of the Texas Water Code for actions brought in district court. Civil penalties obtained in a judicial action may be significantly higher than those obtained in an administrative action because the maximum administrative penalty per day is $10,000 under section 26.136 of the Texas Water Code, regardless of how many violations occur each day. Judicial civil penalties do not have a daily maximum.

Section 361.223 of the Texas Health and Safety Code provides for civil penalties of not less than $100 or more than $25,000 for each act of violation and for each day under Chapter 361 of the Solid Waste Disposal Act. The higher cap per violation or day could itself result in a substantially higher penalty in a judicial

action than that authorized for administrative penalties under section 361.252. In addition, like the administrative penalty authorized under the Texas Water Code, the Solid Waste Disposal Act provides that an administrative penalty may not exceed $10,000 per day regardless of how many violations occur on each day.

The air quality provisions of the Health and Safety Code provide for civil penalties of not less than $50 or more than $25,000 for each day and for each act of violation under Section 382.085. Again, the judicial penalty cap per act and day of violation is substantially higher than the maximum placed on administrative penalties of $10,000 a day for each violation. However, unlike the Texas Water Code and the Solid Waste Disposal Act, the air quality provisions do not limit the total penalties that can be assessed per day to a total of $10,000.

Broad injunctive relief is also available under these environmental statutes. The district court, under section 26.123 of the Texas water Code, "shall grant the injunctive relief the facts may warrant" and is authorized to grant "appropriate" injunctive relief under section 361.228 of the Solid Waste Disposal Act. Section 382.084 of the Texas Health and Safety Code states that a district court shall grant the injunctive relief "warranted by the facts" based upon a finding that a person is violating any air quality statutes, regulations, or agency orders.

Texas courts have been very generous in awarding injunctive relief in environmental cases. The Texas Supreme Court has held that the doctrine of balancing the equities, traditionally applied

in common law injunction actions, has no application to statutorily authorized injunctive relief such as that available in these environmental statutes. State v. Texas Pet Foods, 591 S.W.2d 800 (Tex. 1979). Rather, once the State shows that the law is being violated, it is the court's duty to restrain the violation. Id. at 805.

The courts will issue mandatory injunctions, compelling the defendant to perform certain acts to remediate pollution. They also will issue prohibitory injunctions which order the defendant to cease all polluting activities and to not engage in polluting activities in the future. City of Shoreacres v. State, 582 S.W.2d 211 (Tex. Civ. App. -- Houston [1st] 1979, writ ref'd n.r.e.).

2. The Practice

Examples of cases settled after referral to the Attorney General's Office include a hazardous waste case against Chemical Waste Management, Inc. in 1988 which settled for $1,000,000 plus extensive remedial relief. Another hazardous waste case against Witco, Inc., settled for $955,000 in 1989. Municipal sewage cases were settled against the City of San Antonio for $400,000 (another $300,000 was subsequently paid in stipulated penalties) and against the City of Abilene for $200,000 in civil penalties. Significant settlements under the Clean Air Act included judgments against Dynagen, Inc., for $1,400,000 in 1991; Tex Trac, Inc., for $115,000 in 1990; Texas City Refining, Inc., for $130,000 in 1988; and Shintech, Inc. for $225,000 in 1987.

The resources required to prosecute a case increase when that case is referred to the Attorney General's Office and increase again substantially if the case is actually tried to a jury of lay people who must be painstakingly educated about complex laws and regulations. Notwithstanding the increased resources required, the increased publicity and the public sentiment evidenced by a jury verdict, potentially provide such strong deterrent effects that judicial enforcement has an important role to play in today's environmental enforcement scheme. An occasional reminder of the seriousness with which the public views environmental contamination can also provide a strong incentive for violators similarly situated to reach an accommodation with the agency or the Attorney General's Office before going to trial.

a. State v. Malone Service Company, et al.

In April, 1989, the State went to trial against Malone Service Company and two officers of that company for violations of the Texas Injection Well Act and the Texas Solid Waste Disposal Act. After a two-week trial to a jury, a verdict was returned in favor of the State. The jury found that Malone had improperly discharged into an earthen pit on 418 occasions and assessed the maximum penalty for those violations. It also found that the ground water had been contaminated by the discharge or seepage of solid waste from the earthen pit on a total of 3,495 occasions. The jury assessed penalties of $2,403,900 against the company; $627,000 against the company president for personal participation in some of

the violations; and $22,000 against the plant manager for personal participation in some of the violations.

The appellate history of this case has been lengthy and twisted. The Fourteenth Court of Appeals reversed the trial court's judgment[8] based on its exclusion of evidence which the defendant argued would prove that the State had discriminatorily enforced against it. The Texas Supreme Court reversed the Court of Appeals, holding that the petitioner had not established that the government had purposefully discriminated on the basis of such impermissible considerations as race, religion, or the desire to prevent the exercise of constitutional rights.[9] Therefore, defendant's evidence that others similarly situated had not been similarly enforced against was held to be irrelevant and properly excluded.

On remand, the Court of Appeals considered the points that it had not yet ruled upon. In its second opinion, the court articulated significant principles of law for state enforcement cases. First, it held that the president and plant manager could be held individually liable even though the permit was held in the name of the company. The court found that environmental violations are "analogous to a situation in which a corporate officer who

---

[8]Malone Service Co. v. State, 804 S.W.2d 174 (Tex. App. -- Houston [14th Dist.] 1991).

[9]State of Texas v. Malone Service Co., 829 S.W.2d 763 (Tex. 1992). The Malones petitioned the United States Supreme Court for writ of certiorari. The writ was denied. Malone Service Co. v. State of Texas, 113 S.Ct. 464 (1992).

participates in or directs the commission of a tort may be held personally liable." Slip Opinion at p. 3.

The Court of Appeals also held that 3,495 violations found for the continuing discharge of solid waste into the groundwater was adequately supported by the expert opinion of a TWC geologist that the earthen pit had contributed and was contributing to continual contamination of the groundwater. The jury was allowed to "infer continual seepage in lieu of credible evidence of a force or event that would have stopped the seepage." Slip Op. at 5. The court also noted that jury inference is particularly appropriate in a case such as this where the subsurface discharge is not readily substantiated by direct observation. Id. The Malone's have filed an application for writ of error with the Texas Supreme Court raising five points of error, challenging all of the above holdings as well as others.[10]

b. State v. City of Greenville

In a municipal landfill enforcement action, a jury found that the City of Greenville had violated the Texas Solid Waste Disposal Act 1,419 times by failing to provide adequate cover at a municipal solid waste site for those days. The trial judge awarded civil penalties of $5,000 for those violations, even though the statute provided a $100 minimum civil penalty for each day of violation. The Court of Appeals reversed that judgment, holding that the minimum civil penalty was mandatory for each violation found by the

---

[10]No. D 3937, Malone Service Co., et al v. State of Texas, In the Supreme Court of Texas, application pending.

jury. Therefore, the Court of Appeals rendered judgment for the State in the amount of $141,900, in accord with the jury's finding. State v. City of Greenville, 726 S.W.2d 162 (Ct. App. -- Dallas, 1986, writ ref'd n.r.e.).

This case also established an important legal principle, i.e. that when a statute sets a minimum civil penalty, the court must assess the minimum penalty for any violations found by the jury. This principle, too, will have an important impact for future negotiations of both administrative and judicial enforcement orders.

3. The Future

Since the legislature gave the environmental agencies the authority to levy monetary penalties, they have referred far fewer original judicial actions to the Attorney General's Office. However, there are certain circumstances where the additional resources required to actually try an environmental lawsuit are justified.

Nevertheless, it is reasonable to predict that companies that attempt seriously to resolve their environmental violations at the agency level will probably be successful.

One type of case that is appropriate for judicial enforcement is one in which there is ongoing pollution that requires immediate remedial action. Courts can issue an injunction that is enforceable by contempt when a violator refuses to cooperate with the agency in remedying the problem. Although the agency can issue a compliance order, it must go to court to have it enforced.

Therefore, it is usually more efficient in these circumstances to go to the court in the first instance. It is also helpful to have the higher range of penalties available to use against a recalcitrant violator.

Another type of case that should be considered for judicial enforcement is where the agency has had considerable trouble with several regulatees for similar types of violations. Referring such a case, or several such cases, and actually trying one or more of them, will serve as a strong deterrent to the remainder of the regulatees who will then be very eager to resolve their regulatory problems with the agency.

Another good candidate for judicial enforcement includes cases that involve very few but very serious violations where the law would allow the recovery of a higher dollar amount of penalty per violation. In addition, where legal interpretations are in question and the trial of one case would clarify the law for the negotiation of several other cases, judicial enforcement could advance the overall cause of obtaining compliance with environmental laws.

The State agencies may ultimately look to the example set by the federal government in the way it divides its civil enforcement between administrative and judicial actions. EPA refers about 10% of its enforcement cases to the Department of Justice for judicial enforcement. Perhaps a similar ratio is appropriate for the Texas environmental agencies.

Local municipalities and county governments are also given authority to enforce the three major environmental statutes.

Sections 361.225 and 361.226, Texas Health and Safety Code (solid waste); Section 382.114, Texas Health and Safety Code (air); and Section 26.124 of the Texas water Code. When a local government brings suit, the State agency with jurisdiction over the violator is designated by the statutes as a necessary party in the action. Any civil penalties recovered are divided between the local government that first initiated the suit and the State.

C. Criminal Sanctions

1. The Authority

In 1991, the Texas Legislature adopted far-reaching amendments to the Clean Water Code, the Solid Waste Disposal Act, and the Texas Clean Air Act. Criminal offenses and sanctions under Texas law are now substantially equivalent to those available under federal law.

Offenses under the Texas statutes generally target intentional or knowing misconduct with four exceptions. Three of those exceptions involve "reckless endangerment" offenses. The reckless emission of air contaminants, hazardous wastes, or water pollutants, that place another person in imminent danger of death or serious bodily injury, are offenses under section 382.091(a)(6) of the Texas Health and Safety Code, section 361.222(q) of the Texas Health and Safety Code, and Chapter 26.2125(1) of the Texas water Code, respectively. Punishment for an individual convicted of such reckless behavior is a fine of not less than $1,000 nor more than $100,000; confinement not to exceed one year, or both. For a

corporation convicted of such an offense, punishment is a fine of not less than $2,500 nor more than $250,000. Id. If death or serious bodily injury results from such a violation, an enhancement provision doubles the monetary fine for both the individual and the corporation and increases the potential confinement to 5 years for the hazardous waste and water code offenses. No such enhancement exists under the Texas Clean Air act. Enhancement under that act does occur, however, if there has been a previous conviction for the same offense. That enhancement results in a doubling of the maximum fine and imprisonment available under Section 382.092(g), Texas Health and Safety Code.

There is also one strict liability offense under the Texas Water Code. The discharge (or permitting the discharge) of any waste or pollutant into any water in the State that causes or threatens to cause water pollution unless in compliance with a permit or order can result in a fine of not less than $100 nor more than $10,000 under Chapter 26.2121(g),(h), and (i) of the Texas Water Code. No scienter need be proved and no jail sentence can be levied.

All three of the statutes contain criminal sanctions for intentionally or knowingly failing to pay fees required under those statutes, making false statements or omitting material information in documents submitted to the agencies, failing to notify or report as required, and tampering with or falsifying data from monitoring devices. Sections 361.221(a)(3) and (a)(4); 361.2215(a)(1) and (a)(3); 361.2225; 382.091(a)(2) - (a)(5) of the Texas Health and

Safety Code; Section 26.2121(j); (m); (p); and (s) of the Texas Water Code. These violations contain sanctions for an individual of a fine of not less than $500 nor more than $100,000, confinement in jail not to exceed a year, or both. A corporation is subject to a fine of not less than $1,000 nor more than $250,000. Enhancement provisions double the punishment if there has been a previous conviction of the same offense.

The most serious criminal offenses in Texas law are the "knowing endangerment" offenses: intentionally or knowingly discharging pollutants, or committing other prohibited acts, which place any other person in imminent danger of death or serious bodily injury. Sections 361.222(a), (g), and (1); 382.091(a)(7) of the Texas Health and Safety Code; and Sections 26.2125(a), (g) and (1) of the Texas Water Code. Punishment provided for an individual under those provisions is a fine of between $1,500 and $150,000, imprisonment not to exceed five years, or both. For a corporation, the punishment is a fine of not less than $3,000; nor more than $300,000. Under the Solid Waste Disposal Act and the Texas Water Code, if death results, enhancement provisions double the potential sanction. Enhancement under the Clean Air Act is available if there has been a previous conviction for the same offense. Section 382.092(g), Texas Health and Safety Code.

Under the Solid Waste Disposal Act and the Texas Water Code, if it can be proven that the actor actually had knowledge that his actions were placing any other person in imminent danger of death or serious bodily injury, punishment for an individual increases to

a fine between $2,500 and $250,000; imprisonment not to exceed 10 years; or both. For a corporation, punishment is a fine of not less than $5,000 nor more than $500,000. If death results, enhanced punishment provisions double those sanctions. Sections 361.222(d), Texas Health and Safety Code; Section 26.2125(d), Texas Water Code.

2. Texas Environmental Enforcement Task Force

The move toward criminal enforcement for environmental violations made a significant step forward when Governor Ann Richards, on December 11, 1991, issued Executive Order AWR 91-18, creating the Texas Environmental Enforcement Task Force.

The task force is chaired by Dale Burnett of the Texas Water Commission. Other members include personnel from the Texas Air Control Board, Attorney General's Office, Parks and Wildlife Department, General Land Office, Railroad Commission, and the Governor's Office. In addition, federal agency personnel from the Environmental Protection Agency, the U.S. Coast Guard, the Federal Bureau of Investigation, and the United States Attorney's Office for the Eastern, Southern, and Western Districts, are members of the criminal enforcement Task Force.

Each U.S. Attorney's Office has dedicated at least one attorney to focus on environmental criminal cases. Criminal offenses, therefore, are quite likely to be tried in federal court with State assistance. Among other considerations, this means that the sentencing guidelines will be used for any defendants convicted of environmental offenses and that real incarceration may result

from conviction. The corresponding advantage to the federal entities is that they now have access to an increased number of field personnel in criminal investigations since, through the task force, they can call on the State agencies' field personnel for assistance.

In addition, the Texas Attorney General's Office hired a criminal prosecutor approximately a year ago to assist the Task Force in prosecuting state cases. Other state agencies, notably Texas Parks and Wildlife Department, have added personnel during this past year specifically for the purpose of supporting the Task Force.

One of the most significant investigations to date was reported in the Port Arthur News and the Beaumont Enterprise on July 23, 1992. That week, state and federal officials served a warrant on Bethlehem Steel Corporation Bethship Sabine Yard on Pleasure Island. The warrant alleged violations under the Clean Water Act and The Resource Conservation and Recovery Act.

