



## MEMORANDUM

TO: Attendees

FROM: Planning Committee

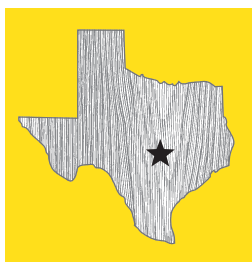
DATE: August 1, 2002

On behalf of the Environmental and Natural Resources Law Section of the State Bar of Texas, the Air and Waste Management Association-Southwest Section, the Water Environment Association of Texas, the Texas Association of Environmental Professionals, the Auditing Roundtable, and the American Bar Association Section of Environment, Energy & Resources, welcome to the Fourteenth Annual Texas Environmental Superconference, "Give our Regards to Broadway." As you know, the conference is an annual event established to create a dialogue among the attendees, who are drawn from the public and private sector and from the legal and technical professions. The conference provides excellent continental breakfasts, lunches and snacks, and plenty of breaks to encourage participants to discuss environmental issues informally. There also will be participant gifts and quizzes and prizes.

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

As always, there are evaluation forms for the program. We appreciate your taking the time to complete them. The organizers of this program take into account these forms in planning next year's conference. In addition, if you have an interest in having a particular topic presented, or in speaking on a particular topic, the evaluation form is the appropriate place to provide that information. Suggestions for themes for next year also are being solicited. Next year's conference is tentatively scheduled for August 7 - 8, 2003. Please mark your calendars. If you would like to receive next year's program electronically, please provide us your e-mail address if you did not include it in your registration.

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



# The Fourteenth Annual Texas Environmental Superconference “Give Our Regards to Broadway”

Thursday — Friday, August 1–2, 2002

## Thursday, August 1, 2002

- 8:00 – 8:45** **Registration** — *A Chorus Line*
- 8:45 – 9:00** **Welcoming Remarks** — *Bring in da noise, Bring in da funk*  
Jeff Civins, Texas Environmental Superconference  
Bob Stewart, Environmental and Natural Resources Law Section, (ENRLS) SBOT  
Cindy Smiley, Air & Waste Management Association – Southwest Section  
Jim Joyce, Water Environment Association of Texas  
Kim McLean, Texas Association of Environmental Professionals  
Tim Wilkins, The Auditing Roundtable  
Kinnan Golemon, ABA Section of Environment, Energy, & Resources

*Moderator:* Kinnan Golemon, Brown McCarroll, LLP

- 1** **9:00 – 9:30** **Environmental Case Law Update** — *Anything Goes*  
Carrick Brooke-Davidson, Andrews & Kurth
- 2** **9:30 – 10:30** **Air Quality Panel** — *Inherit the Wind*  
*Moderator:* Pam Giblin, Baker Botts, L.L.P.  
John Pemberton, EPA Office of Air and Radiation  
V. A. Stephens, Council on Environmental Quality  
Ralph Marquez, TNRCC Commissioner
- 10:30 – 10:50** **Break** — *The Sound of Music*
- Moderator:* Peter Gregg, El Paso Corporation
- 3** **10:50 – 11:35** **Water Quality** — *River Dance*  
Sara Burgin, Brown McCarroll, LLP  
Margaret Hoffman, TNRCC
- 4** **11:35 – 12:00** **Future of Superfund** — *Arsenic and Old Waste*  
Larry Starfield, EPA
- 12:00 – 1:15** **Lunch** — *Greater Tuna*

*Moderator:* Paul Sarahan, TNRCC

- 5** **1:15 – 1:45** **Regulation of Oil and Gas** — *The Producers*  
Michael Williams, Chairman, Railroad Commission of Texas
- 6** **1:45 – 2:30** **State Enforcement Panel** — *Ain't Misbehavin'*  
Leonard Spearman, TNRCC  
Gindi Eckel, Cantey & Hanger  
Erin Rogers, Lone Star Chapter of the Sierra Club
- 7** **2:30 – 3:15** **Enforcement Debate** — *A Funny Thing Happened on the Way to the Forum*  
Eric Schaeffer, former Director of Regulatory Enforcement, EPA  
Scott Segal, Bracewell Patterson, LLP
- 3:15 – 3:35** **Break** — *Sugar Babies*

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

- 8** **3:35 – 4:00** **Post 9/11 Issues for Municipalities** — *Stop the World, I Want to Get Off*  
Steve Collier, City of Austin, Office of Emergency Management

- 9** **4:00 – 4:45** **Brownfields Panel** — *Camelot*  
Myron O. Knudson, P.E., EPA  
Scott Deatherage, Thompson & Knight
- 10** **4:45 – 5:15** **Agency Information Systems** — *The Wiz*  
Ragan Tate, EPA  
Renee Carlson, TNRCC
- 5:15 – 6:00** **Cash Bar** — *Cabaret*

## Friday, August 2, 2002

- 8:30 – 8:45** **Introduction** — *Hello Dolly*  
*Moderator:* Sarah Walls, Cantey & Hanger
- 11** **8:45 – 9:15** **Pro Bono/Environmental Ethics** — *Sweet Charity*  
Andrew Strong, Campbell, George & Strong, LLP
- 12** **9:15:10:15** **Toxic Tort Litigation Demo** — *The Full Monty*  
Wade Porter, Haynes and Boone, LLP  
Michael Mazzone, Haynes and Boone, LLP  
Dr. Gary Krieger, New Fields  
Courtroom Sciences, Inc.
- 10:15 – 10:35** **Break** — *Bells Are Ringing*  
*Moderator:* Charles Jordan, Carrington, Coleman, Sloman & Blumenthal, LLP
- 13** **10:35 – 11:15** **Environmental Management Systems** — *How to Succeed in Business Without Really Trying*  
Scottie Aplin, Advanced Micro Devices  
Jerry Hendon, Pilko & Associates, LP
- 14** **11:15 – 12:00** **EPA/TNRCC Relations** — *The Odd Couple*  
Gregg Cooke, EPA  
Robert Huston, TNRCC
- 12:00 – 1:15** **Lunch (Annual ENRLS Meeting for those who would like to attend)** — *Bye, Bye Birdie*  
*Moderator:* Betty Williamson, EPA
- 15** **1:15 – 2:00** **Attorney/Consultant Debate on Reporting Ethics** — *Cat on a Hot Tin Roof*  
David Cabe, Zephyr Environmental Corporation  
Sally Longroy, Carrington, Coleman, Sloman & Blumenthal, LLP
- 16** **2:00 – 2:40** **TNRCC Permitting** — *Little Shop of Horrors*  
Mark Vickery, TNRCC  
J.D. Head, Fritz, Byrne & Head, LLP
- 2:40 – 3:30** **Open Mike** — *Ragtime*  
*Moderator:* Kathleen White, TNRCC  
Leonard Spearman, TNRCC  
Duncan Norton, TNRCC  
Mark Vickery, TNRCC  
Larry Starfield, EPA
- 3:30** **Closing Remarks** — *Same Time, Next Year*
- Sundaes** — *The Iceman Cometh*



# **Environmental Case Law Update**

## **Anything Goes**

by

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**14<sup>th</sup> Annual Texas Environmental Law Superconference**  
**Austin, Texas**  
**August 1-2, 2001**

In keeping with the theme of this year's presentation of the Environmental Law Case Update "Anything Goes," the following represents an idiosyncratic review of environmental law cases for the past year.

## Supreme Court

### Takings

The U.S. Supreme Court held that moratoria on development imposed during the process of devising a comprehensive land use plan do not constitute a per se taking of property requiring compensation under the takings clause of the U.S. Constitution. Unable to meet deadlines in a compact designed to protect and preserve a lake, a regional land planning agency issued development moratoria until the permanent land use plan required by the compact was developed. Property owners in the area brought suit against the planning agency claiming that the moratoria and the final plan constituted takings of the land owners' property without just compensation. The Court granted certiorari limited to whether the moratoria ordered by the planning agency were per se takings of property requiring compensation under the takings clause and held that they were not. The Court has repeatedly recognized the distinction between physical takings, which involve application of per se rules, and regulatory takings, which are characterized by factual inquiries designed to examine and weigh all the relevant circumstances. Here, the property owners incorrectly applied physical takings rationale to regulatory cases to argue for a categorical rule that whenever the government imposes deprivation of all economically viable use of property, no matter how brief, it effects a taking. Supreme Court cases concerning regulatory takings have implicitly rejected the property owners' categorical approach. Moreover, these cases have not resolved the question of whether a regulation prohibiting any economic use of land for a period of time must be compensated. However, property owners' attempt to claim that all economically beneficial use of their land was deprived by focusing exclusively on the time the moratoria were in place must fail, the Court held, because to sever a portion of time from the fee simple estate and then ask whether the segment has been taken in its entirety ignores the Court's admonition to focus on the property as a whole. Further, fairness and justice will not be better served by a categorical rule that any deprivation of all economic use, no matter how brief, constitutes a compensable taking. That rule would apply to numerous normal delays and would require changes in practices that have long been considered permissible exercises of police power. Tahoe-Sierra Preservation Council, Inc. v. Tahoe Regional Planning Agency, No. 00-1167, 122 S.Ct. 1465 (S. Ct. Apr. 23, 2002).



## Environmental Crimes

The United States Supreme Court has denied certiorari from an Eleventh Circuit case affirming felony convictions of two corporate officials of the conspiracy to commit environmental crimes and violations of the Clean Water Act (CWA), the Resource Conservation and Recovery Act (RCRA), and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). The petition for a writ of certiorari posed questions as to whether the responsible corporate officer doctrine (1) permitted felony convictions of defendants who no longer had authority or the capacity to prevent the violations and were not in a decision-making role at the time the violations occurred and (2) required defendants to have actual knowledge of each element charged in the offense. The petition also asked whether corporate officers and employees of a corporation in bankruptcy may be liable for violations of environmental statutes despite bankruptcy restrictions that deprive them of authority to act to correct or prevent violations. The Supreme Court also denied certiorari on a companion petition brought by another defendant in the same case. *U.S. v. Hansen*, 262 F.3d 1217, cert. denied, 122 S.Ct. 2326, 23227 (Jan. 3, 2002).

## Other Federal Cases

In addition to the Supreme Court, several lower federal courts issued environmental opinions of significance or interest in the past year. Cases below are organized generally by subject matter and include cases from both the Federal Courts of Appeal as well as some district court opinions of interest.

### Solid and Hazardous Waste (CERCLA, RCRA)

#### Solid Waste

The Fifth Circuit affirmed a district court holding that a city was liable for contributing to illegal dumping at two garbage dumps in violation of RCRA, and that the director of the state environmental agency could not be held liable for RCRA violations. Residents brought a citizen suit against the city for illegally contributing to open dumping at two sites and against the director for failing to classify the dumps on EPA's Open Dumping Inventory (ODI) in violation of RCRA. The district court did not err in finding that the city could be held liable under RCRA §7002(a)(1)(B) for contributing to dumping at the sites. Even after the city's attorneys learned that a demolition company hired by the city was illegally dumping at one of the sites, the city continued to work with the company. Additionally, it was not clear error for the district court to infer that the city's waste went to the dump in question. Further, because §7002(a)(1)(B) applies to both past and present acts, the city can still be held liable under RCRA for continuing violations even though it

stopped using the second site in question as a municipal landfill in 1972 and RCRA was not enacted until 1976. In addition, the district court correctly concluded that the residents did not prove that the director violated RCRA by failing to classify the dumps on EPA's ODI. Contrary to the director's arguments, the residents had standing to bring their suit and were not barred from suing the director by the Eleventh Amendment. The residents failed, however, to prove that the director's actions contravened the statutory provisions and regulations of RCRA. The state's plan, submitted to and approved by EPA, met RCRA requirements to provide for the classification of existing solid waste disposal facilities, the closing or upgrading of all existing dumps, and long-term monitoring and contingency plans. Cox v. City of Dallas, No. 99-11029, 256 F.3d 281 (5th Cir. June 26, 2001).

#### CERCLA – Prior Owner

The Fourth Circuit reversed and remanded a district court decision that improperly relieved previous owners of any liability under CERCLA for the cleanup of a parcel of land contaminated with trichloroethylene (TCE). After purchasing the property, the current owner discovered a waste dump on the site with 55-gallon drums, most of which contained a mixture of asphalt and TCE. The individual reported his findings to the state environmental agency and, under their supervision, cleaned up the site. The district court found the previous owners not liable for any of the response costs because the current owner failed to establish that the previous owners had placed the TCE on the property. The district court, however, incorrectly interpreted CERCLA's requirements by holding that liability could not attach under CERCLA §107(a) unless the current owner showed that the previous owners placed or dumped TCE on the site, and unless there was evidence linking the TCE used by the previous owners and the TCE buried in drums at the site. These legal assumptions overlooked the strict liability imposed by CERCLA for any owner or operator of land at which hazardous waste is in fact leaking into the environment. The uncontroverted evidence showed that TCE was routinely used at the site beginning in 1979, that a waste mixture of asphalt and TCE was placed in 55-gallon drums at the site, and that TCE was found in the soil and groundwater at the site, thereby easily supporting the liability of the previous owners. Crofton Ventures Limited Partnership v. G & H Partnership, No. 00-1517, 258 F.3d 292 (4th Cir. July 24, 2001).

#### CERCLA – Consent Decrees

The First Circuit affirmed, with one exception, a district court decision that entered consent decrees formalizing the settlement of several PRPs and that entered a

declaratory judgment holding other PRPs liable for response costs at a Rhode Island CERCLA site. The district court had jurisdiction to approve the consent decrees even though the settlements included parties not sued by the United States because unpleaded claims are allowed as part of consent decrees. Moreover, the consent decrees were procedurally and substantively fair and were reasonable in light of their role in expediting remediation work, the government's substantial cost recovery, and the strength of the cases against the PRPs. Further, the decrees are faithful to CERCLA's purposes even though the nonsettling PRPs may bear disproportionate liability due to the bar on seeking contribution from settling PRPs. The consequence of nonsettlers bearing disproportionate liability is consistent with CERCLA's encouragement of early settlement. In addition, the district court did not err in its declaratory judgment when it found the nonsettling PRPs liable for response costs at the site. Since evidence in the record supports the district court's factual findings and inferences, they are not clearly erroneous and cannot be overturned. Similarly, the district court did not err in admitting and crediting the deposition testimony of an ill witness who received payment for his testimony and did not err in excluding a chart that one PRP prepared for the testimony of that PRP's corporate designee. Additionally, in determining the quantity and hazardous quality of waste disposed of by the nonsettling PRPs, the district court drew a reasonable inference based on the evidence, which supports the finding that each nonsettling PRP deposited waste and that the waste likely contained hazardous substances found at the site in excess of background levels. Moreover, CERCLA permitted the district court to issue a declaratory judgment even though no response costs had yet been incurred because CERCLA §113(g)(2) allows for declaratory relief and applies to contribution actions for both past and future response costs. Further, the district court properly imposed successor-in-interest liability against two companies for waste disposed of by two PRPs. The district court also properly held that a waste hauler was not liable under CERCLA as a transporter or as an arranger and that a city was not liable as an arranger. However, the district court improperly explained its decision to hold the primary PRP responsible for \$6 million of the government's response costs, and, therefore, the case was remanded for clarification of the issue. United States v. Davis, Nos. 00-1234 et al., 261 F.3d 1 (1st Cir. Aug. 17, 2001).

#### CERCLA -- Contribution

The Fifth Circuit affirmed a district court holding that a current owner of contaminated property could not seek CERCLA §113 contribution against a previous owner of the property unless the current owner had incurred or at least faced liability under a CERCLA §106 administrative abatement action or a CERCLA §107 cost recovery action. The plain

language of CERCLA §113(f)(1) requires a party seeking contribution to be or to have been a defendant in a §106 or §107 action. Although §113(f)(1) states that any person may seek contribution during or following a §106 or §107 action, the word "may" establishes an exclusive cause of action and means "shall" or "must." Likewise, the CERCLA §113(f)(1) savings clause, which states that nothing in §113(f) shall diminish the right of any person to bring a contribution action in the absence of a §106 or §107 action, does not allow contribution suits regardless of whether the parties are defendants in a §106 or §107 action. The §113(f) savings clause merely states that the statute does not affect a party's ability to bring contribution actions based on state law. A contrary interpretation would impermissibly nullify that part of §113(f)(1) that requires a party seeking contribution to face a §106 or §107 action. Moreover, the legislative history of CERCLA reinforces the analysis that parties found liable under §106 or §107 have a right to contribution. In addition, the majority of the courts addressing §113(f)(1) have held that a §106 or §107 action must be pending or adjudicated for a party to seek contribution. Therefore, because the current owner conceded that it did not file its §113(f)(1) contribution claim during or following a §106 or §107 action, the district court properly dismissed the current owner's contribution action against the previous owner. *Aviall Services Inc. v. Cooper Industries Inc.*, No. 00-10197, 263 F.3d 134 (5th Cir. Aug. 14, 2001), rehearing *en banc* granted, 278 F.3d 416 (5th Cir., 2001).

#### CERCLA – Prior Owner

The Sixth Circuit upheld a district court decision that a previous owner of property is not liable under CERCLA for any cleanup costs. The district court correctly found that there was no evidence that any release that occurred during the previous owners' ownership of the property caused any increase in the response costs incurred by the current owners. Additionally, there is no evidence that any active human conduct on the part of the previous owners resulted in any additional contamination to the property. Further, the failure of the previous owner to prevent passive migration of hazardous substances during their ownership does not constitute a disposal and does not make them liable under CERCLA. *Bob's Beverage, Inc. v. Acme, Inc.*, No. 00-3045, 264 F.3d 692 (6th Cir. Sept. 4, 2001).

#### CERCLA – Prior Owner

The Ninth Circuit reversed a district court's grant of summary judgment in favor of a petroleum company and the federal government in a suit filed against them for cleanup costs incurred by the current owner of a mobile home park, but affirmed the district court's grant of summary judgment

in favor of prior owners of the park. The prior owners of the park also used it as a mobile home park. Before their ownership, a petroleum production company owned the site. After cleaning up contamination at the park, the current owner sued the prior park owners, the petroleum company, and the government under CERCLA, state nuisance law, indemnity, and various other statutes. The district court dismissed all claims, and the owner appealed. The district court erred in granting summary judgment to the government and the petroleum company on the CERCLA claim. Genuine issues of material fact preclude summary judgment on whether the response costs were "necessary." The touchstone for determining the necessity of response costs is whether there is an actual threat to human health or the environment; that necessity is not obviated when a party also has a business reason for the cleanup. Here, the district court erroneously focused on the ulterior business motive for remediation. As to the prior park owners, however, the district court properly granted summary judgment in their favor on the CERCLA issue. Based on the plain meaning of the statute, there was no disposal during their ownership. Of the terms defining "disposal," the only one that might describe the passive soil migration during their ownership is "leaking," but there was no leaking under the plain and common meaning of the word. Congressional intent further supports this interpretation. Therefore, they are not PRPs and are not subject to liability. However, the district court erred in granting the prior park owners' motion for summary judgment on the current owner's indemnity claim based on the sales agreement because there are genuine issues of material fact as to the necessity of the owner's response costs. In addition, the district court properly dismissed the owner's state nuisance claim against the government for water contamination because the claim is precluded by state law. *Carson Harbor Village, Ltd. v. Unocal Corp.*, Nos. 98-55056 et al., 270 F.3d 863 (9th Cir. Oct. 24, 2001), cert. denied 122 S.Ct. 1437 (Apr. 1, 2001).

#### CERCLA – Arbitration

The Sixth Circuit affirmed a district court decision finding an automotive parts manufacturer liable under CERCLA for discharging PCBs into a river but declining to allocate any response costs to the manufacturer. A group of paper manufacturers, found by EPA and the state environmental agency to be liable under CERCLA for the contribution of PCBs into the river, brought suit against the manufacturer for contribution under CERCLA. Although the district court determined that the manufacturer was liable under CERCLA after finding that the manufacturer released PCBs in measurable or detectable quantities, this finding did not obligate the district court to allocate response costs to the manufacturer irrespective of the court's specific analysis of the relative amount of PCBs released by the manufacturer versus the group. A holding of potential liability does not preclude a zero allocation of response costs. Rather, in allocating these costs, a district court may consider any equitable factors it deems appropriate.

Additionally, the district court did not err in finding that the manufacturer had released an inconsequential amount of PCBs in comparison to the amount of PCBs released by the members of the group. Further, the district court did not err in determining that the factors concerning the relative toxicity of the PCBs released by the parties and the cooperation of the parties with the regulatory authority did not favor any particular allocation of response costs. *Kalamazoo River Study Group v. Rockwell International Corp.*, No. 00-1774, 274 F.3d 1043 (6th Cir. Dec. 18, 2001).

### Causation

The Fifth Circuit affirmed a district court holding that individuals failed to provide sufficient evidence of causation and damages to reach the jury on either water or soil pollution claims brought against an oil company. The individuals own the surface estate of a ranch. The mineral estate of the ranch is separate from the surface estate and owned by an oil company. The individuals sued the oil company claiming that the company's negligent operations contaminated the ranch's soil as well as an aquifer that provided drinking water for the ranch. The individuals' two expert witnesses on water contamination, however, failed to present sufficient evidence that the company caused the pollution of the aquifer and failed to show the extent of the damage resulting from that contamination. Similarly, the individuals' experts on soil contamination failed to establish a legally sufficient evidentiary basis for a reasonable jury to find for the individuals on essential elements of their soil pollution claims. Rather, any finding of liability would require the jurors to speculate as to both the cause of the pollution and the extent of the damage to the surface estate. Therefore, the district court's dismissal of the individuals' claims was affirmed. *Anthony v. Chevron USA, Inc.*, No. 00-50710, 284 F.3d 578 (5th Cir. Mar. 1, 2002).

### CERCLA -- Jurisdiction

The Fifth Circuit held that a district court lacked jurisdiction under CERCLA and the All Writs Act to hear landowners' land contamination claim against various corporations that owned and operated hazardous waste sites. After being sued by the federal government under CERCLA, the corporations entered a consent decree that involved the cleanup and remediation of the sites. The landowners subsequently brought suit in state court against the corporations alleging negligence and strict liability under state tort law. The case was removed to federal district court, which found in favor of the corporations, and the landowners appealed. The district court, however, erred in holding that it had jurisdiction pursuant to CERCLA. Although the landowners alleged that one of the corporations was in violation of both state and federal, this is not sufficient to render the action as one arising under federal law. Here, state law provides a cause of action under which the

landowners can attempt to prove that the corporations tortuously caused damage to their land and can demand the relief they seek. Additionally, various courts have held that the CERCLA saving clauses preserve parties' rights arising under state law. Thus, CERCLA does not completely preempt the landowners' claims under state law. Moreover, the circumstances of the case are not so extraordinary that they demand the removal under the All Writs Act to protect the integrity of the consent decree. The landowners seek compensatory damages under state tort law for alleged injuries to their land. They do not claim violations of the consent decree or allege that the actions complained of are in conformity with the consent decree; nor do they seek any changes to the consent decree. The district court's decision was therefore vacated and remanded with directions that the case be returned to state court. MSOF Corp. v. Exxon Corp., No. 01-30122, 2002 WL 1339874 (5th Cir. June 20, 2002).

#### CERCLA – Attorneys Fees

In a follow-up to the 7<sup>th</sup> Circuit's case in United States v. Tarkowski, 248 F.3d 596 (7<sup>th</sup> Cir., 2001), which held that EPA had exceeded its authority under Section 104 of CERCLA in seeking access to a property because EPA's test results did not indicate that the contamination posed an environmental hazard, the district court first denied the government's request to deny the landowner's petition under the Equal Access to Justice Act ("EAJA") for attorneys fees, United States v. Tarkowski, No. 99 C 7308, 2001 WL 1512539, 53 ERC 1958 (N.D. Ill. Nov. 26, 2001) (Kennelly, J.), and then, subsequently awarded the landowner approximately \$95,000 in fees and expenses holding that the government's action under CERCLA was not justified. United States v. Tarkowski, No. 99 C 7308 (N.D. Ill. Mar. 26, 2002).

#### RCRA – Jurisdiction

A district court denied a concentrated animal feeding operation's (CAFO's) motion to dismiss an environmental group's claims that the CAFO violated various provisions of the CWA and RCRA. The CAFO failed to obtain an NPDES permit before discharging pollutants, and the text and structure of the CWA taken as a whole support the court's conclusion that the CWA subjects the CAFO to the NPDES permit requirement. The CAFO's argument that sprayfields at its operations cannot fall within the definition of a point source because animals are not confined in the sprayfield area is nonsensical. Excluding parts of the waste management system from the definition of a CAFO by limiting the CAFO area to the land underneath the feeding areas would compromise the goals of the CWA by allowing widespread pollution by industrial feedlots pumping waste into other areas of their farms. The sprayfield areas are a vital part of the CAFO's

operations and cannot be separated from the confinement areas merely because the waste has been moved from one area of the farm to another. In addition, question of whether the CAFO returns animal waste to the soil for fertilization purposes or instead applies waste in such large quantities that its usefulness as organic fertilizer is eliminated, and, therefore, a solid waste under RCRA, is a question of fact. This reasoning has been propounded by EPA in recent administrative actions against CAFOs in EPA Region 6. *Water Keeper Alliance, Inc. v. Smithfield Foods, Inc.*, Nos. 4:01-CV-27-H(3), -30-H(3) 2001 WL 1715730 (E.D.N.C. Sept. 20, 2001).

#### RCRA/CERCLA Interaction

A district court held that individuals' RCRA and state law claims against a gasoline corporation that spilled 600,000 gallons of gasoline onto the individuals' property and a surrounding lake and creek are not barred because the state has not engaged in a CERCLA §104 removal action pursuant to RCRA statutory requirements. RCRA citizen suits are only barred to the extent of the scope and duration of a CERCLA cleanup order. Although the state was supervising remediation efforts at the site, there was no agreement between the state and the federal government pertaining specifically to the action and to the site, which is necessary for the state action to be conducted pursuant to CERCLA §104. Additionally, the state's authorization for its hazardous waste management program does not conclusively show that the state was using Superfund money under CERCLA §104 to supervise remediation at the site. Further, the individuals' allegation that present contamination to the land and water surrounding their property continues to pose imminent and substantial endangerment is sufficient to support their claim of a redressable injury. Finally, because the landowners may proceed with their RCRA claim, the court asserted supplemental jurisdiction over the individuals' state law claims. *Abundiz v. Explorer Pipeline Co.*, No. Civ.3:00-CV-2029-H (2002 WL 663573) (N.D. Tex. Apr. 19, 2002) (Sanders, J.).

#### Clean Water Act

##### Judicial Review

The Fifth Circuit vacated a district court's references for summary judgment and other liability issues under the CWA to a special master. Two environmental groups sued EPA and the state of Louisiana for failure to comply with CWA §303(d)'s TMDL requirements. The district court referred the case to a special master and subsequently adopted the findings of the special master. However, that the case was pending for two years and had voluminous filings containing highly technical documents were not exceptional conditions justifying references to a special master. Similarly, the court's crowded docket and



unfamiliarity with the subject matter hardly excused the court's obligation to carry out its judicial function. Further, there were no findings or conclusions by the district court revealing a de novo review of the reports, and, thus, the circuit court was unable to perform a meaningful review of the district court's judgment. Therefore, the orders of reference, the orders adopting the special master's reports, and the final judgment were vacated and remanded to the district court. Sierra Club v. Browner, No. 99-31299, 257 F.3d 444 (5th Cir. July 9, 2001).

#### Judicial Review

The Tenth Circuit affirmed a district court's dismissal of individuals' CWA and APA claims alleging that Oklahoma failed to submit TMDLs to EPA for review and that EPA failed to fulfill its nondiscretionary duty to develop TMDLs after Oklahoma's constructive submission of no TMDLs. The individuals' theory, that Oklahoma's failure to submit TMDLs resulted in a constructive submission of no TMDLs that triggered EPA's nondiscretionary duty to approve or disapprove of the TMDLs, is not supported by the evidence. The theory of constructive submission only applies when the state's actions clearly and unambiguously express a decision to submit no TMDL for a particular impaired waterbody. Here, the uncontradicted evidence is that Oklahoma submitted a number of TMDLs and is making progress toward completing about 1,500 TMDLs over a 12-year period. Additionally, the individuals' APA claim, that EPA failed to fulfill its nondiscretionary duty to develop its own TMDLs after Oklahoma's constructive submission of no TMDLs, duplicates the one the individuals brought under the CWA and should be dismissed. Hayes v. Whitman, No. 00-5113, 264 F.3d 1017 (10th Cir. Aug. 29, 2001).

#### Judicial Review

The Ninth Circuit held that the EPA Administrator's failure or refusal to find a CWA violation or to take enforcement action against an Arizona wastewater treatment plant are discretionary decisions that are not subject to review under the CWA. After the treatment plant's NPDES permit expired in 1996 and 128 permit violations were reported between 1995 and 2000, an environmental group brought a CWA §505(a)(2) citizen suit against EPA seeking to compel the Agency to initiate an enforcement action. Suits against EPA are barred by sovereign immunity unless there has been a waiver of that immunity. Congress has waived immunity in CWA §505(a)(2) only for suits alleging a failure to perform a nondiscretionary duty. The group claims that CWA §309(a)(3) creates a mandatory duty of the EPA Administrator to make enforcement findings when presented

with information suggesting a violation. However, CWA §309(a)(3) contains no language suggesting that the Administrator has a duty to make findings. Instead, §309(a)(3) merely states what follows a finding of a violation by the Administrator. Moreover, the CWA's purpose is to restore and maintain the national waters, and requiring EPA to investigate all complaints, irrespective of their environmental magnitude, could hinder the Administrator's ability to investigate and enforce the most serious violations. Further, although CWA §309(a)(3) states that the Administrator "shall" issue a compliance order or commence a civil action upon finding a violation, the use of the term "shall" does not implicitly impose a mandatory requirement on the Administrator. The term "shall" usually denotes a mandatory duty, but it sometimes is the equivalent of "may." An analysis of the CWA's language, structure, and legislative history leads to the conclusion that CWA §309(a)(3) does not create mandatory enforcement duties. Because there is no nondiscretionary duty that the Administrator failed to perform, CWA §505(a)(2) does not authorize suit against EPA. Thus, there has been no waiver of sovereign immunity and the group's action must be dismissed for lack of subject matter jurisdiction. Sierra Club v. Whitman, No. 00-16895, 268 F.3d 898 (9th Cir. Oct. 2, 2001).

#### Permit Shield

The Fourth Circuit reversed a district court decision that even though a county waste treatment plant's NPDES permit did not prohibit the discharge of heat, the plant violated the CWA when it discharged warm water to a stream since the NPDES permit did not expressly authorize such a discharge. The permit shield defense to an alleged CWA discharge violation applies as long as the NPDES permit holder complies with the express terms of the permit, complies with the CWA's disclosure requirements, does not make a discharge of pollutants that was not within the reasonable contemplation of the permitting authority at the time the permit was granted. Here, the language of the plant's permit does not bar the discharge of heat. Although a footnote to the plant's permit states that "discharge of pollutants not shown shall be illegal," the footnote is ambiguous considering that it can be read to mean either that it is illegal to discharge pollutants not listed or that it prohibits only those pollutants that were not disclosed to the state environmental agency during the permitting process. Given this ambiguity, extrinsic evidence must be evaluated, and this evidence reveals that during the NPDES permit issuance, it was contemplated that the plant would discharge pollutants other than those listed. In addition, the plant adequately disclosed the plant's discharge of heated water to the state environmental agency and the plant's discharges were reasonably anticipated by the state agency. Therefore, the judgment of the district court is vacated. Piney Run

Preservation Ass'n v. County Commissioners of Carroll County, No. 00-1283, -1322, 268 F.3d 255 (4th Cir. Oct. 10, 2001), cert. denied, 122 S.Ct. 1960 (May 20, 2002).

### Elements of Criminal Violation

The Seventh Circuit held that a district court properly interpreted the CWA in concluding that the number of violation days are a sentencing factor and not an element of the crime and, therefore, upheld the fines imposed against a scrap metal factory for illegally discharging wastewater in violation of the CWA. Relying on the U.S. Supreme Court's decision in *Apprendi v. New Jersey*, 530 US 466 (2000), the company argued that it had to be charged in the indictment with each day of violation and that the number of days of violation had to be proven by the government beyond a reasonable doubt. However, the plain meaning of CWA §309(c)(2)'s language expresses Congress' unambiguous intent that the number of violation days is a sentencing factor and not an element of a CWA offense. Section 309(c)(2)'s "shall be punished by" clause indicates that the language following it sets forth the terms of punishment for a CWA violation, and the terms of punishment for a CWA violation include a fine that depends on the number of days of violation. Additionally, the "per day of violation" language in §309(c)(2) qualifies the term of punishment by indicating that there is a "violation" defined elsewhere in the CWA and that the punishment received for this violation depends on the number of days that the violation occurred. Thus, the number of days that the violation occurred is a factor to be determined after a violation has been established, and it was proper for the district court to apply sentencing factors based on a preponderance of the evidence. United States v. Chemetco, Inc., No. 00-3940, 274 F.3D 1154 (7th Cir. Dec. 17, 2001).

### Administrative Appeals

The EPA Environmental Appeals Board (EAB) denied a city's petition for review of its EPA-issued NPDES permit to operate a municipal separate storm sewer system. The city argued that several of the permit conditions require it to regulate, legislate, and use its enforcement powers in violation of the Tenth Amendment's principles of federalism. The city also objected to permit conditions requiring it to develop training and education programs targeted to reduce storm water pollution, arguing that the conditions compel it to speak to its citizens and deliver a message chosen by EPA in violation of its First Amendment right to free speech. As a general rule, constitutional questions of the kind at issue here are reserved for the federal courts. Moreover, the permit provisions in question fall within the immediate contemplation of both the CWA and its implementing regulations. Thus, the city is actually challenging the validity of the statutory and

regulatory provisions themselves rather than the manner in which they were applied when EPA wrote the permit. The regulations authorizing appeals to the EAB contemplate review of conditions of permits, not review of the statutes and regulations that are predicates for such conditions. Thus, because nothing in the city's petition or the administrative record presents circumstances sufficiently compelling to overcome the presumption against nonreviewability of Agency rules in the context of EAB proceedings, the proper forum for the city's challenge lies with the federal courts. In addition, the city failed to demonstrate how other permit conditions evidence error, abuse of discretion, or other unlawful action by the Agency. In re Irving, Texas, Municipal Separate Storm Sewer System, NPDES Appeal No. 00-18 (EPA EAB July 16, 2001).

## Rulemaking

### CAA-HAPS

The D.C. Circuit remanded EPA- promulgated HAPs emission standards for hazardous waste combustors to the Agency because they failed to reflect the emissions achieved in practice by the best performing sources as required by the CAA. Acting pursuant to CAA §112(d)(3), EPA set emission floors for new and existing sources using maximum achievable control technology (MACT). However, EPA violated CAA §112(d)(3) by setting the floors using MACT technology. While standards achievable by all sources using the MACT control might also ultimately reflect what the statutorily relevant sources achieve in practice, EPA may not deviate from §112(d)(3)'s requirement that floors reflect what the best performers actually achieve by claiming that floors must be achievable by all sources using MACT technology. Additionally, the MACT approach does not measure what the best performing sources actually achieve. Further, because factors other than MACT technology affect emissions, emissions of the worst performing MACT source may not reflect what the best performers actually achieve. EPA did not err, however, in relying on worst case data to derive the standards and did not violate the Regulatory Flexibility Act. Cement Kiln Recycling Coalition v. Environmental Protection Agency, Nos. 99-1457 et al. 255 F.3d 855 (D.C. Cir. July 24, 2001).

### FIFRA Reporting

A district court upheld an EPA regulation extending FIFRA §6(a)(2), which requires that pesticide registrants report to EPA on an ongoing basis factual information regarding a pesticide's unreasonable adverse effects on the environment, to opinions regarding unreasonable adverse effects rendered by a registrant's employees or agents. An association challenging the regulation argued that the regulation undermines the

availability of the work product doctrine and the attorney-client privilege to pesticide registrants to the extent the regulation requires registrants to report the opinions of lawyers or of non-testifying expert witnesses prepared in preparation of litigation. The association, however, failed to present any facts to which this argument might be applied. The issue, therefore, is not ripe for decision. Consequently, because the record failed to provide any indication that EPA's construction of FIFRA §6(a)(2) is unreasonable or contrary to law, the court upheld the regulation. *American Crop Protection Ass'n v. U.S. Environmental Protection Agency*, No. CIV A 00-0811, 182 F. Supp.2d 89 (D.D.C. Jan. 31, 2002) (Robertson, J.).