The warrant allowed the taking of samples from areas suspected to be sites of illegal disposal and the review of documents and records maintained at the site. Violations alleged that blasting grit used in sandblasting ships or drilling rigs in dry dock had been discharged into the Sabine-Neches Ship Channel. This material typically contains lead and chromium which may be hazardous wastes, depending on their characteristics.

The Task Force has conducted a review of approximately 25 cases and has initiated investigations in 15 of those. Eleven are

federal lead cases; four are state lead. The Task Force has developed probable cause to obtain criminal search warrants on ten cases from May 1992 to July 1993. One case resulted in an indictment and would have gone to trial in August in federal court in Tyler. The defendant just plead guilty to two felony counts. A pre-sentencing investigation is currently underway. Other indictments are expected in the near future.

3. Southern Environmental Enforcement Network

The Southern Environmental Enforcement Network (SEEN) is a federally assisted, multi-state, inter-governmental organization created to bring together attorneys, environmental regulators and criminal investigators in an effort to promote effective criminal enforcement of environmental laws at the State and local level. It is made up of 37 agencies from 10 states, including Texas. It provides formal training for investigators and prosecutors, information support services and research to its member agencies.

With SEEN, the Task Force has co-sponsored an in-state training course for over 50 persons, including state peace officers and agency inspectors. Ten attorneys have attended basic prosecutorial training and two attorneys have attended advanced prosecutorial training. Twelve inspectors have also attended an intensive 4-day training course in Georgia.

4. The Future

Criminal prosecution for the intentional violation of environmental laws is appropriate and will become the norm. Because of the stigma of criminal prosecution and the potential for

incarceration, criminal enforcement is a strong deterrent and one of the most powerful tools available to reduce environmental violations.

IV. NEW TRENDS IN ENFORCEMENT

A. Enforcement Policy Division

The TWC established the Enforcement Policy Division ("EPD") in September 1992. In July 1993, the Special Investigations headquarters unit was transferred from the Field Operations Division to the Enforcement Policy Division.

The division is expected to continue to expand in FY94 to approximately 15 people. Additional personnel will include persons with extensive backgrounds in the air, water quality and solid waste programs, as well as litigators.

EPD will provide policy and litigation support to the agency's civil and criminal enforcement efforts. It will work in close cooperation with the Legal Division, the Program Divisions, and the Regional Offices. It will also cooperate with appropriate federal and state authorities to investigate and prosecute criminal environmental violations.

Initial priorities for this division will be to work with other divisions to prioritize the enforcement cases that have been remanded to the Office of Hearings Examiner. Cases will then be settled or set for contested case hearings on a priority basis.

In addition, this division will guide agency efforts to review and improve enforcement policies throughout the agency. This

effort is intended to increase consistency between programs and to continually improve the quality of the agency's enforcement efforts.

B. Multi-Media Enforcement

Emphasis on a multi-media enforcement approach will continue to increase. Multi-media inspections encompass more than one environmental regulatory program affecting operations at a facility. This increases the likelihood that the full extent of the environmental problems will be recognized and addressed.

Enforcement remedies focusing only on one media have, in the past, sometimes created problems for other regulatory programs. By addressing all programs at once, a comprehensive remedial plan can be developed. A multi-media approach is also expected to increase enforcement efficiency, result in larger penalties, increase media coverage, and provide a greater potential for innovative settlements such as audits and pollution prevention projects.

The State of Texas began its multi-media program in 1992 in response to the Governor's Executive Order AWR 91-18, discussed above, and in response to encouragement from EPA. The Texas Water Commission and the Texas Air Control Board entered into a Memorandum of Agreement to implement a coordinated approach to the enforcement activities of the two agencies in May, 1992. Texas was one of the first states to submit a multi-media guidance document to the Environmental Protection Agency.

A multi-media review committee consists of members of both State agencies and the Attorney General's Office. The committee compiled potential multi-media inspection sites, coordinated 13 planned inspections, and worked together on the resulting enforcement actions. The agency's multi-media program will be coordinated through the Enforcement Policy Division.

C. Standardized Agency Orders

The agency is interested in enforcement tools that can resolve minor violations in a very standardized manner with a minimum of effort. One possibility being considered would offer a streamlined enforcement procedure for relatively minor violations that have resulted in little or no environmental harm and that do not require long-term corrective actions.

Such a program would probably target specific types of violations and establish specific penalty amounts for such violations. For example, the holder of a water quality permit might be offered the opportunity to sign a standardized agency order for the failure to maintain required information in records of monitoring activities.

D. Supplemental Environmental Projects

In 1993, the Texas Legislature adopted H.B. 2429 which makes it clear that the state has the discretion to consider the willingness of the respondent to contribute to approved supplemental environmental projects in determining the appropriate

amount of administrative penalties in settlement of enforcement cases. The agency is in the process of adopting a policy on supplemental environmental projects.

We are using EPA's guidance documents to assist in the drafting of a policy appropriate for Texas. For example, in accord with EPA's policy, the actual administrative penalties recovered are still expected to capture the economic benefit of noncompliance plus some appreciable portion of the gravity component of the penalty.

EPA's guidelines state that supplemental projects will be considered if (1) violations are corrected through actions to ensure future compliance; (2) deterrence objectives are served by payment of a substantial monetary penalty; and (3) there is an appropriate "nexus" between the nature of the violation and the environmental benefits to be derived from the supplemental project.[11] All supplemental projects must improve the damaged environment or reduce the total risk posed to public health or the environment by the violations.

There are five categories of projects that EPA will consider: (1) pollution prevention in which there is a reduction in the amount of pollutants reaching the environment[12]; (2) pollution reduction - beyond and decrease required for the facility to comply

---

[11] Id. at p. 1-2.

[12] Pollution prevention is defined by EPA as the reduction or elimination of environmental discharges and/or emissions to the environment through the implementation of source reduction and environmentally sound recycling practices. EPA, Pollution Prevention Statement, January 26, 1989, p. 1.

with environmental laws; (3) environmental restoration projects which go beyond repair to enhancement of the environment in the vicinity of the violating facility; (4) environmental auditing projects beyond those that simply represent good business practices; and (5) enforcement-related environmental public awareness projects.[13]

EPA also requires that there be a relationship between the nature of the violation and the environmental benefits to be derived from the proposed supplemental project. Projects that are no longer approvable include (1) general educational or environmental awareness projects; (2) contribution to research at a university concerning environmental study, or (3) a project unrelated to the enforcement action, but otherwise beneficial to the community.[14]

Texas will be guided by EPA's practices, but will not necessarily follow them completely. For example, Texas has many current methods to encourage pollution reduction. We would not approve a pollution reduction project that was already required, for instance, by a company's pledge to the Clean Texas 2000 program. On the other hand, Texas' legislation indicates that general educational or environmental awareness projects are acceptable.

---

[13] Id. at pp. 2-4.

[14] Id. at p. 5.

The primary guiding principle of desirable supplemental environmental projects is to obtain a direct benefit to the environment beyond that which would ensue without the project. Supplemental environmental projects already have been approved on an ad hoc basis in several cases, including the Elf Atochem and Anheuser-Busch cases discussed above and others.

Types of supplemental environmental projects that have been approved in Texas include contributions to communities' collection of household hazardous waste programs, a seminar on regulatory requirements for small-quantity generators, and the cleanup of an illegal municipal solid waste "dump". Projects in the vicinity of the pollution are given preference.

V. CONCLUSION

Compliance is the bottom line measure of the success of our environmental regulatory programs. In order to achieve the promise of our environmental laws, we must have regulatory programs that are enforced in consistent, efficient, fair, and effective ways. These are the goals that will guide the continuing evolution of the enforcement processes at the Texas Natural Resources and Conservation Commission.

papers.dir\CVENF.93

CIVIL ENFORCEMENT UPDATE

Christopher B. Amandes
Vinson & Elkins L.L.P.
Houston, Texas

presented at
5th Annual Texas Environmental Superconference
August 5-6, 1993

Copyright 1993. All rights reserved.

Christopher B. Amandes joined Vinson & Elkins L.L.P. in 1986. His practice spans a wide range of environmental matters, focusing primarily on client counseling and defense of air, water, and solid waste enforcement actions, including participation as a key member of the team that negotiated a federal consent decree to address soils characterization and remediation under the Toxic Substances Control Act at approximately 60 sites in 14 states. He received a B.A. with majors in Environmental Science and Engineering and Biology from Rice University in 1976 and a Masters of Environmental Engineering in 1978. After graduation, he spent four years as a project engineer and manager for Espey, Huston & Associates Engineering & Environmental Consultants in Houston, Texas. He returned to school and in 1985 received a J.D. from the University of California at Los Angeles where he served as Chief Article Editor for the UCLA Law Review and was a member of the Order of the Coif.

From 1985 to 1986, Chris served as law clerk to the Honorable John R. Brown of the United States Court of Appeals for the Fifth Circuit. He is a registered professional engineer in Texas and a member of the Environmental and Natural Resources Law Section of the State Bar of Texas and the American Bar Association Section of Natural Resources, Energy, and Environmental Law.

CIVIL ENFORCEMENT UPDATE

Christopher B. Amandes
Vinson & Elkins L.L.P.

I. FEDERAL CIVIL ENFORCEMENT OF ENVIRONMENTAL LAWS

A. Overview of Federal Civil Enforcement of Environmental Laws

1. Administrative Enforcement of Federal Environmental Laws

The United States Environmental Protection Agency (EPA) administers almost all of the federal environmental statutes. EPA is authorized to enforce most federal environmental laws in an administrative proceeding; the Agency does not need to go to court to initiate and conclude an enforcement action. The advantages to EPA of proceeding administratively relate primarily to time and resources: Administrative enforcement actions are more readily initiated; they can often be resolved quickly; and they do not require the amount of personnel and time as a civil proceeding in federal district court, with all of its attendant procedural and evidentiary requirements. In addition, the amount of administrative penalties that may be assessed by EPA in an administrative proceeding is often the same as the amount that may be assessed in a civil judicial proceeding, although the penalties assessed in administrative proceedings generally tend to be smaller than the penalties assessed in civil judicial proceedings.

2. Administrative Penalty Amounts

The administrative penalty authority provided to EPA under most federal environmental statutes is $25,000 per day for each violation. See Clean Air Act, 42 U.S.C. § 7413(d); Resource Conservation and Recovery Act, 42 U.S.C. § 6928(a)(3); and Toxic Substances Control Act, 15 U.S.C. § 2615(a). The amount of administrative penalty that may be sought in a Clean Water Act enforcement action is limited to $10,000 per day of violation, however. 33 U.S.C. § 1319(g). The amount of administrative penalties sought by EPA often is calculated according to EPA's Civil Penalty Policy, the most recent version of which was issued on February 16, 1984. This policy, which is not program specific, directs EPA to assess civil penalties by considering: (1) the maximum penalty amount that could be assessed; (2) the

economical benefits of noncompliance to the defendant; (3) the gravity of the violations; (4) any actual or potential harm to human health or the environment; (5) the number of violations; (6) the duration of noncompliance; (7) any history of recalcitrance by the defendant; and (8) the defendant's ability to pay the penalty without seriously jeopardizing continued business operations. However, some programs have unique penalty policies that are tailored to address violations of the specific program requirements. Examples of regulatory programs with their own civil penalty policies include the polychlorinated biphenyl (PCB) program under the Toxic Substances Control Act, the Resource Conservation and Recovery Act hazardous waste program, and the underground storage tank program. Appeal of administrative penalties assessed under federal environmental laws is generally to the United States Courts of Appeal under a substantial evidence standard.

3. Limitations on and Enhancements of Administrative Penalty Authority

Some federal environmental laws limit the amount of the penalty that EPA may assess in an administrative action. For example, under the Clean Air Act, the maximum administrative penalty that EPA may assess without the concurrence of the Department of Justice is $200,000. 42 U.S.C. § 7413(d). Similarly, the maximum administrative penalty that EPA may assess under the Clean Water Act is $125,000. 33 U.S.C. § 1319(g)(2)(B). In addition, some federal environmental laws contain provisions that provide certain presumptions or other enhancements to EPA's administrative penalty authority. For example, the Clean Air Act contains a provision that entitles the government to a presumption that a violation, under certain circumstances, is a continuing violation. 42 U.S.C. § 7413 (E)(2). The alleged violator is entitled to rebut the presumption only if it can prove by a preponderance of the evidence that there were intervening days on which no violation occurred or that the violation was not a continuing one. Id. The significance of a continuing violation under most federal environmental laws is that the government may obtain a separate penalty for each day that a violation continues. *See e.g.*, 42 U.S.C. § 6928(g); 42 U.S.C. § 7413(e)(2).

4. Civil Enforcement of Federal Environmental Laws

Civil penalties may be assessed in a judicial action under almost all federal environmental laws. Violations of federal environmental laws are prosecuted by the Department of Justice on behalf of EPA. Like most federal environmental administrative penalties, civil penalties for violations of federal environmental laws are typically set at a maximum

of $25,000 per day per violation. *See* Clean Air Act 42 U.S.C. § 7413(b); Clean Water Act, 33 U.S.C. § 1319(d); Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. § 9604(e)(5)(B); and Resource Conservation and Recovery Act 42 U.S.C. § 6928(g). Civil penalties under the Toxic Substances Control Act, however, generally may be sought only in an administrative proceeding. *See* 15 U.S.C. § 2615. In seeking a penalty in a civil judicial enforcement proceeding, the Department of Justice is not required to conform its penalty claim to the EPA Civil Penalty Policy, and it typically asks in its complaints for the maximum civil penalty allowed by law.

5. Citizen Suits

An often-overlooked enforcement mechanism under federal environmental laws is the so-called "citizen suit." Most federal environmental laws allow citizens to initiate a civil judicial action if the subject of the suit is not then the subject of an ongoing governmental enforcement action. *See, e.g.*, 42 U.S.C. § 6972(b)(2). Typically, the citizen plaintiff must provide 60 days notice to the alleged violator and to EPA before initiating a citizen suit. *See, e.g.*, 42 U.S.C. § 6972 (b)(1). The amount of civil penalty that may be assessed in a citizen suit is identical to the amount of civil penalty that may be assessed in a judicial enforcement action brought by the Department of Justice, i.e., typically $25,000 per day per violation. In addition, successful citizen plaintiffs may recover their costs of litigation, including reasonable attorneys fees, from the defendant. *See, e.g.*, 42 U.S.C. § 6972(e). As a result of a 1987 United States Supreme Court decision in a Clean Water Act citizen suit, citizen plaintiffs may be precluded from obtaining civil penalties for "wholly past" violations unless they can credibly allege a likelihood that the violations will continue or are continuing. *See Gwaltney of Smithfield, Ltd. v. Chesapeake Bay Foundation*, 484 U.S. 49 (1987).

6. Injunctive Relief

In addition to the authority to seek administrative or civil judicial penalties, EPA and the Department of Justice are authorized to seek injunctive relief in both administrative and civil judicial proceedings. *See, e.g.*, Clean Air Act, 42 U.S.C. § 7413(a),(b); Clean Water Act, 33 U.S.C. § 1319(a),(b); Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. § 9604(e)(5)(B); Resource Conservation and Recovery Act, 42 U.S.C. § 6928(a)(1). Under the Toxic Substances Control Act, injunctive relief may be obtained only

in a judicial proceeding, even though penalties may be obtained only in an administrative proceeding. 15 U.S.C. § 2616. In addition, EPA's enforcement of the Comprehensive Environmental Response, Compensation, and Liability Act relies to a large degree on the threat of invoking the remedial injunctive authority found in Section 106 of the Act. *See* 42 U.S.C. § 9606. A detailed discussion of the nature of injunctive relief that may be obtained in an enforcement action is beyond the scope of this paper and will be addressed in other portions of this conference.

B. Federal Civil Enforcement Summary

1. Civil Judicial Referrals

During fiscal year 1992 (FY 92), EPA referred 361 matters to the Department of Justice for prosecution as civil judicial cases. This number was down 8% from the number of matters referred during FY 91. However, significant increases were recorded for referrals under the Safe Drinking Water Act (up 320%), the Clean Air Act (up 18%), and the Resource Conservation and Recovery Act (up 18%). The number of referrals under the Clean Water Act declined by 28 cases, but this decrease is probably is attributable to EPA's increasing reliance on the administrative penalty authority provided by the 1987 amendments to the Act. The bulk of the civil judicial referrals to the Department of Justice continue to be related to the Comprehensive Environmental Response, Compensation, and Liability Act, with Clean Air Act and Clean Water Act referrals as the next most common types. Resource Conservation and Recovery Act referrals were a distant fourth.

2. Administrative Actions

During FY 92, EPA prosecuted 3,667 administrative enforcement actions. This number was the fourth highest annual total, and is down approximately 11% from the record 4,136 actions in FY 89. EPA issued 1,434 administrative penalty orders in FY 92, an increase of 13% from the number issued in FY 91.

3. Contractor Listing

During FY 92, 20 facilities were added to EPA's List of Violating Facilities. Federal agencies are prohibited from entering into contracts with or providing grants or loans to facilities owned or operated by persons convicted of criminal violations of air standards under Section

113(c) of the Clean Air Act or water standards under Section 309(c) of the Clean Water Act. The List of Violating Facilities is the official list of facilities with which the federal government is prohibited from doing business. During FY 92, three facilities were removed from the List, because EPA determined that these facilities had corrected the conditions giving rise to the violations that caused them to be placed on the List. At the end of FY 92, sixty-nine facilities remained on the List of Violating Facilities.

4. Penalty Assessments

During FY 92, a record $78.7 million in civil penalties was assessed. Approximately, $50.7 million of this amount was assessed in civil judicial proceedings and the remaining $28.0 million was assessed in administrative proceedings. Since 1974, EPA has assessed $320.8 million in civil penalties, but two-thirds of this amount has been assessed during fiscal years '90, '91, and '92. The table below shows the distribution of penalties assessed by each major federal environmental program:

FEDERAL ENVIRONMENTAL PENALTY BREAKDOWN FOR FY 92
(in millions of dollars)

Program	Civil Judicial	Administrative	Total
Clean Air Act	22.0	0	22.0
Clean Water Act	17.8	5.3	23.1
Toxic Substances Control Act	0	8.2	8.2
Resource Conservation and Recovery Act	5.9	7.7	13.6
Comprehensive Environmental Response, Compensation and Liability Act	6.7	0	6.7
Federal Insecticide, Fungicide, and Rodenticide Act			1.1*
Safe Drinking Water Act			0.5*
Toxic Release Inventory			2.8*
Other (other Emergency Planning and Community Right-To-Know Act, wetlands, Marine Protection, Research, and Sanctuaries Act)			0.7*

*Distribution between civil judicial and administrative, if any, not available.

5. Supplemental Environmental Projects

During FY 92, EPA negotiated 409 supplemental environmental projects with an estimated value of $50.1 million. EPA classified 48% of these projects in the category of public awareness (mostly arising from the Clean Air Act mobile sources program), 29% in the pollution reduction category (mostly from the Toxic Substances Control Act program), and 15% in the pollution prevention category (mostly from the Emergency Planning and Community Right-To-Know Act, Section 313 program).

C. Significant Recent Federal Civil Enforcement Matters in Texas

1. Arco Lyondell Petrochemical Company (S.D. Tex.): On January 3, 1990, the Department of Justice filed a complaint against Arco for alleged violations of the lead phasedown regulations at the company's refinery in Houston. The case was settled by the entry of consent decree in early FY 93, in which Lyondell agreed to pay a $500,000 civil penalty.

2. Longoria's Muffler Shop (S.D. Tex.): Longoria's Muffler Shop was prosecuted for allegedly removing at least ten catalytic converters from automobiles in violation of the Clean Air Act. In a consent judgment entered on September 27, 1992, the defendant agreed to pay an $10,080 cash penalty plus provide $2,000 for a training program for auto mechanics in the Corpus Christi area.

3. American Lantern Company (S.D. Tex.): On September 1, 1992, a consent decree was entered in which American Lantern Company agreed to pay $300,000 for alleged violations of the categorical pretreatment requirements at the company's facility in San Antonio. According to the allegations in the complaint, the company discharged untreated process water containing excessive levels of metals to the City of San Antonio's publicly owned treatment works for 4-1/2 years.

4. City of Beaumont (S.D. Tex.): On February 20, 1992, the United States District Court for the Eastern District of Texas assessed a $400,000 penalty against the City of Beaumont for failing to implement some basic requirements of an industrial pretreatment program as required by the City's NPDES permit.

5. Koch Refining Company (S.D. Tex.): In a consent decree entered on February 18, 1992, Koch agreed to pay a civil penalty of $500,000 for alleged violations of its NPDES permit effluent limits at its Corpus Christi refinery.

6. Elf Atochem North America, Inc. (EPA Region 6): On June 26, 1992, EPA signed a consent agreement and final order in which Elf Atochem agreed to pay a $900,000 administrative penalty to resolve allegations that it violated the requirements of its hazardous waste incinerator permit at the company's Houston organic chemical manufacturing facility. The administrative complaint also alleged violations of hazardous waste regulations pertaining to inspections, secondary containment for hazardous waster management units, and recordkeeping.

7. Chaparral Steel Co. (N. D. Tex.): On July 10, 1992, the United States District Court for the Northern District of Texas entered a consent decree resolving allegations that the defendant disposed of electric arc furnace dust in a landfill without sufficient treatment as required by the Resource Conservation and Recovery Act land ban. The consent decree required Chaparral to pay a $221,125 civil penalty and prepare and implement a landfill closure plan.

8. Structural Metals Company, Inc. (W. D. Tex.): In a May 27, 1992 consent decree, Structural Metals agreed to pay a $325,000 civil penalty to settle allegations that it disposed of electric arc furnace dust in its on-site landfill without sufficient treatment under the land ban and that it was late in filing two reports on exports of hazardous waste. The consent decree also required Structural Metals to remove and properly treat all illegally disposed dust.

II. State Civil Enforcement of Environmental Laws

A. Overview of State Civil Enforcement of Air Pollution Laws

1. Administrative Enforcement of State Air Pollution Laws

The primary vehicle for regulating air quality in Texas is the Texas Clean Air Act, Tex. Health & Safety Code Ann. chapter 382. The Texas Clean Air Act is administered by the Texas Air Control Board (TACB), which was established in 1965. The TACB is authorized under the Clean Air Act to set air quality standards, set limits on pollutants emitted into the ambient air, and require sources of air emissions to use best available control technology. Since 1985, the

TACB has been authorized to assess administrative penalties to address violations of the Texas Clean Air Act or a TACB rule, permit, or order. *Id.* § 382.088.

2. Administrative Penalty Amounts

The administrative penalty authority provided to the TACB under the Texas Clean Air Act is $10,000 per day for each violation. Id. § 388.088(b). Each day that a violation continues is considered a separate violation. *Id.* The Texas Clean Air Act instructs the TACB to consider the following factors in determining the appropriate amount of an administrative penalty to assess: (1) the seriousness of the violation, including the nature, circumstances, extent, gravity, and any health hazard associated with the violation; (2) the violator's history of previous violations; (3) the amount necessarily to deter future violations; (4) any efforts made to correct the violation; and (5) any other matters that justice may require. *Id.* § 382.088(c). Judicial review of contested TACB administrative penalties is available in state district court in Austin under a substantial evidence standard. *Id.* § 382.090(d); Tex. Civ. Stat. Ann. art. 6252-13a § 19. Under the recent *Texas Association of Business* decision, a supersedeas bond does not need to be posted in order to appeal the assessment of an administrative penalty. *See Texas Ass'n of Business v. Texas Air Control Board*, 36 Tex. Sup. Ct. J. 607 (Mar. 3, 1993).

3. Civil Enforcement of State Air Pollution Laws

Civil judicial penalties may be assessed under the Texas Clean Air Act. Violations of the Act are prosecuted by the Texas Attorney General on behalf of the TACB. Unlike most federal environmental laws, the amount of a civil penalty may be obtained in a civil judicial action is greater than the amount that may be obtained by the TACB in an administrative action. The Texas Clean Air Act authorizes the Attorney General to obtain civil penalties of $25,000 per day per violation. *Id.* § 382.085. The Attorney General may also obtain injunctive relief to address continuing violations that require corrective action. *Id.* § 382.084. The doctrine of balancing the equities has no application to statutorily authorized injunctive relief under state environmental laws. *State v. Texas Pet Foods, Inc.*, 591 S.W.2d 800, 805 (Tex. 1980). The Texas Clean Air Act, like the other major state environmental laws but unlike most federal environmental laws, does not provide mechanism for citizens to enforce the Act.

B. State Air Pollution Enforcement Summary

1. Civil Judicial Referrals During FY 92

The Attorney General settled four lawsuits brought on behalf of the TACB during FY 92. (The fiscal year for the state government runs from September 1 to August 31 of the following year.) The amount of civil penalties obtained in these actions was $1,482,375, although $1.4 million of this total was derived from a single action, which is discussed below. Through the end of June in FY 93, the Attorney General had settled three lawsuits and obtained $559,000 in civil penalties.

2. Administrative Actions

During FY 92, the TACB issued 230 agreed board orders and assessed a total of $2,329,943 in administrative penalties. In comparison, during FY 91, the TACB entered into only 194 agreed court orders, but it assessed a total of $3,269,922 in administrative penalties. Through the end of June in FY 93, the TACB had issued 249 agreed board orders and assessed $1,379,343 in administrative penalties.

C. Significant Recent State Air Pollution Enforcement Matters in Texas

1. Dynagen, Inc.: In October 1991, the Texas Attorney General's office and Dynagen settled a long-running suit involving air emissions from the company's Odessa, Texas rubber manufacturing plant. In the settlement, Dynagen agreed to pay a $1.4 million civil penalty and to undertake extensive actions at the plant over a three year period.

2. Temple-Inland Forest Products: On February 21, 1992, the TACB approved an agreed board order that assessed a $62,000 penalty against Temple-Inland Forest Products for nuisance level air emissions at the company's Evadale pulp and paperboard mill.

3. Texas Petrochemicals Corp.: Also on February 21, 1992, the TACB approved an order assessing a $54,000 penalty against Texas Petrochemicals for nuisance-level smoke and odor emissions at the company's Houston synthetic organic chemical manufacturing plant.

4. Archer Daniels Midland: On June 18, 1992, the TACB approved an agreed board order assessing a $128,000 against Archer Daniels Midland for modifying a cottonseed oil solvent extraction unit at its Lubbock facility without first obtaining a permit or a standard

exemption and for a series of asbestos NESHAP violations related to the company's dismantling of an old cottonseed oil mill.

5. Toshiba International Corp.: A July 23, 1992 agreed board order issued by the TACB assessed a $35,475 penalty against Toshiba International for constructing three aluminum holding furnaces, a varnish dip and bake system, and a bake oven afterburner and stack without first obtaining a permit or standard exemption and for failing to keep proper records of the hours of operation and coating usage for three paint booths, as required by Standard Exemption 89.

6. Lyondell Petrochemical Co.: On September 18, 1992, the TACB issued an agreed board order against Lyondell Petrochemical assessing a $47,500 penalty for failure to give timely notice of a major upset, for NESHAP violations, and for failure to perform quarterly monitoring of fugitive emissions.

7. Scott Polymers, Inc.: Also on September 18, 1992, the TACB assessed a $41,900 penalty against Scott Polymers for constructing and operating two dryers and two tanks at its Saginaw, Texas polystyrene bead manufacturing facility without first obtaining a permit or standard exemption.

8. Elf Atochem North America, Inc.: Also on September 18, 1992, the TACB entered an agreed board order assessing a $41,000 penalty against Elf Atochem for exceeding the 30-unit ground level standard for sulfur dioxide at its Houston organic chemical manufacturing facility.

D. Overview of State Civil Enforcement Water and Waste Laws

1. Administrative Enforcement of State Water and Waste Laws

The Texas Water Commission (TWC) enforces the Texas Water Code and the Texas Solid Waste Disposal Act, which regulate discharges to the waters of the State and the management of industrial solid waste, municipal solid waste, and hazardous waste, respectively. Since 1985, the TWC has been authorized to assess administrative penalties to address violations of the Texas Water Code and the Texas Solid Waste Disposal Act. *See* Tex. Water Code Ann. § 26.136; Tex. Health & Safety Code Ann. § 361.252. In September of this year, the TWC will merge with the TACB and the expanded agency will be known as the Texas Natural Resources Conservation Commission.

2. Administrative Penalty Amounts

The administrative penalty authority provided to the TWC under the Texas Water Code and the Texas Solid Waste Disposal Act is $10,000 per day for each violation. See Tex. Water Code Ann. § 26.136(b); Tex. Health & Safety Code Ann. § 361.252(b). Each day that a violation continues is considered a separate violation. *Id.* The Texas Water Code instructs the TWC to consider the following factors in determining the appropriate amount of an administrative penalty to assess under the Code: (1) the nature, circumstances, extent, duration, and gravity of the violation; (2) the impact of the violation on the receiving waters; (3) the violator's history and extent of previous violations, the violator's degree of culpability, the violator's demonstrated good faith, the economic benefit gained by the violator as a result of the violation, and the amount necessary to deter future violations; and (4) any other matters that justice may require. Tex. Water Code Ann. § 26.136(c). The Texas Solid Waste Disposal Act instructs the TWC to consider substantially the same factors in determining the appropriate amount of an administrative penalty to assess under that Act. Texas Health & Safety Code Ann. § 361.252(c). Judicial review of contested TWC administrative penalties is available in state district court in Austin under a substantial evidence standard. Tex. Water Code Ann. § 26.136(l); Tex. Health & Safety Code Ann. § 361.252(n); Tex. Civ. Stat. Ann. art. 6252-13a § 19. As with the appeal of contested TACB penalties, a supersedeas bond does not need to be posted in order to appeal the TWC's assessment of an administrative penalty.