### CAA-NAAQS

The D.C. Circuit upheld EPA's promulgation of NAAQS for ozone and for PM having an aerodynamic diameter of 2.5 microns or less (PM<sub>2.5</sub>) against challenges from industry and environmental groups that the NAAQS were arbitrary and capricious. Previous decisions in the case addressed only whether the CAA adequately limits EPA's discretion, and, thus, are not dispositive of whether EPA reasonably exercised that discretion, the question at issue here. As to that issue, industry's claims that the PM<sub>2.5</sub> NAAQS must be vacated because EPA did not apply any legal standard, much less the correct standard, must fail. In a passage that industry cited as evidence that EPA failed to identify a safe level of PM<sub>2.5</sub>, the Agency merely disclaimed any obligation to set primary NAAQS by means of a two-step process. Nothing in the statement implied that EPA failed to determine safe levels for fine PM; indeed, the Agency's establishment of new primary NAAQS demonstrates that it did reach a conclusion regarding safe PM<sub>2.5</sub> levels. Additionally, another passage in the regulations documents EPA's rejection of lower standards, demonstrating that the Agency not only recognized, but acted upon, its statutory obligation to set the primary NAAQS at levels no lower than necessary to reduce public health risks. Further, EPA's inability to guarantee the accuracy or increase the precision of the PM<sub>2.5</sub> NAAQS in no way undermines the standard's validity. And, contrary to industry's contention, EPA did not err in not considering whether reducing atmospheric concentrations of fine particles would increase levels of ozone or a different fine particle component. Moreover, EPA should not have set a stricter daily PM<sub>2.5</sub> NAAQS rather than relying almost exclusively on the stringent annual standard as environmental groups claimed. Not only does the court owe deference to an agency's determination regarding the reliability of scientific evidence, but the environmental groups gave no reason to question EPA's judgment regarding the reliability of the risk assessment relied upon in setting the standard. Finally, EPA acted properly in promulgating the ozone NAAQS. The record is replete with studies demonstrating the

inadequacies of the old one-hour averaging standard, EPA discussed at length the advantages of a longer averaging time, and the selection of a 0.08 parts per million standard was not arbitrary or capricious. American Trucking Ass'n v. Environmental Protection Agency, Nos. 97-1440 et al., 283 F.3d 355 (D.C. Cir. Mar. 26, 2002).

#### CAA, -- BART, Regional Haze

The D.C. Circuit held that the BART provisions of EPA's regional haze rule violate the CAA, but that the rule's natural visibility goal and no degradation requirement are not arbitrary or capricious. The regional haze rule calls for states to play the lead role in designing and implementing regional haze programs to clear the air in various national parks and wilderness areas. Under the regional haze rule, once a state has decided that a major stationary source is subject to BART and is considering what BART controls to place on the source, the state must analyze four of the five statutory factors under CAA §169A(g)(2) on a source-specific basis. The fifth factor is considered on a group or areawide basis. In effect, EPA bifurcated the states' determination of the appropriate BART emission limitations for specific sources. The text and structure of the CAA, however, indicate that EPA's bifurcation of the BART determination is impermissible. The language of CAA §169A(g)(2) can be read no other way than to indicate that all five factors inform the states' inquiries into what BART controls are appropriate for particular sources. To treat one of the five statutory factors in such a dramatically different fashion distorts the judgments Congress directed the states to make for each BART-eligible source. Additionally, the regional haze rule's BART provisions are inconsistent with CAA provisions giving the states broad authority over BART determinations. Therefore, the regional haze rule's BART provisions were remanded to EPA. The natural visibility goal and the no degradation requirement, however, were properly promulgated and are not arbitrary or capricious. Further, the court's decision to invalidate the BART provisions rendered unripe an environmental group's claims that EPA did not go far enough with the rule. American Corn Growers Ass'n v. Environmental Protection Agency, Nos. 99-1348 et al., 291 F.3d 1 (D.C. Cir. May 24, 2002).

#### TSCA -- Guidance

The D.C. Circuit vacated a PCB risk assessment guidance document because the court found it to be a rule improperly published without notice-and-comment. The guidance document issued by EPA was ripe for review. The document is final agency action because it marks the consummation of EPA's decision making process and determines the rights and obligations of both applicants and EPA. Additionally, the document is a rule

under TSCA §19(a)(1)(A) and, thus, is subject to the court's review. The document gives substance to the vague language of 40 C.F.R. §761.61(c), does so in an obligatory manner, and is treated by EPA as controlling in the field. Further, the document is binding because it facially requires an applicant for a risk-based variance to calculate toxicity using a certain total toxicity factor. Because the document binds EPA to accept the use of a certain toxicity factor, it follows that the document imposes further obligations on the Agency. And even though the document gives applicants the option of calculating risk in either of two ways, it still requires them to conform to one or the other. Moreover, EPA did not contend that in practice it had not treated the document as binding in the ways described above. Consequently, because EPA issued the document without providing notice-and-comment, the document was vacated. General Electric Co. v. Environmental Protection Agency, No. 00-1394, 290 F.3d 377 (D.C. Cir. May 17, 2002).

Engine manufacturers, automobile makers, and fuel refiners petitioned for judicial review of Environmental Protection Agency (EPA) rule requiring reductions in diesel engine exhaust emissions. The Court of Appeals held that: (1) rule requiring diesel engine manufacturers to substantially reduce both particulate matter and nitrous oxide emissions over several year period was not arbitrary or capricious; (2) rule requiring diesel engine fuel to have only 15 parts per million (ppm) of sulfur was not arbitrary or capricious; (3) EPA lawfully revised its "averaging, banking, trading" program for credits earned by diesel engine manufacturers for producing engines that exceeded emission standards; and (4) challenge to fuel rule, on ground that it did not require new fuel soon enough to satisfy automobile manufacturers' obligations under prior rule mandating lower vehicle emissions, was in fact untimely challenge to prior rule. Petitions denied. National Petrochemical & Refiners Ass'n v. E.P.A., 287 F.3d 1130 (D.C. Cir. May 3, 2002).

In a challenge by the Sierra Club to the State Implementation Plan ("SIP") for the District of Columbia, the Court of Appeals for the D.C. Circuit held that EPA exceeded its authority in extending the attainment deadline for the Washington, D.C. area because the Washington area did not fit into the limited circumstances allowing an extension under the statute, nor did EPA reclassify the non-attainment area as "severe." The Court also rejected the SIP because of EPA's failure to determine reasonably available control measures ("RACM"), the SIP did not provide for rate of progress reductions for years after 1999, and the SIP did not include required contingency measures. Sierra Club v. Environmental Protection Agency, (D.C. Cir., July 2, 2002 Nos. 01-1070 & 01-1158).

## TSCA -- Lead-Based Paint

The D.C. Circuit denied housing industry associations' petition to review EPA's decision to include all hazardous lead-containing dust and soil, regardless of source, within a TSCA rule--known as the Lead Rule--that requires the disclosure of lead-based paint hazards. The associations claim that EPA acted arbitrarily and capriciously and contrary to congressional intent by including dust and soil contaminated by sources other than lead-based paint dust within the Lead Rule's disclosure requirements. However, the Lead-Based Paint Hazard Reduction Act, which amended TSCA, requires EPA and HUD to take action to protect the public from lead-based paint hazards by reducing such hazards, and by requiring owners of housing built before 1978 to disclose any lead-based hazards. The Lead-Based Paint Hazard Reduction Act defines "lead-based paint hazard" as any condition that causes exposure to lead from lead-contaminated dust, lead-contaminated soil, or lead-contaminated paint or surfaces that would adversely impact human health. The Act does not define lead-contaminated dust and lead-contaminated soil to require the lead contamination in each to be derived from paint. Therefore, Congress did not unambiguously express their intent to limit lead-based paint hazards to contamination the source of which is lead paint. Moreover, EPA's interpretation of lead-based paint hazards to include lead-contaminated dust and lead-contaminated soil from sources other than lead paint is a permissible construction of the statute. EPA explained that its decision to cover lead in dust or soil regardless of the source of the lead was based on the fact that there is no good technical basis to determine how much of lead in dust or soil in a specific room or dwelling originated from lead paint. Moreover, the associations conceded that current technology cannot ascertain where lead contamination derives from. In light of this technological limitation, EPA reasonably required disclosure of all lead-contaminated soil and dust regardless of source. *National Multi Housing Council v. United States Environmental Protection Agency*, No. 01-1159, 2002 WL 1232954 (D.C. Cir. June 7, 2002).

## Procedural and Enforcement Issues

### EPCRA -- Penalty Policy

The Sixth Circuit affirmed an administrative law judge's (ALJ's) use of EPCRA's enforcement response policy (ERP) in assessing penalties against a metal manufacturer for failure to file timely reports regarding its processing of toxic chemicals. The ALJ understood that the ERP was only a policy, not a rule, and that it had discretion to depart from the ERP if there was reason for doing so. The ALJ also gave detailed reasons for



applying the ERP in this case and correctly concluded that the manufacturer's lack of culpability was not a reason for departing from the ERP-recommended penalty, especially given the strict liability nature of EPCRA. Further, the ALJ's comment that there were no extraordinary circumstances in the case that would suggest deviation from the ERP does not indicate that the ALJ applied too exacting a standard for deviating from the ERP. The ALJ's statement that the case does not involve extraordinary circumstances must be read as meaning only that this case does not present circumstances that raise policy issues not accounted for in the ERP, and, thus, that departure from the ERP is not warranted. Moreover, the manufacturer misconstrued the substantial evidence standard of review in arguing that the ERP should not have been applied. The manufacturer argued that there was substantial evidence on the record to support its position that the ERP should not have been applied at all, rather than challenging specific factual determinations in the record. Under the substantial evidence standard, the court's review of the ALJ's factual determinations is limited to deciding whether those determinations are supported by substantial evidence on the record as a whole—not whether there was substantial evidence in the record for a result other than that arrived at by the ALJ. Steeltech, Ltd. v. United States Environmental Protection Agency, No. 00-2008, 273 F.3d 652 (6th Cir. Nov. 28, 2001).

#### Consent Decree – Stipulated Penalties

The Seventh Circuit affirmed a district court decision ordering a corporate farm to pay penalties it stipulated to in a consent decree it entered with EPA for the restoration of wetlands destroyed by the farm's construction of a drainage ditch system without a CWA permit. The farm invoked the decree's dispute resolution clause and sought to modify the consent decree. The district court did not find adequate grounds for modification and imposed penalties against the farm. The stipulated penalty provision in the consent decree is not void as a matter of public policy because it allows for penalties to accrue while the parties engage in the dispute resolution process. Although the farm offers precedent allegedly supporting its claim that the dispute resolution provision is against public policy because it inhibits its right of access to the courts, that precedent does not control and is notably distinguishable from the present case in that the parties in those cases fully remedied the environmental harm, and the accrued penalties at issue were unrelated to continuing environmental violations. In fact, controlling precedent requires imposition of the penalties against the farm. Moreover, the farm cannot now escape the consequences of the consent decree with a public policy argument. The stipulated penalty accrual provision does not apply to a successful dispute resolution claim. Unfortunately for the farm, its claim was unsuccessful, but to excuse it from the stipulated

penalties would undermine the consent decree and provide any party to a consent decree a method of delaying performance. In addition, the farm cannot claim that the stipulated penalties were unreasonable since the delay in completion of the work was due to weather conditions beyond its control. The consent decree included a force majeure provision allowing delay due to weather, but the provision required the farm to provide EPA with written notice of such delay. No notice was provided, and the farm cannot now claim that compliance with the schedule was not possible due to the weather. United States v. Alshabkhoun, No. 01-1380, 277 F.3d 930 (7th Cir. Jan. 18, 2002).

#### Attorney-Client Privilege, Work Product

A district court held that an electric utility need not reveal to the federal government calculations and analyses of the utility's emissions that its scientist and attorneys prepared in response to an EPA suit against it for allegedly violating the CAA's NSR requirements, but that the utility must reveal calculations performed in the ordinary course of business and the nature of all defenses it will offer to the government's suit. The utility spent more than \$300 million to rebuild eight plants, but it did not seek an NSR permit or comply with the NSR requirements. The government brought suit claiming that the utility's actions constituted a major modification that triggered NSR requirements, but the utility argued it was exempt from the NSR requirements because the projects did not increase power generation or emissions. During discovery, the government sought the utility's interpretation of its emissions calculations, analyses, witness testimony, and documents relating to the calculation of utility emissions; the criteria used to determine if the utility's rebuilding activities resulted in net emissions increases; and the methods used to calculate utility emissions. The utility refused to disclose the information and sought a protective order. The attorney client privilege clearly encompasses the utility's communication to the attorney for the purpose of obtaining legal advice, and thus covers the communications that the utility's scientist had with utility attorneys. Similarly, the work product exception applies to the calculations and analyses prepared to evaluate the utility's possible defenses to the government's suit. Moreover, the requested documents are not discoverable under the work product hardship exception because the exception only applies to facts, and the documents at issue contain opinions or theories generated from emissions calculations. However, as part of its case management powers, the court can order the disclosure of strategic decisions, and no discovery rule allows a party to withhold preparation and selection of defenses because the defenses may have arisen from attorney-client communications or work product documents. Thus, the utility must provide to the government the basis for its defense by selecting a corporate designee to give a deposition on and produce documents supporting the utility's interpretation of its

emissions calculations and analyses. Further, the designee must provide witness testimony and documents relating to the calculation of utility emissions, the criteria used to determine if the utility's rebuilding activities resulted in net emissions increases, and the methods used to calculate utility emissions. The corporate designee need not be the utility's scientist and the designee need not reveal past confidential communications or documents, but the designee must be fully prepared to reveal the utility's defenses. In addition, the utility cannot withhold revelation of its defenses until the time for expert reports and depositions. *United States v. Duke Energy Corp.*, No. 1:00CV1262, 2002 WL 12717932002 (D.N.C. June 7, 2002) (Eliason, J.).

### Expert Witnesses

The Seventh Circuit affirmed a district court's disqualification of an expert witness and dismissal of a company's third-party CERCLA complaint against a manufacturer for the reimbursement of cleanup costs stemming from groundwater contamination. At his deposition, the company's expert witness admitted that he was not an expert in mathematical models of groundwater flow and that the modeling on which he relied for his conclusion that the manufacturer's plant was within the capture zone for the contamination was done by the expert's assistants. After the manufacturer moved that the expert be barred from testifying, the company responded with affidavits from the assistants. The district court properly struck the affidavits under Fed. R. Civ. P. 37(c)(1) on the ground that the company's disclosure of additional expert witnesses was untimely. The district judge was reasonable in regarding the affidavits as expert reports. An expert witness is permitted to use assistants in formulating his expert opinion, and normally they need not themselves testify. Here, however, the assistants exercised professional judgment that was beyond the expert's ken. Although the expert could have testified that if the manufacturer's plant was within the capture zone some of the contamination may have come from that plant, the expert could not testify that the plant was within the capture zone. A scientist, however well credentialed he may be, is not permitted to be the mouthpiece of a scientist in a different specialty. Further, it is apparent from the affidavits that the expert's assistants did not merely collect data for him or otherwise perform routine procedures, and that the expert himself lacks the necessary expertise to determine whether the techniques were appropriately chosen and applied. Moreover, the district court was correct in finding that the filing of the expert reports was untimely. There was no justification for not disclosing to the manufacturer the opinions of the assistants. The company should have known that the expert's expertise did not extend to scientific issues crucial to the prima facie case and was likely to be contested, and the suit was in its seventh year when the judge acted. To have reopened discovery to give the

manufacturer its crack at the additional experts would have unreasonably extended the litigation and burdened the manufacturer. Because the affidavits were properly struck, the expert witness could not testify. And without the expert's testimony, the company had no case. The district court, therefore, properly granted summary judgment for the manufacturer. *Dura Automotive Systems of Indiana, Inc. v. CTS Corp.*, No. 01-1081, 285 F.3d 609 (7th Cir. Apr. 4, 2002).

#### Judicial Review -- Ripeness

The Fifth Circuit vacated a district court decision holding that the ESA's take provision was a valid exercise of Congress' enumerated powers because the case does not present a case or controversy under Article III of the U.S. Constitution. An individual that pumps water from the Edwards Aquifer in Texas alleged that the U.S. government and an environmental organization threatened to sue area water pumpers for ESA violations based upon the theory that the pumping of water from the Edwards Aquifer harmed endangered and threatened species and was a "take" under the ESA. The district court concluded that the case was ripe for review and that the individual had standing. On the merits, it held that Congress validly exercised its Commerce Clause and treaty powers in enacting the ESA's take provision. This suit, however, does not present justiciable issues. The individual failed to demonstrate that there was a specific and concrete threat of litigation against him sufficient to render his declaratory action an actual controversy and thus ripe for judicial review. A notice of intent to sue the individual individually as distinguished from the Edwards Aquifer board could be a sufficiently specific and concrete threat, but the individual failed to demonstrate that he received such a notice. The district court, therefore, was without jurisdiction to decide the case and its decision was vacated. *Shields v. Norton*, No. 00-50839, 289 F.3d 832(5<sup>th</sup> Cir. Apr. 26, 2002).

#### Environmental Justice

The Third Circuit held that because Title VI proscribes only intentional discrimination, residents of a predominantly minority community do not have a right to enforce through 42 U.S.C. §1983 EPA's Title VI §602 disparate impact discrimination regulations against a state agency that issued an air permit to a cement plant. The community already has two Superfund sites and more than twice the number of permitted facilities already emitting air pollution than exist in typical New Jersey zip code areas. Residents of the community filed a complaint against the agency alleging that the agency intentionally discriminated against them in violation of §601 of Title VI by issuing the air quality permit and further asserted that the facility would have an adverse disparate impact on them in

violation of §602. A district court granted a preliminary injunction to the residents and found that §602 and EPA's implementing regulations contained an implied private right of action. Five days later, the U.S. Supreme Court issued *Alexander v. Sandoval*, 532 US 275 (2001), in which it held that Title VI did not create a private right of action to enforce regulations promulgated under §602. The district court then allowed the residents to amend their complaint to enforce §602 through §1983 and issued a supplemental order and opinion continuing the preliminary injunction based on the residents' §1983 claim, holding that *Sandoval* did not bar the plaintiffs from using §1983 to enforce the federal rights in EPA's Title VI §602 disparate impact regulations. However, disparate impact regulations promulgated under §602 do not create a right that may be enforced through a §1983 action. Based on *Sandoval* and previous Supreme Court cases, the only right conferred by §601 is to be free of intentional discrimination, and §602 limits agencies to effectuating rights already created by §601. Thus, §602 does not grant a right to be free from disparate impact discrimination. Additionally, EPA's regulations at issue here do more than define or flesh out the content of a specific right conferred on the residents by Title VI. Instead, EPA's regulations implement Title VI to give the statute a scope beyond what Congress contemplated and, therefore, are too far removed from congressional intent to constitute a federal right enforceable under §1983. *South Camden Citizens in Action v. New Jersey Department of Environmental Protection*, Nos. 01-2224, -2296 274 F.3d 771 (3rd Cir. Dec. 17, 2001), cert. denied, 2002 WL 706516, 70 U.S.L.W. 3669 (U.S. June 24, 2002) (No. 01-1547).

## Texas Cases

In addition to the federal cases, there were state court cases of note, including an opinion from the Houston Court of Appeals construing the state's Solid Waste Disposal Act.

### Supreme Court

Peanut farmers brought action against herbicide manufacturer alleging strict liability, breach of express and implied warranties, and violations of the Deceptive Trade Practice-Consumer Protection Act (DTPA) arising out of claims that mixed application of herbicides damaged peanut crop. The 91st Judicial District Court, Eastland County, Steven R. Herod, entered summary judgment for manufacturer. The farmers appealed. The Eastland Court of Appeals, 32 S.W.3d 916, reversed and remanded. The manufacturer petitioned for review. The Supreme Court, Craig T. Enoch, J., held that farmers' state law claims were not preempted by Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). *American Cyanamid Company v. Terry Geyer and Brandon*

Geyer, No. 01-0008, 2001 WL 1876346 (Tex.), 45 Tex. Sup. Ct. J. 761 (Tex. June 6, 2002).

### Court of Appeals

Environmental groups sought judicial review of final order issued by the Texas Natural Resource Conservation Commission (TNRCC) granting permit under Solid Waste Disposal Act for burning of solid waste in cement kilns. The District Court, Travis County, 53rd Judicial District, Ernest C. Garcia, J., granted TNRCC's plea to the jurisdiction and dismissed appeal for want of subject-matter jurisdiction. Environmental groups appealed. The Austin Court of Appeals, 26 S.W.3d 684, reversed and remanded. The TNRCC petitioned for review. The Supreme Court, Hankinson, J., held that environmental groups were only required to serve citation on the TNRCC and mail copies of the petition to the other parties in order to invoke jurisdiction of the district court; disapproving Employees' Retirement System of Texas v. McKillip, 956 S.W.2d 795. Texas Natural Resource Conservation Commission v. Sierra Club and Downwinders at Risk, No. 00-1145, 70 S.W.3d 809, 45 Tex. Sup. Ct. J. 394 (Tex. Feb. 21, 2002).

Rancher brought action against petroleum companies and others, alleging that open saltwater pits operated by companies had contaminated groundwater under ranch. The companies brought motions for summary judgment, which the 238th District Court, Midland County, John G. Hyde, J., granted, and the court subsequently entered a severance order making those judgments final. Rancher appealed. The Court of Appeals, McClure, J., held that: (1) genuine issue of material fact as to whether one petroleum company disposed of salt water in pits precluded summary judgment on causation grounds against that company; (2) there was no evidence that other petroleum company ever improperly disposed of salt water in the pits, and thus that company was entitled to summary judgment; (3) injury to rancher's land was permanent, and thus cause of action began to accrue on date of discovery of initial injury; (4) rancher discovered or should have discovered cause of action when he contacted water commission regarding his groundwater, and thus action was time-barred; and (5) continuing tort doctrine and fraudulent concealment doctrine did not prevent petroleum company from obtaining summary judgment. *Jud Walton v. Phillips Petroleum Company, Parker & Parsley Petroleum USA, Inc., Pioneer Natural Resources Company. and Pioneer Natural Resources USA, Inc.*, No. 08-00-00385-CV, 65 S.W.3d 262 (Tex. App. – El Paso Nov. 29, 2001).

Owners of dry-cleaning plants brought statutory cost recovery and common-law action against supplier of dry-cleaning products and services, seeking to recover environmental cleanup costs and other damages incurred by them at their facilities. The 215th District Court, Harris County, Dwight Jefferson, J., awarded owners \$1.5 million in cost recovery. The supplier appealed, and owners cross-appealed. The Court of Appeals, Mirabal, J., held that: (1) supplier was entitled to have jury determine any fact issues required to be resolved under Solid Waste Disposal Act (SWDA); (2) as matter of first impression, arranger liability under SWDA requires nexus between potentially responsible party and disposal of the hazardous substance; (3) supplier became "arranger" within scope of (SWDA) by providing technical advice and services relating to waste disposal; (4) conduct of supplier's agent on premises of dry-cleaning plants rendered supplier "arranger" as a matter of law; (5) neither statutory nor regulatory domestic sewage exclusion applied to chemicals discarded into public sewer system by supplier's agent; (6) agent's conduct constituted "disposal of solid waste" within scope of SWDA; (7) owners were not required to show that supplier's conduct caused them to incur response or cleanup costs; (8) evidence established owners' reasonable and necessary costs of remediation as matter of law; (9) trial court was required to submit contested issues related to apportionment of costs to jury; and (10) remand, rather than rendition, was appropriate remedy. *R.R. Street & Co., Inc. v. Pilgrim Enterprises, Inc., et al. v. R.R. Street & Co., Inc.*, No. 01-98-01429-CV, 2001 WL 1047540 (Tex. App. – Houston [1<sup>st</sup> Dist.] Aug. 31, 2001).

## Carrick Brooke-Davidson

Carrick Brooke-Davidson is of counsel in the Austin office of Andrews & Kurth, Mayor, Day & Caldwell, L.L.P., and is part of the firm's Environmental Litigation Team. Carrick previously served for twelve years in the U.S. Department of Justice, litigating environmental enforcement matters under all the major environmental statutes. His cases have been in Texas, Louisiana, Oklahoma, Arkansas, New Mexico, Missouri, Connecticut, Rhode Island, Massachusetts, New Hampshire, New York, and New Jersey. His experience includes matters involving petrochemical plants, refineries, swine facilities, poultry processing plants, creosoting plants, pipelines, lead smelters, cement kilns, manufactured wood product plants, and aluminum plants. An example of Carrick's representations is a federal multi-media case against an agribusiness. This is a case of first impression regarding the applicability of RCRA to a concentrated animal feeding operation. His environmental career includes work as an environmental consultant specializing in air quality issues.



**PAMELA M. GIBLIN**  
**Senior Partner, Baker Botts L.L.P.**

Pam Giblin is a senior partner in the Austin office of Baker Botts. Ms. Giblin has practiced environmental law for over 25 years, and heads the firm's Environmental Practice Group. She has had extensive experience in permitting, acquisitions and enforcement under state and federal laws dealing with air, water and hazardous waste. She is listed in the Environmental Law section of *The Best Lawyers in America* and is a member of EPA's Federal Clean Air Act Advisory Committee.

Ms. Giblin served on the legal staff of the Texas Air Control Board and as General Counsel of that agency. She is a past member of the Board of Directors of the Environmental Law Section of the State Bar of Texas, past Chairman of the Administrative Law Committee of the State Bar and past Vice-Chairman of the Public Law Section of the State Bar. Ms. Giblin also served as Chairman of the Austin Commission on Electric Rates. She has taught air pollution courses sponsored by EPA for numerous state environmental agencies and is a frequent speaker at seminars and conferences on U.S. and Mexican environmental law issues. She has served on a number of task forces and special committees appointed by the Texas Natural Resource Conservation Commission and its predecessor agencies.

Over the past twenty-five years, Ms. Giblin's broad environmental experience has included virtually all aspects of environmental practice, ranging from air quality to hazardous waste and water quality. Ms. Giblin, who is fluent in Spanish, assists clients in complying with and understanding Mexico's environmental laws and regulations.

Ms. Giblin received her B.A., with honors, in 1967 from The University of Texas and her J.D. from The University of Texas School of Law in 1970. She is certified in Administrative Law by the Texas Board of Legal Specialization and is a member of the State Bar of Texas' Environmental and Natural Resources Law Section.

**R. B. "RALPH" MARQUEZ**  
**Commissioner, Texas Natural Resource Conservation Commission**

Ralph Marquez of Texas City was appointed by Governor George W. Bush to the Texas Natural Resource Conservation Commission (TNRCC) on May 1, 1995, and was confirmed by the Texas Senate on May 5, 1995. His first term expired August 31, 1999, and he was reappointed for a second term that expires August 31, 2005. The Texas Senate confirmed his second appointment on Feb. 21, 2001.

Prior to his appointment, Marquez served on several TNRCC advisory committees and task forces. He is a registered professional engineer and has been a vice-chair of the Texas Chemical Council environmental committee, a board member of the Gulf Coast Water Authority, and served on the State of Texas Waste Reduction Advisory Committee. He also served as chairman of the City of Texas City Environmental Advisory Board.

From 1963 to 1993, Marquez worked for the Monsanto Company in various capacities, including internal company consultant for technical, regulatory and legislative environmental issues. He has a bachelor's degree in Chemical Engineering from the University of Texas and a master's degree in Future Studies from the University of Houston-Clear Lake.

Since joining the Commission, Marquez has served on the U.S. Environmental Protection Agency's Clean Air Act Advisory Committee and the Governmental Advisory Committee to the U.S. Representative to the North American Commission for Environmental Cooperation. He also has served as chair of the Environmental Council of States Regulatory Reinvention Work Group. Marquez has been heavily involved in air, Mexico border, and regulatory innovation issues during his terms on the Commission.

**V.A. STEPHENS**  
**Associate Director for Energy and Transportation,**  
**White House Council on Environmental Quality**

As Associate Director for Energy and Transportation for the White House Council on Environmental Quality, V.A. Stephens also serves as Director of the White House Task Force on Energy Project Streamlining. Ms. Stephens has been active in energy and environmental policymaking roles on both the state and federal levels, including holding the following positions:

Texas Governor Rick Perry, Deputy Policy Director

Texas Lieutenant Governor Rick Perry, Director of State and Federal Relations

Texas Office of State-Federal Relations, Washington Office,  
Natural Resources Policy Director

Texas Natural Resource Conservation Commission,  
Executive Assistant to the Chairman

Texas Agricultural Commissioner Rick Perry,  
Intergovernmental Affairs Special Assistant

Petroleum Marketers Association of America, Legislative/PAC Manager

Ms. Stephens, a native of Houston, received her Bachelor of Arts from the University of Texas at Austin's Plan II Honors program.

**JOHN PEMBERTON**  
**Chief of Staff, Office of Air and Radiation**  
**U.S. Environmental Protection Agency**

John Pemberton is the Chief of Staff for EPA's Office of Air and Radiation in Washington, D.C., joining the air office in October 2001. As Chief of Staff, Mr. Pemberton helps lead the more than 1,200 employees responsible for protecting air quality in the United States, and he oversees the Office's efforts on several policy issues, including those related to agriculture.

Prior to joining EPA, Mr. Pemberton was Republican chief counsel for the U.S. Senate Environment and Public Works Committee. He also has been the associate director for environmental issues for the National Cattleman's Beef Association, and chief policy counsel for the legal studies division of the Washington Legal Foundation.

Mr. Pemberton is a graduate of Southern Methodist University and the Creighton University School of Law.

**INHERIT THE WIND**  
*Federal and State Air Quality Initiatives*

Panelists:

Pam Giblin, Baker Botts L.L.P., Moderator

Ralph Marquez, Commissioner, TNRCC

V.A. Stephens, Associate Director for Energy and Transportation,  
White House Council on Environmental Quality

John Pemberton, Chief of Staff, Office of Air and Radiation,  
U.S. Environmental Protection Agency

*Fourteenth Annual Texas Environmental Superconference  
State Bar of Texas  
August 1-2, 2002*

# **INHERIT THE WIND**

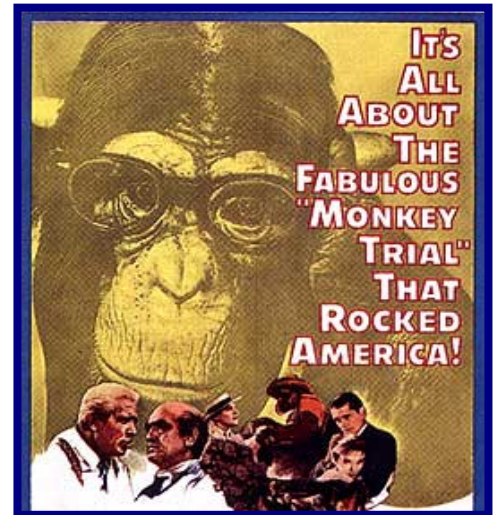
## ***Federal and State Air Quality Initiatives***

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# INHERIT THE WIND

## *Federal and State Air Quality Initiatives*



### I. Introduction.

Air quality issues might not result in the intense legal and emotional debates as did Darwin's theory of evolution, but they are constantly challenged and discussed as key political issues on both state and federal levels. This panel presentation will include discussions of key federal and state initiatives to improve air quality, as well as the federal initiative for streamlining energy-related permitting projects in an environmentally sound manner.

\* \* \*

*I do hateful things for which people love me, and I do loveable things for which they hate me. I'm admired for my detestability. Now don't worry, Little Eva... I may be rancid butter, but I'm on your side of the bread.*

\* \* \*

### II. Federal Initiatives.

#### A. The Clear Skies Initiative.

On February 14, 2002, President Bush announced the Clear Skies Initiative, which is the most aggressive set of legislative improvements to the Clean Air Act since 1990. This program includes the following proposals:

- Sets mandatory caps that dramatically reduce emissions of sulfur dioxide (SO<sub>2</sub>), nitrogen oxide (NO<sub>x</sub>), and mercury from electric power generation at levels significantly below current requirements.

- Mitigates the health and environmental effects of fine particles, ozone, regional haze, acid rain, eutrophication and mercury, and helps states meet the National Ambient Air Quality Standards (NAAQS) to protect public health.
- Provides greater regulatory certainty for new and existing power plants to allow for cost-efficient planning and compliance.
- Provides environmental certainty for the American public and delivers earlier reductions than would be achieved under current law.
- Cuts SO<sub>2</sub> emissions by 73%, from current emissions of 11 million tons to a cap of 4.5 million tons in 2010, and 3 million tons in 2018.
- Cuts emissions of NO<sub>x</sub> by 67%, from current emissions of 5 million tons to a cap of 2.1 million tons in 2008, and to 1.7 million tons in 2018.
- Cuts mercury emissions by 69%, from current emissions of 48 tons to a cap of 26 tons in 2010, and 15 tons in 2018. This would be the first-ever national cap on mercury emissions.<sup>1</sup>

The Clear Skies Initiative proposes to use a cap-and-trade program to establish federally enforceable limits for pollutants. Under this approach, allowances are distributed to generators of electricity, and the cap declines at specific intervals, 2010, and 2018. Generators respond by gradually reducing their emissions early in the program so that they save allowances to use later in the program when the caps are lower. Separate East and West trading regions will be created, and NO<sub>x</sub> reduction caps for the East and West regions will be set to accommodate the different air quality needs in the different regions of the United States. The open trading program also will give power plants the flexibility to choose how their target emission reductions are met, which will minimize compliance costs and will lower prices of electricity to consumers.

On July 1, 2002, EPA released new information demonstrating what effect the nationwide reduction achieved by the Clear Skies Initiative will have on air quality, water quality, and public health in each region of the country. The results show that every part of the country where power plants contribute significantly to air pollution-- primarily, the Northeast, Southeast, and Midwest-- will see vast improvements in air quality, and that many areas will meet air quality standards for the first time in years. This recent modeling is based on the latest available data to project the effects of Clear Skies as accurately as possible. EPA expects to release additional information, including information on mercury deposition, in the near future. The data released by EPA specific to Region VI is included as Attachment A.

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<sup>1</sup> <http://www.whitehouse.gov/news/releases/2002/02/print/20020214.html>



## B. Global Climate Change Initiative.

In addition to the Clear Skies Initiative, President Bush's proposed air quality initiatives include an aggressive strategy that would cut greenhouse gas intensity by 18% over the next ten years.<sup>2</sup> Particular aspects of this initiative include the following:

- Improving the Greenhouse Gas Registry to enhance measurement accuracy, reliability and verifiability, in order to give businesses incentives to invest in new, cleaner technology and voluntarily reduce greenhouse gas emissions.
- Protecting and providing transferable credit for emission reductions to ensure that businesses that register voluntary reductions are not penalized under a future climate policy, and to give credit to companies that can show real emissions reductions.
- Reviewing progress on climate change and, if necessary, taking additional action in 2012 that may include a broad, market-based program and initiatives to accelerate technology.
- Implementing an alternative to the Kyoto Protocol by using a growth-based approach to accelerate the development of new technologies and to encourage partnerships on climate change issues.

In connection with this initiative, EPA has organized a voluntary program, "Climate Leaders," which includes major companies that have agreed to test new greenhouse gas reporting guidelines. Each company participating in the program will establish an individual goal for reducing its greenhouse gas emissions, and will report those emissions voluntarily. EPA is encouraging additional corporate partners representing a wider spectrum of the U.S. economy to participate in this voluntary program.

## C. Streamlining in an Environmentally Sound Manner.

On May 18, 2001, President Bush issued Executive Order #13212 establishing an interagency Task Force to oversee steps, to the extent consistent with applicable law, to expedite projects that will increase the production, transmission, or conservation of energy to the United States. The Administration recognized a need to have a safe, clean, affordable, reliable supply of domestically-produced energy to meet growing demand.

The Task Force is chaired by the Chairman of the Council on Environmental Quality and is comprised of representatives from EPA and the Departments of Agriculture, Interior, and Energy. The Task Force members work closely with other federal agencies, including FERC, the Advisory Council on Historic Preservation, Commerce, State, Transportation and Defense (Army Corps of Engineers). The Task Force members also have worked extensively with state governments and their various trade associations.