3. Civil Enforcement of State Water and Waste Laws

Civil judicial penalties may be assessed under the Texas Water Code and Texas Solid Waste Disposal Act. Violations of both acts are prosecuted by the Texas Attorney General on behalf of the TWC, but they may also be prosecuted by counties and cities. The Texas Water Code authorizes the Attorney General to obtain civil penalties of $10,000 per day per violation, Tex. Water Code Ann. § 26.123(b), but the Attorney General may obtain civil penalties of $25,000 per day per violation for violations of the Texas Solid Waste Disposal Act. Tex. Health & Safety Code Ann. § 361.223(b). The Attorney General also may obtain injunctive relief to address continuing violations that require corrective action. Tex. Water Code Ann. § 26.123(b); Tex. Health & Safety Code Ann. § 361.224. Neither the Texas Water Code

nor the Texas Solid Waste Disposal Act provides a mechanism for citizens to enforce either Act.

E. State Water and Waste Enforcement Summary

1. Administrative Actions

The TWC apparently no longer routinely compiles and makes available information about water-related administrative enforcement activity. Limited information about administrative enforcement actions by the Industrial and Hazardous Waste group at the TWC continues to be compiled, however. During FY 92, the TWC Industrial and Hazardous Waste group issued 42 administrative orders assessing a total of $1,640,760 in administrative penalties ($398,323 of this amount was deferred). By comparison, in FY 91, the same group issued 45 administrative orders assessing a total of $3,429,699 in administrative penalties ($1,956,547 of this amount was deferred). As of April of 1993, the Industrial and Hazardous Waste group had issued 16 orders during FY 93 assessing a total of $2,978,320 in administrative penalties ($184,808 of this amount was deferred).

F. Significant Recent Water and Waste Enforcement Matters in Texas

1. Elf Atochem North America, Inc.: On December 2, 1992, the TWC issued an agreed order assessing a $2,500,000 administrative penalty against Elf Atochem for hazardous waste related violations alleged to have occurred at the company's Bryan agricultural chemical manufacturing facility. This was the largest administrative penalty ever assessed by the TWC. On January 3, 1992, the TWC issued an order assessing a $197,480 administrative penalty against the company ($41,240 of which was deferred) for alleged hazardous and industrial solid waste violations alleged to have occurred at the company's Beaumont organic chemical manufacturing facility.

2. Empak, Inc.: On July 23, 1992, the TWC issued an agreed order against Empak assessing a $136,400 administrative penalty ($11,200 of which was deferred) for a variety of hazardous waste-related violations at the company's Deer Park waste treatment and injection well facility.

3. Tinse Chemical Company, Inc.: On December 10, 1991, the TWC issued an agreed order assessing a $337,600 administrative penalty ($107,600 of which was deferred) against Tinse Chemical for violations of the industrial solid waste regulations occurring at the company's Texas City and Galveston facilities.

4. Texas Hydraulics, Inc. (d/b/a Precise Hard Chrome): On January 13, 1993, the TWC issued an agreed order assessing of $143,040 administrative penalty ($19,304 of which was deferred) against the company for violations of the hazardous waste and industrial solid waste regulations alleged to have occurred at the company's Waco metal plating facility and several off-site disposal areas. The company also agreed to contribute $50,000 to help establish a Waco household hazardous waste collection program.

5. Anheuser-Busch, Inc.: In March 1992, the TWC issued an agreed order assessing a $700,000 penalty against Anheuser-Busch for allegedly discharging various waste waters into the stormwater sewer system at the company's Houston brewery. The company also agreed to contribute $136,870 to Corpus Christi and New Braunfels for the implementation of household hazardous waste collection programs.

Criminal Enforcement

"Wanted Dead or Live"

Tom Kiehnhoff

Ken Houp

5TH ANNUAL TEXAS ENVIRONMENTAL SUPERCONFERENCE

August, 1993

SELECTED TOPICS IN CRIMINAL ENFORCEMENT

By:

Tom N. Kiehnhoff
Assistant United States Attorney
Eastern District of Texas
350 Magnolia
Beaumont, TX 77701

409-839-2538

409-839-2550 (Fax)

This outline sets forth the opinions of the author on the subjects discussed and is not offered as the position of the United States of America or any of its departments or agencies.

BIOGRAPHY: TOM N. KIEHNHOFF

Born: September 13, 1949. Bachelor of Arts - Washington University, St. Louis, Mo., 1971; Juris Doctorate, St. Louis University, 1975; Licensed to practice in Colorado, 1975, United States District Court, District of Colorado, 1975, United States District Court, Eastern District of Texas, 1990, United States Court of Appeals for the Fifth Circuit, 1991; appointed Assistant United States Attorney, Eastern District of Texas, 1991; private practice, 1975-1990.

I. CRIMINAL INTENT

The defining feature of criminal conduct is the voluntary decision of the accused to perform an illegal act. The terms used to define the mens rea element of a criminal offense may vary, but certain distinctions have remained fairly constant.

Strict liability offenses do not require proof that the accused intended to do anything. For example, a speeding offense is commonly proven if speed in excess of the posted limit is shown: it is not necessary to show that the accused meant to speed or even that he knew he was speeding.

Specific intent offenses require explicit proof of criminal intent. As a general rule, not only must the government show that the accused voluntarily engaged in certain acts, but it must also show that he undertook those acts for the purpose of achieving a specific result prohibited by law. For example, to prove most tax violations the government must show both that the accused voluntarily engaged in certain conduct (ie., didn't file a return or filed a false return) and that he engaged in that conduct for the purpose of avoiding a known legal duty (ie., the duty to file a return, the duty to honestly report all income subject to taxation).

General intent crimes require the government to establish that the accused voluntarily engaged in certain acts; the government is not obligated to prove that he engaged in those acts with the intent of achieving a result prohibited by law.

Most environmental crimes are general intent crimes. For example, in order to prove a violation of 42 U.S.C. §6928 (d)(2)(A), the government must prove that an accused caused waste subject to regulation under RCRA to be treated, stored or disposed of and that, at the time of the prohibited act, the accused did not have a permit or interim status authorizing the act. It is not necessary for the government to show that the accused knew the waste was subject to a specific statute or regulation, or that he knew he was required to have a permit authorizing him to treat, store or dispose of the waste. The government need only prove that the accused voluntarily engaged in or directed the act prohibited, that he didn't have a permit and that he knew the material disposed of had the potential to be harmful to others or to the environment.

In United States v. Baytank, 934 F.2d 599 (5th Cir. 1991), the Fifth Circuit held that the government did not have to prove that defendants charged with unlawful storage of hazardous wastes knew that the wastes had been defined as hazardous by the EPA. In Baytank, the defendants had requested an instruction which would have made proof of such knowledge an element of the crime charged. Baytank, 934 F.2d at 612.

The Fifth Circuit held that the trial court was correct when it instructed the jury it could convict if it was shown that the defendants knew the material stored had the potential for harm to others or the environment. The court reasoned that to require more would be to make the defense of "mistake of law" available to a defendant charged with a general intent crime. Baytank, 934 F.2d at 612.

In support of its position, Baytank offered case authority which, it argued, stood for the proposition that in a RCRA prosecution the government was required to prove not only that the accused did not have a permit (a matter of fact), but also that it knew a permit was required; a position which offered inferential support for its requested instruction. The court rejected this argument:

> "The other case relied on by Baytank is United States v. Johnson & Towers, Inc., 741 F.2d 662, 669 (3rd Cir. 1984), cert. denied sub nom. Angel v. United States, 469 U.S. 1208, 105 S.Ct. 1171, 84 L.Ed.2d 321 (1985), a RCRA case where in dicta the court said that to convict the defendant employees they had to know not only that their employer 'did not have a permit' but also that it 'was required to have a permit.' While arguably the latter relates to knowing the **facts** that required the employer to have a permit, the opinion seems to imply a requirement of knowledge of the regulations so requiring. To the extent Johnson & Towers would require knowledge of the regulations, we respectfully decline to follow it." Baytank, 934 F.2d at 613 (emphasis in original)

The court concluded:

> ". . . [K]nowingly means no more than that the defendant knows factually what he is doing - storing, what is being stored, and that what is being stored has the potential for harm to others or the environment, and that he has no permit - and it is not required that he know that there is a regulation which says what he is storing is hazardous under RCRA." Baytank, 934 F.2d at 613.

In United States v. Sellers, 926 F.2d 410 (5th Cir. 1991), a case which involved a RCRA disposal prosecution, the Fifth Circuit approved an instruction that stated the government was not required to prove that the defendant knew the waste was hazardous within the meaning of an EPA regulation: "[W]hen a person knowingly possesses an instrumentality which by its nature is potentially dangerous, he is imputed with the knowledge that it may be regulated by public health legislation." Sellers, 926 F.2d at 416.

In Baytank and Sellers, the Fifth Circuit followed a long line of decisions interpreting "public welfare" statutes - those enacted

to protect public health and the environment. The federal courts have repeatedly held that, where such statutes impose criminal penalties for violations, Congress did not intend to require proof of specific intent to violate the law. United States v. Park, 421 U.S. 658 (1975 (contamination of food by rodents); United States v. International Minerals and Chemicals Corporation, 402 U.S 558 (1971) (transportation of corrosive liquids); United States v. Freed, 401 U.S. 601 (1971) (registration of firearms); United States v. Dotterweich, 320 U.S. 277 (1943) (shipping adulterated and misbranded drugs) Hegglund v. United States, 100 F.2d 68 (5th Cir. 1938) (Oil Pollution Act of June 7, 1924). In United States v. Mullens, 583 F.2d 134, 138 (5th Cir. 1978), the court stated: "It is well recognized that the legislature has the power to delete the requirement of scienter where the statute deals with an area related to the general public health, morals, safety or welfare."

In Baytank, the Fifth Circuit recognized it was not alone in holding that violations of RCRA were not specific intent crimes when it observed that "[a] majority of the circuits have adopted a similar approach under RCRA." Baytank, 934 F.2d at 612, citing United States v. Hoflin, 880 F.2d 1033, 1039 (9th Cir. 1989), cert. denied, 493 U.S. 1083 (1990) (instruction that the defendant knew the substance "had the potential to be harmful to others or to the environment" was sufficient; no requirement to show that it knew it didn't have a permit); United States v. Greer, 850 F.2d 1447, 1450 (11th Cir. 1988); United States v. Dee, 912 F.2d 741, 745 (4th Cir. 1990); United States v. Hayes International Corp., 786 F.2d 1499, 1502-5 (11th Cir. 1986).

The judicial system depends on a perception of fairness. The impact of treating environmental crimes as general intent crimes in the case of an accused who doesn't know the law is a frequent topic of discussion because it would be unfair for a truly "unaware" person to face criminal prosecution. However, the hypothetical which attracts our attention is at odds with reality.

As a practical matter, most people would be hard pressed to credibly argue that they are unaware of at least the existence of the pervasive environmental regulatory scheme which exists in this country. The media, and others, have kept the issue of real and perceived threats to the environment in the public eye for better than a quarter century: at this point, a movie or television show can convey the idea that something sinister and harmful to the environment is happening by projecting the simple image of a 55 gallon barrel being dumped under cover of darkness (unlike the defendant in Baytank, the viewer knows something bad is happening even though he may not know what that something bad is or the section of the Code of Federal Regulations which makes it bad).

The regulated community is no less aware of environmental regulation. Our investigations routinely bring us into contact

both with employees of limited education (the type of person most often asked to do environmental dirty work) and environmental compliance and management personnel. In our experience, persons at the lowest end of the corporate organization can easily articulate the "red flags" that go up whenever they are asked to bury, dump or otherwise secretly dispose of materials at work. Environmental and management personnel often possess a knowledge of the law that rivals that of their government counterparts.

It can be argued that specific intent crimes are so defined to protect the unwary from criminal liability in highly technical matters where the risk to actual safety of the public is not great. Environmental crimes are general intent crimes, therefore, because there is a generally high awareness of environmental regulation and the consequences of noncompliance for the community are potentially disastrous. The judicial treatment of environmental crimes as requiring proof of only general intent is not forging a new burden for the regulated community, rather it is a reflection of the state of our collective knowledge.

II. RESPONSIBLE CORPORATE OFFICER

If a disposal company consisting of two trucks and the two driver/owners who operate them is in the business of illegally dumping hazardous waste onto the ground, proving that each of the owners was aware of the activities of the business is a simpler task than showing knowledge if the same activity is undertaken by employees with no supervisory authority in the Transportation Department of a corporation with over a thousand employees in four states; particularly when the corporation has an employee manual which requires its employees to obey all environmental laws and to report any violations of the same to management.

While the desire of the government to curtail the unlawful activity described above applies with equal force to both the small business and the large corporation, the tools available to the government to achieve that goal, conspiracy, aid and abetting, willful blindness and the responsible corporate officer doctrine do not meet with equal success in each setting.

The law of conspiracy enables the law to punish all persons who knowingly engage in a criminal enterprise without regard to the degree of their participation. Someone with the power to organize a criminal organization can be held criminally responsible for the criminal acts performed by his co-conspirators undertaken to assist the enterprise in reaching its goals.

The essence of the conspiracy is the making of an agreement a requirement that resists easy application to the corporate structure. The idea that the highest and lowest members of a criminal enterprise "agreed" to act in concert is conceptually more

accessible in the context of a criminal organization (for example, a drug distribution ring) or a small business in which each owner is engaged in all facets of the enterprise than it is in a corporation engaged in both lawful and unlawful activities. Drug importers and dealers are not burdened with any pretense of legality and small business owners cannot help knowing virtually every detail of their business. An illegal agreement in a corporation will likely be hopelessly intertwined with a host of legal agreements and further burdened by a corporate environment in which a nearly unfathomable gulf exists between the highest and lowest ranking members of the organization. More to the point, an illegal agreement between the highest levels of management and its lowest employees generally is not necessary to enable the commission of most environmental crimes.

While the grand conspiracy scenario, a sordid tableau in which a cabal of wealthy executives plots the death of the earth for profit, satisfies the same impulse as the stereotype of the innocent caught unawares in the commission of a general intent crime: the truth of corporate environmental crimes is likely to be less exciting.