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<sup>2</sup> <http://whitehouse.gov/news/releases/2002/02/climatechange.html>

The formation of the Task Force was recommended by the National Energy Policy Development Group in order to "rationalize permitting for energy production in an environmentally sound manner by directing federal agencies to expedite permits and other federal actions necessary for energy-related project approvals on a national basis." Specifically, the Executive Order sets forth the following responsibilities of the Task Force:

- Monitoring and assisting agencies in their efforts to expedite review of permits or similar actions, as necessary, and in setting up appropriate mechanisms to coordinate federal, state, tribal, and local permitting in geographic areas where increased permitting activity is expected.
- Accelerating the completion of energy-related projects.
- Increasing energy production and conservation.
- Improving energy transmission.

The Task Force solicited public comment through a two-month call for comment in the *Federal Register*, outreach with agencies and their stakeholders, and a series of open houses.<sup>3</sup> Comment was received on specific projects, primarily in functional areas of electricity generation, electricity transmission, pipelines, hydropower, and exploration and production. The Task Force also received comment on more systemic issues addressing interagency coordination, public lands and NEPA.

Preliminary findings of the Task Force indicate a need for more consistency across regional and/or field offices, as well as a need for deadlines and improved coordination of the NEPA review process. To accomplish this, a lead agency may be designated that will have the authority to coordinate multiple permitting processes. Coordination of permitting activities in the early stages with state and local permitting entities also is encouraged.

D. EPA's 8-Hour Ozone and PM<sub>2.5</sub> NAAQS.

On March 26, 2002, the U.S. Court of Appeals for the District of Columbia Circuit (D.C. Circuit) upheld the 8-hour ozone and PM<sub>2.5</sub> NAAQS in *American Trucking Associations v. EPA*, a case on remand from the Supreme Court, which had ruled that EPA did not violate the non-delegation doctrine in setting the standards. After the Supreme Court remand, state and industry petitioners argued that the standards should be vacated because they were arbitrary and capricious. In its March 26th opinion, the D.C. Circuit rejected this argument, as well as the environmental groups' arguments that the standards should be tighter.

The D.C. Circuit's recent opinion has left only a few issues that EPA must resolve on the 8-hour ozone standard before it can be implemented. First, EPA must address the beneficial effects of ozone in determining whether the 8-hour standard that it set is appropriate. In November 2001, EPA issued a proposal on this issue, in which it stated that it had

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<sup>3</sup> 66 Fed. Reg. 43586 (Aug. 20, 2001).

provisionally determined that the evidence on beneficial effects of ozone is not sufficient enough to justify a relaxation of the 8-hour ozone NAAQS.<sup>4</sup> In addition, EPA must respond to the Supreme Court's remand of the rule to reconcile the provisions of Subparts 1 and 2 of the nonattainment provisions of the Clean Air Act. Even prior to the D.C. Circuit's opinion, EPA had begun looking into the reconciliation issue, and has held public meetings to discuss options for addressing this issue.

E. Recommended Improvements to the Federal New Source Review Program.

In June of this year, EPA submitted a report to President Bush containing its recommendations for improving the federal New Source Review (NSR) program. The report indicates that the current NSR program either has impeded or resulted in the cancellation of projects that would maintain or improve reliability, efficiency, or safety of existing power plants and refineries. As a result of this finding, EPA intends to make improvements in the NSR program in ways that will increase energy efficiency, promote pollution prevention, and encourage companies to install state-of-the-art pollution controls so that emissions will be reduced.

These improvements will include the following:

- Creating a simplified process for companies that undertake environmentally beneficial pollution prevention projects.
- Allowing facilities to operate within plantwide applicability limits (PALs), or site-wide emissions caps, which would provide greater flexibility to modernize their operations.
- Giving plants that install "clean units" operational flexibility if they continue to operate within the permitted limits. Clean units must have an NSR permit or other regulatory limit that requires the use of best air pollution control technologies.
- Evaluating how much a facility will actually emit after a proposed change, instead of estimating emissions increases based upon what a plant would emit if operated 24 hours a day, 365 days a year.

In addition, EPA plans to propose guidelines to clarify what activities meet the standard of *routine maintenance, repair and replacement*. The current NSR program excludes repairs and maintenance activities that are "routine," but the difficulty in determining which repairs meet or exceed that standard has deterred companies from conducting badly needed repairs that could reduce unnecessary emissions of pollution and hazardous conditions at these plants.

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<sup>4</sup> 66 Fed. Reg. 57159 (Nov. 14, 2001).

\* \* \*

*I am more interested in the Rock of Ages than I am in the age of rocks.*

\* \* \*

### III. State Initiatives.

#### A. Homeland Security and Air Quality.

The TNRCC carries out its mission of protecting the State's human and natural resources by enforcing laws to protect human health and the environment, and by allowing for flexibility in achieving environmental goals of clean air, clean water, and safe management of waste. With respect to homeland security, the TNRCC uses both of these approaches to help regulated facilities determine their vulnerability to actions, such as air contamination, which could pose a risk to human health.

An applicant for an air quality permit must consider the worst-case scenario for a release of contaminants from the planned facility, and the facility must include features to reduce both the likelihood of a release under that scenario and the severity of any release that could occur. Typically, applicants satisfy this requirement by reducing the amount of potentially dangerous chemicals at the facility, by protecting key areas of the facility against damage of any kind, and by adding instruments to detect the release of a hazardous substance and bring it quickly under control. Agency investigators check these disaster mitigation measures each time a facility is inspected and, to reduce their own liability, many facility operators go beyond these measures.

#### B.



The TNRCC and the Texas Department of Transportation (TxDOT) have initiated a joint, high-profile campaign to publicize important messages about air quality and its effect on Texans' health. The *Drive Clean Across Texas* campaign, which was modeled after TxDOT's *Don't Mess With Texas* anti-litter campaign, is the nation's first statewide public outreach and public education campaign designed to improve air quality. Although industrial activities contribute significantly to air pollution, the initial focus of the campaign is on mobile source pollution. The first step in *Drive Clean Across Texas* is to increase awareness and change attitudes, and the second step of the campaign is to inspire changes in driving behavior. With the way Texans feel about their cars, this clearly will be a challenge.



This advertising program focuses on the Houston/Galveston (HGA) and the Dallas/Fort Worth (DFW) nonattainment areas. Any gasoline-powered vehicle registered in Harris, Collin, Denton, Dallas or Tarrant counties must pass a new emissions inspection test, in addition to its annual vehicle safety inspection. Depending on the model year of the vehicle, it will receive one of two new tests:

- *The Acceleration Simulation Mode (ASM2) test— for model years 1995 or older.* This test uses a chassis dynamometer to measure emissions under simulated driving conditions. The ASM2 measures all of the common factors in ground-level ozone formation, including hydrocarbons, carbon monoxide and NO<sub>x</sub>. A vehicle will fail the test if there is an excessive amount of any of these three pollutants.
- *The On-Board Diagnostic II (OBDII) test—for model years 1996 or newer.* All newer vehicles feature a built-in computer that monitors the fuel, ignition and emission system components while adjusting and recording system operations. The OBDII test uses this computer to quickly and accurately check all the emissions-related parts of the vehicle.

D. The Texas State Implementation Plan (SIP).

Texas meets federal air quality standards with the following exceptions: (1) ozone in the HGA, DFW, El Paso, and Beaumont/Port Arthur areas; and (2) carbon monoxide and particular matter in El Paso. In addition to these four nonattainment areas, Corpus Christi, Victoria, Austin, San Antonio, and Northeast Texas are five near-nonattainment areas that currently meet ozone air quality standards by a slim margin.

1. HGA Area SIP Update. The TNRCC has proposed changes to the Texas SIP that would dramatically affect the HGA nonattainment area.<sup>5</sup> These proposed revisions to agency rules and the SIP address recent scientific findings and fulfill a Consent Order that was part of the settlement of the case filed by the Business Coalition for Clean Air - Appeal Group in January 2001. The proposal includes several key changes, including the following:

- Four new rules that address the impact of highly-reactive volatile organic compounds from industrial sources on rapid ozone formation in the HGA Area. Specifically, the rules address cooling towers, flares, fugitives, and process vents.<sup>6</sup>

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<sup>5</sup> 27 Tex. Reg. 5394 (June 21, 2002).

<sup>6</sup> The TNRCC subsequently discovered a computational error in the first rule proposal that resulted in an inaccurate emission rate of 0.6 pounds per hour for all highly-reactive VOCs emitted from each flare. In order to correct this inaccuracy, the Commission will propose to establish a new emission rate of 7.4 pounds per hour for all highly-reactive VOCs emitted from each flare in the HGA area.

- A revision that would formally incorporate the protocol for the Texas Emission Reduction Program (TERP) into the HGA attainment demonstration via EPA's Economic Incentive Program.
- A proposed change that would incorporate NO<sub>x</sub> reductions from S.B. 7 and S.B. 5 energy efficiency measures into the HGA attainment demonstration.
- Proposed changes to the industrial, commercial, and institutional source control requirements that already are included within the federally approved SIP for the HGA ozone nonattainment area which, if adopted, would change the maximum amount of NO<sub>x</sub> emission reductions required from certain point sources. The amendments also reorganize and modify existing portions of the agency's Chapter 117 rules and would add carbon monoxide and ammonia emission specifications for electric generating facilities located in 31 attainment counties of East and Central Texas.
- A proposed change in the previously adopted speed limit restriction to retain, until May 1, 2005, the 55-mph speed limit for vehicles greater than or equal to 10,000 pounds and to postpone speed limit reductions for vehicles less than 10,000 pounds (gross vehicle weight rating). The TNRCC will perform a more thorough review of the speed limit restriction leading up to the mid-course review SIP revision. If, after that review, the agency determines that a speed limit strategy for passenger vehicles is not necessary to demonstrate attainment, the SIP will be revised to remove the speed limit strategy.

Adoption of these rules is scheduled for December 4, 2002, at which time the proposed SIP revisions will be submitted to EPA for final approval.

## 2. DFW Area SIP Update.

In May 2001, the 77th Texas Legislature passed S.B. 5, which required the TNRCC to submit a SIP revision to the EPA deleting the requirements of two rules in Chapter 114 (relating to *Control of Air Pollution from Motor Vehicles*) from the SIP. The current proposed SIP revision reflects the repeal of these two rules as part of the control strategy for the DFW ozone attainment demonstration.<sup>7</sup> The first rule restricted the use of construction and industrial equipment (non-road, heavy-duty diesel equipment rated at 50 horsepower and greater) as an air pollution control strategy to delay the emissions of NO<sub>x</sub>, a key ozone precursor, until later in the day and thus limit ozone formation. The second rule required owners or operators of diesel-powered construction, industrial, commercial, and lawn and garden equipment rated at 50 horsepower and greater to replace their affected equipment with newer Tier 2 and Tier 3 equipment, with the amount and timing of reductions depending on the horsepower rating of the engine fleet.

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<sup>7</sup> 26 Tex. Reg. 6935 (Sept. 7, 2001).

The diesel emission reduction incentive program contained in S.B. 5 replaced the above-referenced rules, as it will result in reductions greater than those that were expected from the rules that were repealed. Therefore, the NO<sub>x</sub> reductions previously claimed in the DFW attainment demonstration SIP will be achieved through an alternate but equivalent federally enforceable mechanism. EPA currently is reviewing the proposed changes to the SIP, and is expected to publish a conditional notice of approval depending on whether funding for the program is authorized by the next Texas Legislative Session (2003).

#### E. Title V Settlement Problems.

Over the objections of several environmental advocacy groups, EPA granted full approval to the Texas Title V program on December 6, 2001.<sup>8</sup> EPA followed up the approval notice with a Notice of Deficiency in January that identified several deficient elements of the Title V program that the State of Texas must correct in order to retain full approval of the program.<sup>9</sup> The TNRCC currently is preparing a rulemaking in an attempt to respond to EPA's Notice of Deficiency, and it has agreed to change certain other aspects of its Title V program to avoid additional deficiency notices.

On February 4, 2002, three of the groups that had filed adverse comments on EPA's approval of the Texas Title V program (Public Citizen, Sierra Club and the Galveston-Houston Association for Smog Prevention (GHASP)) filed a lawsuit in federal court challenging EPA's approval. The lawsuit alleges that EPA violated the federal Clean Water Act and abused its discretion when it granted full approval to the Texas Title V program. Two of the petitioners in that lawsuit then filed a second lawsuit in the same court on March 7, 2002 that challenges EPA's failure to issue more Notices of Deficiency for the Texas Title V program. The petition, filed by Public Citizen and GHASP, alleges that EPA violated the federal Clean Air Act by failing to issue a Notice of Deficiency for "each and every one of the deficiencies identified in the Petitioners' comments." The two lawsuits were combined for briefing purposes, and TNRCC and an intervenor group comprised of members of the regulated community filed motions to intervene in the combined suits on behalf of EPA in March.

EPA, TNRCC and the Petitioners did not settle the lawsuits and the Petitioners' brief was filed in June. The Petitioners' brief argues that the court should vacate EPA's approval of the Texas Title V program. The brief further argues that, should the court not overturn EPA's approval of the program, it should force EPA to issue Notices of Deficiency for several additional issues, including:

- Public Participation - the adequacy of the public notice of draft permits provided by TNRCC and the practice of allowing the public comment and EPA review periods to run concurrently;
- Deviation Reporting - whether TNRCC satisfies federal requirements regarding the "prompt" reporting of deviations;

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<sup>8</sup> 66 Fed. Reg. 66318 (Dec. 6, 2001).

<sup>9</sup> 67 Fed. Reg. 732 (Jan. 7, 2002).

- Compliance Certification - the adequacy of TNRCC's compliance certification form;
- Enforcement Authority - TNRCC lacks adequate enforcement authority as a result of the limited amnesty provided by the Voluntary Emission Reduction Permit (VERP) program; and
- Permitting Deadlines - TNRCC's failure to meet the permit issuance requirements established by Title V.

EPA's reply brief, along with any briefs submitted by the intervenors, is due in late July.

\* \* \*

*I tell you Brady had the same right as Cates; the right to be wrong!*

\* \* \*

#### F. Maintenance, Start-up, and Shutdown Emissions.

Earlier this year, the TNRCC proposed rules addressing the voluntary inclusion of maintenance, start-up and shutdown (MSS) emissions into NSR permits.<sup>10</sup> Although the rulemaking proposed a *voluntary* program, if a permit applicant or current permit holder would choose to authorize routine MSS emissions, then all routine MSS emissions at any facility authorized by the permit would have to be included. When presented to the TNRCC Commissioners for adoption, it was decided to temporarily withdraw the rules from consideration, which had been heavily criticized by industry. The rules currently are scheduled to be considered for adoption at the TNRCC's August 21, 2002 Agenda.

#### G. Grandfather Permits.

State rules implementing the grandfather permitting requirements mandated by H.B. 2912 (Acts of the 77th Legislature, 2001) became effective on June 12, 2002.<sup>11</sup> The rules establish four new types of permits for grandfathered facilities-- existing facility permits, small business stationary source permits, electric generating facility permits, and pipeline facilities permits. Grandfathered facilities located in East Texas must submit permit applications or notices of shutdown by September 1, 2003, and grandfathered facilities located in West Texas must submit permit applications or notices of shutdown by September 1, 2004. The amendments also create a new incentive program to assist owners and operators in retrofitting reciprocating

<sup>10</sup> 27 Tex. Reg. 4526 (May 24, 2002).

<sup>11</sup> 27 Tex. Reg. 4954 (June 7, 2002).



internal combustion engines associated with pipelines that are required to make a 50% reduction in NO<sub>x</sub> emissions.

Development of these rules generated substantial stakeholder interest, particularly those rules associated with the pipeline facility permit. The TNRCC has been meeting with a stakeholder group that continues to discuss issues associated with pipeline facility permits for grandfathered facilities, particularly emissions averaging, reimbursement of control costs from the Emissions Reductions Incentives Account to certain owners or operators of grandfathered reciprocating internal combustion engines located in the East Texas region, and HGA SIP requirements.

\* \* \*

#### IV. Conclusion.

In conclusion, it is much more than the wind that will be inherited by future generations. Although clean air and clear skies are a focal point of the Bush Administration, as well as of state environmental agencies across the country, the attention to energy, water, and other natural resources must not be overlooked, and federal initiatives for streamlining in an environmentally sound manner exemplify our nation's commitment to the preservation of all of our natural resources.

## Sara Marquis Burgin

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Ms. Burgin joined the environmental section of Brown McCarroll after graduating from law school in 1982 and for the past twenty years she primarily has been representing industrial and municipal entities before the TNRCC and EPA on water quality permitting and enforcement matters. Ms. Burgin has been active since the mid-1980s in the TNRCC's triennial revisions to the Texas surface water quality standards and the implementation of those standards through permitting. Ms. Burgin is a member of the TNRCC's nutrient criteria stakeholder workgroup.

# **DEVELOPMENT OF NUMERIC WATER QUALITY CRITERIA FOR NUTRIENTS**

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**FOURTEENTH ANNUAL  
TEXAS ENVIRONMENTAL SUPERCONFERENCE  
August 1-2, 2002**

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**I. INTRODUCTION.**

The Texas Water Quality Standards (TWQS), like the water quality standards of most states, contain narrative rather than numeric criteria for nutrients that can cause excessive growth of aquatic vegetation. However, pursuant to directives from the U.S. Environmental Protection Agency (EPA), the Texas Natural Resource Conservation Commission (TNRCC) must adopt numeric nutrient criteria in the TWQS during the next triennial review. Staff members of the TNRCC are evaluating various alternatives and on November 30, 2001, submitted to the EPA a preliminary draft workplan for considering nutrient criteria. In accordance with that workplan, the TNRCC held a nutrient criteria stakeholders meeting on May 20, 2002. The following is intended to summarize the framework within which the TNRCC is working and the status of the TNRCC's efforts towards development of nutrient criteria proposals for the Commissioners consideration during the next triennial standards revision in Texas.

**II. EPA REQUIREMENTS AND DIRECTIVES.**

**A. Historical Background.**

Prior to the EPA's efforts that began in the mid-1990's the only national water quality criteria relating to nutrients with for nitrate nitrogen and phosphorus. In 1976, in EPA's publication entitled, Quality Criteria for Water (also known as the Red Book) EPA presented ambient water quality criteria for nitrates, nitrites and phosphorus. The criterion for nitrate nitrogen was 10 mg/L for protection of domestic water supplies. The phosphorus criterion was 0.10  $\mu$ g/L elemental phosphorus for the protection of marine and estuarine waters. The phosphorus criterion was based on a conservative estimate to protect against the toxic effect of the bioconcentration of elemental phosphorus to estuarine and marine organisms. Neither criterion was intended to address eutrophication.

The EPA's recent efforts to address nutrients in the Nation's waters are in response to the National Water Quality Inventory 1996 Report to Congress that cites nutrients (nitrogen and phosphorus) as one of the leading causes of water quality impairment in our Nation's rivers, lakes and estuaries. Excessive nutrients have been implicated with the large hypoxic zone in the Gulf of Mexico and *Pfiesteria* induced fish kills and human health issues in the coastal waters of several states.

EPA determined that it needed to expand and update its guidance in the area of nutrient assessment and control. EPA held a National Nutrient Assessment Workshop in December 1995. Following the workshop, EPA developed a nutrient criteria strategy. EPA published notice of the draft national strategy in the Federal Register on June 25, 1998 (63 Fed. Reg. 34648). The draft national strategy was subject to peer review and general public comment. The major elements of the strategy include:

1. Use of a regional and waterbody-type approach for development of nutrient water quality criteria.
2. Development of waterbody-type technical guidance documents.
3. Establishment of an EPA National Nutrient Team and Regional Nutrient Coordinators.
4. Development by EPA of nutrient water quality criteria guidance in the form of numerical regional target ranges which EPA expects States and Tribes to use in implementing state water quality criteria.
5. Monitoring and evaluation of the effectiveness of state nutrient management plans as they are implemented.

#### **B. EPA Nutrient Criteria Documents.**

In January 2001, EPA announced the availability of seventeen Ecoregional Nutrient Criteria Documents for lakes and reservoirs, rivers and streams, and wetlands within specific geographical regions (ecoregions) of the United States. EPA published an additional nine ecoregional nutrient criteria documents in December 2001. The nutrient criteria documents that have been prepared by the EPA are developed under Section 304(a) of the federal Clean Water Act. Section 304(a) criteria are intended to assist states in developing water quality standards that are protective of designated uses. Water quality criteria developed under Section 304(a) are based solely on data and scientific judgments and do not consider economic impacts or the technological feasibility of meeting the criteria in a body of water. Most of the Section 304(a) criteria that the EPA has developed over the years are based upon laboratory analyses of that concentration of a pollutant that causes adverse impacts on representative aquatic organisms. EPA states that this approach is not workable for nutrients because the adverse effects of nutrients are strongly affected by regional and seasonal conditions and their effects are ultimately expressed on ecosystems as a whole. EPA notes that because every ecosystem has unique species, climatological, hydrological, and soil conditions, it determined that the development of nutrient criteria could most efficiently be achieved using a reference condition approach.

### **C. Basis of EPA's Criteria.**

EPA's nutrient criteria are based upon concentrations of nutrients that would be found in what EPA terms "minimally impacted" reference water bodies. EPA defines minimally impacted as a condition in water bodies where some enrichment is allowed, but not enough to cause adverse effects. EPA's rationale for basing its criteria on concentrations of nutrients in the waters is that conditions that represent minimal impacts provide a baseline that should protect assigned designated uses. EPA advocates selecting the 75th percentile of a distribution of reference condition values as a recommended target for a sufficiently protective value that provides an appropriate margin of safety.

EPA developed its nutrient criteria recommendations using empirically derived reference conditions. In other words, EPA did not measure the concentrations of nutrients in minimally impacted reference waters. Instead, EPA used the 25th percentile of a distribution of samples from the entire population of waterbodies with a given physical classification (e.g. an ecoregion). EPA states that the 25th percentile of a sample distribution from the entire population serves as a surrogate for the 75th percentile of a sample distribution from reference sites. In support of its methodology, EPA states that data analyses available to EPA indicate that the 25th percentile of data from the entire population roughly approximates the 75th percentile of data from reference sites. Each document presents recommended criteria for causal parameters (total phosphorus and total nitrogen) and response variables (chlorophyll *a* and some form of water clarity, i.e., turbidity or Secchi depth).

#### **4. Suggested Approaches for State Development**

EPA recommends the following approaches to states in their development of nutrient criteria, in order of preference:

**First Preference.** Wherever possible, develop nutrient criteria that fully reflect localized conditions and protect specific designated uses using the process described in EPA's Technical Guidance Manuals for nutrient criteria development. Such criteria may be expressed either as numeric criteria or as procedures to translate a state or tribal narrative criterion into a quantified endpoint in state or tribal water quality standards.

**Second Preference.** Adopt EPA's section 304(a) water quality criteria for nutrients, either as numeric criteria or as procedures to translate a state or tribal narrative nutrient criterion into a quantified endpoint.

**Third Preference.** Develop nutrient criteria protective of designated uses using other scientifically defensible methods and appropriate water quality data.

EPA notes that states are free to develop their own standards. They do not have to be based on EPA's criteria as long as a state's standards protect the designated use and are based on a sound scientific rationale. EPA recognizes that states should ideally divide

their waters into smaller groups than the ecoregions EPA used because smaller groups will be more likely to reflect similar waterbody size, physical and geographic characteristics, and other natural features.

#### 5. November 14, 2001 EPA Memorandum

On November 14, 2002, Geoffrey Grubbs of the EPA issued a memorandum entitled, "Development and Adoption of Nutrient Criteria into Water quality Standards". That memorandum directed states to submit to the EPA by the end of 2001 a Nutrient Criteria Development Plan. EPA notes that states have the flexibility to prioritize their waters. For example, states may choose to prioritize their waters to address impaired waters and waters that may be threatened. EPA requires that such prioritizations be explained in the state nutrient criteria development plans. EPA intends for each final state nutrient criteria development plan to be developed in coordination with the EPA such that EPA has agreed to the approach, milestones and the schedule.

EPA reiterates in the memorandum that EPA intends to propose to promulgate nutrient water quality criteria, relying substantially on EPA's section 304(a) water quality criteria, where states and authorized tribes have not substantially completed their adoption of nutrient standards by the end of 2004, if EPA determines that new or revised standards are necessary to meet the requirements of the Clean Water Act. EPA's determination regarding the need to promulgate federal standards for a particular state will be based upon the states compliance with the agreed upon nutrient development plan.

### **III. EXISTING TEXAS NUTRIENT STANDARD.**

The Texas water quality standards currently state at 30 Texas Administrative Code (TAC) Section 307.4(e):

Nutrient Parameters. Nutrients from permitted discharges or other controllable sources shall not cause excessive growth of aquatic vegetation which impairs an existing, attainable, or designated use. Site specific nutrient criteria, nutrient permit limitations and/or separate rules to control nutrients in individual watersheds will be established where appropriate after notice and opportunity for public participation and proper hearing.

As noted in the provision, an approach used in Texas has been development of watershed rules which require additional treatment of wastewater discharges in or near specified water bodies. Some watershed rules focus on enhanced reduction of oxygen containing pollutants such as biochemical oxygen demand (BOD) and ammonia. Others require phosphorus reduction or prohibition of discharge due to nutrient concerns. For discharges not covered by a watershed rule, the TNRCC's document entitled, "Implementation of the Texas Natural Resource Conservation Commission Standards via Permitting" (August



1995) (Implementation Procedures) sets out the mechanism for the TNRCC to address nutrient parameters through permitting, including through the antidegradation policy. The antidegradation policy requires that applications for new permits and permit amendments that would increase discharge loadings be reviewed to evaluate the impact of the discharge on dissolved oxygen and other parameters of concern at the discharge site such as fecal coliform bacteria, phosphorus, nitrogen, turbidity, dissolved solids, temperature and toxic materials. Phosphorus reduction has been required in a variety of permits to address nutrient issues at the discharge site.

The TNRCC currently uses 85th percentiles of all instream monitoring data as the screening level for instream measurements of total phosphorus and nitrate nitrogen. These screening levels are only intended as a preliminary indication of concern. Additional information is required before the TNRCC lists a water body as “nutrient impaired” pursuant to Section 303(d) of the Clean Water Act. Currently, only the North Bosque River and Upper North Bosque River are specifically listed as nutrient impaired on the Texas Section 303(d) list.

#### **IV. TNRCC ACTIVITIES TO DEVELOP REVISED NUTRIENT CRITERIA.**

Pursuant to the directive from the EPA, the TNRCC submitted a draft Nutrient Criteria Development Plan (Draft Plan) to EPA on November 30, 2001. The TNRCC’s Draft Plan addresses several topics, including the TNRCC’s proposed scope of criteria development, existing data, and the possible need for additional data and data analysis. The Draft Plan also mentions the TNRCC’s plan to establish a stakeholder group, the objectives for the group and the TNRCC’s draft schedule for development of revisions to the State’s nutrient criteria. The TNRCC’s efforts to develop nutrient criteria will preliminarily focus on major reservoirs. The TNRCC plans for proposed criteria for reservoirs to be available as part of the next triennial revision of the Texas water quality standards. The TNRCC has not developed a schedule for nutrient criteria for streams and rivers, estuaries or wetlands.

The TNRCC is exploring different strategies for development of nutrient criteria. The TNRCC is exploring: 1) basing criteria on direct concentrations of nutrients, 2) basing criteria on direct indicators of eutrophication (e.g. chlorophyll *a*), 3) developing “translator” procedures that relate concentrations of nitrogen and phosphorus to direct indicators of eutrophication, 4) relating criteria to protecting water-quality related uses, and 5) basing criteria on various percentiles of ambient concentration of nutrient and chlorophyll *a* as set out in EPA’s guidance documents.

To evaluate the appropriate spatial scale for nutrient criteria, the TNRCC is evaluating such options as 1) the EPA’s ecoregions defined in its guidance, 2) smaller ecoregions and watersheds within Texas, 3) individual reservoirs, 4) zones within a reservoir (i.e. riverine, transition zones), 5) the TNRCC’s basin groupings, and 6) waterbodies with similar chemical, physical, and hydrologic characteristics. The TNRCC is also evaluating the importance of temporal scales such as seasonality.

Data analysis is an important component of the TNRCC's efforts. The TNRCC anticipates that initial development of nutrient criteria will be accomplished using existing data. The U.S. Geological Service (USGS) is providing data analysis funded by the EPA. The USGS has begun review of data in both the EPA's and TNRCC's databases. The USGS is looking at current data and historical data from the 1960's and 1970's. Part of what the USGS has been doing is reviewing and "cleaning up" the data used by EPA in its guidance documents that is supposed to reflect Texas waters.

## **V. AROUND THE REGION 6 STATES.**

### **A. Oklahoma.**

The Oklahoma Water Resources Board (OWRB) adopted changes to the Oklahoma water quality standards on March 12, 2002, that became effective July 1, 2002. The Oklahoma standards were amended to add a numeric criterion for phosphorus in Oklahoma's Scenic Rivers to protect the aesthetics of those waters. The adopted numeric criterion is to be fully implemented within ten (10) years of the effective date pursuant to a procedure that is to be set out in a separate rule. The adopted Oklahoma standards state at 785:45-5-19 (Aesthetics):

#### **(c)(2) Nutrients.**

(A) Narrative criterion applicable to all waters of the state. Nutrients from point source discharges or other sources shall not cause excessive growth of periphyton, phytoplankton, or aquatic macrophyte communities which impairs any existing or designated beneficial use.

(B) Numerical criterion applicable to waters designated Scenic Rivers. The thirty (30) day geometric mean total phosphorus concentration in waters designated "Scenic River" in appendix A of this Chapter shall not exceed 0.037 mg/L. The criterion stated in this subparagraph (B) applies in addition to, and shall be construed to as to be consistent with, any other provision of this Chapter which may be applicable to such waters, and such criterion shall be fully implemented within ten (10) years as provided in a separate rule promulgated by the Board.

The OWRB states in its summary of the adopted standards that the amendment is intended to "protect the aesthetics and 'outstanding resource' character of Oklahoma's Scenic Rivers, and to be responsive to EPA's recent directive that states develop nutrient criteria by 2004." OWRB, Agency Rule Report, page 2, adopted March 12, 2002. OWRB goes on to state that, "the figure of 0.037 mg/L was based upon the 75th percentile of the results published in 'Nutrient Concentrations and Yield in Undeveloped Stream Basins of the United States' (Gregory M. Clark, David K. Mueller and M. Alisa Mast; Journal of the American Water Resources Association, Volume 36, No. 4, August 2002)." OWRB notes that use of the 75th percentile is in accordance with EPA recommendations. OWRB also states that the 0.037 mg/L criterion is, "likely achievable if appropriate controls on

nonpoint source pollution, and appropriate adjustment for point source discharges, are implemented throughout the watersheds by the agencies with environmental jurisdiction.” OWRB, Agency Rule Report, page 8.

It is important to note that the Illinois River, designated by OWRB as a Scenic River, begins in northwestern Arkansas. The portion of the river in Arkansas receives discharges from municipalities and from poultry and other nonmunicipal operations. Thus, OWRB’s action in adopting the criterion has significant interstate implications. OWRB states that it intends to work through the Arkansas-Oklahoma Arkansas River Compact Commission to seek implementation by Arkansas of the same numeric phosphorus criteria for the portion of the Illinois River in Arkansas. Oklahoma’s suggestion is unlikely to be agreeable to Arkansas. OWMB seems to have adopted the criteria for the Illinois River without any consideration for the feasibility of achieving the criteria in ten years or the significant economic implications the criteria will have in Arkansas.

#### **B. Arkansas, Louisiana and New Mexico.**

Like Texas, Arkansas, Louisiana and New Mexico currently have narrative nutrient criteria. None of these states has officially proposed nutrient criteria in response to the EPA’s directive. As mentioned above, Arkansas must deal with the situation of the Illinois River and the OWRB numeric standard of 0.037 mg/L (under the federal Clean Water Act discharges in an upstream state may not cause water quality standards in a downstream state to be violated). In general, Arkansas appears to favor watershed goals which would be applicable to smaller regions than EPA’s ecoregions.

Louisiana appears to be moving towards an approach similar to EPA’s guidance that focuses on the ecoregional framework. The Louisiana Department of Environmental Quality (LDEQ) has delineated ten (10) draft ecoregions in Louisiana. LDEQ intends to use its Water Quality Management Network data to produce criteria ranges for total nitrogen, total phosphorus, turbidity and Secchi depth for each waterbody type. Louisiana intends to comply with the timeframes for nutrient criteria development set out by the EPA.

New Mexico developed a document entitled, "Nutrient Assessment Protocol for Streams" (July 2000) (Nutrient Protocol) for use in assessing the need for a Total Maximum Daily Load on a stream reach that is listed on the State of Mexico's Section 303(d) list as impaired by plant nutrients. The New Mexico Environment Department is in discussions with EPA to determine if the Nutrient Protocol is adequate to satisfy EPA's requirements without a change in New Mexico's surface water quality standards.

## **VI. CONCLUSIONS.**

To avoid having the EPA publish nutrient criteria for Texas that would be based upon the EPA guidance documents, the TNRCC must move forward with a Texas-specific approach to revise its nutrient criteria. The TNRCC intends to focus its efforts prior to

the 2004 deadline on major reservoirs in the State. The TNRCC's timeline is that prior to the end of calendar year 2004, the TNRCC will produce draft proposals for nutrient criteria for selected waters for consideration by the TNRCC commissioners and subsequent review by the EPA and stakeholders. During the development of the proposals the TNRCC plans to continue to work with the EPA regarding agreement on the TNRCC's criteria development plan and to hold stakeholder meetings.

## **VII. SUGGESTED REFERENCES.**

1. [www.epa.gov/waterscience/criteria/nutrient/ecoregions/index.html](http://www.epa.gov/waterscience/criteria/nutrient/ecoregions/index.html)
2. [www.epa.gov/waterscience/criteria/nutrient.html](http://www.epa.gov/waterscience/criteria/nutrient.html)
3. [www.dpa.gov/waterscience/standards/nutsi.html](http://www.dpa.gov/waterscience/standards/nutsi.html)
4. [www.deq.state.la.us/planning/305b/2000/305b-2.htm](http://www.deq.state.la.us/planning/305b/2000/305b-2.htm)
5. [www.adeg.state.ar.us/water/wqs\\_review.htm](http://www.adeg.state.ar.us/water/wqs_review.htm)
6. [www.owrb.state.ok.us/wq/wqsrevisions.html](http://www.owrb.state.ok.us/wq/wqsrevisions.html)
7. [www.tnrcc.state.tx.us/permitting/waterperm/wqstand/index.html#development](http://www.tnrcc.state.tx.us/permitting/waterperm/wqstand/index.html#development)
8. [www.nmenv.state.nm.us/swqbnutrient/NutrientAssessmentProtocol.pdf](http://www.nmenv.state.nm.us/swqbnutrient/NutrientAssessmentProtocol.pdf)



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##### - Larry Starfield -

##### Deputy Regional Administrator

In March 2002, Larry Starfield became the Deputy Regional Administrator for the United States Environmental Protection Agency Region 6 in Dallas, Texas. In this position, Larry is responsible for managing the Region's resources to maximize organizational performance and to accomplish effective policy implementation of EPA programs in the South-Central United States.

Prior to serving in this capacity, he served as the Regional Counsel for Region 6 starting in 1997. As Regional Counsel, he managed an office of approximately 60 lawyers that provided legal advice to the Regional Administrator and Region 6 program offices regarding the interpretation and implementation of federal environmental laws.

Before joining Region 6 in June 1997, Mr. Starfield spent ten years with EPA's Office of General Counsel in Washington, D.C., where he served as staff attorney, Assistant General Counsel for RCRA, and Acting Associate General Counsel for Solid Waste and Emergency Response.

Before coming to EPA, he worked in Paris, France, from 1985 to 1987 as the correspondent for the Bureau of National Affairs on French environmental law. From 1981 through 1985, he was an Associate with the law firm of Skadden Arps Slate Meagher & Flom, in Washington, D.C. He is a graduate of Wesleyan University and Yale Law School.

Current as of April 2002

For more information, please  
contact the EPA Region 6  
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**FUTURE OF SUPERFUND (*Arsenic and Old Waste*)**  
Lawrence Starfield, Deputy Regional Administrator  
U.S. Environmental Protection Agency, Region 6, Dallas, Texas

**Resources for the Future**

To help answer the question about whether or not additional funding is needed for the Superfund program, Congress asked Resources for the Future (RFF) to estimate the future cost of the program. More specifically, as part of the conference report that accompanied the FY 2000 Departments of Veterans Affairs and Housing and Urban Development, and Independent Agencies appropriations bill, RFF was asked to conduct an independent study to estimate how much money will be needed by the U.S. Environmental Protection Agency (EPA) to implement the Superfund program from FY 2000 through FY 2009. Congress identified six elements for the study:

- 1) cost to clean up sites on the National Priorities List (NPL) at the end of FY 1999;
- 2) cost of cleaning up sites added to the NPL from FY 2000 through FY 2009;
- 3) cost to conduct emergency response and removal actions;
- 4) cost of conducting Five-Year Reviews;
- 5) cost of long term response actions; and,
- 6) cost of administration of the Superfund program.

The congressional language requesting the report specifically excluded estimates of the cost of cleaning up sites owned and operated by Federal agencies and the cost to EPA of overseeing these cleanups. The cost to EPA of carrying out the brownfields programs was also excluded, as were Superfund costs to potentially responsible parties and state environmental agencies. In conducting its study, RFF based its estimates on current law and assumed no change in existing law or policy. It also based its estimates on past expenditures at sites.

**Findings and Conclusions**

The RFF reached several conclusions.

1. The RFF determined that EPA's need for Superfund monies will not decrease appreciably below FY 1999 expenditures until FY 2006. Even at the high end of the scale, expenditures in FY 2009 would be only 3% less than in FY 1999.
2. The RFF determined that the total estimated cost to EPA of implementing the Superfund program from FY 2000 through FY 2009 ranges from \$14 billion to \$16.4 billion. To reach this estimate, the study considered the removal program; the remedial program; site assessment; program staff, management and support; program administration; and other programs and agencies with Superfund-related work.

3. The major driver of EPA cleanup cost from FY 2000 through FY 2009 will be fund-lead action at sites which were on the NPL at the end of FY 1999. Although EPA has made great strides in cleaning these sites up, there is still considerable cleanup work remaining. The RFF estimated that costs at these Fund-lead sites is much greater than that for actions at sites which will be added to the NPL in the future.
4. The RFF determined that it is difficult to predict the number, type and cost of future NPL sites. In addition to traditional Superfund sites, EPA expects to add a number of mega sites to the NPL. The average cleanup cost of a mega site is approximately \$140 million, more than 10 times that of a nonmega site, which has an average cleanup cost of about \$12 million. Predicting future costs is also complicated by the expected increase in the percentage of nonmega sites which will be cleaned up with Trust fund monies, because these are usually sites which States do not have the resources to address.
5. More information is needed to assess the level of resources needed for program management, policy, and administrative support functions to implement the Superfund program.
6. The post-construction completion phase of the program will become increasingly important to the success of the program. In the past, EPA has placed greater emphasis on completing construction at sites. As more sites are cleaned up, more emphasis will be placed on activities such as Five-Year reviews and long term response actions. Future investments may be needed to ensure that remedies remain protective of public health and the environment.

### Recommendations

The RFF identified four major issues it believes are critical to help formulate a clear mission for the Superfund program and to improve its effectiveness and efficiency.

1. Congress, EPA and the states need to review and clarify the purpose of the National Priorities List. RFF recommended that EPA, with the involvement of its stakeholders, undertake several actions:
  - determine if sediment and mining sites should be placed on the NPL or be addressed through some other mechanism;
  - establish a process for identifying potential NPL sites;
  - review the EPA policy requiring a governor's letter for listing; and,
  - study the states' financial capacity to pay for state cleanups and their share of federal cleanups and how this impacts the Superfund program.
2. EPA needs to assess the level of program management, policy and administrative support resources needed to implement the Superfund program. EPA needs to evaluate its

staffing level and costs of program management to determine if current levels are needed. EPA also needs to determine why regional staff charge a large percentage of time to non-site activities.

3. EPA needs to improve its management and financial systems for tracking Superfund progress and costs. EPA should:
  - review the purpose, structure and management of the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) and the Integrated Financial Management System (IFMS) to determine if the systems are meeting the needs of decision makers
  - re-structure CERCLIS to minimize errors and outdated information; and,
  - improve IFMS to be useful for analyzing the costs of individual components of the program.
4. EPA needs to give higher priority to post-construction activities to ensure that remedies in place remain protective. The RFF suggested the following measures:
  - clarify the definition of “protectiveness” in the Five-Year Reviews;
  - develop a system to track recommendations in the Five-Year Reviews and verify implementation of these recommendations;
  - develop a system to track implementation of institutional controls; and,
  - improve public access to Five-Year Reviews via the EPA website.

### **One Cleanup Program**

Recognizing that strides need to be taken to ensure that the Superfund program is efficient and effective is a high priority at EPA. Toward that end, EPA is implementing a new initiative that promotes a coordinated approach to cleaning up contaminated sites under the various EPA Federal, state and tribal programs. The overarching goal is to ensure that all of the Nation’s cleanup programs are communicating and coordinating so that efficient, effective and protective approaches are used to cleanup and revitalize contaminated sites. The Nation’s programs will work in harmony to achieve cleanups that protect public health and the environment, and support property revitalization. Cleanup and redevelopment programs will coordinate to promote mutual acceptance across programs, sound and protective remedies, shared science and technical approaches, and seamless public information systems. The One Cleanup Program Initiative will build on the experience of the states, tribes, and federal government to efficiently leverage resources and maximize protective site cleanups and revitalization of contaminated properties.



EPA, working in partnership with the states, developed four goals to focus the initiative on actions that will move toward the One Cleanup Program.

1. Recognize and affirm the range of cleanup approaches and promote cooperation.

EPA will undertake actions that enhance communication and cooperation among all cleanup programs so that any particular contamination problem can be cleaned up using approaches that are acceptable to all programs, regardless of the implementing authority.

2. Make cleanup information clear and accessible.

EPA will work with all cleanup programs to develop information systems and measurements that clearly convey the status and results of site cleanups and EPA waste program activity. Actions under this goal will combine various state, tribal and federal cleanup information in user friendly ways to allow greater access and understanding by the public and stakeholders.

3. Use efficient, effective and protective management approaches.

EPA will work with all programs to evaluate and prioritize resources across state/tribal/federal cleanup programs to achieve the greatest environmental benefit.

4. Take maximum advantage of creative ideas and innovative technologies.

EPA will work with all programs to ensure that cleanup process and technology improvements are implemented to the greatest extent possible.

### **NACEPT Advisory Panel on Superfund**

On May 30, 2002, U.S. Environmental Protection Agency (EPA) Administrator Christine Todd Whitman announced the formation of a new advisory panel to make recommendations on the role Superfund should play in addressing the nation's most polluted and costly hazardous waste sites. The panel would also consider the RFF report and its recommendations.

The advisory panel was formed as a Subcommittee to the National Advisory Council for Environmental Policy and Technology (NACEPT). The EPA formed NACEPT in 1988 to provide a forum for public discussion and independent advice to the Agency. NACEPT council members include senior-level decision-makers; experts from academia, business and industry; community and environmental advocacy groups; federal, state, local and tribal governments; regulators; and environmental justice, labor, non-governmental and professional organizations.

The Agency enlarged the Superfund Subcommittee's scope to reflect consideration of the Superfund program in context with other federal and state waste cleanup programs. This broader focus will consider how the Nation's waste programs can work together in a more effective and unified fashion, so that citizens can be assured that federal, state, tribal and local governments are working optimally to make sites safe for their intended uses.

The overall intent of this effort is to assist in identifying the future direction of the Superfund program in the context of other federal and state waste and site cleanup programs. Specifically, the Superfund Subcommittee will review the relevant documentation and, to the extent possible, provide answers to questions that relate to: a) the role of the National Priorities List; b) mega sites; and, c) measuring program performance. It is expected that the Subcommittee activities will be accomplished by a series of meetings over an 18-month period.

### The Role of the National Priorities List

The process to place sites on the National Priorities List (NPL) has become increasingly contentious since the Superfund program's inception. Some stakeholders support the notion that the NPL is most appropriately a "tool of last resort." Others believe the current process inappropriately emphasizes keeping sites off the list. Perceptions aside, sites placed on the NPL are typically those with either recalcitrant or no potentially responsible parties (PRPs), those where States lack funds to perform cleanup, those considered Federal facilities, or where tribal, trustee, or affected community pressure is applied. Other cleanup avenues include the Resource Conservation and Recovery Act (RCRA) program, the relatively new Brownfields program, Federal agency response programs, Leaking Underground Storage Tank Program, State deferral or voluntary cleanup programs, and EPA's use of so-called "NPL-equivalent" cleanups and large-scale removals.

The subcommittee will address many issues, including the following.

7. What should be the role of the NPL in addressing waste cleanup and what does it mean to be placed on the NPL?
  1. What should be the relationship between the NPL and other cleanup programs?
  2. How to best ensure an adequate level of cleanup?
  3. How to integrate the NPL and other programs/statutes (Natural Resource Damages, Clean Water Act, Brownfields, etc.)?
  4. Should the NPL be a "tool of last resort?" In particular, what is the appropriate role of non-NPL cleanups and states in addressing sites?
  5. What are the impacts/implications of placement on the NPL (funding, community, etc.)?
  6. How can Environmental Justice concerns be more effectively integrated into the implementation on the NPL (e.g., synergistic and cumulative impacts)?

7. What is the appropriate use of the NPL in the context of mega sites (e.g., river basins)?
  8. What are the issues associated with the goals of remediation and economic redevelopment?
2. Who should be involved in determining what sites are listed (e.g., states, tribes, and communities)?
    1. What should the nature of their involvement be?
    2. Should their role differ depending on the site type or risk?
    3. What is the role of local authorities?
    4. What is the role of communities (in listing, risk assessment methodology, etc.)?
    5. How can the role of the Agency for Toxic Substances and Disease Registry (or equivalent) be integrated at non-NPL sites?
  5. What kinds of sites belong on the NPL?
    1. Should the NPL be used for a more limited range of sites?
    2. How can Tribal sites be addressed more effectively through the NPL? (How can cultural and subsistence-living factors be integrated more effectively?)
    3. What is the role of Risk (ecological, human health) in determining which sites should be on the NPL?
    4. What are the technical criteria for listing a site?
    5. What should the interaction be between the removal and remedial programs?
    6. What are the broader issues of NPL listing (stigma, etc.)?

The NACEPT Superfund Subcommittee will also be looking at the information needs related to the National Priorities List. They will undertake many tasks to assess information needs, such as:

1. Assess the relative costs of using other cleanup programs as alternatives to the NPL.
2. Determine whether EPA has used the citizen petition process to add sites to the NPL. If so, how?
3. Identify the other remedial/cleanup alternatives and their obligations/requirements (RCRA, TOSCA, state standards, etc.)
4. Identify other funding sources (non-EPA public sources, private funding)
5. Assess the issues behind “recalcitrant parties”
6. Understand EPA guidance on the listing process
7. Assess the characteristics of other cleanup programs that have made them more or less successful than the NPL. What kinds of sites were involved (cost, complexity, etc.)?
8. Gain a better understanding of the Hazard Ranking System and the application of the “magic number.”
9. Assess community acceptance of NPL listing vs. voluntary cleanups.

10. Determine what types of sites are typically listed on the NPL. (Is it true that “sites placed on the NPL are typically those with either recalcitrant or no potentially responsible parties (PRPs), those where States lack funds to perform cleanup, those considered federal facilities, or where tribal, trustee, or affected community pressure is applied?)
11. Assess the use of 106 Orders (and funding to implement).

### Mega Sites

Mega sites pose an additional challenge to the future of the Superfund program. The RFF Superfund cost study defined mega sites to those NPL sites where cleanup costs (i.e., total removal and remedial action costs) exceed \$50 million. Mining and contaminated sediment sites are often considered synonymous with mega sites, although the majority of mining and sediment sites are not mega sites, and vice versa. The RFF indicated that cleanup costs for mega sites are among the major variables driving future program costs. Mega site cleanups, especially those tied to mining and contaminated sediments, are also often difficult and time consuming.

The NACEPT Superfund Subcommittee will address many issues related to mega sites.

1. Should costs be the determining factor when designating sites as mega sites, or should other factors such as complexity or geographic size be considered?
2. What are the reasonable policy options for addressing mega sites? Are there viable alternatives to placing mega sites on the NPL and/or ways of containing their costs (for example, listing only the highest priority portions of the sites)?
3. What are the unique aspects of mega sites that might require different decision making process for NPL listing? (For example, large geographical distribution such as a river basin, a slow rate of progress, risk management challenges, or factors specifically relevant to federal facilities)

As with the role of the NPL, more information is needed about mega sites before decisions can be made about their impact on the future of Superfund. Some information needs about mega sites include:

1. Confirm the characteristics that drive the cost of mega sites (quantity of material, etc.)
2. Confirm the list of sites defined as “mega sites.”
3. Bring in outside experts to help frame the discussion around issues where the committee may be missing expertise.
4. Clarify the federal budgeting process and how mega sites are funded.
5. Summary of RFF study

6. Clarify EPA's position on liability/cleanup responsibility for state/private/other ownership.
7. Determine the impact of PRPs protecting their assets.

### Measuring Program Progress

For approximately the last seven years of the Superfund program, construction completion has been the program's key measure of progress for sites on the NPL. However, this milestone only reflects the final outcome of years of analysis, cleanup work and effort at NPL sites. Construction completion neither measures nor characterizes the impacts of cleanup efforts on human health and the environment. Furthermore, construction completions do not correlate as milestones for non-NPL cleanups or with efforts at other hazardous waste cleanups. In the past few years, the Resource Conservation and Recovery Act (RCRA) program developed indicators to gauge the impact of its efforts on human health and the environment. The Superfund program has capitalized on RCRA's efforts and conceptualized similar indicators for Superfund work. Nonetheless, there still are few cross-program metrics to capture comprehensive outcomes for interim work. This void impedes the Agency's ability to communicate work at hazardous waste sites to the public, Congress, states and the regulated community. The Agency expects to share new measure proposals with the panel and will seek feedback from the Subcommittee on those proposed measures.

Among the issues that will be addressed are the following:

1. What criteria should be used to measure progress?
  1. Should environmental indicators be established that are consistent among environmental programs/
  2. Review the definition of construction completion and the relationship between that and "really being done."
  3. Determine the role of public/community values in determining progress (e.g., cultural, social, subsistence lifestyles).
  4. How to address and respond to remedy failures?
2. Who should be involved in measuring progress and defining success? What is the role of communities and other parties?
3. What is the long-term effectiveness of institutional controls (particularly enforcement), containment and natural attenuation?
4. How to integrate long-term stewardship into the goals of the program?
  1. How to assure responsibility?
  2. How to fund for long-term stewardship?

To address how to measure success, specific information is needed:

1. Clarify how the money is used and what you get from it.
2. Determine how communities feel about the program. Is there consensus about what communities identify as success and progress?
3. Assess the impacts/implications of economic redevelopment vs. remediation.
4. What are the timing assumptions for construction completion (speed of cleanup)?
5. What are the institutional controls available for monitoring and long-term stewardship?
6. What environmental indicators do other cleanup programs use?
7. What factors influence whether a resource is useable (cultural factors, factors influencing subsistence lifestyles, etc.)?
8. Determine the steps for communities to assess their own measures of success.
9. Determine how to measure long-term treatment scenarios for those sites that do not reach construction completion.
10. Identify congressional perspectives on success.

### Operating Principles

Clearly, the charge to this committee is significant and will require much coordination and dialogue. One of the first tasks was to establish a framework within which the committee would work. The committee will operate using a collaborative problem-solving approach. This approach calls for the committee to:

- 7) gain a thorough understanding of the issues, interests, and ideas of the members;
- 8) based on that understanding, develop goals and objectives designed to satisfy the respective interests of the members;
- 9) develop recommendations based on the consensus opinions of the Subcommittee;
- 10) consensus means that everyone can “live with” the outcome, though aspects of it may not be their first choice; and,
- 11) in the absence of consensus, the divergent opinions of the members will be documented.

Collaborative problem solving depends on mutual respect and careful listening among members. Meetings will be structured to support a respectful atmosphere and the development of trust and understanding among members.

In accordance with the Federal Advisory Committee Act (FACA), opportunity will be provided for public comment at each public meeting of the Subcommittee. The Subcommittee will carefully consider input from the public in its deliberations and will include a summary of public comments in the public record of the Subcommittee’s work.

In the case where outside experts need to be consulted, an explicit effort will be made to bring accurate and trusted information, data and professional expertise into the process.

In accordance with FACA, all formal meetings of the Subcommittee will be open to the public and press. When Subcommittee members are contacted by the press, they are expected to represent only their personal perspectives and not to characterize the views of other members or the Subcommittee deliberations. In some cases, the Subcommittee may designate the chair or other representative to handle press contacts.

A neutral, third-party facilitator will assist the Subcommittee by guiding the discussions in a balanced and fair manner that keeps the Subcommittee focused, respectful, and within time limits agreed to in agendas.

### Conclusion

As Administrator Whitman said on May 30, 2002, "I am forming this advisory panel to spur a national dialogue on the Superfund program. Today, Superfund exists alongside other cleanup programs, such as state voluntary cleanups, that did not exist when the statute was created more than 20 years ago. As we move forward as a country on addressing contaminated sites, we need to consider how all of these cleanup tools can work together in a more effective and united fashion."

I am confident the NACEPT Subcommittee will provide up the information we need to truly identify the future of the Superfund program.

NATIONAL ADVISORY COUNCIL ON ENVIRONMENTAL POLICY AND  
TECHNOLOGY  
(NACEPT) SUBCOMMITTEE ON SUPERFUND - MEMBERS

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Raymond Loehr, Professor of Civil Engineering, University of Texas, Austin, Texas

Members:

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 Sue Briggum, Director of Environmental Affairs, Waste Management, Inc., Washington, DC  
 Grant Cope, Attorney, US Public Interest Research Group, Washington, DC  
 Jim Derouin, Attorney, Steptoe & Johnson, Phoenix, Arizona  
 Richard Dewling, President, Dewling Associates, Inc., Union, New Jersey  
 Steve Elbert, Senior Vice President of Global Environmental Management, British Petroleum America, Inc., Warrenville, Illinois  
 Jane Gardner, Manager and Counsel, Corporate Environmental Programs, General Electric Co., Fairfield, Connecticut  
 Mark Giesfeldt, Director of Remediation and Redevelopment Program, Wisconsin Department of Natural Resources, Madison, Wisconsin  
 Glenn Hammer, Vice President of Environmental Health and Safety, Ashland, Inc., Columbus, Ohio  
 Delores Herrera, Executive Director, Albuquerque San Jose Community Awareness Council, Inc., Albuquerque, New Mexico  
 Robert Hickmott, Senior Vice President, The Smith-Free Group, Washington, DC  
 Aimee Houghton, Associate Director, Center for Public Environmental Oversight, Washington, DC  
 Ken Jock, Director, Environmental Division, St. Regis Mohawk Tribe, Akwesasne, NY  
 Frederick Kalisz, Jr., Mayor, City of New Bedford, Massachusetts  
 Ed Lorenz, Chair, Pine River Superfund Citizens Task Force/Professor of History and Political Science, Alma College, Alma, Michigan  
 Mildred McCain, Executive Director, Harambee House, Inc., Savannah, Georgia  
 Michael Mittleholzer, Director of Regulatory Affairs, National Association of Home Builders, Washington, DC  
 Thomas Newlon, Senior Counsel, Port of Seattle, Seattle, Washington  
 Lindene Patton, Vice President, Zurich U.S. Specialties, Zurich North America, Great Falls, Virginia  
 Victoria Peters, Assistant Attorney General, Colorado Attorney General's Office, Lakewood, Colorado  
 Kate Probst, Senior Fellow, Resources for the Future, Washington, DC



Ed Putnam, Assistant Director, Remedial Planning and Design, New Jersey Department of Environmental Protection, Trenton, New Jersey

Catherine Sharp, Assistant Division Director, Land Protection Division, Oklahoma Department of Environmental Quality, Oklahoma City, Oklahoma

Alexandria Schultz, Director of Legislative Affairs, Mineral Policy Center, Washington, DC

Mel Skaggs, President, InDepth Environmental Associates, Inc., Southlake, Texas

Richard Stewart, Emily Kempin Professor of Law, Center on Environmental and Land Use Law, New York University School of Law, New York, New York

Wilma Subra, Technical Advisor, Louisiana Environmental Action Network, New Iberia, Louisiana

Michael Tilchin, Vice President, CHM2, Herndon, Virginia

Jason White, Environmental Scientist, Cherokee Nation, Tahlequah, Oklahoma

Robin Wiener, President, Institute for Scrap Recycling Industries, Inc., Washington, DC

CHAIRMAN MICHAEL L. WILLIAMS

# BIOGRAPHY

► Meet Commissioner Williams

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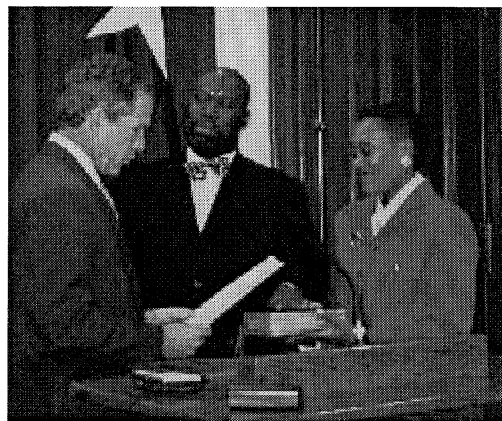
**FAQs**

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**CONTACT  
CHAIRMAN  
WILLIAMS**

Michael L. Williams was initially appointed to the Texas Railroad Commission by former Governor George W. Bush in December 1998 to serve the unexpired term of Carole Keeton Rylander. Williams was elected by his fellow commissioners in September 1999 to chair the Commission. In November 2000, the people of Texas elected him to complete the term expiring in the year 2002. He is the first African American in Texas history to hold a statewide executive post and is the highest ranking African American in Texas state government.



He serves as an associate member and chairs the Public Outreach Committee on the **Interstate Oil and Gas Compact Commission**. He also represents the Railroad Commission of Texas on the **Coastal Coordination Council**-a consortium of Texas state agencies concerned with coastal environmental matters, the Alternative Fuels Council, and the **Southern States Energy Board**. Williams is the Railroad Commission "point person" for the agency's regulatory reform and technology modernization efforts. In October 2001, Governor Rick Perry appointed Williams to the **Governor's Task Force on Homeland Security**.

Prior to his appointment to the Railroad Commission of Texas, Williams served as general counsel to a Texas-based high-tech corporation. He also served in a volunteer capacity as the general counsel of the Republican Party of Texas, the chairman of the Texas Juvenile Probation Commission and on the Board of Directors of the Arlington Chamber of Commerce, the Texas Public Policy Foundation and Our Mother of Mercy Catholic School.

In 1990, President George H. W. Bush appointed Williams to be Assistant Secretary of Education for Civil Rights at the U.S. Department of Education.

Previously, Chairman Williams served as Deputy Assistant Secretary for Law Enforcement at the U.S. Department of the Treasury. In that capacity, he had oversight responsibility for the Federal Law Enforcement Training Center, the U.S. Secret Service, the U.S. Customs Service, the Bureau of Alcohol, Tobacco and Firearms and the Financial Crimes Enforcement Network (Aug '89 - Jun '90).

He also served as Special Assistant to Attorney General Richard Thornburgh at the U.S. Department of Justice (Jan '88 - Jun '89). In 1988, former U.S. Attorney General Ed Meese awarded Williams the Attorney General's "Special Achievement Award" for the conviction of six Ku Klux Klan members on federal

weapons charges. He is a former federal prosecutor from 1984-1988 and a former assistant district attorney in his hometown of Midland, Texas.

The son of public school teachers, Williams earned a bachelor's, master's and law degree from the University of Southern California.

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Updated: December 20, 1999

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**Paper not submitted for this topic.**

**BIOGRAPHY OF  
LEONARD H.O. SPEARMAN, JR.**

*Leonard H.O. Spearman, Jr., is the Deputy Director of the Office of Compliance and Enforcement of the Texas Natural Resource Conservation Commission (TNRCC). This office oversees the agency's environmental objectives and initiatives for the Compliance Support, Field Operations, Monitoring Operations and Enforcement divisions. Prior to this assignment, he was the Regional Director for the Houston Regional Office of the Texas Natural Resource Conservation Commission (TNRCC) since 1997. The TNRCC is the premier state environmental agency with Houston's Region 12 overseeing the largest inventory of business, utilities, and industries in the state. Before coming to TNRCC, he was with Harris County Judge Robert Eckels serving as legislative coordinator.*

*He is a member of the Clean Air Coalition and serves on the City of Houston Land Redevelopment Committee. Spearman serves as an Advisory Board member of the Galveston Bay Foundation and is a member of the Transportation Policy Council. Spearman is also a board member of the Mickey Leland Environmental Internship Program and the TNRCC Field Operations Division Strike Team.*

*Spearman was with the City of Houston Housing and Community Development Department as Manager of the Economic Development Division. Prior to that, he was with the U.S. Department of Housing and Urban Development in Washington, D.C. serving as Counselor and Special Assistant to the Assistant Secretary for Housing-Federal Housing Commissioner and served as Deputy Associate Director, Presidential Personnel for The White House.*

*Spearman is a graduate of the University of Florida and Texas Southern University's Thurgood Marshall School of Law.*



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### EMPLOYMENT




**Cantey & Hanger, L.L.P.**, *Associate (1998-current)*  
Environmental and Litigation practice

### EDUCATION

**J.D., Vanderbilt University Law School (1998)**  
*Study Abroad:* Oxford University, Magdalen College, Oxford, England (1996)  
*Honors:* Moot Court Competition Finalist; Executive Justice, Moot Court; Jessup International Moot Court team; Chair, Barrister's Ball  
B.A., Ouachita Baptist University, *magna cum laude* (1995)  
*Study Abroad:* Moscow State University, Moscow, Russia (1994)

### PROFESSIONAL

#### Fort Worth - Tarrant County Young Lawyers

- President (2002)
- President Elect (2001 - 2002)
- Vice President (2001)
- Secretary (2000-2001)
- Director (1999-2000)
-  Instituted and implemented Suit Up for Success, a professional clothing drive and interview/resume seminar for the unemployed in Tarrant County
-  Chaired the Santa Claus is Coming to Court program, a Christmas gift giving party for over 200 underprivileged children
-  Created & organized the Millennium Membership Drive, a fall event, free to all young lawyers, offered to increase membership at the local affiliate level

#### Tarrant County Bar Association

- Environmental Section, Tarrant County Bar, Chair (2001 - 2002)
- Historical Preservation Committee (2000-2001)

#### Texas Young Lawyers Association

- **Director (2002 - 2004)**
- Member Services Committee, Co-Chair (2000-2002)
- President's Award of Merit (2000 - 2001)
- National Trial Competition Committee (1999-2000)

#### American Bar Association

- Member, (1998-2003)
- Assembly Delegate (2000)

#### Professional Associations

- Air & Waste Management Association, Member (2001 - 2002)
- Society of Texas Environmental Professionals, Member (2001 - 2002)
- Eldon B Mahon Inn of Court, Associate Member (1999-2001)
- **Defense Research Institute, Member (2000-2001)**

**Community**

- Northside Inter Church Agency, Board Member (2000-2001), Vice President (2002)
- People to People for Peace Conference, Peace Initiative Coordinator (2002)
- Community Conversation on Capital Punishment (developed by the City of Fort Worth's Human Rights Commission), Co-Chair (2002)
- Habitat for Humanity (2002)
- American Red Cross, Annual Fund-raising Drive (2002)
- Big Brothers & Big Sisters (1999-2000)
- **Junior Achievement (2000)**

**Publications and Speeches**

- Texas Environmental Superconference, "State Enforcement" (2002)
- North Texas Organization of Pretreatment Professionals, "Compliance History" (2002)
- Chamber of Commerce, "Compliance History" (2002)
- Manufacturer's Association of Fort Worth, "Compliance History" (2002)
- Fort Worth Business Press, "Compliance History and Its Impact on You" (2002)
- Fort Worth Chamberletter, "Business Owners Have Opportunity to Comment on Compliance Legislation" (2002)
- Chamber of Commerce, "Recent Supreme Court Developments in Environmental Law" (2001)
- The Counselor, "Passive Migration" (2000)

# **FOURTEENTH ANNUAL TEXAS ENVIRONMENTAL SUPERCONFERENCE**

**STATE ENFORCEMENT ACTION:  
THE COMPLIANCE HISTORY RULEMAKING**

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August 1-2, 2002



**Abstract:** In the summer of 2001, after the Sunset Review of the TNRCC, the Texas legislature passed House Bill 2912. Among the requirements of the bill was a mandate for the TNRCC to draft a rule that would govern the definition and use of compliance history. On the heels of that mandate, the TNRCC issued its compliance history rulemaking in two phases. Phase I, 30 Texas Administrative Code (“TAC”) §60.1, became effective January 9, 2002 and sets out the components that make up an entity’s compliance history. Phase II, 30 TAC §60.2 - 60.3, was still in proposal form as of the date this paper was submitted; it proposes how compliance history will be calculated and used. This new compliance history rulemaking may very well change the face of permitting and enforcement for every entity subject to the TNRCC’s jurisdiction.

## **I. Pre - HB 2912 Use of Compliance History**

The TNRCC used compliance history prior to issuance of this year’s compliance history rule to determine the severity of the penalty it imposed for a violation. In the TNRCC Penalty Policy<sup>1</sup>, adjustments could be made to an entity’s base penalty based upon the following factors:

- culpability;
- good-faith effort to comply;
- compliance history;
- economic benefit gained through noncompliance; and
- other factors as justice may require.

Two of those factors evaluated an entity’s past compliance - culpability and compliance history. In evaluating culpability, the TNRCC looked at whether the company could have reasonably anticipated and avoided the violation. In making a determination of culpability, the TNRCC looked at a specific site and examined the five-year history of the site. The Penalty Policy states, in part:

“In order to answer this question, staff will review the following:

- whether the violator received a previous notice of violation (NOV), verbal or written, for similar violations;
- whether the violator had submitted compliance plans for prior violations noted in the same program; and
- whether documentation indicates culpability exists.”

The TNRCC could add 25 percent to the penalty amount if it answered yes to any of the above. The TNRCC could not add to the penalty amount if it answered no to all the above.

When evaluating compliance history, the TNRCC looked at the five-year history of the entity “in all programs of all media under the jurisdiction of the TNRCC for the specific site under enforcement.” In addition to site-specific inquiry for all media, the TNRCC considered the histories of all of the entity’s locations in Texas for the medium of the violation (i.e., water, air, waste).

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<sup>1</sup> TNRCC Penalty Policy, dated October 1, 1997, amended January 1, 1999.

The TNRCC could also consider previous TNRCC or federal enforcement orders, district court orders, federal court orders or criminal convictions related to environmental laws. If the site had any of those orders five years prior to the date of the inspection, then the TNRCC would add the following to the entity's base penalty amount: if a second violation or order was found for the site, the TNRCC added 25% to the penalty; if a third violation or order was found for the site, the TNRCC added 50% to the penalty; and, if a fourth violation or order was found for the site, the TNRCC added 100% to the penalty. Additionally, 10% would be added to the penalty if the TNRCC found a violation or order in the same medium as the current enforcement action.

## **II. House Bill 2912**

Why is there a new compliance history rulemaking: Sunset Review - 2001. The TNRCC underwent Sunset Review prior to the 2001 legislative session, and as a result, House Bill 2912 was passed in the summer of 2001. H.B. 2912 required the TNRCC to make a number of changes to its rules, and among those changes was the TNRCC's evaluation of compliance history for each entity in Texas subject to the TNRCC's jurisdiction. H.B. 2912 stipulated that the compliance history rule would be promulgated in two phases: Phase I would define the compliance history components and had to be in effect by February 1, 2002; Phase II would address the classification and use of compliance history and had to be in effect by September 1, 2002. Much of what is written in adopted 30 TAC §60.1 and proposed 30 TAC §60.2-60.3 was mandated by the Texas legislature and created a degree of inflexibility for the TNRCC when it came time to draft the rules.

## **III. Phase I - Adopted 30 TAC §60.1<sup>2</sup>**

### **A. Application of Compliance History - 30 TAC §60.1 (a)(1-5)**

The TNRCC, as required by H.B. 2912, set out four specific areas where it will use compliance history: permitting decisions, including issuance, renewal, amendment, modification, denial, suspension, or revocation; enforcement; announced investigations; and participation in innovative programs.<sup>3</sup> The term permit means licenses, certificates, registrations, approvals, permits by rule, standard permits, or other forms of authorization.<sup>4</sup>

Compliance histories will not be reviewed in order to sanction every activity that occurs under the TNRCC's jurisdiction. Rather, compliance history is utilized for authorizations that require some level of notice to the TNRCC, and that require the TNRCC to review and approve or disapprove of

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<sup>2</sup> 27 Texas Register 191; effective January 9, 2002.

<sup>3</sup> 30 TAC §60.1 (a)(1).

<sup>4</sup> 30 TAC §60.1 (a)(2).

the authorization requested, a.k.a. decision permits.<sup>5</sup> Compliance history rules do not apply to “no decision” permits, examples of which are tanks registered under 30 TAC § 334.7 or 334.127, emissions authorized by permit by rule, or wastewater/storm water discharge notices of intent. In addition, compliance history review does not apply to:

- voluntary permit revocations;
- minor amendments and nonsubstantive corrections to permits;
- Texas pollutant discharge elimination system and underground injection control minor permit modifications;
- Class 1 solid waste modifications, except for changes in ownership;
- municipal solid waste Class I modifications, except for temporary authorizations and municipal solid waste Class I modifications requiring public notice;
- permit alterations;
- administrative revisions;

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<sup>5</sup> 30 TAC §60.1 (a)(3); substantive review does not include the TNRCC confirming receipt of a submittal.

air quality new source review permit amendments which meet the criteria of 30 TAC §39.402(a)(1 - 3) and minor permit revisions under 30 TAC Chapter 122 (Federal Operating Permits); and occupational licensing programs under TNRCC's jurisdiction.<sup>6</sup>

#### B. Development and Application of Compliance History - 30 TAC §60.1 (a) (6-8)

According to the new rule, the TNRCC should have begun developing compliance histories on February 1, 2002.<sup>7</sup> Then, beginning September 1, 2002, 30 TAC §60.1 applies to the use of compliance history in the following TNRCC decisions: applications submitted for permit issuance, amendment, modification, or renewal; inspections and flexible permitting; a proceeding initiated for permit suspension or revocation or the imposition of a penalty in a matter under TNRCC's authority; and applications submitted for other forms of authorization, or participation in an innovative program, except for flexible permitting.

If a motion for reconsideration or a motion to overturn is filed on any actions that are not supposed to consider compliance history (e.g., voluntary permit revocations, minor permit amendments), and is set on the TNRCC's agenda, the executive director will prepare a compliance history and file it with the Office of the Chief Clerk at least six days before the motion is considered.

#### C. Compliance Period - 30 TAC §60.1 (b)

This is one provision of the rule that was changed due, in large part, to comments received in November 2001 on the proposed rule. The TNRCC had initially proposed a compliance period of "at least" five years. When adopted 30 TAC §60.1 was published, the TNRCC had capped the compliance period at five years.

The compliance history period includes the five years prior to the date the permit application is received by the executive director; the five-year period preceding the date of initiating an enforcement action (i.e., issuing an NOV); for purposes of determining whether to conduct an announced investigation, the five-year period preceding an investigation; or the five years prior to the date the application for participation in an innovative program is received. There is one provision which allows for the extension of the five-year cap. The compliance history period may be extended beyond the date the application for the permit or participation in an innovative program is received by the TNRCC up through completion of review of the application. For example, if a permit application is received on January 1, 2003, but the permit is not issued until January 1, 2004, the TNRCC is authorized to look at the applicant's compliance history from January 1, 1998 ( five years prior to the date the application was received) regardless of the length of time approval takes.

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<sup>6</sup> 30 TAC §60.1 (a) (4-5).

<sup>7</sup> 30 TAC §60.1 (a)(6).

## D. Compliance History Components - 30 TAC §60.1 ©

As opposed to proposed rule 30 TAC §60.2 (f), which foresees calculating compliance history on a site-specific basis, the compliance history referenced in 30 TAC §60.1 © will include multimedia compliance-related information about the site under review, *as well as other sites which are owned or operated by the same person or entity*. There has been considerable questioning during the comment period for proposed rule 30 TAC §60.2 as to how these two different positions will be reconciled. Furthermore, 30 TAC §60.1 © gives a laundry list of components which will be included when the TNRCC performs a compliance history review. There are both positive and negative components listed.