The perceived dedication of the corporation to its bottom line is often enough in itself to inspire lower level employees to engage in criminal activities in order to advance themselves; simply put, middle level managers will take care of cost cutting without the necessity of an agreement between the boardroom and the rank and file employees. Environmental compliance is too often the first expense to be viewed as expendable. If a purpose of the law is to hold persons with the authority to order compliance with the law liable for failure to comply with the law, conspiracy is often an unworkable tool.

A person can be criminally liable for aiding and abetting another in the commission of a crime. A person may aid and abet an offense either by performing an illegal act or directing that the act be performed. All of the conceptual problems which exist with conspiracy as a tool to reach those persons ultimately in control of an organization apply to aiding and abetting as a theory of criminal liability. Again, if the purpose of a law is to hold persons with the authority to order compliance with the law liable for failure to comply with the law, the use of aid and abetting as a means is difficult in the context of a large organization.

The law recognizes that a person may be criminally liable for an offense if he deliberately shields himself from facts which would make him aware of criminal wrongdoing. The doctrine of "willful blindness" is directed at the person who uses his distance from the scene of criminal wrongdoing as a shield. It is particularly applicable to the corporate setting in which a facially neutral directive to "cut costs" from headquarters can translate into a host of unwanted activities. The Fifth Circuit

has recognized the doctrine of willful blindness. United States v. Evans, 559 F.2d 244, 246 (5th Cir. 1977), reh'g denied 565 F.2d 1215, cert. denied, 434 U.S. 1015, 98 S.Ct. 731, 54 L.Ed.2d 759 (1978). If a purpose of the law is to hold persons with the authority to order compliance with the law liable for failure to comply with the law, willful blindness creates an incentive on the part of such persons to inquire and insure that compliance is being achieved as well as requiring them to respond to evidence that compliance is not being achieved: turning a blind eye is not enough.

While willful blindness is a judicially created theory of criminal liability, the responsible corporate officer doctrine traces its origin to public welfare statutes. The Supreme Court upheld the strict liability provisions of such a statute when it sustained the conviction of the officer of a corporation found to have shipped adulterated and misbranded drugs in interstate commerce. United States v. Dotterweich, 320 U.S. 277, 64 S.Ct. 134 (1943) In Dotterweich, the Court accepted the clear legislative intent to place those persons best able to prevent the conduct proscribed by law strictly liable for any deviation without regard to their intent.

In 1987, Congress amended the Clean Water Act by adding "responsible corporate officers" to the definition of "persons" who could be held criminally and civilly liable for violation of the act. 33 U.S.C. §1319 (c)(6). Prior to the amendment, the criminal provisions of the Clean Water Act had been interpreted as general intent statutes. United States v. Frezzo Brothers, Inc., 546 F.Supp. 713 (E.D.Pa. 1982) aff'd 703 F.2d 62 (3rd Cir. 1983), cert.denied, 464 U.S. 829 (1983) (held that "willful" violation standard in pre-1986 statute did not make the offense a specific intent crime - in 1986 the mental state in the criminal offense section was changed from "willful" to "knowing").

The Tenth Circuit interpreted the amendment as an expansion of the persons who could be held accountable for a criminal violation of the Clean Water Act. United States v. Brittain, 931 F.2d 1413 (10th Cir. 1991). Whether the courts will ultimately hold responsible corporate officers strictly liable when the statute creating the offense requires general intent remains to be seen; at least one court has refused to do so in the context of a RCRA prosecution. United States v. MacDonald & Watson Waste Oil Co., 933 F.2d 35 (1st Cir. 1991).

The appearance of an old theory (the responsible corporate officer doctrine) in a new setting illustrates the continuing interest of law enforcement and the legislature in developing a means to give those persons with the power to ensure compliance with the law an incentive to diligently exercise that power. While the reach of the responsible corporate officer doctrine is further examined by the courts, it seems that willful blindness is the most

pertinent theory of liability to address that problem, at least in the context of large organizations.

III. KNOWING ENDANGERMENT

Both the Clean Water Act (CWA) and the Resource Conservation and Recovery Act (RCRA) have enhanced penalty provisions when an activity prohibited by the statute places another in imminent danger of death or serious bodily injury. 33 U.S.C. §1319 (c)(3)(A) (CWA); 42 U.S.C. § 6928 (e) (RCRA).

In United States v. Protex Industries, Inc., 874 F.2d 740 (10th Cir. 1989), a prosecution brought under the knowing endangerment provisions of RCRA, the Tenth Circuit approved a jury instruction which provided in part:

> "Counts 17, 18 and 19 of the indictment charge the defendant Protex Industries, Inc. with knowingly endangering three of its employees . . . in violation of 42 United States Code, Section 6928 (e). Under RCRA, in order to establish that Protex is guilty of endangering these employees, the prosecution must first establish that Protex is guilty of any one or more of Counts 7 through 13 or Count 16 of the indictment. . .
>
> Counts 7 through 13 and Count 16 each allege a RCRA violation involving illegal treatment, storage or disposal of hazardous wastes. If you find that Protex is guilty of any one or more of these charges, then and only then may you consider whether Protex is also guilty of Counts 17, 18 and 19.
>
> "In order to prove that Protex Industries is guilty of any offense charged in Counts 17, 18 and 19, the prosecution must establish the following two additional elements as to each such count:
>
> 1. That by one or more of the defendant Protex's RCRA violations, involving illegal treatment, storage or disposal of hazardous wastes, if you find any such violations, Protex placed the employee named in each count in imminent danger of death or serious bodily injury; and
>
> 2. That Protex knew, at the time of such RCRA violations, that it placed such employee in imminent danger of death or serious bodily injury.
>
> To convict under Count 17, 18 or 19, **it is not necessary that the prosecution prove that death or serious bodily injury actually occurred. The prosecution must only show**

that the defendant Protex Industries knew that by its conduct, it placed another person in imminent danger of death or serious bodily injury. Imminent danger means the existence of a condition or combination of conditions which could reasonably be expected to cause death or serious bodily injury unless the condition is remedied. While the existing danger must result or arise from the defendant's illegal conduct, such danger need not result in actual harm. It may involve harm that does not result in immediate death or serious injury. What the prosecution must show is that Protex knowingly endangered employees, not that it actually injured them." (from transcript of the trial court's instructions - emphasis supplied)

The business of Protex was recycling drums which had previously held toxic substances. The indictment in Protex alleged that three employees of Protex whose job it was to clean and paint drums brought to the facility for recycling came into contact with listed and characteristic waste when they dumped solvent waste as well as toxic waste resulting from the cleaning of the drums onto the ground. The indictment alleged that as a consequence of this unlawful disposal of characteristic and listed hazardous wastes without a permit, the employees suffered solvent poisoning as well as an increased and irreversible risk of cancer from exposure to the toxic waste.

Protex argued without success that risk of cancer did not meet the definition of "serious bodily injury" found at 42 U.S.C. §6928 (f)(6), that trial court erred when it instructed the jury that it could convict if it found that the defendant had a "reasonable expectation" that death or serious bodily injury would result from its unlawful conduct and that the failure to provide duplicate samples of tests conducted during inspections provided it with a defense.

In United States v. Borowski, 977 F.2d 27 (1st Cir. 1992), a prosecution under the knowing endangerment provisions of the Clean Water Act, the First Circuit declined to extend the protection of the act to employees asked to handle and dispose of hazardous pollutants which entered facilities owned by a publicly-owned treatment works. In arriving at its decision, the court looked to act's purpose to "restore and maintain the chemical, physical and biological integrity of the Nation's waters." In addition, the court was persuaded that when Congress adopted RCRA it was the purpose of that law and not the Clean Water Act to provide a "full range of remedies designed to protect both health and the environment" arising from the handling of hazardous wastes. Borowski, 977 F2d at 30-31.

The court in Borowski failed to recognize an anomaly created by its decision. While its holding is apparently consistent with

Protex which offered protection to employees faced with serious bodily injury as a consequence of their employer's RCRA violations, the court in Borowski failed to recognize that the disposal before it would have been subject to RCRA but for a exemption to the definition of "solid waste" which excluded it. 40 CFR § 261.4(a). It remains to be decided whether the agency meant to reduce the protection available to employees asked to dispose of hazardous waste when the exemption which takes them out from the protection of RCRA was based more on an overlap in regulatory authority than any determination that the materials were somehow less hazardous because they were going into a navigable water or POTW instead of onto the ground.

Finally, the inconsistency of the Borowski holding with the apparent intent of the law is found in the Sentencing Guidelines. Under the Guidelines, a defendant convicted under either the Clean Water Act or RCRA for a unlawful "mishandling" of hazardous or toxic substances (that is a conviction other than for knowing endangerment which is covered by a separate guideline) faces a sentence enhancement if the release resulted in a substantial likelihood of death or serious bodily injury. U.S.S.G. §2Q1.2 (2). Nothing in the guideline or the commentary following it excludes employees as victims when consideration is given to whether or not the enhancement should be applied.

IV. PENALTIES FOR CRIMINAL VIOLATIONS OF FEDERAL ENVIRONMENTAL LAWS.

Both persons and organizations can face criminal sanctions for violating federal environmental law. The penalties which may be imposed include imprisonment, fines and restitution.

Fines for criminal acts are governed by 18 U.S.C. §3571, which provides for a fine of not more than the **greatest** of the following:

Individual	Organization
The amount set forth in the law creating the offense	The amount set forth in the law creating the offense
The amount under section (d) of 18 U.S.C. §3571	The amount under section (d) of 18 U.S.C. §3571
For a felony, not more than $250,000	For a felony, not more than $500,000
For a misdemeanor resulting in death, not more than $250,000	For a misdemeanor resulting in death, not more than $500,000

For a Class A misdemeanor that does not result in death, not more than $100,000	For a Class A misdemeanor that does not result in death, not more than $200,000

18 U.S.C. §3571 (d) provides for an alternative fine which may equal twice the pecuniary gain to the defendant or twice the loss to the victim without regard to the maximum fine levels.

Restitution under the Victim and Witness Protection Act of 1982 (VWPA) is limited to convictions under Title 18 and certain other federal laws not relevant to this discussion. 18 U.S.C. §3663 (a)(1). By way of example, because the offense is found in Title 18, a conviction for conspiracy to violate a federal environmental statute could subject a defendant to liability for restitution. 18 U.S.C. §371.

Even if the offense is not one described in the VWPA, the defendant and the government may agree that restitution will be made: such an agreement vests the sentencing court with jurisdiction to impose a restitution order. 18 U.S.C. §3663 (a)(3).

Finally, restitution may be imposed in any case if it is imposed as a condition of probation. 18 U.S.C. §3563 (b)(3) However, if a defendant is not eligible for probation, then restitution would not be available. 18 U.S.C. §3561.

The following summarizes the criminal provisions of some of the federal environmental laws which have been the subject of criminal prosecutions (the entry titled "Maximum Fine" refers to the fine established in the law creating the offense):

A. RESOURCE CONSERVATION AND RECOVERY ACT (RCRA).

1. Criminal sanctions.

a. **42 U.S.C. §6928 (d).** Knowing transportation of regulated hazardous waste to an unpermitted facility **(d)(1)**; knowing treatment, storage or disposal of regulated hazardous waste without a permit or interim status or in violation of a material permit condition or a material condition of any interim status regulation or standard **(d)(2)**.

FIRST OFFENSE	SUBSEQUENT VIOLATION
Class D felony. Max. Imprisonment: five years. Max. Fine: $50,000 a day.	Class C felony. Max. Imprisonment: ten years Max. Fine: $100,000 a day.

b. **42 U.S.C. §6928 (d).** Knowing omission of information or false statements (this includes filings with a State if the filing is required as a part of a federally authorized state program) **(d)(3)**; activity involving regulated hazardous waste or used oil coupled with a knowing destruction, alteration or failure to keep a record required by the law **(d)(4)**; knowing transportation of regulated hazardous waste or used oil without a manifest **(d)(5)**; knowing exportation of a regulated hazardous waste to another country without the consent of that country or in violation of an agreement between that country and the U.S concerning the export **(d)(6)**; activity involving nonhazardous used oil in violation of a material permit condition or regulation **(d)(7)**.

FIRST OFFENSE	SUBSEQUENT VIOLATION
Class E felony. Max. Imprisonment: two years. Max. Fine: $50,000 a day.	Class E felony. Max. Imprisonment: four years. Max. Fine: $100,000 a day.

c. **42 U.S.C. §6928 (e).** Violation of §6928 (d) knowing that the conduct placed another in imminent danger of death or serious bodily injury. The following terms are specifically defined: "knowing", "organization" and "serious bodily injury." 42 U.S.C. § 6928 (f).

Class C felony.
Maximum Imprisonment: fifteen years.
Maximum Fine: $250,000 (individual)- $1,000,000 (organization)

B. CLEAN WATER ACT (CWA)

1. Criminal sanctions.

a. **33 U.S.C. §1319 (c)(1)(A):** negligent violation of section 1311, 1312, 1316, 1317, 1318, 1321 (b)(3), 1328 or 1345 of the CWA, or negligent violation of any permit (including authorized State permits) implementing the same, or negligent violation of any pretreatment requirement or negligent violation of any dredge or fill permit issued by the Secretary of the Army (or authorized State dredge or fill permit).

b. **33 U.S.C. §1319 (c)(1)(B):** negligent introduction of a pollutant or hazardous substance into a sewer system or POTW which a person knew or reasonably should have known could cause personal injury or property damage or negligent introduction of a pollutant or hazardous substance which causes the POTW to violate an effluent limitation or permit condition.

FIRST OFFENSE	SUBSEQUENT VIOLATION
Class A misdemeanor. Max. Imprisonment: one year. Max. Fine: $25,000 a day. Min. Fine: $2,500 a day.	Class E felony. Max. Imprisonment: two years. Max. Fine: $50,000 a day. Min. Fine: $2,500 a day.

c. **33 U.S.C. §1319 (c)(2)(A) and 33 U.S.C. §1319 (c)(2)(B):** knowing violation with respect to the conduct described at (c)(1)(A) and (B).

FIRST OFFENSE	SUBSEQUENT VIOLATION
Class E felony. Max. Imprisonment: three years. Max. Fine: $50,000 a day. Min. Fine: $5,000 a day.	Class D felony. Max. Imprisonment: six years Max. Fine: $100,000 a day. Min. Fine: $5,000 a day.

d. **33 U.S.C. §1319 (c)(3)(A):** knowing violation of section 1311, 1312, 1316, 1317, 1318, 1321 (b)(3), 1328 or 1345 of the CWA, or knowing violation of any permit (including authorized State permits) implementing the same, or knowing violation of any pretreatment requirement or negligent violation of any dredge or fill permit issued by the Secretary of the Army (or authorized State dredge or fill permit) by a person or entity who knows at the time that he thereby places another person in imminent danger of death or serious bodily injury. **33 U.S.C. §1319 (c)(3)(B):** defines mental state for "knowing endangerment," "organization," and "serious bodily injury."

FIRST OFFENSE	SUBSEQUENT VIOLATION
Class C felony. Max. Imprisonment: fifteen years. Max. Fine: $250,000 (ind.) Max. Fine: $1,000,000 (org.)	Class B felony. Max. Imprisonment: thirty years Max. Fine: $500,000 (ind.) Max. Fine: $2,000,000 (org.)

e. **33 U.S.C. §1319 (c)(4):** knowingly makes false statements, entries or tampers with or renders inaccurate any monitoring device or method required by the CWA.

FIRST OFFENSE	SUBSEQUENT VIOLATION
Class E felony. Max. Imprisonment: two years. Max. Fine: $10,000.	Class E felony. Max. Imprisonment: four years. Max. Fine: $20,000 a day.

f. **33 U.S.C. §1321 (b)(5):** failure to notify the National Response Center of a spill of oil or a hazardous substance.

Class D felony.
Max. Imprisonment: five years.
Max. Fine: As provided by Title 18

C. COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION AND LIABILITY ACT (CERCLA - "Superfund")

1. Criminal sanctions.

a. **42 U.S.C. §9603 (b)**, failure to notify an "appropriate agency of the United States" of the release of a hazardous substance from a vessel or facility which release is into or upon navigable waters (vessel), or which may affect natural resources under the ownership or control of the U.S. (vessel), or which is a reportable quantity (facility).

FIRST OFFENSE	SUBSEQUENT VIOLATION
Class E felony.	Class D felony.
Max. Imprisonment: three years.	Max. Imprisonment: five years.
Max. Fine: Title 18	Max. Fine: Title 18

b. **42 U.S.C. §9603 (d)**, destruction, alteration or falsification of records concerning hazardous substances contained or deposited in a facility.

FIRST OFFENSE	SUBSEQUENT VIOLATION
Class E felony.	Class D felony.
Max. Imprisonment: three years.	Max. Imprisonment: five years.
Max. Fine: Title 18	Max. Fine: Title 18

D. SAFE DRINKING WATER ACT

1. Criminal sanctions.

a. **42 U.S.C. §300H-2(b)**, willfully violates any requirement of an underground injection control program.
Class E felony.
Max. Imprisonment: three years.
Max. Fine: Title 18

b. **42 U.S.C. §300i-1(a)**, tampers with a public water system.

Class D felony.
Max. Imprisonment: five years.
Max. Fine:

c. **42 U.S.C. §300i-1(b)**, attempt to tamper or threaten to tamper with a public water system.

Class E felony.
Max. Imprisonment: three years.
Max. Fine:

5TH ANNUAL TEXAS ENVIRONMENTAL SUPERCONFERENCE
August, 1993

DID I REALLY "KNOW" THIS? (CRIMINAL ENFORCEMENT - WANTED DEAD OR ALIVE)

BY:

Kenneth E. Houp, Jr.
Law Offices of Kenneth E. Houp, Jr.
910 West Avenue
Austin, Texas 78701-2210
Office (512) 477-4434
Fax (512) 477-6004

Resource Material Provided by Lynn L. Bergeson
Weinberg, Bergeson & Nueman
1300 Eye Street N.W., Suite 1000 West
Washington, D.C. 20005

and

The National Criminal Defense Lawyer's Association
Environmental Criminal Law Seminar
Chicago, June 10-11, 1993

BIOGRAPHY: KENNETH E. HOUP, JR.

Born: June 17, 1945. Bachelor of Arts - English, University of Florida, 1967; Juris Doctorate - University of Texas, 1970; Licensed to practice in Texas, 1970; United States District Court, Western District of Texas; 1972, U.S. Court of Appeals, Fifth Circuit; 1981, United States Supreme Court, 1976 Board Certified Specialist - Criminal Law, Texas Board of Legal Specialization, 1975 (re-Certified every five years since); Lecturer of Law, University of Texas School of Law, 1977 - present; Member: National Association of Criminal Defense Lawyers; Texas Criminal Defense Lawyers Association; Austin Criminal Defense Lawyers Association.

KENNETH E. HOUP, JR.
LAW OFFICES OF KENNETH E. HOUP, JR.
910 West Avenue
Austin, Texas 78701-2210
Office (512) 477-4434
Fax (512) 477-6004

DID I REALLY "KNOW" THIS?

Kenneth E. Houp, Jr.

TABLE OF CONTENTS

I. Federal court interpretations of "Possession of Knowledge" 2
II. Criminal liability under federal law for "Knowing Endangerment" 4
III. Other Trouble Areas: "Responsible Corporate Officer" 5
A. Going After the "Fat Cats" 5
B Defending the "Fat Cats" 6
IV. Conclusion 8

DID I REALLY "KNOW" THIS?

Kenneth E. Houp, Jr.

All of the major federal environmental statutes contain certain provisions for criminal penalties which are triggered by "knowing" violations of their provisions.[1] There are more severe, from a penalty standpoint, "knowing endangerment" sections of some of these laws,[2] and less severe, from a penalty standpoint, "negligence" sections.[3]

Violations under the comparable Texas statutes utilize the "knowing" standard also,[4] but some are mixtures of the Texas Penal Code culpable mental states of "intentional", "knowing", "reckless" and "negligence".[5] There is no question that the definitions of the various culpable mental states in Texas environmental criminal laws are controlled by Texas Penal Code §§6.03 and 1.03(b).

The problem in federal criminal law statutes, unlike Texas' penal structure, is that none of the major federal statutes have language in their general criminal liability provisions defining "knowingly". Three of these laws, including the Resource Conservation and Recovery Act[6] (RCRA), define the term when used in the context of "knowing endangerment." Cases focusing on the requirements for liability for "knowing" federal criminal environmental violations must be examined to determine what events may trigger liability.

I. FEDERAL COURT INTERPRETATIONS OF "POSSESSION OF KNOWLEDGE"

Texas has a statutorily defined definition of "knowledge" as it relates to any criminal offenses.[7]

Although RCRA and other federal environmental statutes require that felony violations be committed "knowingly", the traditional burden of proof for proving criminal intent varies within Circuits. Knowledge, for example, may be inferred from circumstantial evidence.[8] Thus, in the environmental area, criminal prosecution can be based on virtually any environmental violation, regardless of whether the act was "intentional" or otherwise. The cases discussed below demonstrate how the standards for RCRA, one of the most commonly utilized federal criminal statutes, show how the standards for RCRA are different in environmental cases.

> In United States v. Hoflin, 880 F.2d. 1033 (9th Cir., 1989), cert. denied, 110 S.Ct. 1143 (1990), the issue was whether a felony conviction for disposing of hazardous waste without a RCRA permit required proof that the defendant had "knowledge" that there was no permit for disposal and that the waste was RCRA-hazardous. The defendant was director of a public works whose responsibilities included, among other things, the operation of the sewage treatment plant. The defendant ordered his plant manager (and other employees) to dispose of drums of paint waste by burying the drums in the ground. Several years later, the plant manager reported the incident. The drums were dug up and found to be leaking. Since the paint was hazardous under RCRA, the government charged that the materials should have been disposed of at a permitted facility.
>
> The defendant claimed that he was "unaware" that the facility did not have a permit to dispose of the paint or that the paint was RCRA-hazardous. The 9th Circuit affirmed his conviction and stated that if "Congress intended knowledge of the lack of a permit to be an element ... it easily could have said so." The Court then concluded that under RCRA *no* evidence is needed to prove that the defendant knew that a permit was required, that no permit had been obtained, or that the waste was hazardous under RCRA.
>
> United State v. Dee, 912 F.2d 741 (4th Cir., 1990), stands for a similar proposition. In Dee, the defendants were civilian employees of the U.S. Army employed at the Aberdeen Proving Ground in Maryland. The three were convicted of illegally storing, treating, and disposing of RCRA-hazardous waste. On appeal, they argued that they did not "knowingly" commit the crimes as they did not *know* the chemicals at issue were RCRA-hazardous waste.

The Fourth Circuit affirmed the convictions. In so doing, the Court stated that "anyone who is *aware* that he is in possession of (hazardous waste) or dealing with them must be *presumed* to be aware of the regulation." (parenthetical and emphasis added). In addition, the Court stated that the knowledge element of RCRA "does extend to knowledge of the general hazardous character of waste", but there is no requirement that the defendant know that the material is hazardous waste under RCRA.

In United States v. Haynes International Corp, 786 F.2d. 1149 (11th Cir., 1989), the Eleventh Circuit concluded similarly. In reversing a District Court's decision, the defendants were found guilty of knowingly transporting hazardous waste to a facility without a RCRA permit. The Eleventh Circuit acknowledged that "knowingly" required only that the defendant *knew* that the wastes were being treated, stored, or disposed of, and *not* that the wastes were hazardous under RCRA *or* that he *knew* the facility to which the wastes were sent required a permit.

The case of United States v. Dean, 969 F.2d. 187 (6th Cir., 1992), also stands for the proposition that a conviction for storing and disposing of hazardous waste under RCRA requires only that the proof show that the wastes were treated or stored or disposed of without a permit, and that "it does not require that the person charged have known that a permit was required, and *that* knowledge is not relevant."

What these cases point out is the distinction that Texas law makes between a "conduct" knowing violation and a "result" knowing violation of a Texas environmental law. A strong argument of Texas environmental law violations could be made that they should be knowingly "result" oriented. That is, "a person acts knowingly, or with knowledge, with respect to a *result* of his conduct, when he is aware that his conduct is reasonably certain to cause the *result.*" Tx.Pen.Code §6.03(b).

The federal theory, as evidenced by the above cited cases, is limited to "conduct" related "knowing" violations. In other words, to violate RCRA and other federal environmental laws, one would only have to "know" that he buried a drum of chemicals (conduct) to be guilty of the violation. He would *not* have to "know" that the act would "reasonably cause the *result*" i.e., pollution, disposing at an unpermitted facility etc.

There is one case with a twist:

In United States v. Speach, 968 F.2d. 995 (1992), the Ninth Circuit concluded that a conviction under RCRA for knowingly transporting or causing to be transported any hazardous waste to a facility without a permit requires proof that the defendant knew that the facility had no permit. In distinguishing its earlier decision in Hoflin, (discussed *supra*), the Court discussed the differences between 42 U.S.C. §6928(d)(1) and 6928(d)(2). The conviction was under subsection (d)(1). The Court construed subsection (d)(2), which provides that criminal liability attaches to any person who "knowingly treats, stores, or disposes of any hazardous waste ... (A) without a permit ...; or (B) in knowing violation of any material condition or requirement of such permit; [or] (C) in knowing violation of any material condition or requirements of any applicable interim status regulation or standards."

The Court stated that the absence of a second reference to the element of "knowledge" in §6928(d)(2)(A), contrasted with §§6928(d)(2)(B) and (C), which was the basis of liability in the Hoflin decision.

The Court concluded that subsection (d)(2)(A) is intended to impose liability on persons who lack a permit or whose facility lacks a permit. Subsection (d)(1) "deals not with a violator's lack of a permit but with a lack of a permit on the part of the person to whom the violator delivers hazardous waste." Thus, the Court concluded that subsection (d)(1) "requires transporters like Speach (the defendant) to ensure that other parties have storage permits. We decline to impose liability on those defendants absent proof that they knew the recipient's permit status."

One final case deserves consideration because it involves corporate criminal sanctions.

> In United States v. Johnson & Towers, Inc., 741 F.2d. 662 (3rd Cir. 1984), cert. denied sub nom., Angel v. United States, 469 U.S. 1208 (1985), two managers *and the corporation* itself were charged with violating RCRA by illegally disposing of waste in a trench that ultimately drained into the Delaware River. Despite the fact that neither manager was in a position to secure the permit himself, the Court found that the jury could *infer* knowledge of the permit requirement as to individuals "who hold the requisite responsible positions with the corporate defendant." Here, however, neither employee was aware that the company did not have a permit.[9]

II. CRIMINAL LIABILITY UNDER FEDERAL LAW FOR "KNOWING ENDANGERMENT"

Three major federal environmental laws have "knowing endangerment" prohibitions which impose liability on persons who "knowingly" place another in imminent danger of death or serious bodily injury: 1) RCRA, 2) the Clean Water Act and 3) the Clean Air Act.[10] Because these provisions were enacted relatively recently, there is little case law interpreting the level of "knowledge" that must be present in order to satisfy the government's burden of proof.

Each statute contains a statutory interpretation of the word "knowing" as it applies, for example, in RCRA, to the "knowing endangerment" subsection:

> (1) A person's state of mind is knowing with respect to (A) his conduct, if he is aware of the nature of his conduct; (B) an existing circumstance, if he is aware or believes that the circumstance exists; *or* (C) a result of his conduct, if he is aware or believes that his conduct is substantially certain to cause danger of death or serious bodily injury.
>
> (2) In determining whether a defendant who is a natural person (is it a defense if one is an unnatural person?) knew that the conduct placed another person in *imminent* danger of death or serious bodily injury (A) the person is responsible only for actual awareness or actual belief that he possessed; and (B) knowledge possessed by a person other than the defendant but not by the defendant himself may not be attributed to the defendant; (parenthetical humorously added; emphasis added).
>
> Provided, that in proving the defendant's possession of actual knowledge, circumstantial evidence may be used including evidence that the defendant took affirmative steps to shield himself from relevant information.[11]

The first successful conviction under RCRA's "knowing endangerment" clause came in 1987 when a company was convicted of knowing endangerment of its three employees who suffered an increased cancer risk after cleaning used chemicals, pesticide, and paint drums and underground storage tanks without adequate protection or ventilation[12]. In Protex, the Tenth Circuit interpreted RCRA's "knowing endangerment" provision to mean that a *corporate officer* or *manager* could be held criminally liable for the knowing endangerment of another even if the manager was less than substantially certain that the substance could cause death or serious bodily injury. The Court stated that as long as the substance is in fact capable of causing death or serious bodily injury,[13] the only knowledge required on the part of the defendant was that the release was reasonably expected to cause death or serious bodily harm. The "substantial certainty" referred not to the degree of the defendant's knowledge of the harm, but to the defendant's culpable mental state. Shortly after Protex, an *individual* who disposed of three 55 gallon drums of hazardous waste in a vacant lot in New York was held liable for "knowing endangerment" and other violations, and faced up to 21 years in prison and $310,000 in fines.[14]

Criminal defense attorneys should lock onto the word "imminent" in RCRA's, 42 U.S.C.A. 6928 (f)(1)-(2). This writer can personally remember running behind the mosquito foggers in Houston, Texas, circa 1953, when he was eight years old. No one knew then that the DDT in the mosquito fog (and I mean fog) was carcinogenic or did they? Was "cancer causing" even a medical consideration then? The point the writer is trying to make is that today's environmental ignorance could be tomorrow's environmental killer.