### 1. **Negative Components**

The first components listed that could be detrimental to a regulated entity's compliance history are any Texas or federal final enforcement orders, court judgments, consent decrees, and criminal convictions relating to compliance with "applicable legal requirements" under the TNRCC or EPA jurisdiction.<sup>8</sup> Next, any Texas Water Code §7.070 orders (Agreed Orders) dated on or after February 1, 2002 will be considered. To the extent that this information is "readily available" to the TNRCC, final enforcement orders, court judgments, and criminal convictions relating to violations of environmental laws from other U.S. states will be utilized as components of compliance history.

Additionally, chronic excessive emissions events, as defined in Texas Health & Safety Code §382.0215(a), are components of an entity's compliance history. Another compliance history component is any information required by law or any compliance-related requirement necessary to maintain federal program authorization. Dates of investigations, both by TNRCC and EPA, are used in compliance history review.

Finally, and what came as one of the bigger surprises in the final adoption of this rule, all written NOV's, including written notification of a violation from a regulated person, issued **on or after September 1, 1999**, will be used in calculating an entity's compliance history. The TNRCC did provide one exception to the component of compliance history that evaluates NOV's. The TNRCC specifically excluded those NOV's administratively determined to be without merit. The TNRCC also set out the procedure for contesting the merit of NOV's.

However, the proposed rule had stated that NOV's would only be considered after February 1, 2002. After the adopted rule was published, a constitutional challenge to this language was filed with the Texas Attorney General. Even though the Attorney General did not find the retroactive use of NOV's in compliance history unconstitutional, other challenges may still be filed in court. See "G" below for a full discussion of the Attorney General's Response.

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<sup>8</sup> "Applicable legal requirement" is defined as an environmental law, regulation, permit, order, consent decree, or other requirement.

## 2. **Positive Components**

There are also positive components that will be factored into a regulated entity's compliance history - though the "how" of the factoring has been an issue of much discussion during the comment period on 30 TAC §60.2.

The TNRCC will consider the type of environmental management systems (EMSs), if any, that an entity uses for environmental compliance. Another component that could buoy an entity's compliance history is any voluntary on-site compliance assessments the TNRCC performs under a special assistance program. Any participation in a voluntary pollution reduction program will weight the compliance history review positively.

Further, the TNRCC will "consider" an entity's description of early compliance with or offer of a product that meets future state or federal government environmental requirements. Finally, and what may prove to be a harmful component as well, the TNRCC will review the date of letters notifying it of an intended audit conducted and any violations disclosed under the Texas Environmental, Health, and Safety Audit Privilege Act. The problem with this component is that the act of conducting a voluntary audit could be a positive component in an entity's compliance history, but that advantage could be outweighed quickly when the TNRCC factors in all self-disclosed violations as negative components. During the comment period for 30 TAC §60.2, commenters suggested that self-disclosed violations not be factored into the compliance calculation.

Also, the name and telephone number of a TNRCC staff person will be provided in each compliance history evaluation, so the evaluated entity or the public can contact the TNRCC for additional information regarding compliance history.

### E. Change in Ownership - 30 TAC §60.1 (d)

In addition to the compliance period and the compliance components, there is an additional consideration. If ownership of the site changed during the five-year compliance period, the compliance history of the site under each owner during that five-year period will be distinguished. Specifically, for any part of the compliance period that involves a previous owner, the compliance history will include only *the site* under review. This means that there is one exception to the 30 TAC §60.1© rule that considers both the site and other sites owned or operated by the same person. The exception, 30 TAC §60.1(d), states a change in owners during the compliance period will require the TNRCC to include only the site under review for the period that included another owner.<sup>9</sup>

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<sup>9</sup> Note that a change in operator will be dealt with as a change in owner if the operator is a co-permittee.

#### G. Attorney General's Opinion on 30 TAC §60.1<sup>10</sup>

The question asked by Representative Warren Chisum was whether the provisions of H.B. 2912 on regulated entities' compliance history authorized the TNRCC to consider compliance history that occurred prior to February 1, 2002. In a nutshell, Attorney General John Cornyn disagreed with Representative Chisum's assertion that considering violations before February 1, 2002 was unconstitutional. The Attorney General said that the TNRCC has the authority to consider compliance history that dates back from five years prior to the time the TNRCC's regulatory authority is invoked, including any compliance history prior to February 1, 2002.

The opinion stated that the TNRCC defined the NOV and Agreed Order components so that they did not raise an issue of unconstitutional retroactivity. First, the Agreed Order component did not violate retroactivity because Agreed Orders are considered only after February 1, 2002, under the compliance history rule. Second, the Attorney General asserted that the mechanism by which entities can protect their interests is the TNRCC's procedure for allowing regulated entities to argue that an NOV is without merit and exclude it from the compliance history consideration should the NOV be administratively determined to be without merit. That stated protection was sufficient to remedy any retroactivity problem, according to the Attorney General. In addition, the Attorney General stated that the allowance of NOVs prior to February 1, 2002, in the compliance history review was appropriate since the compliance history rule protects the public safety.<sup>11</sup> The opinion stated it was unnecessary to determine whether regulated entities had a vested right under article I, section 16 of the Texas Constitution to have their compliance history determined under the law that was in effect when the events took place. The reason that analysis was not conducted was because the compliance history rule applies to programs in place designed to protect the public health, safety and welfare, and the legislature is not restricted by the Texas Constitution from enacting retroactive statutes necessary to safeguard those interests.

### IV. Phase II - Proposed 30 TAC §60.2 - 60.3<sup>12</sup>

#### A. Proposed Rule

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<sup>10</sup> Opinion No. JC-0515; Rendered June 24, 2002.

<sup>11</sup> "A valid exercise of the police power by the Legislature to safeguard the public safety and welfare can prevail over a finding that a law is unconstitutionally retroactive." *Id.*

<sup>12</sup> Proposed on April 12, 2002; 27 Texas Register 2930. Rule adoption and TNRCC response to comments pending as of the date this paper was submitted.

## **1. Classification - 30 TAC §60.2 (a - d)**

The proposed rule would evaluate the compliance history and classify each site beginning September 1, 2003, and then reevaluate the site every six months after the initial classification.

Note, this is a site classification, so the TNRCC only proposes to classify the individual sites, not an entity for its set of sites. Each site is labeled either a high performer, loosely defined as a site with an above average compliance history, an average performer, defined as a site that generally complies with environmental rules, or a poor performer, meaning the site performs below average.

The TNRCC also allows for one of two things to happen if a site does not have any compliance information in its file - the site can be given the default classification of average or the TNRCC may conduct an investigation to develop a compliance history. During the comment period, commenters noted that the danger in this proposition is the possibility for a company to have a skewed compliance history if it only has that one inspection on record. If violations are found during an investigation, and the entity is not considered complex, then these first violations could create a poor performer classification, particularly in smaller businesses.

The next portion of the proposed rule, 30 TAC §60.2©, addresses how the TNRCC will classify violations - major, moderate or minor. Major violations include:

- those that the TNRCC and EPA agreed are major in their Enforcement Memorandum of Understanding;<sup>13</sup>
- violation of an enforcement order, court order or consent decree;
- operating without authorization;
- action/inaction that causes adverse effects on human health, safety or environment;
- falsification of documents;
- criminal convictions; or
- any violation similar in character that the executive director deems major.<sup>14</sup>

Moderate violations include:

- substantial failure to monitor, analyze or test a release or discharge;
- substantial failure to maintain records;
- having an operator without a license;
- any release or discharge not classified as a major violation;
- failure to inspect the facility; or
- any violation similar in character the executive director deems moderate.<sup>15</sup>

Minor violations include:

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<sup>13</sup> Memorandum of Understanding between EPA and TNRCC, dated April 1, 1999.

<sup>14</sup> 30 TAC §60.2(c)(1).

<sup>15</sup> 30 TAC §60.2(c)(2).



- not meeting all monitoring or testing requirements;
- not meeting all analysis or waste characterization requirements;
- not submitting or maintaining all documents;
- not meeting all maintenance requirements; or
- any violation similar in character the executive director deems minor.<sup>16</sup>

The TNRCC proposed 30 TAC §60.2 (d) in an attempt to establish criteria for repeat violators per H.B. 2912's mandate. A site would be considered a repeat violator if the same major violation is documented more than one time during the five year compliance period. Since the TNRCC must consider revoking a permit if a site is classified as a repeat violator, the TNRCC limited the definition of repeat violator by making only repeat *major* violations that are of a similar nature the trigger. However, the TNRCC specifically requested comments on how to better define repeat violator, with a specific emphasis on how to utilize the number and complexity of sites in the definition. During the comment period, a number of recommendations were made on how to alter the repeat violator definition. As of the date of this paper, the response to comments had not yet been published, but the TNRCC has indicated in stakeholder meetings and in comments on compliance history that it does intend to change this portion of the proposed rule.

## **2. Compliance Formula - 30 TAC §60.2 (e -f)**

Under the proposed rule, every site would be assigned a complexity factor of 1, 3 or 5. This complexity factor is then used in the compliance formula. The higher the complexity factor for a site, the better for the regulated entity. The complexity factor is one of the divisors in the compliance calculation, and the higher the complexity factor, the lower the compliance number, and thus the better the compliance rating. One of the drawbacks of the proposal is that a regulated entity not specifically listed in the complexity factor 3 or 5 categories will automatically be given a complexity factor of one. The TNRCC established the complexity factors by looking at the number of points of emission, discharge or release to the environment at the site, specifically analyzing the existing air program point source database that had already classified the site by number of facilities on site. An average number of facilities per account (the accounts from the point source database) were calculated for each Standard Industrial Classification (SIC), and SICs were sorted in descending order. Once that analysis was complete, a complexity level was assigned to each SIC, with the result being that national security, space research and technology, chemicals and allied products, petroleum refining, freight and warehouse-special warehousing and storage, air transportation, pulp or paper mills, oil and gas extraction, and cement kilns and manufacturing were given a complexity factor of 5, and electronic, communications, manufacture of transportation equipment, business services, primary metal refining and processing industries, measurement instruments, transportation services, railroad, food and kindred, and water transportation were given a complexity factor of 3.<sup>17</sup> Any other

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<sup>16</sup> 30 TAC §60.2(c)(3).

<sup>17</sup> 30 TAC §60.2 (e)(1)(A-B).

industry is automatically given a complexity factor of one. Additionally, for an entity that owns or operates 25 or more sites in Texas, a factor of one will be added to its complexity factor.<sup>18</sup> Since the compliance formula only calculates a numerical rating for a site, not an entity, it is surprising that the number of sites an entity owns in the state would be a factor in the complexity determination.

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<sup>18</sup> 30 TAC §60.2 (e)(2).

Following the proposal for complexity factors is the most critical element of the compliance history proposal - the formula. The classification that is determined from this formula is based only on components for the site.<sup>19</sup> That translates to every site, not every regulated entity, having a classification of high, average or poor.

A point system is proposed for the compliance calculation. The TNRCC says that the points are either determined by the significance of the violations or by the type and complexity of the component. This compliance calculation would be performed for an entity applying for a permit, subject to enforcement, considered for investigation, or participating in an innovative program. The point allocation in the compliance calculation is as follows:

- major violation in any formal enforcement orders, court judgments and consent decrees x100 (and any repeat violations in this category will be multiplied by 2);
- moderate violation in any formal enforcement orders, court judgments and consent decrees x 60;
- minor violation in any formal enforcement orders, court judgments and consent decrees x 20;
- major violation in any NOV's x 5 (and any repeat violations in this category will be multiplied by 2);
- moderate violation in any NOV's x 3;
- minor violation in any NOV's x 1;
- counts in all criminal convictions x 500; and
- chronic excessive emissions events x 100.<sup>20</sup>

Then, the compliance calculation sums the above points to reach Subtotal A. Subtotal A is divided by the site complexity factor (5, 3 or 1) to reach Subtotal B. Subtotal B is divided by the number of investigations at the site to reach Subtotal C. Investigations include both record reviews and physical evaluations.<sup>21</sup> The TNRCC says this inclusion of record reviews helps link

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<sup>19</sup> 30 TAC §60.2(f).

<sup>20</sup> 30 TAC §60.2(f)(1). Note the TNRCC has stated criteria for determining chronic excessive emissions events will be determined in another rulemaking.

<sup>21</sup> Record reviews include wastewater discharge monitoring report evaluations, Title V permit certification evaluations, upset/maintenance report evaluations, reviews of reports from 40 Code of Federal Regulations (CFR) Parts 60, 61 and 63, reviews of reports from 30 TAC Chapter 116 or 117, review of a stack performance tests, and evaluation of continuous emission monitoring systems or predictive emission monitoring systems certifications.

the complexity of the site to the calculation because a more complex site would have more evaluations.

The TNRCC looks at Subtotal C and classifies the site as follows: less than 10 points = high performer; 10-99 points = average performer; 100 or more points = poor performer. The TNRCC did specifically request comment though on this proposed range<sup>22</sup>, and there is a strong likelihood the proposal will change before adoption.

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<sup>22</sup> 27 Tex.Reg. 2930.

The classification based on Subtotal C may then, under the proposed compliance calculation, be reclassified by the executive director based on “mitigating factors.”<sup>23</sup> This proposal is supposed to allow for a reduction in the points based on the positive components that apply to a regulated entity. Those components are set out above in II E.2., the discussion on 30 TAC §60.1©. Mitigating factors also include a purchase of a poor performing site by a person or regional entity with other high performer sites. This mitigating factor language was the portion of the proposed rule most commented on during the comment period. The concern, as is discussed more fully below, is that there are only objective standards for negative components and no requirement that the TNRCC consider any positive environmental steps the entity has taken.

### **3. Use - 30 TAC §60.3**

The TNRCC proposes to consider compliance history when preparing draft permits or when deciding to issue, renew, amend, modify, deny, suspend or revoke a permit. That consideration would include reviewing the site-specific classification, as well as the entity’s entire compliance history. The review of the entity’s compliance history will focus on patterns in the compliance history (which would include looking at the entity’s sites outside Texas, if any).

Then, based upon the review, the TNRCC can impose permit conditions responsive to an entity’s history. Additionally, should an entity be classified as a poor performer there are numerous permit restrictions that may be imposed, including:

- reduced renewal terms;
- notices of deficiency which require more specificity in the application;
- prescriptive permit provisions to address recurring problems;
- citizen outreach program requirements;
- citizen advisory panel requirements;
- additional monitoring;
- individual permit authorization in view of general permit registration or permit by rule;
- co-permittees; or
- other site operation or monitoring action requirements.

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<sup>23</sup> 30 TAC §60.2(f)(3).

Poor performers and repeat violators are also restricted in other ways. The TNRCC “shall” deny or suspend a poor performer’s authorization to discharge under 30 TAC Chapter 205 (Waste Discharges), and deny its permit or permit renewal for a flexible permit under 30 TAC Chapter 116 (Air Pollution).<sup>24</sup> The TNRCC “may” deny or amend a poor performer’s solid waste management facility permit renewal, or hold a hearing on a poor performer’s air permit amendment, modification or renewal.<sup>25</sup> Furthermore, if the TNRCC believes there is a question as to whether an entity can comply with a material term of its hazardous waste management facility permit, then the TNRCC must provide an opportunity to request a contested case hearing for renewal application. Finally, while the TNRCC may deny or modify the permit of a repeat violator, it must deny a permit or permit amendment of an entity that “has an unacceptable compliance history based on violations constituting a recurring pattern of conduct that demonstrates a consistent disregard for the regulatory process, including a failure to make a timely and substantive attempt to correct the violation(s).”<sup>26</sup>

The proposed rule requires the TNRCC to consider compliance history before:

- issuing, amending or renewing a permit to discharge effluent made up primarily of sewage or municipal waste;
- determining if the use or installation of an injection well for the disposal of hazardous waste is in the public interest;
- renewing a preconstruction permit;
- approving an application to process or dispose of low level radioactive waste; and
- revoking or suspending a permit.<sup>27</sup>

Similarly, the TNRCC may also consider compliance history before:

- renewing or amending a Texas Water Code, Chapter 26 permit (water);
- issuing, renewing or amending a Texas Health & Safety Code, Chapter 382 permit (air); and
- granting, denying or restricting a Texas Health & Safety Code, Chapter 401 license or registration (radioactive materials).<sup>28</sup>

In addition to consideration of compliance history and the high/average/poor performer classification, the TNRCC is allowed to revoke a permit of a *repeat violator* for:

- a criminal conviction;
- a violation that caused or could cause adverse effects on human health or safety or adverse effects on the environment;

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<sup>24</sup> 30 TAC §60.3(a)(3)(A).

<sup>25</sup> 30 TAC §60.3(a)(3)(B).

<sup>26</sup> 30 TAC §60.3(a)(3)(E).

<sup>27</sup> 30 TAC §60.3(a)(4)(B) and (6).

<sup>28</sup> 30 TAC §60.3(a)(4)(A).

- repeatedly operating without required authorization;
- documented falsification; or
- egregious violations.<sup>29</sup>

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<sup>29</sup> 30 TAC §60.3(a)(7).

A poor performer or repeat violator classification does not only affect a regulated entity's permit status under the proposed rule. Those negative determinations also impact investigations and enforcement actions. Poor performers may be given technical assistance from the TNRCC in an attempt to improve compliance.<sup>30</sup> The TNRCC can also increase the number of investigations at a facility for poor performers, and must perform their investigation unannounced.<sup>31</sup> For repeat violators, the TNRCC may increase enforcement penalties and oversight of the entity.<sup>32</sup>

Poor performers are also prohibited from participating in the regulatory flexibility program under proposed 30 TAC §60.3 (d)(3) as well as prohibited from benefitting from regulatory incentives under their environmental management system (EMS), should they have one. The TNRCC would also be authorized to recommend technical assistance to poor performers or provide assistance in developing an EMS, including requiring specific reporting under that EMS.<sup>33</sup>

The last issue that proposed 30 TAC §60.3 addresses is when, and how, classification can be reviewed. For matters where a contested case hearing is available under the law, i.e., permits or enforcement, a hearing may be requested based on issues relating to the regulated entity's compliance history.<sup>34</sup> For permit applications where a contested case hearing is not available, the applicant or other person who disputes the classification made by the TNRCC may file a motion to overturn the executive director's action with the chief clerk.<sup>35</sup> In either case, the contesting party bears the burden of proving why the classification should be changed.

## B. Comments

### 1. Most frequent comments

By the close of the comment period on proposed 30 TAC §60.2-60.3, the TNRCC had received over 477 form letters and 67 other comment letters. Those rules will probably be considered for adoption on the Commissioner's July 24<sup>th</sup> agenda, with an effective date of August 15<sup>th</sup>. Executive Director Jeff Saitas stated that staff informed him there will be approximately 235,000 compliance history determinations made and posted on the TNRCC website on September 1<sup>st</sup>. Comments ranged from the very specific requests of a specific entity or industry to the very broad concerns of public interest groups or the business community. There were also a few comments from legislators who had been part of the H.B. 2912 drafting process. To follow is a brief discussion of

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<sup>30</sup> 30 TAC §60.3(b)(1).

<sup>31</sup> 30 TAC §60.3(b)(2-3).

<sup>32</sup> 30 TAC §60.3(c).

<sup>33</sup> 30 TAC §60.3(d)(2-3).

<sup>34</sup> 30 TAC §60.3(e)(1).

<sup>35</sup> The motion to overturn must be filed in accordance with the provisions of 30 TAC §50.139. 30 TAC §60.3(e)(2).



some of the most popular areas of concern.

*Classifications of Performers as High/Average/Poor:*

The most frequent issue raised in this category was defaulting an entity on which the TNRCC did not have enough information into the “average” classification. Commenters mentioned that it was unclear as to what “inadequate information” was from the TNRCC’s view point, and that just because an entity did not have compliance information for a specific site did not mean there was not compliance history for the entity. Specifically, if an entity has inadequate information for one site, but has compliance history for other sites in Texas, the commenters suggested the one site with inadequate information should not default to average.

Another comment in this category included that the classification process should provide reasonable certainty and not subject a person or site to successive and duplicative re-evaluations.

Commenters suggested the interval between the compliance history reviews should be changed - either expanded from 6 months to a year or reduced to a few months.

*Classifications of Violations as Major/Moderate/Minor:*

A number of comments were made about the use of clerical or administrative errors in compliance history evaluations. There was great concern that certain paperwork violations are deemed major violations in the proposed rule due to the classification of all violations listed in the Enforcement Memorandum of Understanding (MOU) between the EPA and TNRCC as major.<sup>36</sup> One resolution recommended was that the TNRCC adopt only certain portions of the MOU into the major classification category. Also, commenters asked that simple clerical or administrative violations be removed from the minor violation category altogether.

Numerous commenters urged the TNRCC to clearly define all major and moderate violations and leave all undefined violations in the minor category. Under the proposed rule, it is within the executive director’s discretion to classify a violation as major even if it is not specifically listed as a major violation. Most commenters in this category disagreed with the TNRCC having the discretion to classify a violation as major. Along those same lines, there were requests to distinguish between major and moderate criminal violations.

A few other comments suggested that:

- all major violations should consist of an actual or potential adverse effect on human health, safety or the environment, or prevent the enforcement of regulatory requirements;
- the TNRCC should not classify federal or out of state violations as major/moderate/minor;
- the TNRCC should not classify a regulated entity’s dealings with another facility that does not possess required authorization as a major or moderate violation because there is no way for an entity to know if third party facilities have all their authorizations; and
- since some TNRCC orders, court orders and consent decrees demand compliance with minor requirements, such as record keeping, it would be inappropriate to consider all violations of orders as major violations.

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<sup>36</sup> Memorandum of Understanding between EPA and TNRCC, dated April 1, 1999; 30 TAC §60.2(c)(1)(A).

### *Complexity Factors:*

Most commenters on the proposed complexity factors requested a restructuring of the classification. Complexity of the facilities and the number of the facilities were recommended as factors for the TNRCC to consider. Additionally, it was suggested that facilities should be compared by same type or SIC code. There were also requests that the complexity factors not be rigidly pre-selected, but rather, the TNRCC should set out an objective criteria which the owner could meet in order to demonstrate the complexity of its site.

### *Compliance Calculation:*

Commenters noted that the formula, as set out in the proposed rule, leads to double counting of events, specifically violations. The formula would allow for NOVs to be counted both at the time of issuance and then again in an Agreed Order reflecting those NOVs. It is possible under the proposed rule a violation could be counted more than twice, as the same event could be added cumulatively to the compliance history rating as the violation moves from a self-reported deviation to an NOV to an NOE to an EDPR to a final enforcement order or court judgment. Regarding using NOVs in the calculation, commenters suggested self-reported violations not be counted. Also, commenters suggested the number of violations should equal the number of events of noncompliance, rather than the number of regulatory provisions the TNRCC alleges were violated.

There was a suggestion made that the TNRCC lacks the authority to enhance the effect of repeat violator status by doubling the points added to the compliance rating if a *entity* is a repeat violator. As drafted, it appears that this doubling would apply to any violations, so the TNRCC should clarify that doubling only applies to a repeat of the same violation at the same facility, not to any violation at any site.

Additionally, it was recommended the investigation number in the calculation should include those investigations performed by EPA. The investigation portion of the calculation should also clarify which types of investigations and record reviews it anticipates considering.

There were several concerns expressed that the classification formula, as proposed, undermines true high performers by making that category too accessible. Some commenters noted that there were too many high performers under the proposed formula. Part of the high valuation that occurs with the proposed calculation could be remedied, per commenters, if complexity was removed as a divisor in the formula. It was suggested that the complexity of a site or entity does not have a role in this formulation.

Finally, there was concern about the inclusion of chronic excessive emissions events in the calculation. Commenters suggested that chronic excessive emissions not be included until it is defined in a rulemaking, or that chronic excessive emissions be removed altogether from the formula, as chronic excessive emissions are not listed in H.B. 2912 and the determination of whether emissions events become excessive or chronic will not be an enforcement procedure. (Note, however, that chronic emissions events are already listed as a component as set forth in adopted rule 30 TAC §60.1.)

### *Mitigating Factors/Positive Components:*

This particular category was far and away the most popular area of comment. There were two very divergent view points: public interest groups argued that positive components should not be considered at all as those factors are not part of a regulated entity's compliance history, and industry groups strongly urged a more objective standard of measuring the proactive environmental measures businesses have initiated. Again, note that adopted rule 30 TAC §60.1 already lists a number of positive components that will be factored into each entity's compliance history. Commenters requested additional quantifiable incentives for proactive steps such as audits and EMSs. The TNRCC could encourage environmental excellence, commenters said, by guaranteeing that investment in environmental programs and other positive actions will be reflected in site classifications (via objective values set for each positive component).

Another area of great concern was that the current owner should not be liable for acts or omissions of another owner. It was suggested that the automatic and unconditional imposition of pre-existing site compliance history on unrelated persons is improper.

Finally, commenters suggested that there was a need for a procedure for regulated entity's to submit the positive information prior to the TNRCC compiling the compliance history. The TNRCC has indicated that positive measures will not be in its records, so each regulated entity is responsible for submitting positive components to the TNRCC in order to qualify for the benefit. Thus, a process will be needed that the entity can utilize to submit evidence of proactive environmental measures.

#### *Site Compliance History versus Regulated Entity Compliance History:*

The biggest issue in this category, by both business and public interest, is the failure to define how compliance history will be assessed for regulated entities. Many public interest organizations stated that the TNRCC, under H.B. 2912, must classify both the site and the entity objectively and failed to do so in the proposed rule. Businesses tended to question the method the TNRCC would use to evaluate overall compliance history. The adopted rule, 30 TAC §60.1, states explicitly that a regulated entity will be given a compliance history, yet the formula in proposed rule 30 TAC §60.2(f) only rates a specific site. Some commenters asked whether the TNRCC will consider the site compliance history primarily with respect to proposed actions in relation to that site, and then secondarily consider the entire compliance history of the entity.

#### *Permit Revocation:*

The two primary comments in this category were that: one, the statute does not mandate permit revocation for poor performers; and two, permits should only be revoked for repeat violators classified as poor performers.

#### *Enforcement Actions and Penalties:*

It was recommended that the violations that make up the compliance history, not just the classifications, should be used in developing permit conditions and structuring enforcement orders. Some commenters referred to H.B. 2912's requirement for the TNRCC to use compliance history classifications in enforcement, and they suggested that the optional

enhancement of penalties or ordering provisions is not sufficient implementation of this requirement.

The other comments addressed complexity's role in enforcement. Commenters suggested that enhancement of administrative penalties for repeat violators should address site complexity and/or numerosity by providing for penalty mitigation or deferral where repeat violator status is demonstrated to be a site-specific aberration resulting from complexity or a high number of facilities, i.e., the repeat violator's site or sites are uniformly classified as high performers.

#### *Repeat Violator/Poor Performer Classifications:*

Again, there were two divergent camps of comments in this category. The first set of commenters suggested that the repeat violator classification should not be limited to the same media or type of violations as proposed, but rather should encompass all categories of violations generally. The second set said that the TNRCC needs to revise the repeat violator section to reflect that the classification relates specifically to the site rather than the person and relates to one class of violation or one area of media.

A few other commenters suggested that only final orders should be used as a measure of repeat violators; that the repeat violator standard and the complexity of a person's environmental compliance obligations should be linked; and that the TNRCC exceeds its authority by imposing many of the limitations on poor performers, as it would need statutory authority, and it has no authorization to deny or modify a permit on the basis of a designation as a repeat violator.

#### *Commenting on Compliance History:*

Both Representative Chisum and Senator J.E. "Buster" Brown weighed in on the issue of how the TNRCC proposed to allow people to challenge compliance history. They indicated that the public and the entity should not be allowed a contested case venue to dispute compliance history. There was some frustration that there was no clear process for input into the development of the executive director's classification from the regulated entity or citizens. Senator Brown said that H.B.2912 intended to provide opportunities for public participation, but that the TNRCC should change the contested case hearing provision to a simpler executive determination on classification with an opportunity for a motion to overturn.

Industry also weighed in on the issue. Some suggested that it was improper to allow any party in a contested case to provide information on compliance history, and admissibility and use of compliance history in the TNRCC proceedings should be limited to a known standard.

Commenters noted the need for a mechanism to ensure the accuracy of the information used to compile the compliance history which would allow the entity the opportunity to review and comment on its compliance history summary prior to publication. Along those lines, commenters requested a process for initial appeal of the classification decisions. However, some commenters suggested that a request for a contested case hearing based solely on issues related to compliance history should be denied unless the requestor could demonstrate that the classification or use was based on incomplete or inaccurate information or misapplication of the formula and that the error, if corrected, would result in a change in the site classification.

## 2. Proposals for change

There were a variety of recommended solutions to change the proposed rule and here are a few of those comments.

*On using average as a default classification:* An entity with other sites in Texas, but which has no compliance history information on the site for which it is applying, would be given either the lowest compliance rating of all its Texas sites or an average compliance rating from all its other Texas sites.<sup>37</sup>

*On violation classifications:* The definition of moderate violation should include the following subcategory: Any otherwise major or minor violation of similar character or impact determined by the executive director to be a moderate violation. The definition of minor violation should include the following subcategory: Any otherwise major or moderate violation of similar character or impact determined by the executive director to be a minor violation.<sup>38</sup>

Also suggested was that the rule should consider only violations that have occurred in Texas, as there is no way to weight violations that occurred out of state. Additionally, the commenter recommended that consent decrees and enforcement orders entered into solely for the purpose of addressing remediation, which do not involve noncompliance, be excluded.<sup>39</sup>

*On complexity:* In addition to the use of the point values assigned to the primary SIC codes, complexity should take into account the following factors:

- The number of emission points at a site;
- The number of applicable requirements to which a facility is subject at a site;
- The number of employees necessary to adequately operate the site exceeds 50 and for each additional 100 employees the complexity factor shall increase by .5; and

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<sup>37</sup> Comments dated May 2, 2002, from the Public Interest Counsel.

<sup>38</sup> Comments dated May 2, 2002, from 7-11, Inc.

<sup>39</sup> Comments dated May 2, 2002, from Port of Houston Authority.

An evaluation by the TNRCC of the state and federal regulations assigning a complexity weight or value to those requirements.<sup>40</sup>

Another proposal was that the complexity factor of 5 would include facilities subject to at least two of the following: Federal Operating Permit (FOP major source), Prevention of Significant Deterioration (PSD) Air Permit (major source), New Source Performance Standard, NESHAP/MACT standard, Acid Rain Program, Texas Pollutant Discharge Elimination System (TPDES) Wastewater Discharge Permit, RCRA TSDF Permit, Radioactive Material Disposal License, and Large Quantity Generators of Hazardous Waste. The complexity factor of 3 would include any facilities subject to one of the above plus any one of TPDES Storm Water Discharge Permit, UIC Permit, Air Permit (non PSD, non FOP but not Permit by Rule), and other similar agency issued permits, or any two of the TPDES Storm Water Discharge Permit, UIC Permit, Air Permit (non PSD, non FOP but not Permit by Rule), and other similar agency issued permits. The complexity factor of one would include all others.<sup>41</sup>

*On the values set forth in the compliance calculation:* As entities continue to improve their environmental programs, they should be able to reduce the impact of violations from years past. Thus, there should be a gradual decrease in the point values given to violations that are older. For example, a major violation worth 100 points in the compliance calculation now, could be worth 80 points in two years, 70 points in three years, 55 points in four years and 40 points in five years. This system would still allow for repeat violators to be punished at the full point value as is suggested in the compliance calculation.<sup>42</sup>

*On the weight to be given positive components:* Divide the total compliance number (attained after adding together all the violations, then dividing by the complexity factor & number of investigations) by half if the company has an EMS in place.<sup>43</sup>

Also suggested was that in addition to the discretionary mitigating factors, the TNRCC should

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<sup>40</sup> Comments dated May 2, 2002, from the Association of Texas Intrastate Natural Gas Pipelines.

<sup>41</sup> Comments dated May 2, 2002, from Thompson & Knight, LLP.

<sup>42</sup> Comments dated April 30, 2002, from Cantey & Hanger, LLP.

<sup>43</sup> Comments dated May 2, 2002, from Waste Management of Texas, Inc.

subtract 10 from the final compliance score when an entity conducts an environmental audit of its site and subtract 25 from the final score when an entity implements an environmental management system at its site.<sup>44</sup>

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<sup>44</sup> Comments dated May 2, 2002, from Birch & Becker, LLP, on behalf of the City of Garland, Greenville Electric Utility System, the City of San Antonio, and San Miguel Electric Cooperative, Inc..

*On an ownership change during the compliance period:* The rule language should be changed to read: “Where a site has undergone a change of ownership during the compliance period, the compliance history attributable to the time when the site was owned or operated by previous owners shall be used to calculate a site classification under 60.3, or to designate the new owner as a repeat violator as defined in that section, only where the executive director has made a finding that a previous owner retains a substantial interest in or control over the site, or that the changes of ownership was caused by the prior owner for the purpose of avoiding the impact of the site compliance history.”<sup>45</sup>

Also suggested on this topic was that the classification of compliance history for a recently acquired site should not be included or considered as part of the classification of compliance history of the new owner. A distinction would be made for new sites - a site rated as a poor performer under a prior owner would not be subject to the provisions of 60.3 (a)(3) (Poor Performers and Repeat Violators) for 3 years after ownership change. If after 3 years, the site achieves a compliance history rating of average or high, then the compliance history components resulting from the prior owner would be deleted from the site compliance history. If after 3 years, the site fails to achieve a compliance rating of average or high, the compliance history components from the prior owner would not be deleted from the site compliance history.<sup>46</sup>

*On inspections:* The rule should be changed to count inspections that have been performed by other regulatory bodies, including the EPA, for purposes of the compliance calculation.<sup>47</sup>

*On repeat violators:* Complexity factors should be used to determine the threshold at which a person becomes a repeat violator, i.e., the number of violations required to designate a person as a repeat violator should be equal to the entity’s complexity factor plus one.<sup>48</sup>

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<sup>45</sup> Comments dated May 2, 2002, from 7-11, Inc.

<sup>46</sup> Comments dated May 2, 2002, from Vinson & Elkins, LLP.

<sup>47</sup> Comments dated May 2, 2002, from Lloyd, Gosselink, Blevins, Rochelle, Baldwin & Townsend, P.C., on behalf of the Lone Star Chapter, Solid Waste Association of North America, Allied Waste Systems, Inc., BFI Waste Systems of North America, Inc., and the National Solid Wastes Management Association Texas Chapter.

<sup>48</sup> Comments dated May 2, 2002, from Port of Houston Authority.



Also suggested in this category was that repeat violators should be classified in three tiers: highly complex sites, with a complexity factor of 5, that had four or more major violations during the compliance period would be classified as repeat violators; moderately complex sites, with a complexity factor of 3, that had three or more major violations during the compliance period would be classified as repeat violators; any other sites, with a complexity factor of 1, that had two or more major violations during the compliance period would be classified as repeat violators.<sup>49</sup>

Another proposal was that the following criteria for repeat violators should be added:

- Only include violations incorporated into a TNRCC order or court order that caused a significant adverse effect to human health, safety and the environment;
  - The violations must be attributed to the same owner/operator;
  - The violations must be of an identical or similar nature and affecting the same unit or facility;
- and,

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<sup>49</sup> Comments dated May 2, 2002, from the Public Interest Counsel.

Repeat would mean occurring more than three times over a five year period and reflects a willful indifference or intentional disregard for compliance with the particular requirement.<sup>50</sup>

*On commenting on compliance history:* The process should include publishing the initial classification of each site in the Texas Register. Any person wishing to challenge the classification of a site would notify the director in writing within 30 days after publication. The challenge would set forth the basis for the dispute and provide all the documentation necessary for a reconsideration. If someone other than the owner is challenging the classification, then the owner would be notified and provided a copy of the challenge within 14 days of the TNRCC's receipt and would have 14 days to respond to the challenge. Within 30 days of receiving the reply or 45 days from receiving the challenge, the executive director would notify the challenger and owner of the decision. A motion to overturn the executive director's decision could be filed within 10 days of its issuance. Annual reviews of the classification would be subject to the same review process, but the challenge would be limited to evidence resulting from events from the last classification.<sup>51</sup>

## **V. Adoption of 30 TAC §60.2-60.3 and the Future of Compliance History**

As of the date this paper was submitted, the comment period had expired for proposed rules 30 TAC §60.2-60.3, but the TNRCC had not yet published the comments, its response to comments, or the final rules. As evidenced from the summary of comments, there will most likely be a number of changes on how the TNRCC classifies and uses compliance history. The TNRCC has already indicated there may be flexibility on some of these issues, including, but not limited to: complexity factors; criminal violations; and a return to a 5-level classification. However, as certain legislators have indicated that the TNRCC has not been responsive in this rulemaking to the goals of H.B. 2912's subsection on compliance history, it is also likely that the Texas legislature will revisit this legislation in the 2003 session.

Between the time of adoption of 30 TAC §60.2 - 60.3 and the time of any amendments pursuant to legislation, the regulated community will have to implement a number of changes in order to prevent being classified as poor performers. One change, which the environmental community is already seeing, is the exponential growth of EMSs. More and more entities are implementing EMSs at their facilities because of the advantages they see in their day - to - day operations, and now because it will (hopefully) improve their compliance history rating. The growth of EMSs will continue into the foreseeable future, especially after the adoption of 30 TAC §60.2-60.3. Furthermore, entities will need staff dedicated to addressing the environmental issues that crop up daily, even hourly, including permitting, record keeping, reporting, monitoring, updating and

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<sup>50</sup> Comments dated May 2, 2002, from the Association of Texas Intrastate Natural Gas Pipelines.

<sup>51</sup> Comments dated May 2, 2002, from Waste Management of Texas, Inc.

maintaining equipment. The environmental mistakes made by entities will now have a much more detrimental effect on their ability to operate than in the past. Environmental errors are no longer something for which you can simply budget, but rather must be guarded against proactively so that permits are not revoked or restricted and enforcement penalties and orders are not enhanced.

More entities will commission annual environmental audits. These audits can be advantageous for two reasons: one, they can be counted as a positive component in an entity's compliance history; two, they can ensure that the entity is staying in compliance.

Finally, there will be a noticeable change in how entities interact with the TNRCC. Agreed Orders may become an endangered species as entities feel compelled to challenge initial enforcement actions in order to safeguard their compliance history rating. Since entities will be contesting the enforcement actions taken by the TNRCC in hopes of warding off an order, and since there will no longer be the enticement of Agreed Orders not becoming part of compliance history, the desire to enter into an Agreed Order with the TNRCC will dissipate. Even further, there will most definitely be an increase in contesting the merit of NOVs, instead of just counting them as a cost of doing business. The TNRCC has set out a process for contesting NOVs, and it will certainly be broken in by the end of the year. There may also be a swell of NOV contests brought for NOVs that were issued between September 1, 1999, and February 1, 2002 (the time frame between when 30 TAC §60.1 allows the TNRCC to consider NOVs and the effective date of the rule), as the recipients of the NOVs did not know the ramifications of the notices at the time they were issued. In addition to contesting enforcement matters, there will be a flood of regulated entities petitioning the TNRCC, in whatever manner is ultimately adopted in the rule, to reconsider their compliance history rating, as well as submitting evidence of the positive measures they have implemented at their facilities. Doubtless, these new rules will change, must change, the manner in which the regulated community deals with their daily operations.

## **A Grassroots Perspective on TNRCC'S Enforcement Problems and the Effectiveness of Sunset Reforms**

Pollution in Texas is at a dangerous level: each year thousands of Texans travel to emergency rooms with asthma or heart attacks from air pollution, undergo costly cancer treatments due to toxic contamination of neighborhoods, become prisoners in their own homes because of noxious odors from massive confined animal feedlots, or are routinely evacuated or required to shelter in place to avoid the health-threatening effects of upset emissions. Environmental indicators show that some pollution problems in Texas are not getting better—in many cases they are getting worse.

This paper examines the state of the Texas environment, trends in TNRCC enforcement, and four key Sunset reforms related to enforcement.

### **State of the Texas Environment**

In 2000, the Texas Sunset Advisory Commission summarized the results of its year-long study of TNRCC by stating that “[g]reater assurances of compliance with environmental standards by the regulated community are needed to adequately ensure the protection of Texan’s health and the environment.”<sup>1</sup> Environmental data available at the time showed that Texans were in great need of better enforcement and increased compliance with environmental standards. Texas ranked number one nationally in the release of almost every type of hazardous pollutant:<sup>2</sup>

- Total toxic releases from industrial sources
- Toxic air pollutants
- Carbon dioxide from fossil fuels
- Carbon monoxide (CO)
- Nitrogen oxide (NOx)
- Volatile organic compounds (VOCs)

Texas also ranked first in the number of facilities in significant non-compliance with Clean Water permits and classified a third of its rivers and streams out of compliance with federal Water Quality Standards. 260 out of every million Texans were burdened with an added cancer risk from hazardous air pollutants.

At the same time, Texas ranked 46<sup>th</sup> on per capita spending on the environment (air quality, drinking water) spending a paltry \$27.47 per person.

Instead of using increased inspections, enforcement orders, fines and penalties, and strategic civil and criminal suits to bring polluters into compliance, TNRCC decreased its reliance on these tools and increased emphasis on “voluntary compliance programs.” In fact, TNRCC’s most recent Strategic Plan states that two of the agency’s guiding principles are to promote and foster voluntary compliance with environmental laws, and to ensure that regulations promote flexibility in achieving environmental goals.<sup>3</sup> Texas environmental indicators show that TNRCC’s enforcement strategies are not working—many environmental conditions in Texas are either stagnant or worsening.

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<sup>1</sup> *Texas Natural Resource Conservation Commission Staff Report*, Sunset Advisory Commission, 2000, p.

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<sup>2</sup> EPA, *National Overview of 1997 Toxic Release Inventory*.

<sup>3</sup> *TNRCC Strategic Plan, State of the Texas Environment, Fiscal Years 2001-2005*, p.4.

The most recent data shows that Texas still leads the nation in total toxic releases from industrial sources, and that total TRI air releases have increased since 1997. While VOC and NOx emissions have decreased since 1997, sulfur dioxide and particulate matter have increased.<sup>4</sup> Texas remains the leading emitter of VOCs, NOx, has become the leading emitter of PM-2.5 and PM-10, and has the highest daily averages for ozone-season NOx and VOCs.<sup>5</sup> Texas is not even half way through ozone season this summer, yet nine of the communities monitored by TNRCC have already exceeded the eight-hour average ozone standard.<sup>6</sup> Two-thirds of Texans live in non-attainment or near-non-attainment areas—in the Gulf Coast region, only 16 percent of the population breathes air that meets federal health standards.<sup>7</sup>

Most Texans agree that stronger enforcement and less reliance on voluntary compliance are needed. When asked about mandatory versus voluntary pollution controls, 74% of Texans in a recent survey agreed that only by having mandatory regulations for companies will there be a guarantee in the reduction of pollution. Only 22% said that they supported voluntary systems to handle pollution. 74% of Texans believe either that the laws protecting the environment are not strong enough, or that the laws are not strictly enforced and should be.<sup>8</sup>

### Enforcement Trends

As the tables below show<sup>9</sup>, self audits (for which no fines or penalties can be assessed and which remain secret from the public and even most agency employees) are on the rise, while inspections, issuance of NOVs, and judicial order penalties are down.

Fiscal Year	Routine Investigations	Complaint Investigations	NOVs	Notices of Intent to Audit	Civil Judicial Orders
1996	64,069	7,940	12,096	44	44
1997	64,543	8,026	16,108	53	48
1998	61,481	7,692	13,353	81	51
1999	73,563	7,430	11,480	64	42
2000	69,318	7,799	12,918	104	32
2001	62,925	6,699	11,947	195	36

### Investigations

Total investigations have dropped steadily from FY 99 to FY 2001, with FY 2001 showing the least total investigations of any year examined. This is true even though inspections of petroleum storage tanks increased from an average of about 5,800 per year in FY 96-98 to over 7,300 per year in FY 99, 2000, and 2001.<sup>10</sup>

<sup>4</sup> *Toxic Release Inventory 2000*, Executive Summary, Table ES-3, and *TNRCC Strategic Plan, State of the Texas Environment, Fiscal Years 2003-2007*, Table 1, "Scorecard for the State of the Texas Environment," p. 12.

<sup>5</sup> Environmental Defense, *Scorecard*, available at [www.scorecard.org/rankings](http://www.scorecard.org/rankings)

<sup>6</sup> Data from TNRCC's web page, [http://www.tnrcc.state.tx.us/cgi-bin/monops/8hr\\_4highest](http://www.tnrcc.state.tx.us/cgi-bin/monops/8hr_4highest)

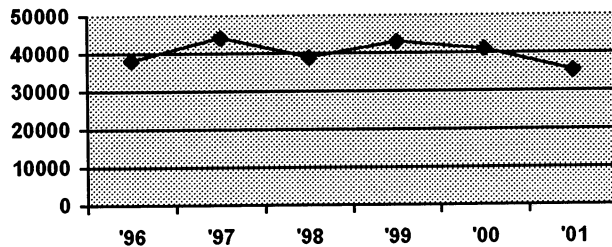
<sup>7</sup> *TNRCC Strategic Plan Fiscal Years 2003-2005*, p. 13.

<sup>8</sup> Tarrance Group, 2000.

<sup>9</sup> *TNRCC Final Annual Enforcement Report, Fiscal Year 2001*, p. 7.

<sup>10</sup> *TNRCC FY 2001 AER*, p. 5.

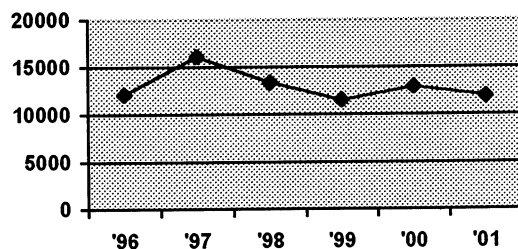
**Total Inspections FY 96-01**



### **NOVs**

The number of NOVs issued in FY 2001 are lower than in any other year from FY96-2001 except FY99. TNRCC's Annual Enforcement Report (AER) states that in 2001, 95% to 99% of facilities were found to be in compliance following investigations. However, TNRCC's definition of "compliance" discounts as "minor" all NOVs not resulting in formal enforcement action and thus not worthy of causing a facility to be considered out of compliance.<sup>11</sup> For an accurate assessment of compliance, TNRCC should include NOVs; the 77<sup>th</sup> Legislature made clear its intent for NOVs to be considered part of a facility's compliance history.

**Total NOVs**



### **Administrative Penalty Orders**

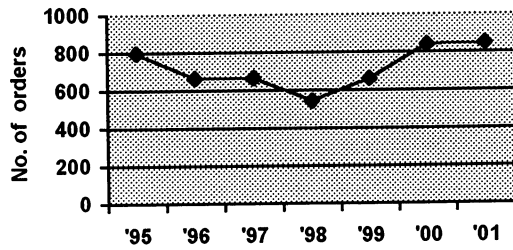
While the number of administrative orders has increased in the last few years, the average penalty assessed per order has generally declined. There has been a similar decline in the average penalty due per order, that is, the actual penalty paid, minus the amount deferred, minus the amount offset in exchange for a supplemental environmental project. On average, less than half the penalty assessed was actually required to be paid to the state general revenue fund in FY 2001.

Deferrals reflect penalties deferred contingent on the violator carrying out certain actions. Penalty "offsets" are granted in return for the violator agreeing to use the money on a supplemental environmental project (SEP). Between FY 1995 and FY 2001, approximately \$ 22 million in penalties that would have otherwise been paid to the state general revenue fund were either deferred or waived in lieu of SEPs. TNRCC has steadily increased the relative amount of penalty that can be offset through a SEP, even though the offsets are often inconsistent with the Commission's policy of requiring direct environmental benefit for a substantial penalty offset.

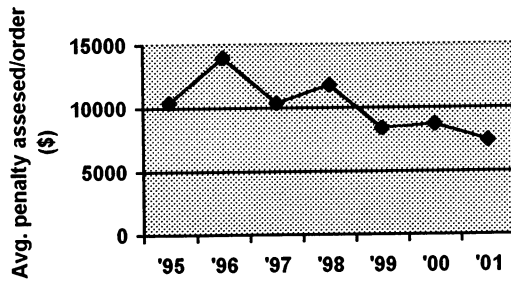
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<sup>11</sup> TNRCC FT 2001 AER, p. 4.

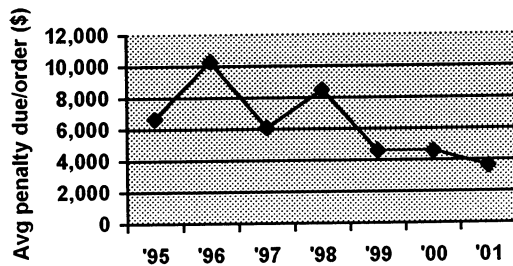
### Trends in Administrative orders



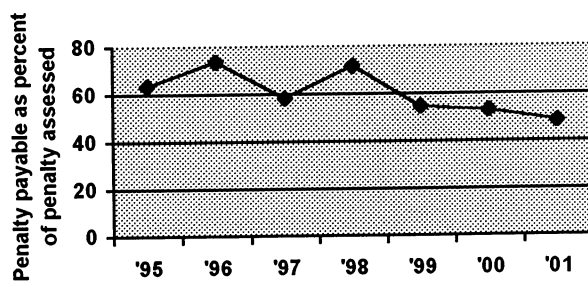
### Trends in assessed penalties



### Trends in penalties due



### Trends in Deferrals and SEP offsets



### Sunset Reforms

Out of frustration with TNRCC's inability or unwillingness to curb unhealthy levels of pollution, over 100 small community groups representing thousands of Texans came

together with statewide environmental, religious, consumer, and health groups representing over a quarter million Texans to form the Public Interest Sunset Working Group. PISWG adopted a 10-point reform agenda for TNRCC reform (Appendix 1) that included several demands for better enforcement.<sup>12</sup> PISWG and its later incarnation as the Alliance for a Clean Texas (ACT) not only pressured TNRCC to better enforce existing environmental rules and laws, but also advocated for a legislative package of reforms throughout TNRCC's Sunset review during the 77<sup>th</sup> session.

Out of the many reform components that ACT focused on during the Sunset review and legislative process, there were four major reforms ACT supported in HB 2912 (the TNRCC Sunset bill) related to enforcement: defining and using compliance history in permitting and enforcement decisions, creating an independent Office of Public Interest Counsel (OPIC), allowing the use of citizen-gathered information, and protecting against cumulative impacts of pollution.

### **Compliance History**

The Sunset Advisory Commission wrote in the spring of 2000 that "TNRCC has no system for judging compliance history collectively and cannot compare individual entities' performances. The minimal information compiled by the agency on "Enforcement Against Entities with Prior Orders" "could suggest that the agency's enforcement actions are not successful in bringing violators into compliance."<sup>13</sup> Additionally, the Advisory Commission noted that "while TNRCC could hold entities accountable through its permitting process by denying or not renewing permits for chronic poor performers...to date no permit has been denied for this reason."<sup>14</sup>

The Sunset Commissioners voted to require TNRCC to develop a common definition of compliance history and use that history in future permitting and enforcement decisions, as well as decisions such as whether a regulated entity will receive surprise or announced inspections or be able to participate in "innovative" programs. ACT supported the inclusion of past NOV's as part of the compliance history, and NOV's were eventually included in HB 2912's list of compliance history components. In December 2001, the TNRCC Commissioners adopted a rule that allowed compliance components for the previous five years to be considered in permitting, enforcement, and certain other decisions. One day before the rule was adopted, Representative Warren Chisum requested an AG opinion on the constitutionality of rule and argued that polluters' slates should be wiped clean. The Texas Attorney General's Office issued an opinion on June 24, 2002 supporting the TNRCC's right to include past NOV's in the compliance history, stating that "...the compliance history rule applies to programs designed to protect the public health, safety, and welfare, and the Legislature is not precluded by article 1, section 16 of the Texas Constitution from enacting retroactive statutes that are necessary to safeguard these interests."<sup>15</sup>

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<sup>12</sup> For example, *10 Demands for a True Texas Environmental & Public Health Agency* states that "The agency must stop issuing permits and permit renewals to violators of environmental laws... The agency must conduct surprise inspections... All major facilities must be inspected annually. ... The new agency must make violators pay fines that offset the economic advantage gained by the violators. ... The agency must consider environmental justice, cumulative effects, and land use compatibility in all permitting decisions."

<sup>13</sup> Sunset Advisory Commission, *TNRCC Staff Report*, 2000, p. 25.

<sup>14</sup> Sunset Advisory Commission, *TNRCC Staff Report*, 2000, p. 24.

<sup>15</sup> Office of the Attorney General John Cornyn, Opinion No. JC-0515, June 24, 2002 (available at <http://intranet1.oag.state.tx.us/opinions/jc/JC0515.pdf>)



While ACT supports the inclusion of past NOV's as a compliance component, there are several problems with the rule—specifically, the rule limits its review to the legal entity in a permit or permit application. This creates a loophole that enables polluters and their subsidiaries to evade scrutiny under the new model by changing corporate names or creating new subsidiaries. (See Appendix 2 for ACT comments on the rule.)

The second compliance rule—how the before-mentioned components will be weighted and used to make permitting and enforcement decisions—is currently being revised and is scheduled to be proposed for adoption at the August 2002 Commissioners' agenda.

### **Independent OPIC**

OPIC is charged with representing the public in permitting, enforcement, and rulemaking decisions by TNRCC. With only staff seven attorneys, one staff support person, one intern, and only 10% of the commission budget, OPIC "cannot fulfill its statutory duty to represent the public interest in all proceedings before the Commission," according to the Sunset Advisory Commission's findings.<sup>16</sup>

The Sunset report explains additional factors limiting OPIC's ability to carry out its duties in regard to enforcement, permitting, and rulemaking: the Public Interest Counsel is hired by the Commission and relies on the Commission for its budget and staff, and OPIC is statutorily prohibited from appealing a decision of the Commission.

While the TNRCC Executive Director and his staff are put in the position of defending the applicant's permit during contested case hearings, OPIC has to be able to present a broader view of the public interest. Similarly, in rulemakings and enforcement decisions, OPIC needs independent technical help to wade through complex economic and scientific factors to arrive at the best solution for the general public.

HB 2912 did not allow OPIC to become fully independent, but it does allow OPIC to hire its own independent technical experts. However, no funding was appropriated for this purpose. OPIC receives a substantially smaller budget than other agency's public counsels do and receives substantially less than the Office of Public Assistance (\$200,000 less) or the ED's general counsel (\$900,000 less).

HB 2912 established a joint interim committee charged with making recommendations regarding OPIC's independence and authority to appeal Commission decisions. The committee has held two public hearings and will make its recommendations at a third and final hearing in the fall of 2002. The right to appeal and budget independence for OPIC will help ensure that the public is represented in enforcement decisions.

### **Citizen-Gathered Information**

Texans across the state routinely complain about TNRCC's lack of response to complaints and failure to punish law-breaking polluters. Air and waste complaint investigations decreased from FY 1995 to FY 1999, and a greater percentage of those complaints were classified by the agency as low priority. In fact, TNRCC regional staff report that complaints received after hours are difficult if not impossible to address because investigations occur only during regular business hours.<sup>17</sup> The Sunset Advisory

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<sup>16</sup> Sunset Advisory Commission, *TNRCC Staff Report*, 2000, p. 67.

<sup>17</sup> Sunset Advisory Commission, *TNRCC Staff Report*, 2000, p. 81-82.

Commission concluded that “the lack of TNRCC resources to inspect every regulated facility makes citizen reports of potential violations of the state’s pollution laws a valuable compliance tool... Commission policy and practice also limit the use of resources that could assist the agency’s compliance efforts, including the use of credible citizen-gathered evidence.”

ACT and its member grassroots groups pushed for legislative changes allowing the agency to use citizen-gathered information for enforcement. HB 2912 states that TNRCC may initiate enforcement action based on citizen-gathered information. The bill specifically states that TNRCC “may initiate an enforcement action...based on information it receives from a private individual if that information, in the commission’s judgment, is of sufficient value and credibility to warrant the initiation of an enforcement action.” If citizen-gathered information is relied on by TNRCC to prove an enforcement case, the information must have been collected in accordance with Commission protocols. Previous to passage of the bill, TNRCC policy since around 1995 had been to NOT accept this type of citizen evidence and to require that TNRCC staff personally verify a violation.

TNRCC Commissioners adopted a rule implementing this section of HB 2912. TNRCC has developed a brochure and a web page and will do some regional trainings to help the public understand how to submit evidence. However, hurdles remain significantly high for submitting information TNRCC will consider “credible.” In order for information to be guaranteed credible, the gatherer must know and comply with one of 14 protocols listed on TNRCC’s web site. Some of these protocols require formal training, several are hundreds of pages long, and electronic copies of several of the protocols do not exist. In order for evidence to be used in an enforcement action, the gatherer must sign an affidavit stating that she or he knew and followed all appropriate protocols in gathering the information.

TNRCC has taken a step forward in accepting “credible” citizen evidence.” Further steps are needed order to fully take advantage of using the eyes, ears, and noses of residents across the state to bring violators into compliance. (See ACT comments on the Citizen Evidence Rule, Appendix 3)

### **Cumulative Impacts**

Many low income communities and communities of color are subject to breathing “toxic cocktails”—emissions from several pollution sources mixed together in an airshed. These communities—and especially those near the refineries on the Gulf Coast—have been desperately searching for a way to protect themselves from this deadly pollution. Currently, the TNRCC will not consider information relating to releases from facilities other than the facility that is the subject of a permit. This results in the commission underestimating the risk to the environment and to public health in areas where there discharges, releases or emissions from multiple facilities.

Health and environmental impacts from a proposed facility are not confined to the risks associated to the emissions or discharges from that specific plant, but are part of the total risks from all emissions and discharges in an area. The combined emissions and discharges may pose greater risks because the total amount the public and environment are exposed to is greater and/or because certain substances in the discharges and emissions could combine in synergistic ways to pose greater risks.

During the 77<sup>th</sup> session, Representative McClendon introduced HB 38, a bill that directed the TNRCC to develop a policy to better protect the public from cumulative impacts from multiple facilities sited within an area and place greater priority on enforcement and monitoring in such areas. This bill did not become part of HB 2912 and failed to pass on its own. However, a version of HB 38 was incorporated into HB 2912 requiring TNRCC to “develop and implement policies, by specific environmental media, to protect the public from cumulative risks in areas of concentrated operations and give priority to monitoring and enforcement in areas in which regulated facilities are concentrated.”

TNRCC has initiated no rulemakings to develop and implement these required policies and is currently not scheduled to. TNRCC must develop policies for addressing pervasive environmental justice problems in Texas.

### **Conclusion**

Pollution continues to have a severe impact on public health and the environment. Voluntary approaches to compliance are not working. TNRCC should increase fines and penalties to ensure that any economic benefit of noncompliance is recapped and prevented in the future, increase inspections and response to complaints in priority areas, and decrease some of the barriers to effective use of citizen-gathered evidence.

# APPENDIX 1



## 10 Demands for a True Texas Environmental & Public Health Protection Agency

**1. Create a new Texas agency whose mission is to protect the public health and environment in Texas**

*The Texas Natural Resource Conservation Commission must be re-created and given a new name that reflects the mission of the agency. The mission of the agency is NOT to promote economic development.*

**2. The agency must be accountable to the people of Texas and unable to be influenced by polluter money.**

*In order for citizens to trust in the integrity of agency policies, money politics in agency decisions must be neutralized. There must be strict prohibitions in the law preventing conflicts of interest. The agency must not serve as a consultant to any regulated business in permitting or enforcement activities. The agency must not spend time "perfecting" polluters' permits at tax-payer expense.*

**3. No business has the right to pollute, but all Texas residents have the right to clean air and water.**

*The agency must enforce crucial citizen rights such as the right to:*

- *participate in hearings on a level playing field with polluting industries*
- *enforcement of environmental laws by citizens and local governments*
- *have complaints investigated quickly and remedied in a short time-frame*
- *easily access data from the agency*
- *know which pollutants citizens are being exposed to and when, where, and how they are being exposed*

**4. The goal of issuing pollution permits must be to reduce and eventually eliminate pollution.**

*The agency must stop issuing permits and permit renewals to violators of environmental laws. Cumulative effects of pollution from multiple sources in one area must be factored into all permitting.*

**5. The agency must adequately review but not support polluters' permits in hearings.**

*The agency is accountable ONLY to the citizens. It must only present evidence in a hearing when there is no other party to do so.*

**6. The Office of Public Interest Counsel must be independent, adequately funded and have the ability to appeal agency decisions in court.**

*Independence and the authority to appeal, combined with a budget sufficient for witnesses and appellate procedures would make OPIC the type of effective advocate on behalf of the environment and public health that's needed.*

**7. The agency must protect civil rights and actively ensure that low income communities and communities of color do not bear a disproportionate share of pollution.**

*The agency must consider environmental justice, cumulative effects, and land use compatibility in all permitting decisions.*

**8. The funding structure for the agency must ensure adequate funding of core programs and incorporate sufficient incentives for pollution reduction.**

*Texas ranks 46<sup>th</sup> in the nation in per capita spending on environmental protection and must do better.*

**9. The agency must have the funding and the legislative directive to PREVENT pollution problems by inspecting and monitoring polluting facilities and enforcing environmental laws.**

*The agency must conduct periodic surprise inspections. All major facilities must be inspected annually. Permits must be permanently revoked after three significant violations. The new agency must make violators pay fines that offset the economic advantage gained by the violations.*

**10. The agency must seek input and advice from a broad range of perspectives (ie: include the public and not just industries) Advisory or working groups for rules and policies must be balanced.**

## **APPENDIX 2**

**COMMENTS OF THE ALLIANCE FOR CLEAN TEXAS (ACT)  
ON PROPOSED COMPLIANCE HISTORY COMPONENTS RULE  
RULE LOG NO. 2001-070-060-AD**

Our comments are divided into three general sections:

1. Circumvention of Statutory Directives and Legislative Intent
  - a. Failure to include past NOV's
  - b. Inclusion of irrelevant factors
  - c. Failure to include other clearly relevant and statutorily authorized factors
2. Creation of a New Corporate Shell Loophole
3. Information Gathering

ACT does support the minimum five-year compliance period specified in proposed §60.1 (b).

**1. Circumvention of Statutory Directives and Legislative Intent**

**a. Failure to Include Past NOV's**

Proposed § 60.1(b)(7) states that only NOV's issued after February 1, 2002 will be included in an entity's compliance history. This is a blatant attempt to partially reinstate the "clean slate" provision of HB 2912 that was specifically rejected by the legislature. The "clean slate" provision was not in the House-passed version of HB 2912—it was added by the Senate Natural Resources Committee. However, the Senate sponsor of HB 2912 specifically removed the provision during debate on the Senate Floor (Amendment 1 to HB 2912), and it did not reappear in the conference committee report that was approved by both the Senate and the House.

No other provision of HB 2912 provides a basis for the "clean slate" approach to NOV's. Moreover, TNRCC's transparent attempt to rationalize this provision (i.e. the agency needs time to track and set evaluation procedures for NOV's) has no basis in law. Even if TNRCC cannot yet track NOV's via an automated database, that is woefully insufficient basis upon which to ignore clear legislative intent.

The phrase "*on or after February 1, 2002*" must be removed from proposed §60.1(b)(7). Further, this section should be clarified to include all violations that are "self-reported" to the agency: self-reported violations are essentially equivalent to (and clearly as meritorious) as notices of violation issued by the agency.

**b. Inclusion of Irrelevant Factors**

Proposed 60.1(b)(8), (10), (11) and (12) would allow TNRCC to include various factors that are completely irrelevant to compliance performance. Including these factors is contrary to the clear directives of HB 2912 regarding which factors must be part of compliance history.

In fact, Section 5.753(b) as added by HB 2912, provides that the compliance history "must" include certain factors; it does not say "at a minimum" or "include, but not limited to" certain factors and thus the agency does not have discretion to include the factors specified in 60.1(b) (8), (10), (11) or (12).

Without waiving the foregoing, even if § 5.753(b) were interpreted as giving TNRCC discretion to include additional factors, the items in the proposed sections specified above are *irrelevant* to compliance performance and there can be no justification for their inclusion. Neither a "notice of audit" (§ 60.1(b)(8)); having a voluntary on-site compliance assessment by the executive director (§ 60.1(b)(10)); participation in

a “voluntary pollution reduction program” (§60.1(b)(11)); or “description of early compliance with or offer of a product that meets future state or federal government requirements” (§ 60.1(b)(12)) are relevant to *compliance performance*.<sup>18</sup>

In fact, it is obvious from the preamble that these factors relate not to compliance performance, but rather to some general notion of “*commitment to environmental excellence*.” While indications of such a commitment are surely important to determining a company’s *intent* or approach, they are not in any way indicative of actual *compliance performance*. As such, there can be no reasoned justification for including them as components of compliance history.

TNRCC’s lack of a rationale, objective and non-arbitrary approach to consideration of factors outside the ones specified in § 5.753(b) is further evidence by the agency’s outright rejection of more relevant factors, such as compliant history and evidence that a facility has had to implement its emergency or contingency plan. Clearly, complaints *are* relevant to compliance performance, and they are recognized as such under current agency practice and rules.

Sections 60.1(b) (8), (10), (11) and (12) should be eliminated from the final rule. If §60.1(b)(9) is included, it should be clarified to include any review of the effectiveness of the entity’s environmental management system.

### **c. Failure to include other clearly relevant and statutorily authorized factors**

The preamble states that the proposed rule does not include notices of violation from EPA (even though these currently are part of air permit compliance histories), and that such NOV’s are not included because TNRCC does not have the “opportunity” to evaluate their merit.

ACT disagrees strongly with this approach. The statute does not distinguish between federal and state NOV’s, and EPA NOV’s should be included. If the entity against which the NOV has been issued believes the NOV is without merit, it can provide that information to TNRCC, which can, combined with information from EPA, evaluate the merit of the NOV.

The proposed rules would also include only those § 7.070 orders issued after February 1, 2002. ACT believes the statute is unambiguous: these orders are to be included in compliance history notwithstanding any other statutory provision (please also refer to the “clean slate” discussion above). While it may lead to an unexpected result for those who thought 7.070 orders would not be a part of their compliance history, that is not sufficient basis for ignoring a clear statutory directive.

Finally, two provisions of § 60.1(b) should be clarified. First, § 60.1(b)(5) should be clarified to explicitly include violations that are required to be reported under federal programs being administered by the state, as well as violations and enforcement actions by local governments that are enforcing state or federal environmental laws (e.g. Harris County Pollution Control District’s enforcement program; municipal enforcement of pretreatment requirements, etc.). This would include such items as discharge permit violations under the TPDES program or deviation reports under the Title V program). Second, § 60.1(b)(6) should be modified to include the type of investigation (announced or unannounced). This information is relevant to the likelihood that the investigation would uncover violations.

## **2. Creation of New Corporate Shell Loophole**

According to the preamble, TNRCC has determined that it will only look at the compliance performance of the entity as defined by its “legal name”, and not examine the performance of any parent, sister, daughter, or, presumably, subsidiary corporation. As noted in the preamble, this would be a change in existing agency practice.

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<sup>18</sup> The *results* of an on-site compliance assessment by the ED *would* be relevant and should be included in compliance history, but that is not what the proposed rule provides for. It provides that the mere fact that a compliance assessment occurred should be included in the history.



Such change is absolutely unwarranted, and is not justified by any statutory directive of HB 2912. In fact, HB 2912's performance based regulatory structure is, if anything, intended to be more, not less, comprehensive in the evaluation and use of compliance history. Poor performers may have several related operations, all of which are under essentially the same corporate umbrella, but which are "operated", at least on paper, by separate corporate entities, partnerships or other ownership forms. The full range of those operations should be included in a compliance history in order to give the agency an accurate picture of performance.

Instead, the proposed rule's new corporate shell loophole would allow a notoriously poor operator to use a variety of corporate names to avoid scrutiny. We strongly believe that the proposed rules gives regulated entities an additional incentive to create such alter-egos and that many companies will take full advantage of it. This is based on actual experience, such as past trends with waste management companies forming separate corporations for each landfill they own; poultry operation in East Texas and refining and chemical companies in the Gulf Coast, to mention a few.

Proposed § 60.1 (c), regarding changes in ownership, provides an even greater incentive. A company could change its legal name in the 4<sup>th</sup> year of the 5-year compliance period, and thereby avoid scrutiny of its statewide operations for the previous four years.

The final rule should eliminate this unwarranted, unjustifiable loophole, which threatens to undermine much of the value and intent of the entire performance-based regulatory structure. The final rule should reflect existing agency practice of considering compliance history of closely related corporate entities (parent, sister, daughter, common general partnership owners, etc.).

### ***3. Information Gathering***

The rule proposes to rely solely on the ICIS and OTIS systems for federal and other state's compliance history information. It also provides that decisions made with data from these sources are not "voided" by the subsequent discovery of enforcement orders, judgments or other information not in the database. ACT is deeply concerned that these databases may be out-of-date or otherwise inadequately maintained by other states and thus may lack the full information on compliance history of regulated entities with operations in other states. This section must be amended to:

- (1) require the regulated entity whose compliance history is under review to provide to TNRCC all enforcement orders, court judgments and criminal convictions relating to violations of environmental laws of other states;
- (2) provide that TNRCC will accept verifiable information from third parties regarding enforcement orders, court judgments or criminal convictions relating to violations of environmental laws of other states, Texas local governments<sup>19</sup>, and other Texas state agencies when reviewing an entity's compliance history in undertaking an action subject to this chapter.

To exclude this information would be arbitrary and capricious.

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<sup>19</sup> Especially where the local governments are enforcing state or federal law (e.g. Harris County Pollution Control Department enforcement actions; municipal enforcement of federal/state industrial pre-treatment requirements, etc.).

## **APPENDIX 3**

**COMMENTS ON PROPOSED §70.4  
ENFORCEMENT ACTION USING INFORMATION  
PROVIDED BY PRIVATE INDIVIDUAL -**

**SUBMITTED BY ALLIANCE FOR CLEAN TEXAS (ACT)**

**RULE LOG NO. 2001-029-070-AD  
October 9, 2001**

**VALUE OF INFORMATION GATHERED  
BY THE PUBLIC**

ACT supports the Texas Natural Resource Conservation Commission's ("TNRCC's") reliance on information gathered by members of the public in environmental monitoring, compliance and enforcement efforts. State agencies across the country, as well as the Environmental Protection Agency, have long recognized the value of volunteer environmental monitoring and information gathering. *See, for example, [www.epa.gov/volunteer/epasvmp.html](http://www.epa.gov/volunteer/epasvmp.html)*). Individuals often live adjacent to facilities and, therefore, have access to more timely day-to-day information about compliance at the facility, including compliance at night and on weekends, than does the TNRCC. In HB2912, the Legislature indicated its clear intent that the TNRCC change its policies and begin to utilize evidence gathered by the public to increase enforcement and compliance.<sup>20</sup>

TNRCC's adoption of rules acknowledging the Agency's ability to rely on information gathered by the public, however, will not be enough. The Agency will have to provide

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<sup>20</sup> In the past, citizens were routinely frustrated by the Agency's failure to accept and utilize the information they gathered. For example, individuals in Midlothian collected air samples in canisters according to TNRCC instructions. The Agency, however, did not retrieve and analyze those samples within the required "protocol" timelines.

information, training and support to the public in order to ensure that the enforcement partnership between TNRCC and the public is an effective one.

**RULES SHOULD NOT UNREASONABLY  
LIMIT DIRECTOR'S USE OF INFORMATION  
GATHERED BY INDIVIDUALS - § 70.4(c)(3)**

While ACT recognizes that evidence utilized in administrative or judicial enforcement proceedings must meet evidentiary standards, ACT is concerned that the proposed rule may unreasonably restrict the information available for use by the Director. Under HB2912 and the proposed rules, the Executive Director maintains the discretion to decide whether or not to take enforcement action based on any particular information. The proposed rules merely describe what information the Director may use as the basis for an enforcement action. Given this, the commission should be careful to not unnecessarily restrict the information that may be used by the Director to enforce environmental laws.