The law has a tendency to lag behind technology, if for no other reason than the law has to be legislated and judicially reviewed. Technology and "findings" hit the street as fast as the *New England Journal of Medicine* etc. hit the *New York Times* and the *Wall Street Journal.*

III. OTHER TROUBLE AREAS: "RESPONSIBLE CORPORATE OFFICER"

A. Going After the "Fat Cats"

What needs to be understood is that the Department of Justice is not content with going after "just" employees and "corporations". They have now set their sights on CEO's and Presidents. Since the Environmental Crimes Section of the Department of Justice was established in 1982, as of Fiscal Year 1991, 824 indictments have been returned, with 624 convictions.[15]

Two United States Supreme Court cases lead the way to CEO's environmental criminal liability. United States v. Dotterweich, 320 U.S. 277 (1943); and United States v. Park, 421 U.S. 658 (1975). Both dealt with interpretations of the Food and Drug Act's strict liability.

Because Dotterweich and Park revolve around a "health and welfare" issue, they are extremely important to environmental law.

They stand for the proposition that any corporate officer bearing a "responsible" relationship to an environmental statute, who is not powerless to prevent others from committing such conduct, can be held criminally liable for a violation of that statute. Environmental laws are "health and welfare" areas such as those considered in Dotterweich and Park.

On the other hand, Dotterweich and Park involved strict liability statutes. No "mens rea" was required for conviction. On the other, other hand, a great deal of "inference" is going on. For one who is in a "heavily regulated industry" with "great ramifications for the public health and safety", he is supposed to know the regulatory provisions governing his conduct.[16]

In Dotterweich, *supra*, the Court addressed whether an individual corporate officer, not simply the company, could be prosecuted under a misdemeanor provision of the Food and Drug Act for introducing or delivering adulterated or misbranded drugs into interstate commerce. The Court held that the President of Buffalo Pharmacal Company was subject to criminal prosecution. The Court expressly premised its decision on the fact that the Food and Drug Act was designed to protect public health and welfare. The purposes of the Food and Drug Act "touch phases of the lives and health of people which, in the circumstances of modern industrialism, are largely beyond self protection."

No *mens rea*, or culpable mental state was required to convict the President of Buffalo Pharmacal Co. The Court reasoned that, absent such a requirement, no proof of criminal knowledge was necessary because the Food and Drug Act "puts the burden of acting at hazard upon a person otherwise innocent *but* standing in a responsible relation to a public danger." The Court, recognizing that the above language might sweep too broadly, concluded: "... [t]he offense is committed by all who do not have such a responsible share in the furtherance of the transaction which the statute outlaws." The Court declined to define who these persons were, rather, leaving that decision to "the good sense of the prosecutors, the wise guidance of trial judges, and the ultimate judgment of juries."

The dissent felt that while the President could have been charged civilly with negligence and mismanagement by his company and shareholders, vicarious criminal liability was not warranted.

Park, *supra*, was also involved with the Food and Drug Act. Park was CEO of ACME Markets, a national retail food operation. ACME employed approximately 36,000 people and operated 874 retail outlets and 16 warehouses around the country. The charges revolved around rat infestation found in the company's Baltimore warehouse. Park had been put on notice by the FDA of a similar problem at ACME's Philadelphia warehouse, and that Park was also previously put on notice of the situation in Baltimore. The evidence further revealed that the same ACME vice president was in charge of sanitation for both the Philadelphia and Baltimore facilities, and that Park had conferred with him and other ACME officers to ensure that corrective action would be taken.

Could Park be held *strictly liable* for the violations? Park did not personally participate in the acts causing the violation, but the Supreme Court, relying on Dotterweich, *supra*; held that the Government was not required to prove that Park himself engaged in wrongful conduct. Rather, the government could establish the violation by demonstrating "... that the defendant had, by reason of his position in the corporation, responsibility and authority either to prevent in the first instance, or promptly to correct, the violation complained of, and that he failed to do so."

The Jury Charge that gave rise to Park's appeal stated:

> The individual is or could be liable under the statute, even if he did not consciously do wrong. However, the fact that the Defendant is present and is a chief executive officer of the ACME Markets does not require a finding of guilt. Though, he need not have personally participated in the situation, he must have had a *responsible relationship* to the issue. The issue is, in the case, whether the Defendant, John R. Park, by virtue of his position in the company, had a position of authority and responsibility in the situation out of which these charges arose. (emphasis added).

The Court emphasized that the challenged instruction did not permit the jury to convict Park solely on the basis of his corporate position, but rather, he held a position of trust, and had the ability to correct the situation, as well as the responsibility to correct the situation. Park's awareness of the problem did not sit well with the Court, and his failure to restructure the sanitation problem once confronted, were circumstances the Court took into consideration.

The Court did recognize that even the implementation of a new internal system might fail to prevent all violations. The Court indicated that Park *could have* raised an *affirmative defense* that he was powerless to prevent the violation, and sought a jury instruction requiring the government to prove beyond a reasonable doubt that he was capable of preventing the violation.

B Defending the "Fat Cats"

What is to be learned from Dotterweich and Park, *supra*, is that any corporate officer is fair game for federal prosecution in an environmental context if that officer bears a responsible relationship to conduct proscribed by a health and welfare statute, who is not powerless to prevent others from committing the proscribed conduct. Environmental laws, like the Food and Drug Act, are health and welfare statutes. Thus, the concept of "responsible corporate officer" has gradually been adopted into environmental jurisprudence. Two environmental statutes, the Clean Water Act and the Clean Air Act, expressly include the term "responsible corporate officer"[17] as a target of prosecution.

While the Food and Drug Act violations at issue in Dotterweich and Park were strict liability offenses, most modern federal environmental laws require proof of the defendant's "knowledge"[18]. Though the Food and Drug Act at issue in Dotterweich and Park, contrasts with most current environmental laws from a strict liability standpoint, the applicable statutes share a public policy common viewpoint. Therefore, the parameters of the "responsible corporate officer" doctrine in the environmental context have never been firmly established.

The Court in Park stated that responsibility for compliance with a health and welfare statute imposes "not only a *positive duty* to seek out and remedy violations when they occur but also, and primarily, a duty to implement measures that will ensure that violations will not occur."

Texas law on corporations and associations is governed first by the Texas Code of Criminal Procedure[19] Only Chapters 1, 2, and 3 of the Penal Code "apply to offenses defined by other laws, unless the statute defining the offense provides otherwise..."[20] Thus, it appears that with respect to §7.23 of the Texas Penal Code, and §7.24, that Texas law is dissimilar to federal law as it relates to "responsible corporate officer."

§7.23. Criminal Responsibility of Person for Conduct in Behalf of Corporation or Association

(a) An individual is criminally responsible for conduct that he performs in the name of or in behalf of a corporation or association to the same extent as if the conduct were performed in his own name or behalf.

(b) An agent having primary responsibility for the discharge of a duty to act imposed by law on a corporation of association is criminally responsible for omission to discharge the duty to the same extent as if the duty were imposed by law directly on him.

(c) (Not applicable)

§7.24. Defense to Criminal Responsibility of Corporation or Association

It is an affirmative defense to prosecution of a *corporation* or *association* under §7.22(a)(1) or (a)(2) of this code that the high managerial agent having supervisory responsibility over the subject matter of the offense *employed due diligence to prevent its commission*. (emphasis added.)

Under Texas law, a corporation or association would *not* be free from prosecution for a strict liability offense[21], "... unless a legislative purpose not to impose criminal responsibility on corporations or associations plainly appears."[22]

What is not clear under Texas law is whether a person such as the defendant in Park, *supra*, would have the affirmative defense available in §7.24 for a corporation or association if the high managerial agent took the steps Park took in a non-strict liability crime. It makes little practical sense that a corporation or association could escape liability if a high managerial agent employed due diligence to prevent the commission of an environmental crime, but the high managerial agent would swing on the gallows without benefit of the same affirmative defense.

In the Federal environmental context, the question has arisen whether the government may prove a corporate officer's criminal knowledge by simply showing that he would have known that environmental violations were occuring had he been properly fulfilling his corporate duties. The question has also arisen whether this characterization of the responsible corporate officer doctrine, in the words of the Dotterweich, *supra*, dissent, imposes vicarious criminal responsibility for corporate "negligence and mismanagement," and reads the requirement of criminal "knowledge" out of environmental criminal laws.

Defense attorneys have argued that the "responsible corporate officer doctrine should apply only in cases involving strict liability statutes like the Food and Drug Act.[23] Prosecutors, not surprisingly, take the opposite position.[24] Broad sweeping language from some courts suggest that the "responsible corporate officer" doctrine may operate as a theory of substitute knowledge similar to agency theory. That is, the guilty state of mind of a subordinate employee who commits an environmental criminal offense may be attributed to the corporate officer who stood in a responsible relation to the offense but had no knowledge of the offense. Alternatively, it has been posited that the "responsible corporate officer" doctrine simply raises the inference of actual knowledge on the corporate officer's part due to his or her position of responsibility.

Recent developments in the law indicate that, while the "responsible corporate officer" doctrine applies to cases where the health and welfare statutes contain some element of a culpable mental state, its application does not act as a "knowledge" substitute. Rather, it merely raises the inference that the corporate officer possessed knowledge of the offense.

IV. CONCLUSION

The "knowledge" standard for most federal criminal environmental law crimes does not substantially exceed the standards for administrative or civil violations. Due Process and Equal Protection considerations would seem to mandate, as Constitutional protections, greater prosecutorial proof of "knowledge" in criminal cases than required for a federal civil violation.

"Responsible corporate officers" should begin vigorous implementation of an environmental compliance program, and make sure their in-house counsel or outside counsel have more than a passing knowledge of the applicable federal *and* state criminal environmental laws.[25]

Footnotes

1 See, e.g., RCRA §3008(d), 42 U.S.C. §6928(d); CERCLA, §103(d), 42 U.S.C. §9603(d); CAA §§113(c), 318(e), 42 U.S.C. §§7413(c), 7618(c); CWA §309, 33 U.S.C. §1319; Emergency Planning and Community Right-to-Know Act. (EPCRA) §325(b), (d), 42 U.S.C. §11045(b), (d).

2 See, e.g., C.W.A. §309(c)(3), 33 U.S.C. §1319(c)(3); RCRA §3008(e), 42 U.S.C. §6928(e); CAA §113(c)(5), 42 U.S.C. §7413(c)(5)

3 See, e.g., C.W.A. §309(c)(1), 33 U.S.C. §1319(c)(1); CAA §113(c)(4), 42 U.S.C. §7413(c)(4).

4 See, e.g., Texas Hazardous Substance Spill Prevention and Control Act, Water Code, §26.268(d); Hazardous Communication Act, Health and Safety Code, §502.012(f).

5 See, e.g., Hazardous Substances, Health and Safety Code, §501.035.

6 42 U.S.C. §6901 et.seq.

7 Texas Penal Code, §6.03(b):

> A person acts knowingly, or with knowledge, with respect to the nature of his conduct or to circumstances surrounding his conduct when he is aware of the nature of his conduct or that the circumstances exist. A person acts knowingly, or with knowledge, with respect to a result of his conduct when he is aware that his conduct is reasonably certain to cause the result.

8 While culpable mental states may always be inferred by circumstantial evidence, e.g., by the use of a deadly weapon as it bears on the "*intent* to kill" in a murder or attempted murder case, "knowledge" could be a more illusive term in the context of a federal environmental case.

9 "Double Secret Probation", Animal House.

10 See RCRA §3008(e), 42 U.S.C. §6928(e); CWA, §1319(c)(3), 33 U.S.C. §309(c)(3); CAA §113(c)(5)(A)-(B), 42 U.S.C. §7413(c)(5)(A)-(B). See also, e.g., Texas Hazardous Communication Act, Health and Safety Code, §502.012(f).

11 See, RCRA §3008(f)(1)-(2), 42 U.S.C. §6928(f)(1)-(2).

12 See, United States v. Protex Industries, 874 F.2d. 740, (10th Cir. 1989)

13 As a criminal law practitioner of primarily non-environmental crimes, I have seen the Texas Court of Criminal Appeals describe/define *anything* as a "deadly weapon" *if* it causes death. i.e. Hands, water, etc. Bottom line, if "it" causes death or serious bodily injury, it is a "deadly weapon."

14 United States v. Tumin, No. 87-CR-488 (E.D.N.Y., April 13, 1988).

15 *Environmental Law*, Northwestern School of Law of Lewis and Clark College, Fall 1992.

16 *Ibid.*

17 See CWA, 33 U.S.C. §1319(c)(6); CAA, 42 U.S.C. §7413(c)(6)

18 See, discussion of "knowledge" federally, *supra.*

19 Tx. Code Crim. App. 17A, *et. seq.* (1991).

[20] Tx. Penal Code §1.03(b)

[21] Tx. Penal Code §7.22(a)(3)

[22] *Ibid.*

[23] See, Brief for Appellant D'Allesandro at 16-17, United States v. MacDonald & Watson Waste Oil Co., 933 F.2d. 35 (1st Cir., 1991). Appellant D'Allesandro argued:

> "In a nutshell, the responsible corporate officer doctrine has never been applied to impose liability for crimes with a knowledge or intent element. Indeed, its application in those contexts would be fundamentally inconsistent with the doctrine itself."

[24] See, Brief for Appellee at 25, United States v. Brittain, 931 F.2d. 1413 (10th Cir., 1991).

[25] The section on the responsible corporate officer doctrine was extracted liberally from *Environmental Law*, Northwestern School of Law of Lewis and Clark College, Fall 1992.

TABLE OF CONTENTS

I. Introduction.....2

II. Environmental Racism..... 2

A. What is Environmental Racism..... 2

B. Myth or Reality..... 3

C. Why is there such Disparity?..... 6

III. Environmental Inequity..... 8

A. What is Environmental Inequity?..... 8

B. Is it Good Sound Business or Isn't It?..... 9

C. The Powerful versus the Powerless..... 10

Conclusion.....11

I. INTRODUCTION

The question of "environmental inequity or environmental racism" is one that has become very prevalent throughout the country. In some ways, this has become one of the new political "hot potatoes" and part of a new civil rights movement. In fact, the issue has attracted so much attention that the United States Environmental Protection Agency (EPA) has set up an Office of Environmental Equity as well as the State of Texas establishing a Task Force to explore the methodology employed by its primary environmental agencies (Texas Air Control Board, Texas Water Commission) to determine how their policies and procedures might disproportionately impact low income communities in particular those of color.