**A. Protocols Should Not Limit the Director's Use of "Credible Evidence"**

TNRCC must retain enforcement authority equal to that available to the Environmental Protection Agency in order to qualify for continued delegation of federal programs. Federal regulations provide that any "credible evidence" may be used to demonstrate violations of the Clean Air Act. 40 CFR 83.13-83.28 (Feb. 24, 1997). The preamble to EPA's credible evidence rules states:

[t]hese revisions make clear that enforcement authorities can prosecute actions based exclusively on any credible evidence, without the need to rely on any data from a particular reference test. . . . clearly providing that federally approved SIP test methods or Agency reference test

methods are not the exclusive means of establishing noncompliance . . .”  
*Id.* at 8316.<sup>21</sup>

EPA’s proposed credible evidence rule originally included lists of “presumptively credible evidence” and “presumptively credible monitoring methods.” *Id.* at 8316. The EPA deleted these lists from its final rule adoption, however, and stated:

After consideration of public comments, EPA had decided to delete these lists because they are potentially confusing and unnecessary. While EPA continues to believe that the listed evidence and monitoring methods are indeed credible, the Agency recognizes that both judicial and administrative tribunals routinely make determinations concerning the admissibility and weight of evidence on a case-by-case basis. *Id.*

Likewise, ACT is concerned that a limited list of protocols will be "confusing and unnecessary." The list of protocols could prevent the Director from taking enforcement action based on otherwise credible evidence simply because the evidence was “physical or sampling data” that was not collected in conformity with one of the listed protocols. It is impossible for TNRCC to include in its protocols all possible methods of physical or sampling data collection that could produce credible evidence. TNRCC should, therefore, be careful not to create an exclusive list.

To satisfy the federal requirement that the agency be able to take enforcement based on any "credible evidence" as well as HB2912's requirement that physical or sampling data have been collected in accordance with agency protocol, ACT suggests that the Commission adopt a protocol that recognizes the Director's ability to determine on a case-by-case basis whether or not physical or sampling data collected by individuals is "of sufficient value and credibility." Such a protocol should ensure that credible

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<sup>21</sup> Likewise, the Senate Report on the 1990 amendments to the Clean Air Act noted that “courts may consider any evidence of violation or compliance admissible under the Federal Rules of Evidence, and that they are not limited to consideration of evidence that is based solely on the applicable test method in the state implementation [plan] or regulation.” 135 Cong. Rec. S. 9650, 9655 (Aug. 3, 1998).

evidence, even if collected by means not contemplated in an existing agency protocol, may be considered by the Director on a case-by-case basis. Such a protocol would in no way require that Director to take enforcement action based on evidence he did not believe was credible.

ACT also notes that §70.4(c)(3) should be amended to delete the requirement that an individual submitting physical or sampling data be willing to submit a sworn affidavit demonstrating that they knew and followed relevant agency protocols. It is irrelevant whether the individual knew of the protocols. It is only relevant whether or not the physical or sampling data was collected in compliance with the protocols. The requirement could have a chilling effect upon citizen involvement.

#### **B. Protocols Should Be Available for Public Comment**

ACT believes that the heart of this rulemaking is the protocols that the public will be required to follow. The rule preamble states that the rule does not identify the protocols because they are numerous and apply to only certain types of cases. ACT and its members, however, clearly have an interest in ensuring that all reliable sampling and data collection methods are included in the list of protocols.<sup>22</sup>

The rule preamble also states that the agency's pamphlet on compliant policies and procedures will describe the agency's protocols. The draft pamphlet, however, includes no description of protocols or information regarding how to find out about the protocols.<sup>23</sup>

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<sup>22</sup> See, for example [www.bucketbrigade.org](http://www.bucketbrigade.org).

<sup>23</sup> The brochure does refer to a website, but there is nothing currently at the address.

The proposed protocols qualify as rules pursuant to the Texas Government Code. Tex. Gov't Code § 2001.003.<sup>24</sup> Because the list of protocols that the Agency will require the public to follow has not yet been proposed, the comment period should be extended to allow at least a thirty-day public comment period on the protocols. Tex. Gov't Code § 2001.023.

**C. Rules and their Implementation Should Not Create New Evidentiary Burdens.**

As noted by EPA, administrative and judicial tribunals routinely evaluate the weight and admissibility of evidence. While some information gathered by the public may not, in

itself, be sufficient to sustain an enforcement proceeding, this information may nonetheless be admissible and valuable. The rule preamble states that the “ED can pursue an enforcement action only if he/she knows the information he/she relies on will be admissible as evidence at the hearing.” The commission should be careful not to confuse the issue of admissibility with the issue of how much weight should be give particular information. Information gathered by the public should be acceptable for use in an Agency enforcement proceeding unless it is clearly inadmissible pursuant to the rules of evidence and the Texas Government Code.

The Texas Government Code specifically provides:

**§2001.081. Rules of Evidence**

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<sup>24</sup> “Rule”: (A) means a state agency statement of general applicability that: (i) implements, interprets, or prescribes law or policy; or (ii) describes the procedure or practice requirements of a state agency.” Tex. Gov't Code § 200.1003(6).

The rules of evidence as applied in a nonjury civil case in a district court of this state shall apply to a contested case except that evidence inadmissible under those rules may be admitted if the evidence is:

- (1) necessary to ascertain facts not reasonably susceptible of proof under those rules;
- (2) not precluded by statute; and
- (3) of a type on which a reasonably prudent person commonly relies in the conduct of the person's affairs.

Tex. Gov't Code § 2001.081. Information that does not meet the rules of evidence may, therefore, still be utilized in an administrative enforcement proceeding if certain conditions are met. The Agency should make clear that nothing in the proposed rule is intended to increase the evidentiary burden for the use of any information beyond what is required by the rules of evidence and Texas Government Code.<sup>25</sup>

## **TNRCC SHOULD PROVIDE THE PUBLIC WITH INFORMATION AND TRAINING**

The clear intent of HB2912 is to increase the TNRCC's enforcement capabilities through the use of information gathered by the public. The Sunset Staff Report noted that "[b]y accepting citizen-gathered evidence, the Commission would have another tool in its compliance process . . . ."<sup>26</sup> In order to fulfill this intent, the TNRCC must not only acknowledge its ability to rely on information gathered by the public in enforcement proceedings, but must make sure that the public is aware of the various types of information which may be useful to the agency in enforcement proceedings and is given training in how to collect such information.

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<sup>25</sup> Clearly, the standards for what citizen-gathered information may be used to show violations of environmental laws may not be more stringent than the standards applied by regulated industry to demonstrate that they are in compliance with environmental laws. In contested case hearings, the Agency routinely relied on testimony of permit writers in areas in which the permit writers have little expertise. The Agency and the ALJs rely on the Judges ability to weigh the value of the testimony.

<sup>26</sup> Sunset Staff Report 2000, Texas Natural Resource Conservation Commission at p. 83.



**A. Publicize Public/Agency Enforcement Partnership:** TNRCC needs to ensure that the public knows about the agency's change in policy and is aware that information the public collects may now be used in agency enforcement actions. ACT supports the development of a comprehensive brochure that explains the various types of information that may be used in enforcement - including photos, video, and testimony as well as physical or sampling data.

The draft brochure, while a good initial step, does not contain enough detail to be helpful to members of the public that want to assist the agency with its compliance and enforcement efforts. The brochure should contain more specific information regarding what types of information would be useful for detailing various environmental violations. In addition, it should detail how and within what time frames, the Agency will respond to publicly submitted information regarding violations. Finally, it should identify agency staff, trained in monitoring and data collection, who can provide assistance to members of the public.

**B. Explanation of Protocols:** The brochure should explain, in simple terms, what the agency protocols require and how the public can comply with them. Upon request, the Agency staff provided a draft, partial list of protocols. Many of the items on the list were reference documents that were hundreds of pages long and contained very technical language. TNRCC needs to ensure that it translates any protocols it requires the public to follow into easy to understand, step-by-step guides. The Private Well Disinfection and Water Sampling protocol, which was on the list provided by the

Agency, provides an example of such a guide. (See, [www.tnrcc.state.tx.us/admin/topdoc/gi/005.pdf](http://www.tnrcc.state.tx.us/admin/topdoc/gi/005.pdf))

**C. Training:** TNRCC should provide, or contract with others to provide, training for the public on how to comply with agency protocols. Some existing groups, such as the Bucket Brigade and Texas Watch, have expertise in training the public in environmental monitoring and might be able to perform these trainings for the Agency. The Agency should, however, cover the costs of such trainings.<sup>27</sup> The training should be available at various locations across the state. In addition, the TNRCC should have specified staff available to advise individuals regarding compliance with protocols.

**D. Equipment/Testing:** To the extent specific equipment is required to comply with monitoring protocols, TNRCC should provide assistance in making this equipment available. TNRCC's brochure should provide lists of where such equipment may be obtained and provide rental or loan programs for such equipment.

Likewise, the Agency should provide assistance in covering lab costs. Citizens may have the time and expertise to collect credible evidence, but not have the extra money to cover additional costs.

**E. Program Monitoring/Reporting:** TNRCC should monitor and report on the effectiveness of the citizen evidence program. TNRCC should track the information submitted by the public, the number of enforcement actions brought based on such information and the number of times information is submitted that is not sufficient to meet Agency protocols. If evidence is routinely submitted that the Agency cannot rely

upon, the summary of protocols available on the web should be revised to clarify the required procedures and additional training should be provided.

### **TNRCC SHOULD REVISE ITS COMPLAINT RESPONSE PROCEDURES - § 70.4(e)**

The rule preamble notes that any information submitted by individuals that is not sufficient for an enforcement proceeding will be treated as a complaint. The preamble states that the Agency is taking this opportunity to review its complaint procedures and is considering whether to give earlier notice of the status of the Director's response to complaints. ACT encourages the Commission to revise its complaint response procedures to address the following concerns:

**A. Early Written Response:** TNRCC should ensure that a written response is provided to any person submitting a complaint, information or evidence within ten days. The response should include a description of what action has been or will be taken by the Agency. The response should also include a copy of TNRCC's compliance/citizen-evidence brochure (unless the person has already received a brochure.) A follow up response should be provided when Agency investigation of the complaint is complete.

**B. Categorization of Complaints:** The Agency should closely evaluate how it categorizes complaints and ensure that any complaints about violations that might have a health impact - whether acute or chronic - are responded to within 48 hours.

**C. Reasonable Investigation and Utilization of Information:** When the agency receives information from individuals that may not comply with protocols, the agency

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<sup>27</sup> In the past, citizens have been willing to attend smoke school and learn how to read opacity emissions from facilities in their neighborhoods. When a fee was charged for these classes, however, the individuals could not longer afford to attend.

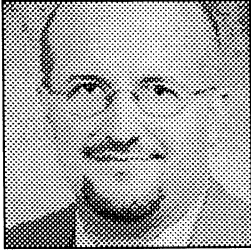
should investigate and utilize the information to the fullest extent possible. For example, water quality sampling data may not identify violations at a specific facility, but may identify a stream segment that should be included on the 303(d) list.

In performing investigations, investigators need to consider the timeliness of their response to a complaint. For example, investigators should not dismiss complaints simply because the odor effects complained of have moved off of the complainant's property by the time the investigator arrives. Wind conditions may have shifted, but clearly a nuisance odor noted anywhere off of the facility should be cited as a violation. Current policy is to not cite a violation if the odor is not on the complainant's property at the time the investigator arrives – even if the odor is present down the street.

### **CONCLUSION**

While the public information/evidence program is not a substitute for strong permits, thorough inspections and enforcement by the Agency, the program should increase environmental compliance and enforcement. ACT and its members are willing to do their part to increase monitoring and information collection. TNRCC must also do its part, through training and support, if the public monitoring program is going to be an effective one.

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Segal



### **Scott Segal**

**March 12, 2002 -- Testimony of Scott H. Segal, Bracewell & Patterson, L.L.P., before the Senate Subcommittee on Superfund, Toxics, Risk and Waste Management, Committee on Environment and Public Works. Hearing on the Status of the Enforcement Program of the U.S. EPA**

Scott Segal is a partner in the Government Relations and Strategy Section of the law firm of Bracewell & Patterson, LLP. For the last thirteen years, Scott has focused on environmental and energy policy development in Washington, D.C., representing a range of industry and non-profit interests. He serves as spokesman for the Electric Reliability Coordinating Council.

On Clean Air Act issues, Scott is widely published and quoted. He has argued several major Air Act cases before the Circuit Court of Appeals for the District of Columbia. He serves as outside general counsel to the Council of Industrial Boiler Owners.

Scott also is a frequent writer and speaker on environmental topics. He is an adjunct professor teaching environmental law and policy development at the University of Maryland (University College). He has appeared on Fox News, CNN, PBS, NBC, and NPR on environmental and public policy topics. For a publications list, [click here](#).

Scott Segal is a graduate of Emory University (BA) and the University of Texas School of Law (JD). He lives in Washington, D.C.

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## **Clarification of New Source Review and Environmental Enforcement: A Few Considerations**

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Distinguished superconferencers, in keeping with the classical theme of the Forum, let me just say that I come today neither to praise NSR nor to bury it. Thanks for allowing me to present some thoughts today regarding New Source Review clarification specifically and EPA enforcement generally. My name is Scott Segal, and I am a partner at the law firm of Bracewell & Patterson. In that capacity, I have represented clients here in Washington on environmental policy matters for thirteen years. I have worked with a wide variety of federal agencies, and have become familiar with a number of industrial sectors. I have represented private corporations, trade associations, and non-profit organizations. In addition, I serve on the adjunct faculty of the University of Maryland (University College) in the area of Science and Technology Management.

I represent many groups that have taken an active interest in environmental enforcement matters. With respect to the current need to clarify the New Source Review, or NSR, program, I specifically represent the Electric Reliability Coordinating Council, a group of six electric utilities. Further, I serve as outside counsel to the Council of Industrial Boiler Owners, a trade association whose members represent some twenty industrial sectors. While I have learned much from these clients, the views I express today are my own.

Of course, as I am sure you have heard, the U.S. EPA made a series of announcements on June 13, 2002, regarding clarification of NSR. While the EPA statements are by no means definitive, they did constitute a step in the right direction. After all, it is often said that the first step in solving a problem is to admit (finally) that you have one. With respect to the perverse incentives created by muddying the waters on routine maintenance, the EPA has now admitted the problem and committed to fixing it. In the last attachment, I refer directly to EPA's recent actions. But first, let me state the case for clarity in the NSR program.

### **1. Environmental Indicators Show Marked Improvement: the Example of Clean Air.**

In the United States today, we have much to be proud of when we contemplate the success of environmental programs. It has often been observed that at the outset of the current federal environmental programs in the early 1970's, our problems were substantial and obvious. It stands to reason that at that time, and for a period following, our environmental enforcement priorities were also fairly obvious. In many ways, as milestones of environmental achievement have been reached, our adversarial enforcement model has not caught up.

It is clear that substantial environmental progress has been made since the adoption of major control statutes. Using clean air progress as an example, we can see measurable success. An analysis of federal government data earlier this year demonstrates astounding reductions. The analysis tracks air quality gains and energy consumption during the 30-year period from 1970-1999. It is derived solely from data produced by the U.S. Environmental Protection Agency (EPA) and the Energy Information Administration (EIA) of the U.S. Department of Energy.

The nationwide data show that since 1970:

- Carbon monoxide (CO) levels have dropped 28 percent;
- Sulfur dioxide (SO<sub>2</sub>) levels have decreased 39 percent;
- Volatile organic compound (VOC) levels have declined 42 percent;
- Particulate matter (PM-10) levels have fallen 75 percent;
- Airborne lead levels have declined 98 percent; and
- Overall energy consumption has increased 41 percent - by sectors, commercial energy consumption grew by 80 percent, residential energy by 34 percent, and industrial energy consumption by 21 percent.[1]

These gains are evident even in challenging air emission situations, such as the State of California. As Peter Venturi, a California State Air Resources Board official stated at a recent EPA hearing in Sacramento, "The system is working," noting that smog-forming emissions from businesses in the state have declined by 50% in the past 20 years despite a 40% increase in population and commensurate industry growth.[2]

The acid rain reductions, contained in Title IV of the 1990 CAAA, are of special importance because they in part serve as a model for the Administration's recent Clear Skies Initiative and for legislation pending before this Committee. Title IV has, by all accounts, been highly successful. Gregg Easterbrook, a senior editor at the New Republic, wrote last summer that the results have been "spectacular. Acid rain levels fell sharply during the 90's, even as coal combustion (its main cause) increased." [3]

Notwithstanding these successes, there remain some difficult problems. Ozone levels, while improving, are still in violation of the NAAQS in substantial sections of the country. I think it's important to say here that while acid rain is primarily, though not exclusively, a power plant problem, ozone is primarily a mobile source problem today. Cars, trucks and buses account for twice the NO<sub>x</sub> produced by power plants, which in turn have no role in VOCs, the other smog precursor. That mobile sources account for the greater portion of pollutants of concern to human health is clear. EPA itself has observed that, "in numerous cities across the country, the personal automobile is the single greatest polluter, as emissions from millions of vehicles on the road add up. Driving a private car is probably a typical citizen's most 'polluting' daily activity." [4]

Much has been written recently about the effects of small diameter particulate matter, or PM. Thanks to a combination of the TSP and PM10 NAAQS, the ozone standard and the acid rain program, the United States has engineered a massive reduction of PM10, which is now largely in attainment (achieving a 15% reduction from 1990 to 1999 and a 80% reduction from 1970). EPA has pending a NAAQS to control PM2.5 which could, if implemented, call for further reductions of power plant emissions, along with other pollutants. In the meantime, existing EPA control programs are producing continuing reductions of what EPA describes as the "gaseous precursors of fine particles (e.g., SO2, NOx and VOC), which are all components of the complex mixture of air pollution that has most generally been associated with mortality and morbidity effects" (PM2.5 emissions declined 17% from 1990-1999). In addition, it is far from clear that PM levels should be viewed as a traditional enforcement issue; the President's own proposal for a Clear Skies Initiative is another, undoubtedly more efficient mechanism to incentivize and engineer further reductions in PM. And recent data has demonstrated that among the most dangerous forms of PM are those arising from automobile exhaust B a source controlled by the federal reformulated gasoline program, a program enforced with a minimum of traditional adversarial enforcement actions.

## 2. Changing Environmental Enforcement to Reflect New Realities.

In some respects, we are a victim of our own success. As environmental indicators are trending in a positive fashion, the decisions we make as a society become more difficult in the area of allocation of resources. Environmental protection remains just as important, but the tools we use must become more refined. Unfortunately, while many program officers understand the need for changing priorities, enforcement officers often view the world in a binary fashion with little room for subtlety.

There seems to be a bipartisan consensus that such an approach makes little sense, and can even produce perverse results. Then-Vice President Al Gore, in his September 1994 report to President Clinton on the progress of governmental reinvention activities, observed that, "EPA Administrator Carol M. Browner, for instance, is reaching out to all parties with potential roles to play. Environmental protection, she says, can no longer succeed as an adversarial process, with the polluter on one side of the table and the offended party on the other. Now, all parties must sit and work together." [5] Two years later, Vice President Gore revealed the successes that could be achieved when pilot projects were adopted B sometimes over the objections of enforcement officers B such as Project XL and the Common Sense Initiative at EPA. He stated, "EPA has found that when they let companies volunteer to cut pollution without the government dictating how they had to do it, thousands of companies jumped at the chance." [6]

What Vice President Gore and Administrator Browner recognized from their efforts at governmental reform is what is evident today: as the nature of environmental challenges has changed, so too must antiquated notions of a purely adversarial approach to enforcement.



Two thoughtful legal observers have articulated a rubric for judging effective environmental enforcement. To be effective, an enforcement regime must:

- be clear in what it mandates and prohibits;
- be predictable in how it punishes violations of the regulations, and rely where possible on cooperative, problem-solving approaches; and,
- seek environmental improvement, not numerical enforcement targets.[7]

By the standards of this approach, it would appear that the current approach to environmental enforcement is less than optimal. One the first measure B clarity B the New Source Review program is an example presently of what NOT to do. But it is hardly alone in a lack of clarity. In fact, one widely-quoted study has it that fewer than one third of the responding attorneys felt that it was even possible to comply fully with federal environmental laws given their current lack of clarity.[8] Unfortunately, the mechanism used to address enforcement clarity often is part of the problem: when EPA issues enforcement guidance documents that have the effect of creating entirely new obligations without notice and comment rulemaking, obligations become all the more confusing and less respectful of proper process.[9]

The second observation, the need for predictability, is also missing in many of today's enforcement activities. Again, the NSR program is an excellent example of the problems faced by the regulated community. As we further discuss in the White Paper attached to this Statement as Appendix One, EPA's NSR rules, which for thirty years have been consistently applied only to new greenfield sources or major modifications of existing sources, are now being reinterpreted without any rulemaking change and applied to routine repair, replacement and maintenance activities at all existing sources, causing major disruption in routine maintenance schedules, curtailing power output, and dismembering whole Titles of the Clean Air Act.

The rationale for the radical shift in interpretation is in the allegation that utilities are by illicit maintenance keeping afloat old plants that were "grandfathered" from any CAA controls and that are now threatening the nation's health. But the 1990 CAA Amendments mandated sweeping reductions for all power plants regardless of age through the use of highly efficient market incentives. The 1990 Act thus established a flexible market-based system that is working very efficiently to drive down pollution through 2010 and beyond, but that is now being repealed by administrative fiat and replaced by an outmoded, inefficient and counterproductive command and control regime.

And the clear truth is that many of the targets of the current NSR enforcement initiative are functionally related to routine maintenance, repair and replacement. They cannot usefully be characterized as major modifications or boiler or powerplant expansions. Appendix Two delves into the exact nature of the activities at issue here.

The last component of effective enforcement - a desire to embrace outcomes over mere numbers of cases - is again often missing in today's approach to enforcement. Of course, current

enforcement efforts are not without their traditional numerical successes. Indeed, EPA released data on its enforcement and compliance assurance results earlier this year, which included "record-setting amounts of money violators have committed to environmental cleanups and restoration, and for projects to protect the environment and human health beyond injunctive relief, and to record penalty assessments." [10]

Despite this numerical success, Administrator Whitman has recognized that such numbers are not the sole relevant benchmark. "With our state and local partners, we set a high priority on areas that posed serious threats to health and the environment," said EPA Administrator Christie Whitman. "The Administration is determined to actively pursue those who fail to comply with the law while working closely with the regulated community to find workable and flexible solutions." [11] Clearly then, there is growing recognition that it is important to prioritize enforcement; to target areas of greater environmental reduction; and to work cooperatively towards solutions.

Perhaps it is Administrator Whitman's experience as a Governor that has led her to this conclusion. We should remind ourselves that the number of federal enforcement actions are not the sole indicators of success. In fact, two years ago, the U.S. Congress commissioned the Environmental Commission of the States to examine relevant differences and interrelationships between federal and state enforcement actions. ECOS reported that in one year alone, States passed over 700 environmental statutes for which there were no federal counterparts. However, federal statistics collected by EPA do not count enforcement efforts undertaken by the States in reference to these actions. [12] Indeed, of the universe of all enforcement actions undertaken by both the States and EPA, States alone conducted about 90 percent. [13] However, the great majority of these actions are undertaken in a spirit of cooperation and compliance assurance. ECOS concluded:

"Many State environmental leaders do not believe that their primary goal is just to conduct enforcement actions. It is more important to assure compliance, and more important still to improve environmental quality and public health. For this reason, States have been leaders in developing 'compliance assistance' programs." [14]

But, in any event, it is curious and misplaced criticism to look at elements such as numbers of cases and workyears of budget allocation as reflective of actual realities. If it is to succeed in moving the needle towards additional compliance, enforcement programs must be less adversarial and of greater real assistance. As one State regulator put it, "the true measure of successful enforcement is in quantifiable improvement in our environment. Improved natural resources, not fines, must be the primary objective of any effective environmental policy." She concluded: "Allowing states to establish, develop, and implement environmental improvement policies is critical to their autonomy and the health of the environment. Heavy fines simply encourage litigation and slow environmental progress." [15]

### 3. The Price of Failure: the Case of NSR Clarification.

EPA's reinterpretation is not only flawed as a matter of law, but it also undermines our energy supply, environmental protection and workplace safety. Because NSR is a costly and time-consuming process, EPA's current position discourages utilities from undertaking needed maintenance projects. This makes plants more reliant on deteriorating components, resulting in less efficient, less reliable and higher emitting power generation. For example, the efficiency of currently available steam boiler equipment decreases over time as plant components deteriorate. Boiler tubes, in particular, are subject to very harsh temperature, pressure, and chemical conditions, and leaks result. Short-term fixes include patching tubes where there are leaks, but eventually whole sections begin to wear out and must be replaced if the plant is to continue to operate. Yet EPA's reinterpretation of NSR could have such a routine and necessary activity declared non-routine.

There are 300,000 megawatts of coal-fired generating capacity which is 55% of all electricity generated in the United States. Approximately 1,200 coal-fired generating units are in service. These generating units involve two distinct sets of operations: (1) a steam cycle (e.g., the boiler and related equipment), and (2) the turbine cycle (where the electricity is generated). In the past few years, there have been some very exciting innovations in the turbine technology area. For example, just one type of efficiency improvement project, the so-called Dense-Pack which enhances the efficiency of turbine blades, can result in a very significant improvement in the efficiency with which steam is turned into electricity.

A more efficient turbine results in more electricity output from the same steam input, with no greater fuel use. For example if one assumes that most generating units could improve efficiency by between 2% and 4% (a very conservative estimate, based upon the actual operating experience of several units which have installed the Dense-Pack technology), this would mean an additional output of 6,000-12,000 megawatts of power in the near term, with significant decreases in emissions per unit of fuel burned. This increase in available installed capacity is the equivalent of building 20-40 new plants of 300 megawatts each with no new emissions. We should recall that the very definition of pollution is inefficiency; getting more electrons out of less coal is the best way to prevent pollution.

Last, we should be clear that many of our colleagues in organized labor support the notion that the NSR program should be clarified in order to allow for sufficient routine maintenance activities. The greater the incentive for maintenance, the safer our work environment will be. Attached for the Subcommittee's review as Appendix Three is a statement offered by the International Brotherhood of Boilermakers at EPA's regional conference on NSR held last summer.

## **APPENDIX ONE: ELECTRIC RELIABILITY COORDINATING COUNCIL**

### **WHITE PAPER ON CLARIFICATION OF NEW SOURCE REVIEW**

#### **SUMMARY**

EPA's NSR ("New Source Review") rules, which for thirty years have been consistently applied only to new greenfield sources or major modifications of existing sources, are now being reinterpreted without any rulemaking change and applied to routine repair, replacement and maintenance activities at all existing sources, causing major disruption in routine maintenance schedules, curtailing power output, and dismembering whole Titles of the Clean Air Act. The rationale for the radical shift in interpretation is in the allegation that utilities are by illicit maintenance keeping afloat old plants that were "grandfathered" from any CAA controls and that are now threatening the nation's health. But the 1990 CAA Amendments mandated sweeping reductions for all power plants regardless of age through the use of highly efficient market incentives. The 1990 Act thus established a flexible market-based system that is working very efficiently to drive down pollution through 2010 and beyond, but that is now being repealed by administrative fiat and replaced by an outmoded, inefficient and counterproductive command and control regime.

#### **I. How did we get here?**

· The CAA, which has produced dramatic reductions in air pollution over the last three decades despite explosive economic growth, operates through two approaches. The first approach develops national health and environmental standards for the states to apply to the existing sources in their jurisdictions. DOE reports that the utility industry alone has spent more than \$30 billion to achieve compliance with these health standards.

· The second approach applies the best current technology to new sources and major modifications of old sources that increase pollution levels where inclusion of such technology can be integrated in an efficient manner without highly disruptive retrofitting. The purpose is to prevent new pollution by new plants, both to preserve air quality in areas that attain health standards, and to avoid complicating ongoing plans to clean up existing plant and equipment in areas that do not.

· Because of delays and regulatory difficulties primarily associated with ozone attainment and a need to address acid rain not previously regulated, the Congress enacted the 1990 CAA Amendments ("1990 CAAA") to impose a sweeping array of new pollution reductions on power plants (and other pollution sources as well). These new programs included the acid rain program of Title IV, which mandates a 50% reduction in SO<sub>2</sub> by 2010, and the interstate transport

provisions of Title I, which are now being implemented to impose additional NO<sub>x</sub> controls in Midwestern power plants that may themselves be located in attainment areas, but that send pollution through tall smoke stacks to the neighboring states.

· These new programs adopt a different -- and highly successful -- approach that assigns and limits the absolute number of tons a plant can emit, leaving to the plant the decision as to how to reduce its tons, rather than assign a particular technology to the plant which it must build. Because the preexisting NSR program is technology-based, rather than ton-based, EPA issued a rulemaking in 1992 to reconcile the old with the new, as described more fully below. It is this 1990 CAAA and 1992 rulemaking which EPA is now blatantly violating -- by, for example, forcing utilities to accelerate reductions much faster than those mandated by Title IV of the 1990 CAAA.

· As indicated above, NSR was intended primarily to apply to new sources and can also apply to existing plants only when a large industrial source of air emissions, a refinery or a power plant makes a non-routine physical or operational change that results in or causes an emissions increase.

· Over the last thirty years, EPA's regulations and practice have excluded from NSR all "routine maintenance, repair and replacement" activities undertaken by power plants and other industries. Additionally, EPA surveyed utility maintenance projects, including "life extension projects," in the early 1990s and concluded that those did not trigger NSR. EPA also has published guidance in the Federal Register defining what was routine by reference to the standard practices of the relevant source category, in this case the utility industry. Likewise, EPA's regulations specifically exclude any increases in emissions associated with operating a facility more hours, unless such an increase is prohibited by a federally enforceable permit condition.

· EPA's practices interpreting the NSR rule were explicitly described to Congress by then-EPA Administrator Reilly and other Agency officials when Congress was considering the Clean Air Act Amendments of 1990. One of the reasons Congress adopted the Acid Rain provisions of Title IV to reduce SO<sub>2</sub> by 50% (10 million tons) was because utility units typically operate for 65 years or longer without major modification and the NSR program would not obtain equivalent reductions. To help facilitate cost-effective compliance by the utility industry with both the ton-based 1990 CAAA and the pre-existing technology-based NSR program, EPA, after an extensive notice and comment process in 1992, promulgated a rule which explicitly laid out all of the NSR procedures applicable to the utility industry and confirmed that "pollution control" projects would not trigger NSR.

· In 1996, EPA initiated a rulemaking to revise the 1992 NSR rule, but never finished it. Instead, in 1999, EPA commenced a major enforcement initiative against virtually every coal-fired utility plant in the country for repair and replacement activities undertaken over the past 20 years. Under EPA's reinterpretation, virtually every maintenance, repair or replacement project undertaken by any utility plant could be considered non-routine. Any project that increases availability or efficiency or corrects problems causing forced shutdown of plants potentially triggers NSR. EPA

abandoned its simple test for determining when maintenance practices are routine -- common industry practices -- and now applies a multi-factor (more than 20 different factors) weighing and balance test that only it can perform with any sort of regulatory certainty. Amazingly, even installation of pollution control equipment by utilities may now be viewed as an NSR-triggering event.

· Whatever policy merits EPA believes justify its new position on NSR applicability, EPA's efforts to achieve this through enforcement actions against utilities for projects undertaken decades ago is inconsistent with current law. If EPA believes this NSR reinterpretation is correct, it should only apply it after notice and comment rulemaking or ask Congress for new legislation to revise the 1990 CAAA.

· In justifying its enforcement actions, EPA claims that its sole goal is to avoid emission increases by power plants operating more hours than in the past. This point is so important that a more detailed explanation is in order. Under the Clean Air Act provisions, every power plant in the country is allowed to emit a certain quantity of various regulated pollutants, of which NO<sub>x</sub> and SO<sub>x</sub> are the two key ones. Each utility plant has a legally mandated emission rate -- a maximum amount of pollution that can be emitted per hour, per day, per month, or even annually, depending upon air quality and other consideration. But, any time a plant slows down because of a maintenance problem, it will necessarily be able, once repaired, to operate more hours -- and emit more -- than it did during the problem period -- even the emissions are well within the limits spelled out in the State SIP and the federal reductions required by Title IV. These various limits are spelled out in permits held by utility plants or in state implementation plans, and they reflect EPA-prescribed public health-driven ambient standards. These limits cannot be breached by power plants under any circumstances, and there is no claim that any of the plants subject to the EPA enforcement did exceed the permitted limit of emissions. However, every unit must be prepared to operate more hours within their tonnage limits in order to meet customer demand.

· EPA's definition of an emission increase is artificial and arbitrary. Power plants operate under extremely harsh conditions; every several years, as the plant equipment deteriorates, the plant's efficiency, availability and reliability go down. Eventually, the plant operator performs a set of routine maintenance procedures to restore and maintain the plant's efficiency, availability and reliability. To emphasize, throughout all of these changes, the plant never increases or exceeds its legally binding and public health-driven emission limits. EPA, however, compares a plant's actual emissions at the time it was operating in the recent past before a maintenance procedure with its future potential emissions following that procedure, assuming that the plant will, as a result of the project, operate every hour of every day in the year at maximum output. In other words, EPA's methods always predicts an emission increase even though none may occur, and even though the plant may not under any circumstances exceed the CAAA's mandated reductions.

## II. EPA's Reinterpretation Discourages Needed Maintenance Procedures and Reduces Generating

## Capacity

·EPA's reinterpretation is not only flawed as a matter of law, but it also undermines our energy supply. Because NSR is a costly and time-consuming process, EPA's current position discourages utilities from undertaking needed maintenance projects. This makes plants more reliant on deteriorating components, resulting in less efficient, less reliable and higher emitting power generation. For example, the efficiency of currently available steam boiler equipment decreases over time as plant components deteriorate. Boiler tubes, in particular, are subject to very harsh temperature, pressure, and chemical conditions, and leaks result. Short-term fixes include patching tubes where there are leaks, but eventually whole sections begin to wear out and must be replaced if the plant is to continue to operate. Yet EPA's reinterpretation of NSR could have such a routine and necessary activity declared non-routine.

·A plant operator typically will accept some level of deterioration in efficiency for a short period of time but must eventually undertake the repair and maintenance necessary to regain lost efficiency and to maintain unit availability. The timing of these projects depends in part on the demands being placed on the power plant to operate to meet energy supply needs. Unit unavailability can seriously impair a utility's ability to meet customer demand and nearly always results in running less efficient units. Operating inefficient units increase the amount of pollution emitted. Under the EPA Office of Enforcement and Compliance Assurance's new interpretation of the NSR rules, it is these projects, designed to maintain efficiency and availability, that are no longer regarded as "routine." EPA then assumes the unit will operate more hours than before the project and further assumes that the project, rather than customer demand, weather, or other unit outages, causes this increase. Once EPA thus determines that NSR will be triggered, the unit cannot even begin to proceed with the project without either going through the lengthy NSR permitting process, which takes a year or more, or without "capping" operations at historical levels. Thus, the unit must either wait or derate. Either alternative can have significant adverse consequences for the reliability of the country's electric supply. Waiting can idle a unit during peak demand for 12-24 months, more if intervenors challenge the permitting. Derating effectively confiscates capacity, even when the unit is permitted to operate at maximum output year-round.

·Over the next 3-5 years, thousands of megawatts of existing generating capacity will be lost if companies are not able to undertake these routine maintenance and repair projects, or if companies must accept caps on utilization to avoid lengthy NSR. In the longer term, EPA's new position would involve the loss of an even greater number of megawatts. The result of EPA's reinterpretation will be the decrease in available installed power plant capacity at a time when we already have a supply shortage -- something this nation, and the West in particular, can ill afford.

### III. EPA's Reinterpretation Discourages Efficiency Improvements

·There are 300,000 megawatts of coal-fired generating capacity which is 55% of all electricity generated in the United States. Approximately 1,200 coal-fired generating units are in service.

These generating units involve two distinct sets of operations: (1) a steam cycle (e.g., the boiler and related equipment), and (2) the turbine cycle (where the electricity is generated). In the past few years, there have been some very exciting innovations in the turbine technology area. For example, just one type of efficiency improvement project, the so-called Dense-Pack which enhances the efficiency of turbine blades, can result in a very significant improvement in the efficiency with which steam is turned into electricity.

- A more efficient turbine results in more electricity output from the same steam input, with no greater fuel use. For example if one assumes that most generating units could improve efficiency by between 2% and 4% (a very conservative estimate, based upon the actual operating experience of several units which have installed the Dense-Pack technology), this would mean an additional output of 6,000-12,000 megawatts of power in the near term, with significant decreases in emissions per unit of fuel burned. This increase in available installed capacity is the equivalent of building 20-40 new plants of 300 megawatts each with no new emissions.

- As an example, this type of efficiency improvement, if installed by the approximately 1,000 utility units (out of some 1,200 existing coal-fired utility plants) that can be most easily retrofitted with Dense-Pack technology, would reduce criteria pollutants that NSR was meant to address (NO<sub>x</sub> and SO<sub>x</sub>) substantially.