Numerous studies have shown that there is a great disparity of environmental hazards that exist in lower income neighborhoods with a strong correlation to color. However, reaching some conclusion on the motivation for the existence of such phenomenons remain the subject of much debate. The following is a discussion of these phenomenons with the intent of enlightening and invoking some proactive response in dealing with the question of environmental inequity or environmental racism; whichever the case may be.

II. ENVIRONMENTAL RACISM

A. What is Environmental Racism

The mere use of the term "environmental racism" is one that generates considerable thought and conversation. It has often been suggested that the use of this term in some media context is simply a form of sensationalism. The truth of the matter is that regardless to the motivation behind the use of the term, it is a real issue that must be dealt with whether it is myth or reality.

So, how do we deal with the myth or reality of environmental racism? Firstly, there needs to be some definition given in this discussion to provide a basic frame in which to work. In individually assessing each word in the subject term, the word "environmental" is one that is probably readily agreed upon to be the conditions that one is surrounded by whether they be physical, cultural, social, or ecological. The term "racism" would be the belief that one race is superior to others, hence setting up a system of deliberate discrimination based on perceived superiority. The sum total of the two could be described as races of people who's surrounding have been negatively impacted by the one race that perceives itself as being superior.

B. Myth or Reality

The hint that there is some deliberate racist act by any group of people will provoke an immediate defensive response without any examination of why the accusations have been made. The thought that in the highly civilized country that we live in, in the 1990's, that there could be some form of institutionalized racism is purely unthinkable. On the other hand, there is a small vocal minority who speaks for a larger silent minority that there is conclusive evident that environmental racism is indeed reality and not myth.

Another perspective in examining "environmental racism" is the "racial discrimination in environmental policy-making, and the enforcement of regulations and laws. It is racial discrimination in the deliberate targeting of communities of color for toxic waste disposal and the sating of polluting industries. It is racial discrimination in the official sanctioning of the life-threatening presence of poisons and pollutants in communities of color. And, it is racial discrimination in the history of excluding people of

color from the mainstream environmental groups, decision-making boards, commissions, and regulatory bodies."[1]

The notion of environmental racism first made headlines in 1982 when a predominantly African American community protested the decision of officials to site a Polychlorinated Biphenyis (PCB) landfill in Warren County, North Carolina.[2] This action subsequently lead to a study by the General Accounting Office (GAO) investigating the socioeconomic and racial composition of communities surrounding the four major hazardous waste landfills in the EPA's Region IV which in comprises eight southern states (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, and Tennessee). The GAO report found that three of the four facilities were located in communities that were predominately black, although African Americans made up only one-fifth of the population in the region. Furthermore, the forth community was located in a community which had a 38% African American population giving further credibility to the argument that the sating of these facilities were racially motivated.

A second incident which focused public attention on the issue of environmental racism was the 1987 release of the United Church of Christ's Commission for Racial Justice[3] reported on the distribution of hazardous waste sites in this country. The United Church of Christ sponsored this study in response to the GAO report. The

---

[1]Chavis, Jr., Rev. Benjamin F. 1993. "Foreword." Confronting Environmental Racism: Voices from the Grassroots. Robert D. Bullard, eds. Boston, MA: South End Press.

[2]General Accounting Office (GAO). 1983. Sitting of Hazardous Waste Landfills and Their Correlation with Racial and Economic Status of Surrounding Communities.

[3] United Church of Christ. 1987. Toxic Wastes and Race in the United States: A National Report on the Racial and Socioeconomic Characteristics of Communities with Hazardous Waste Sites. New York: Commission for Racial Justice, United Church of Christ.

study found that the proportion of residents who are minorities in communities that have a commercial hazardous waste facility is about double the proportion of minorities in communities without such facilities. Where two or more facilities are located, the proportion of residents who are minorities is more than triple. The 1987 study also found that three out of every five African and Hispanic Americans live in communities with uncontrolled toxic waste sites. The study was able to pinpoint race as the single best predictor of the location of commercial hazardous waste facilities. Socioeconomic factors such as average household income or property values play only a secondary role.

The United Church of Christ report concluded that it is "virtually impossible" that the nation's commercial hazardous waste facilities are distributed disproportionately in minority communities merely by chance, and that underlying factors related to race in all likelihood play a role in the location of these facilities. Among others these factors include: (1) the availability of cheap land, often located in minority communities and neighborhoods;[4] (2) the lack of local opposition to the facility, often resulting from minorities' lack of organization and political resources as well as their need for jobs;[5] and (3) the lack of mobility of minorities resulting from poverty and housing discrimination that traps them in neighborhoods where hazardous waste facilities are located.[6]

Evidence about the environmental racism phenomenon in Texas was published by Robert Bullard of the University of California in

---

[4]Mohai, P., and B. Bryant. 1992. "Environmental Racism: Reviewing the Evidence." In B. Bryant and P. Mohai, eds. Race and the Incidence of Environmental Hazards: A Time for Discourse. Boulder, CO: Westview Press.

[5]Ibid.

[6]Ibid.

1983.[7] The study, "Solid Waste Sites and the Houston Black Community," concluded that from the early 1920s to the late 1970s, all of the city-owned municipal landfills that were used to dispose of Houston's garbage were located in African American neighborhoods.[8] Although African Americans made up only 28% of Houston's population, 82% of the solid waste sites (public and private) were located in African American neighborhoods.[9] In fact, waste generation is directly correlated with per capita income. Yet, few garbage dumps and hazardous waste sites are located in affluent areas. There is also evidence that environmental racism is not limited to hazardous waste sites.[10] In fact, many of the studies have examined the disproportionate effects of air pollution on minority communities.[11]

C. Why is there such Disparity?

The question is often asked, "are not minorities disproportionately impacted simply because they are disproportionately poor?" Economics does play a role, but according to numerous

---

[7]Bullard, R.D. 1983. "Solid Waste Sites and the Houston Black Community." Sociological Inquiry 53(Spring): 273-88.

[8]Ibid.

[9]Ibid.

[10]Wernette, D.R., and L.A. Nieves. 1992. "Breathing Polluted Air." EPA Journal March/April(18); Mohai, P., and B. Bryant. 1992. "Environmental Racism."

[11]Gelobter, M. 1992. "Toward a Model of Environmental Discrimination." In B. Bryant and P. Mohai, eds. Race and the Incidence of Environmental Hazards: A Time for Discourse. Boulder, CO: Westview Press; Gianessi, L., H.M. Peskin, and E. Wolff. 1979. "The Distributional Effects of Uniform Air Pollution Policy in the U.S." Quarterly Journal of Economics (May): 281-301.

studies, race is the overwhelming factor.[12] Because of limited income and wealth, poor people do not have the means to buy their way out of polluted neighborhoods. Also, land values tend to be lower in poor neighborhoods, and the neighborhoods attract polluting industries seeking to reduce the costs of doing business.[13] In addition, the mobility of minorities has been restricted and continues to be restricted by housing discrimination.[14] Minority communities are vulnerable to offers of new polluting facilities by promises of financial incentives, compensation, and jobs; often they have no viable alternatives for an economic base to support their communities.[15] Then, because noxious sites are unwanted (the "NIMBY" syndrome) and because industries tend to take the path of least resistance, communities without political power are either targeted for such facilities,[16] or are least able to mount a protest.[17]

The residents of these targeted communities share the following characteristics:

---

[12]United Church of Christ; Mohai, P., and B. Bryant; Mohai, P., and B. Bryant. 1992. "Race, Class, and Environmental Quality in the Detroit Area." In B. Bryant and P. Mohai, eds. Environmental Racism: Issues and Dilemmas 42 (forthcoming); Bullard, R.D. 1992. "In Our Backyards." EPA Journal March/April(18); Wernette, D.R., and L.A. Nieves. 1992.

[13]United Church of Christ.

[14]Bullard, R. D. 1992.

[15]Chase, Anthony. 1993. "Environmental Racism." Rutgers Law Review. March.

[16]Bullard, R.D., and B.H. Wright. 1987. "Environmentalism and the Politics of Equity: Emergent Trends in the Black Community." Mid-American Review of Sociology 12: 21-38.

[17]Environmental Protection Agency. 1992. Environmental Equity: Reducing Risk for All Communities. Volume 2. EPA230-R-92-008A.

- **they tend to be unaware of policy decisions affecting them and the consequences of those decisions;**
- **they are not organized; and**
- **they lack the resources (time, money, contacts, and knowledge of the political system) for taking political action.**[18]

Minority communities are at a disadvantage not only in terms of resources, but also because of underrepresentation on governing bodies.[19] When location decisions are made, this underrepresentation translates into limited access to policymakers and lack of advocates for minority interests.

III. ENVIRONMENTAL INEQUITY

A. What is Environmental Inequity?

The terminology "environmental justice" and "environmental equity" is often substituted for "environmental racism." Robert Bullard views "environmental justice" as a quest for "justice, fairness," and "equity" as a "dynamic social movement."[20] In EPA's report "Environmental Equity: Reducing Risk for All Communities," EPA wrote, "Environmental Equity refers to the distribution of environmental risks across population groups and to our policy responses to these distributions."[21] We would like to deal with this issue from the point of environmental inequity. Environ-

---

[18]Mohai, P., and B. Bryant. 1992. "Environmental Racism."

[19]Bullard, R.D. 1983.

[20]Bullard, Robert D. 1993. "Introduction." Confronting Environmental Racism: Voices from the Grassroots. Robert D. Bullard, eds. Boston, MA: South End Press.

[21]Environmental Protection Agency. 1992. Environmental Equity: Reducing Risk for All Communities. Volume 1. EPA230-R-92-008.

mental inequity as we shall discuss in this text will relate to the unfair and unjust environmental situations that exist or the inequitable distribution of environmental risk.

It is clear that environmental inequities exist on the national level. There is additional evidence, both anecdotal and of a more rigorous nature, to support the charge in Texas. However, to more thoroughly understand why these inequities exist there should be some time given to contributing elements.

B. Is it Good Sound Business or Isn't It?

One of the key elements in making any business decision is financial consideration. The thought that the price of land in a locale is appreciably more economical than another would stand as good reason to purchase the cheaper land. However, to dismiss this as being the only element for the acquisition of land would be very narrow in scope and quite possibly detrimental to the success of that business. In fact, this type of mentality has probably been the greatest contributor to the environmental inequities that exist today, especially as there is minimal consideration of impact on the surrounding area through this kind of a thought process. It should also be noted that to continue business as usual would only increase these great injustices.

Another misconception that tends to increase the inequities is the premise that the location of a facility in a particular area will greatly enhance the economic development of that community and also provide jobs that are in most cases, badly needed. I would be incline to agree that there are occasions where in fact this does become a reality, but more often than not these promises are merely good intentions at best. Even if good opportunities are to come as a result of this, the possibility still exist that this good company for employment potential is a bad company as far as environmental impact to the community. The question has been asked

"when do you bite the hand that feeds you?" and the response given "when that hand feeds you poison." Certainly, it becomes a difficult choice when realizing what resources are necessary for basic survival yet, the total impact of your decision must be considered to ensure all angles have been addressed.

C. The Powerful versus The Powerless

The suggestion that the struggle to obtain environmental equity is a classic case of the weak versus the strong, would undoubtedly be met with great opposition. Although, there has been significant documentation of a tie between race, class, and environmental inequities, there is still the argument that the "haves" are not taking advantage of the "have nots" or the "powerful" preying on the "powerless." The term "powerless" in this text is not to imply no power, but lack of power. This lack of power is often evident in our society as the very nature of a capitalistic society lends itself to the principle of one furthering its own prosperity with minimal consideration of others or the powerful using those with less power to enhance their status. Lest I lead you astray, it should be duly noted that this is certainly not an argument against capitalism, but instead a call for each of us to continually appeal to our consciences in making those decisions that will impact upon other people. The capitalist society in which we live has various do-processes to ensure that there is continual effort to achieve some more excellent degree of equality, although as an engineer, I understand this is like approaching infinity - you never reach it.

There are numerous factors to consider in the discussion of powerful versus powerless. The great disparity that has existed in most all levels of appreciable influence or power probably parallels the power struggle. That is, the decision-making positions within government (political or regulatory), industry, and even environmental interest have been typically held by indi-

viduals who were not/are not sensitized to equity issues and most assuredly not those of an environmental nature. To put into another form, it could be said that for one to bring resolution to a problem, he must first recognize that a problem exist. Being removed from a situation gives the illusion that "all is well." An example of this syndrome would be the lack of opposition to a proposed or existing facility perceived as being a silent endorsement, where in reality the lack of opposition may be a lack of knowledge of how to oppose, understanding of what is proposed, or the powerless feeling that accompanies the mental attitude that "they are going to do what they want to do anyway."

Conclusion

Studies performed to date with respect to the relationship of race, class, and environmental conditions have consistently shown that hazardous facilities and polluting industries are disproportionately located in minority neighborhoods. This finding would appear to be a very strong argument that there is indeed some presence of environmental racism. However, proving that there has been deliberate intent to environmentally discriminate against others based on race is very difficult to substantiate, even at that very subjective to interpretation. Nevertheless, it is safe to conclude that there are environmental inequities that are very prevalent in minority and low income communities. Furthermore, I feel it is more important to recognize that there is a problem with the disproportionate location of environmental hazards and, that policies, procedures, and programs are enacted to bring a setting more closely resembling equity, than to search for someone to point the finger at in blame. I, on the other hand, am compelled to note that there is still the need for some focused attention on the subject of environmental racism for to remain silent on the issue would continue to perpetuate the unacceptable conditions that exist in a country founded on the principle that all men are created equal.

Finally, there have been some steps made in the right direction, but hardly enough to have the kind of impact that will make a real difference in bringing about equity. In the process of making effectual change, it is imperative that there is a careful assessment of all elements that have contributed to the great disparity of environmental conditions that are now a part of our society. There must be extensive ongoing analysis and study of progress (or lack there of) of the new phenomenon of environmental equity. The most important phase of this change will be the forming of a proactive/cooperative relationship between industry, regulators, and the environmental interest community such that there is a realistic understanding of processes and conditions. This would ultimately lead to environmental equality through knowledge and understanding by all, as well as the empowerment of the underrepresented to the end that they are an integral part of the system. I guess you could call this the "due process" of the environmental system.

Environmental Racism

"Eastside, Westside"

Clyde Pikes

ENVIRONMENTAL RACISM

OR

ENVIRONMENTAL INEQUITY?

Presented at

The 5th Annual Texas Environmental Superconference

August 5 - 6, 1993

Four Seasons Hotel
98 San Jacinto Boulevard
Austin, Texas

by

Clyde Pikes, Jr.
Texas Air Control Board
12124 Park 35 Circle
Austin, Texas 78753