- However, under EPA's reinterpretation of its NSR rules, the installation of even this type of beneficial technology requires an elaborate, expensive and time-consuming permitting process, which results in the imposition of additional costly control technology requirements on existing plants, and therefore discourages the installation of new and more efficient technologies.

#### IV. Conclusion

Overall, the effect of EPA's recent position is to block routine maintenance, repair and efficiency improvement projects that could immediately expand generating capability without increasing fuel burning and will decrease by a significant percentage the total available installed capacity through caps on operations. Stated differently, EPA's reinterpretation of NSR is tantamount to shutting down dozens of utility units every year at a time when electricity supply is already so short as to be unreliable in many areas.



## **APPENDIX TWO: THE TRUE NATURE OF REPAIR AND REPLACEMENT**

This document provides more detail on major repair and replacement projects that must be undertaken at utility generating stations, in order to keep those facilities operational. The utility industry generally plans for a major outage at each generating unit at a regular interval, which has changed over time. During the 1970s and earlier, annual outages were the norm, and each unit would be removed from service for several weeks at a time to undertake a comprehensive boiler inspection and repair outage. Currently such outages occur on schedules ranging from 18 months to three years, and they therefore last longer. Turbine overhauls are planned on longer intervals, approximately every five to eight years, and generally last even longer due to the nature of the work required. In the years when turbine overhauls are scheduled, more extensive boiler work can also be scheduled to occur.

During each major outage, work will be conducted on one or more of the projects discussed below. For each, this document provides examples of the types of major repair and replacement projects that are conducted in the industry, a discussion of the consequences of not undertaking the project, and information on typical project costs. There are many smaller repair and replacement projects that take place in each of these projects that are not discussed here, given our focus on major repair and replacement projects that are common in the utility industry. These smaller projects will typically be performed during forced outages as time permits, during shorter scheduled outages on weekends, or during the planned outages scheduled for the more significant projects discussed in this paper. These smaller projects add to the overall capital costs incurred for repair and replacement projects at an individual unit over time.

### **1. Boiler Tube Assemblies**

#### **a. Project Description**

Boiler tube assemblies include superheaters, reheaters, economizers and boiler walls and floors. These tube assemblies may also be known as division walls, wing walls, waterwalls or steam generation tubes. Boiler walls consist of rows of tubes mounted along (and essentially forming) the interior walls of a boiler. Superheaters, economizers and reheaters are typically bundles of tubes which hang from the ceiling or sides of a furnace into the hot combustion gasses. The heat in the furnace is thereby transferred to the water or steam passing within each tube.

Boiler tubes function in extreme conditions. These tubes are not exotic alloys and therefore are expected to experience wear and periodic failure. Corrosion and erosion, in addition to temperature and pressure-related stresses, wear or weaken the tubes. When boiler tubes leak, those tubes, and typically surrounding tubes, must be repaired or replaced. If deterioration is limited to a few tubes, repairs can be effected by cutting out the leaking section of tubes and welding in place a new tube section. More extensive deterioration, including deterioration

anticipated based on the results of nondestructive analysis of the boiler walls, requires replacing an entire tube assembly. When materials that can better withstand the destructive environment of the boiler and can reduce the susceptibility of the tubes to wear are available, it is common practice to use those materials to the extent it is cost-effective. Similarly, improvements in tube arrangement in the boiler are common as the individual air/gas flow patterns of a boiler are established. Finally, the headers that collect the water or steam and feed it into the tube assemblies and the structural components associated with the tube assemblies are also subject to deterioration due to the same failure mechanisms.

#### b. Consequences of Forgoing Project

Once a tube develops a leak, the unit can only operate for a few hours to a couple of days, depending on where the leak is in the boiler and whether the leak endangers the integrity of other tubes or components. After that short time, the unit must be shut down in order to repair or to replace the leaking tubes, because tube repairs must be conducted off-line after the boiler has cooled. Replacement of an entire tube assembly becomes necessary as anticipated or projected failures increase. Forgoing replacement severely jeopardizes the reliability of the unit by requiring that it be repeatedly shut down in response to tube leaks. Ultimately, tube leaks can require that the plant be shut down. Foregoing replacement also jeopardizes the integrity of other tubes and components, creating a risk of massive boiler failure that would endanger employees and prevent the boiler from being operated to supply electricity.

#### c. Other Information

Repair of leaking sections and wholesale replacement of tube assemblies are common projects. Replacing tube assemblies can cost up to \$40/kw on a large coal-fired boiler, and even more on a smaller boiler. A census of repair and replacement practices at coal-fired utility boilers shows that entire tube assemblies have been replaced by almost every boiler in the industry, with some replacements occurring as early as 5 years after commercial operation.

### 2. Air Heaters

#### a. Project Description

Electric steam generating plants use air heaters to pre-heat the combustion air to improve the combustion process and the overall efficiency of the unit. Generally, air heaters receive hot flue gas passing through the economizer and cooler combustion air from the forced draft fan. Air heaters transfer the heat from the hot flue gas to the cooler combustion air. Regenerative air heaters perform this heat transfer through the use of air heater tubes or baskets (which are comprised of rows of metal plates with corrugations and undulations designed to facilitate flow paths and heat transfer).

Condensation and the presence of ash can corrode, erode or plug air heater baskets or tubes. While washing and sootblowing (see project family #10) may address short-term plugging issues, corrosion of the metal surfaces and the resulting losses in heat transfer require the replacement of

air heater baskets or tubes at a frequency ranging from 5 to 15 years.

Air heaters also suffer from the erosive effects of ash and other materials, especially if gaps in air heater seals are worn or weakened. This may lead to the replacement not only of air heater tubes and basket layers, but also of structural elements, seals and gaskets. When air heater tubes or basket layers and associated equipment are replaced, it is standard practice to consider improvements in plate configuration, in materials or in the corrugation or undulation of the plates, or in the arrangement of tubes to account for the specific requirements of a particular boiler.

#### b. Consequences of Forgoing Project

If air heater tubes, baskets and other air heater equipment are not replaced when they deteriorate, the plant loses efficiency because the incoming combustion air is not warmed sufficiently. As the air heater becomes further plugged or corroded, the unit is further limited in its capability to generate electricity because less air and exhaust gases can pass through the air heater. As the efficiency of the unit decreases, the amount of emissions per unit of electricity generated increases. If most or all of the air heater is plugged, no air can flow through, and the unit cannot operate. Ultimately, if not replaced, pieces of the air heater that have been eaten away could be sucked into the boiler, causing damage and forcing the boiler to shut down.

#### c. Other Information

The replacement of air heater basket layers, tubes and the seals around the air heater are common projects. Replacing tubes and basket layers can cost up to \$6/kw on a large coal-fired boiler. As with other components, costs in \$/kw tend to be higher on smaller boilers. A census of repair and replacement practices at coal-fired utility boilers shows air heater baskets/tubes have been replaced by over 80% of the units surveyed.

### 3. Fans

#### a. Project Description

A fan consists of a bladed rotor, or impeller and a housing to collect and direct air or gas. Many boilers operate with both forced and induced draft fans - also known as "balanced draft." These boilers use the forced draft fan to push air through the combustion air supply system into the furnace. The induced draft fan is on the other end of the furnace, and sucks combustion gases through. In this way, the two fans maintain the pressure of the boiler in "balance" or at atmospheric pressure or slightly negative pressure.

Other boilers were designed to operate at positive pressure, using only a forced draft fan and no induced draft fan. However, this design forces heat and ash through the joints of the boiler and ducting system, resulting in employee health, safety and other concerns stemming from the dusty environment. These include increased equipment maintenance needs due to the high dust levels.

Accordingly, many companies with positive pressure boilers have replaced the forced draft fan system with a balanced draft fan system to correct these maintenance and employee safety problems.

Another kind of fan necessary to pulverized coal-fired boiler operation is a primary air fan. Primary air fans supply coal pulverizers with the air needed to dry the coal and transport it to the boiler. Primary air fans may be located before the air heater (cold primary air system) or downstream of the air heater (hot primary air system).

In some cases, gas recirculation fans are used for controlling steam temperature, furnace heat absorption and slagging of heating surfaces. They are generally located at the economizer outlet to extract gas and re-inject it into the furnace.

Fans rotate at high speeds, and experience erosion and cyclic fatigue. They therefore need to be replaced periodically. Fans (e.g., induced draft fans) may also be subject to high temperatures, erosive ash, and corrosive gases.

#### b. Consequences of Forgoing Project

Poor fan operation translates immediately and directly to reduced boiler load and less production of electricity. If a large fan fails, it can shut down the unit. Failure of small fans in a multiple system will result in reduced boiler load. Fan systems that fail or that cause maintenance and employee safety problems must be replaced for the boiler to continue to operate.

#### c. Other Information

Common replacement projects include balancing and blade replacements, and wheel, motor and rotor replacement. Fan replacement projects can cost up to \$20/kw. Replacement of a forced draft fan system with a balanced draft fan system can cost up to \$70/kw. A census of repair and replacement practices at coal-fired utility boilers shows that fans have been substantially replaced at more than 70% of the units in the industry.

### 4. Mills/Feeders

#### a. Project Description

Feeders deliver raw coal from the coal bunker to the pulverizer (also called "mills"). Coal crushers and conditioners are used in some cases to prepare the coal for the mills. Coal pulverizers then grind coal to a fine powder, suitable for efficient combustion in the furnace.

Various types of feeders are used in the industry, including gravimetric feeders, volumetric feeders, and bucket-type feeders. Replacing volumetric feeders with technologically superior gravimetric feeders is common in the industry, in order to improve the consistent measurement of

coal added to the mills.

Pulverizers are manufactured in several designs. Some pulverizers use metal balls that roll around a metal track and crush coal. Other pulverizers use rollers to crush the coal. Both designs contain motors and gear boxes to drive the grinding mechanism. Pressurized air created by seals and air fans keeps the fine coal dust out of the motor and gears. Nevertheless, fine coal dust is present and causes continual wear and eventual failure of mills.

The coal is sorted within the pulverizer and delivered to the burners by the primary air fan. In some designs, exhaustor fans then deliver the pulverized coal through pipes to the burners for introduction into the furnace. The "classifier," located at the top of the pulverizer, contains openings through which fine coal passes on its way to the burners; coarser particles hit the classifier and fall back to the grinding mechanism.

The major causes of wear and deterioration in pulverizer systems are abrasion due to exposure to hard minerals such as quartz and pyrite found in raw coal, and erosion due to the stream of solids that strikes pulverizer surfaces. Given the constant wear experienced in a pulverizer, repair and replacement of pulverizers and related equipment is essential to continued operation of the boiler.

The components that experience direct, constant wear and that require periodic replacement include rollers, tables, and balls; classifiers; bearings in rollers and the shaft; and seals and motors. Within the feeder system, belts, flow control devices, and associated piping must periodically be repaired or replaced. Eventually, abrasion and erosion of the pulverizer may become so severe that the pulverizer or mill internals must be replaced.

#### b. Consequences of Forgoing Project

The obvious consequence of mill/feeder failure is the reduction of the capability of the mill to deliver coal to the boiler, and hence of the unit to generate electricity. As less fuel is available to the boiler, less steam can be produced. More subtly, improper mill performance leads to combustion problems that not only damage other equipment but that increase emissions. For example, coal which remains too coarse will not combust completely, and will cause a loss of efficiency and an increase in particulate emissions. Some equipment in a mill or feeder cannot be repaired effectively more than a few times because the mill parts then will not work together properly. Replacement of the mill is then necessary.

#### c. Other Information

Replacing wear parts in the interior of the mill can cost up to \$2/kw, and replacement of a mill can cost up to \$5/kw. A census of repair and replacement practices at coal-fired utility boilers shows that pulverizer mills have been replaced or substantially replaced (e.g., the entire grinding zone) at more than 50% of the units in the industry.

## 5. Turbines and Generators

### a. Project Description

In the steam turbine at a modern power plant, superheated steam from the boiler is exhausted over turbine blades (these look like the fanjet blades in a jet engine). Because the steam is very hot (about 1000E°F), enters at very high pressure (2400 to 3600 pounds per square inch), and contains impurities, turbine blades experience substantial wear and tear. For example, there are impurities in the steam - like little pieces of sand - hit the turbine blades at extremely high velocities and damage the blades by pitting them. When turbines are inspected, some blades or rows of blades (e.g., the "high pressure" or HP section) may need to be replaced.

When blades are replaced, the manufacturer typically offers a new, more efficient design or better alloys as the result of R&D or new, more durable materials. Indeed, the older, less efficient design may no longer be available. Use of more efficient turbine blades also allows the turbine to use a smaller amount of steam to produce the same amount of electricity, thereby decreasing emissions per megawatt of power output. Other turbine components, including nozzles, diaphragms and rotors, are also commonly replaced when they deteriorate or fail.

Generator rotors and stators are also subject to failure. The generator rotor turns (is rotated) inside the stator. Both the stator and the rotor are typically made of steel and have "slots" that run their length. Both the rotor and the stator have windings, that is, wires that fit into the slots. A direct current is applied to the rotor winding, which turns this large piece of steel into an electromagnet. The stator winding is a conductor (typically copper). When an electromagnet is turned relative to a conductor, it produces a current in the conductor. The current produced in the stator winding is the electricity made by the generator, which is then sent to the transmission grid.

The windings are surrounded by insulation. This insulation can wear out due to heat, electrical and/or vibratory stress (e.g., rubbing on adjacent insulation.) Also, insulation can deteriorate due to exposure to contaminants such as moisture and oil, particularly from the cooling mechanism. If the wear is extensive, the entire winding itself must be replaced.

Finally, the steam turbine shell may develop defects due to stresses created by high temperatures and high pressures. If the turbine shell develops defects, it is commonly repaired or replaced at the same time the turbine blades are replaced.

### b. Consequences of Forgoing Project

Replacement of damaged turbine blades is a necessity both from a reliability and from a safety standpoint. Damaged, rotating turbine blades can break off and fly through the turbine casing at extremely high velocity, creating the risk of serious injury or death and extensive damage to the power plant. To avert this catastrophe, turbine blades are inspected and replaced if wear and tear indicates they may fail.

Besides the employee safety issue, a broken blade can damage other portions of the generating unit, resulting in prolonged unit shut-down. Even prior to failure, deteriorated blades reduce the efficiency with which steam is turned into electricity, thereby reducing the electric output of a generating station and increasing the amount of emissions per unit of electricity produced.

Worn windings and insulation in the generator stator and rotor decreases the efficiency of the generator to convert mechanical energy to electrical power. This translates to increased fuel consumption and increased emissions per unit of electricity and decreases the capacity of the unit to produce electricity. Failed insulation also presents a fire hazard, and can result in faults that prevent the generator from operating at all.

### c. Other Information

Common projects include the replacement of turbine blade rows or sections and turbine rotors. Moreover, a generator rotor or stator is rewound periodically in the life of a unit. Turbine blade and turbine rotor replacement projects can cost up to \$20/kw, while shell replacements can cost up to \$60/kw. A census of repair and replacement practices at coal-fired utility boilers shows that more than 90% of the units in the industry have replaced turbine blades or rotors.

## 6. Condensers

### a. Project Description

Once steam has passed through the turbine, it is condensed back to water, which is cleaned, pumped again to high pressure and returned to the boiler. The condenser provides the heat transfer necessary to convert the spent steam into water.

The condenser consists of a large chamber containing bundles of long, thin tubes. The tubes contain flowing water (typically river water or some other source of cooling water). Low temperature steam exiting the turbine at pressure approaching a perfect vacuum is directed into the chamber across the outside of the bundles of tubes, which are arranged perpendicular to the steam path. As the steam flows over the outside of the tubes, the heat from the steam is transferred to the cooling water inside the tubes. As enough heat is removed from the steam, the steam condenses to water.

The combination of steam constantly passing across the outside of the condenser tubes and water (filtered, but typically untreated) passing through the inside of the tubes leads to corrosion and erosion. Also, the interior of the tubes is subject to plugging and biological fouling. Despite constant efforts to clean the tubes, tubes eventually become partially or entirely plugged and no longer provide heat transfer. Also, if a condenser tube leaks, untreated river water will enter the steam path due to the vacuum on the steam side and will contaminate the high purity steam.

Short-term repairs include intentionally plugging a leaking tube. When numerous tubes have

become plugged, it is necessary to replace an entire set of condenser tubes (also known as retubing the condenser). When new materials designed to better withstand the destructive environment of the condenser are available, it is typical to use the improved materials.

#### b. Consequences of Forgoing Project

Because the steam side of the condenser is at a vacuum, when a leak occurs, the dirtier cooling water flows into the steam side. This necessitates shutting down the unit so as not to allow the untreated water to damage the boiler and the turbine. The leaking condenser tubes are then plugged. As tubes are plugged, the unit becomes less efficient, meaning that its ability to generate electricity declines and more emissions are associated with each unit of electricity produced. Condenser tube leaks eventually become so significant that the unit is constantly being shut down to plug tubes. Eventually, the condenser must be retubed or the unit can no longer operate.

#### c. Other Information

The replacement of entire tube bundles is common, and such replacement projects cost up to \$10/kw at larger boilers. A census of repair and replacement practices at coal-fired utility boilers shows that more than 60% of the units in the industry have replaced condenser tubes.

### 7. Control Systems

#### a. Project Description

Careful monitoring and control of operating conditions at a coal-fired electric steam generating unit are necessary to insure safe, efficient, and reliable operation of the unit. Control and monitoring equipment at a unit consists of three major (core) systems: 1) boiler controls; 2) turbine controls; and 3) balance of plant management. Instruments and controls have advanced rapidly in the past two decades to provide greater operator knowledge and ability to optimize unit performance and to control emissions. For this reason, it is typical to replace out-dated benchboard type switches, lights, gauges, recorders, and manual/automatic stations with digital, computerized controls with touch screen monitors.

#### b. Consequences of Forgoing Project

Because controls help manage all aspects of combustion, unrepaired or outmoded controls will prevent the boiler from operating as efficiently and safely as is possible with modern controls. Moreover, because outmoded controls cannot manage a unit with the same efficiency as modern controls, failure to replace outmoded controls will result in higher emissions associated with start-up, shut-down and combustion staging. Often, replacement parts for outmoded controls may simply be unavailable.

#### c. Other Information



The replacement of pneumatic controls with solid state, computerized or automated controls has occurred at most units, and will continue to occur as technology improves. Such projects can cost up to \$10/kw on larger units, and \$40/kw on smaller units.

## 8. Coal and Ash Handling

### a. Project Description

Coal handling equipment includes everything involved in unloading the coal from its transportation device (a railcar, barge or truck), storing it in a pile, and then conveying it to the plant so that it arrives at the feeders. After unloading, the coal is typically transported to a storage pile by a conveyor belt and reclaim system. While on the pile, the coal is usually managed by bulldozer, and then pushed onto a conveyer belt feeder. Sometimes a crusher in the coal storage area "pre-crushes" the coal. The coal travels by conveyor belt to the plant, where it is distributed among a series of bunkers by the tripper cars. The bunkers sit above and supply the feeders.

Much of the coal handling system is exposed to the weather. Moreover, coal is a hard substance that wears away the handling equipment. For example, conveyor belts, the motors that drive them, and structural equipment wears and corrodes over time, and this equipment is therefore commonly repaired and/or replaced. The rate at which the coal handling equipment deteriorates is influenced by the type of coal that is burned, with the result that variations in the coal that is burned in a boiler can lead to accelerated deterioration or obsolescence of existing coal handling equipment. Other factors that contribute to deterioration include local climate and proximity to salt water.

Once coal is combusted, the ash that results from the combustion process is collected in hoppers (bottom ash) or by pollution control equipment (fly ash). Once collected, the ash is recycled or treated and stored in ash storage ponds or landfills. The equipment for collecting, transporting and storing ash is subject to deterioration resulting from corrosion, abrasion and exposure to the environment.

### b. Consequences of Forgoing Project

If coal handling equipment is not repaired or replaced when it deteriorates, fuel cannot be fed to the units and the plant must reduce load or eventually be shut down. Replacements are necessary when deterioration is so severe that repairs would be ineffectual, or where repairs would not resolve reliability problems. If ash handling equipment and disposal systems are not subject to constant maintenance and repair, the boiler will have to reduce load or cease operation until the ash it generates can be properly handled.

### c. Other Information

Common projects involving coal handling equipment include the replacement of conveyer belts

and motors, pre-crushers, barge and rail unloaders, and tripper cars. Such projects can cost up to \$4/kw. Common projects involving ash handling equipment can cost up to \$15/kw.

## 9. Feedwater Heaters

### a. Project Description

Once the turbine has finished with the steam, the steam is condensed into water in the condenser and sent back to the boiler for reuse. Between the condenser and the boiler are a series of low pressure and high pressure feedwater heaters that gradually raise the temperature of the feedwater prior to returning it to the boiler, where it is then converted to steam. The feedwater system includes a condensate polishing unit (more common on larger, newer units) where impurities are removed, low pressure feedwater heaters, a deaerator heater, a boiler feed pump and high pressure feedwater heaters. From the last high pressure feedwater heater, the feedwater is delivered to the economizer inside the boiler.

A feedwater heater consists of a shell that covers a densely packed bundle of U-shaped tubes in which the condensate or feedwater flows. On top of the shell, there is an inlet for extraction steam from the turbine. As the condensate or feedwater flows through the tubes, extraction steam passes over the outside of the tubes and transfers heat to the water inside the tubes. Condensate or feedwater passes through the heaters in series, gradually increasing temperature thereby making the overall unit more efficient.

The feedwater heater system is subject to deterioration due to the effects of pressure, temperature and corrosion. It is common for tubes in this system to spring leaks, with the result that the heater must be bypassed until the unit can be taken off line to conduct repair or replacement activity. Newer corrosion resistant alloys to reduce maintenance problems are under constant development.

When leaks are detected, feedwater tubes are typically plugged. From 10 to 30% of the tubes may be plugged in some units, resulting in a significant reduction in unit efficiency. At some point, plugging tubes is no longer an option and replacement is necessary.

### b. Consequences of Forgoing Project

Failure to plug leaking tubes results in a loss of overall unit efficiency and reliability. A tube leak therefore requires that the feedwater heater be bypassed until the unit can be taken off line for plugging or replacement of the leaking tubes. Plugged tubes cannot be feasibly repaired, so replacement is necessary once enough tubes have been plugged. Failure to replace the heater means that the heater must be removed from service, which can cause significant losses in efficiency and reduce the capacity of the unit to generate electricity, increase the emissions from the boiler per amount of electricity generated, and increase the reliability problems of the other feedwater heaters.

### c. Other Information

Replacing an individual feedwater heater can cost up to \$5/kw for a large unit. A census of repair and replacement practices at coal-fired utility boilers shows that more than 80% of the units in the industry have replaced feedwater heaters or major tube bundles in the feedwater heaters.

## 10. Sootblowers/Water Lances

### a. Project Description

When coal is burned in the boiler, "ash" is produced which adheres to the boiler walls and tube assemblies and to the air preheater. The buildup of ash immediately reduces the heat transfer capability of these components which, in turn, means that more fuel is required to maintain the same load. In the long term, the presence of ash (slag) will cause tube overheating and boiler tube leaks, and may completely plug an air preheater.

Sootblowers are mechanical devices used for on-line cleaning of ash and slag deposits in the boiler, in order to maintain the heat transfer efficiency and to prevent damage to tube assemblies and other components. Various types of sootblower are used in a boiler depending on the location in the boiler, the cleaning coverage required and the severity of the deposit accumulation. Sootblowers basically consist of: (1) a tube element or lance which is inserted into the boiler and carries the cleaning medium (typically steam or compressed air), (2) nozzles in the tip of the lance to accelerate and direct the cleaning medium, (3) a mechanical system to insert or rotate the lance, and (4) a control system.

Acoustic blowers, which rely on sound waves, are also used. Sootblowers of all designs must function in the harsh environment of the boiler and are subject to wear due to exposure to high temperatures, corrosion, and erosion from high velocity particles. Accordingly, sootblowers are commonly replaced as they wear out. Also, because the slagging characteristics of a boiler can change over time, it is common to change the type of sootblower as the slagging characteristics change or become better understood.

### b. Consequences of Forgoing Project

Failure to replace a deteriorated sootblower so that it can continue to remove soot, ash, and slag, will limit the capacity of the unit to generate electricity, and will eventually shut the unit down. Moreover, if boiler tube assemblies are not kept clean, more tube failures will occur, requiring more frequent shut downs to replace tube assemblies (see project family #1). Uncontrolled slagging can also cause catastrophic boiler damage if the accumulated slag falls from the boiler wall or roof onto the boiler floor.

### c. Other Information

Sootblowers damaged from wear have been replaced at most units in the industry. Replacement of water lances, sonic blowers and related technology is also common. Such projects can cost up to \$9/kw.

## 11. Burners

### a. Project Description

Burners provide the final link between the fuel and combustion air and the boiler. Burners are specialized tubes or barrels (in the case of cyclone boilers) which direct pulverized coal (carried by primary air) and combustion air (or secondary air) into the combustion zone. Each boiler has many burners. The arrangement and performance of the burners have a direct impact on the distribution of air, the stability of the flame in the boiler and the combustion efficiency. These factors are adjusted by controlling the rate and pattern in which air and fuel enter the boiler.

For boilers other than cyclone boilers, dampers (driven by attached linkages) and vanes control the swirl and volume of air, while restrictors may be used to manage the volume of coal. Each burner consists of a coal (or other fuel) pipe and nozzle with a nozzle tip or impeller at the end of the nozzle at the interior wall of the boiler. Surrounding the fuel nozzle is the windbox, with secondary air passing through the windbox and into the boiler via a toroidal opening with the nozzle tip at the center. Accessories such as flame scanners and lighters are commonly found in the burner assembly.

Burners, particularly the nozzle tips, are required to function in extreme conditions. Corrosion, erosion and temperature-related stresses wear or weaken the tips. Further, the combustion zone can extend to the tip itself, and the high temperatures can effectively destroy the tip. The damper linkages are subject to high use and may fail from exposure to the boiler environment. Finally, because burner configuration and performance play a key role in staging and controlling combustion, entire burners may be replaced with modernized designs intended to control the formation of NO<sub>x</sub> or otherwise improve the efficiency or completeness of the combustion, thereby reducing emissions.

A cyclone boiler is designed to melt as much ash in the coal as possible during the combustion process, and then to drain it from the bottom of the furnace in order to keep molten slag off of the superheater and other tube assemblies. This design objective is accomplished by creating a combustion zone outside the main furnace. These combustion zones or "cyclones" are cylindrical barrels attached to the sides of the main furnace. Crushed coal and air are introduced into the cyclone in a tangential pattern, in order to create a swirling motion to promote mixing of the coal and air to ensure complete combustion of the coal. The introduction of crushed coal and air at high velocities erodes the cyclone, and the hot molten slag environment causes corrosion. High temperatures cause metal fatigue and deterioration of the cyclone.

### b. Consequences of Forgoing Project

Failure to replace damaged burners or cyclones reduces the efficiency of combustion. Moreover, a damaged burners can clog and create a safety hazard. Unrepaired damper linkages prevent the unit operator from controlling the volume and spin of combustion air and will reduce the efficiency of the unit, thereby increasing emissions for each unit of electricity generated.

#### c. Other Information

Common projects involving burners include the replacement of cyclones, burner tips, burner linkages and the wholesale replacement of burners for low NO<sub>x</sub> designs. Burners or cyclones have been replaced one or more times at most units in the industry, at a cost of up to \$30/kw.

### 12. Motors

#### a. Project Description

There are numerous electric motors in a power plant. For example, motors are used to drive fans, pumps, conveyor belts, pulverizers, and so on. All motors have insulation which breaks down over time, causing the motor to overheat and even short out. Usually, when motors short out they shut down automatically, but they can even catch on fire or explode. When motors short out, they can be rewound or, if rewinding is too expensive, they must be replaced.

#### b. Consequences of Forgoing Project

Failure to replace or to rewind a damaged motor risks a fire (or explosion if the motor is near coal dust) if the motor continues operating. Shutting down the motor means the pump, fan, mill, conveyor, etc. will no longer operate. This means that the unit must either operate at a lower capacity or potentially even that the unit must be shut down.

#### c. Other Information

It is common to rewind or to replace a motor. Replacement projects can cost up to \$5/kw per motor. A survey of repair and replacement practices at coal-fired utility boilers shows that it is common in the industry to replace electric motors.

### 13. Electrical Equipment

#### a. Project Description

Electrical equipment is used to transmit electricity and make it usable for electrically-powered fans, motors, conveyors, lights, and numerous other applications in a power plant. There are several types of electrical equipment, including buses or wires that transmit the electricity, transformers that convert it into a usable form, switchgear or breakers that turn it on and off and protect it from electrical surges. In addition, for motors, there are often motor control centers and motor starters. Also, the plant itself uses buses, transformers and switchgear in the process of supplying electricity from the generator to the grid.

Shorts and overloads can occur in any of this equipment due to coal dust and the harsh environment of power plants. Damaged equipment is either repaired or replaced, depending on the severity of the damage.

b. Consequences of Forgoing Project

Replacement of electrical components that have deteriorated or are damaged due to the harsh power plant environment is necessary to support the electrical equipment at the power plant. If the electrical circuits are not operating, the equipment served by that circuit cannot operate and the unit will be unable to supply electricity at its previous capacity, if at all.

c. Other Information

Replacement of switchgears, and other electrical equipment components are very common. Replacement projects can cost up to \$9/kw.

14. Pumps

a. Project Description

Pumps are used to convey fluids around a power plant, including water (condenser circulating pumps) or water containing ash (ash sluice pumps). Pumps have moving parts. Ash sluice pumps are exposed to erosive, highly stressful environments. Other pumps, such as boiler feed pumps, are exposed to extreme temperatures and are expected to operate at very high pressures. These failure mechanisms lead to deterioration, which often requires replacement of a pump.

b. Consequences of Forgoing Project

If a pump is not repaired, additional stress is placed on other pumps in the system, and reliability problems will result. Eventually (immediately for some pumps) failure to replace certain broken pumps means that the boiler cannot operate at its design pressure.

c. Other Information

Common projects involving pumps include replacement of boiler feed pumps and ash sluice pumps. Replacement projects can cost \$10/kw. A census of repair and replacement practices at coal-fired utility boilers shows that nearly 100% of the units in the industry have overhauled or replaced boiler feedpumps.

15. Piping/Ducts/Expansion Joints

a. Project Description

Pipes are used to carry mass (fluids or fluids containing solids) through a power plant. Ducts are essentially square pipes that carry air or flue gas. In an industrial environment like a power plant, pipes and ducts spring leaks due to the high pressure, high temperature and corrosive environment. If a section of pipe or duct leaks on an ongoing basis, the economic choice is to replace that section.

Expansion joints are flexible pieces that connect two sections of ductwork or piping. They are used because temperature differences cause different sections of ductwork or pipe to expand and contract at different rates. Even though expansion joints are designed to move as the contraction and expansion occurs, they can experience cracks and separations due to fatigue. If too many leaks occur, they must be replaced.

#### b. Consequences of Forgoing Project

Leaking ducts, pipes or expansion joints dilute the power of the fan or pump. Failure to repair or replace the pipe, duct or joint, therefore, will prevent the unit from generating electricity at its design capacity. Moreover, leaks of steam, gasses or fuel present safety hazards which must be addressed in a timely manner once they are identified.

#### c. Other Information

Replacing leaking ductwork, high temperature steam pipes, ash handling pipes, fuel piping, and expansion joints are common projects. It is also common to convert from fabric to metal joints or the reverse, depending upon boiler characteristics. Replacement and repair projects can cost up to \$23/kw.

### 16. Air Compressors

#### a. Project Description

Air compressors are mechanical devices similar to a pump, except that they compress air instead of a liquid. Air compressors have moving parts that are subject to wear. The principal use of compressed air in steam plants is for pneumatic drives for dampers and valves, system controls, some types of sootblowers, and power repair hand tools.

#### b. Consequences of Forgoing Project

Failure to repair the service air system will affect at least some and perhaps many aspects of the plants controls. If control air is no longer available, it becomes impossible to position valves properly and the unit cannot be operated.. Failure of the air compressors that service sootblowers will prevent the operation of those devices, with the resulting damage to the boiler (see project family #10).

c. Other Information

Replacement is often the most economical choice for fixing a damaged compressor. Replacement projects can cost up to \$2/kw.



## **APPENDIX THREE: BOILERMAKERS STATEMENT**

Statement of Paul Kern, Recording Secretary, Local Number 105  
International Brotherhood of Boilermakers, Iron Ship Builders,  
Blacksmiths, Forgers and Helpers, AFL-CIO  
4561 U.S. 23 - South  
Piketon, Ohio 45661  
Public Meeting Regarding New Source Review

Members of the panel, thanks for allowing the Boilermakers Union to provide a statement at today's discussion of New Source Review. The Boilermakers are a diverse union representing over 100,000 workers throughout the United States and Canada in construction, repair, maintenance, manufacturing, professional emergency medical services, and related industries. I am recording secretary at one of our large locals, located in the Greater Cincinnati area.

First, let me be clear today that Boilermakers do not oppose the Clean Air Act, nor do we oppose its rigorous enforcement. In fact, construction lodges of our union look forward to doing much of the actual work for the installation of new technologies and controls at utility plants and for industrial boilers across this region and the country. In reference to the Nox control program alone, our international President Charlie Jones recently wrote:

"The EPA estimates that compliance measures will cost about \$1.7 billion a year. A sizeable portion of that money will go to the Boilermakers who do the work necessary to make the additions and modifications required by the SCR technology."[16]

Aside from Nox control, Boilermakers have always led the way on Clean Air Act issues. For example, Boilermakers were pioneers in installation of scrubbers and further in fuel-substitution programs at our cement kiln facilities. In short, Boilermakers have been there to meet the challenges of the Clean Air Act, to the benefit our members and all Americans that breathe clean air.

However, Boilermakers cannot support the EPA's recent interpretation of its authority under the New Source Review program. NSR, correctly interpreted, forces new sources or those undergoing major modifications, to install new technology, like the technology President Jones mentioned. We support NSR in that context.

But, when NSR is applied to the routine maintenance policies and schedules of existing facilities, very different results occur. In those cases, facilities are discouraged from undertaking routine actions for fear of huge penalties or long delays or both. By applying NSR in that way, we are pretty sure that Boilermakers won't have the opportunity to work on maintenance projects that we know are extremely important to energy efficiency. Just hearing about recent events in California is enough to make the case that facilities need to be as efficient as possible.

Efficiency is not the only reason to encourage routine maintenance. Experienced professionals or Boilermakers new to the trade can both tell you: maintenance is necessary to maintain worker safety. Electric generating facilities harness tremendous forces: superheater tubes exposed to flue gases over 2000 degrees; boilers under deteriorating conditions; and parts located in or around boilers subjected to both extreme heat and pressure. Any EPA interpretation which creates incentives to delay maintenance is simply unacceptable to our workers.

As you can see, Boilermakers do not ask for repeal or substantial revision of the NSR program. We encourage the development and installation of new technology, and we stand ready to continue to train and apprentice workers to meet the needs of the Clean Air Act. However, when the NSR programs goes where it wasn't intended - and discourages the very maintenance, repair and replacement activities that constitute the livelihood of Boilermakers - we must strongly object.

Thanks for the opportunity to make a statement.

## **APPENDIX FOUR: What EPA Actually Has Done to Clarify NSR**

A wide variety of descriptions have been offered in the press to characterize what the U.S. EPA has done to clarify the applicability of the New Source Review program. As with most environmental programs, once the hyperbole is stripped away, the action can be seen as quite modest. There has not been any wholesale change in NSR; nor has the program been “rolled back” in any way. Indeed, by attempting to inject some commonsense applicability determinations in the short term, and by promising to review routine maintenance, repair and replacement issues over the longer term, the program hopefully will be more sensitive to efficiency needs, and hence more effective.

EPA describes the historical background of its June 13, 2002, announcement in this way:

In May 2001, The National Energy Policy Development Group, in its National Energy Policy Report recommended that "the Administrator of the Environmental Protection Agency, in consultation with the Secretary of Energy and other relevant agencies, review New Source Review (NSR) regulations, including administrative interpretation and implementation, and report to the President on the impact of the regulations on investment in new utility and refinery generation capacity, energy efficiency, and environmental protection."

On June 22, 2001, EPA issued a background paper, giving an overview of the NSR program and how it relates to utility and refinery generating capacity, energy efficiency, and environmental protection.

As part of the NSR regulations review process, EPA held four public meetings across the country to take comment on the background paper and gather additional information.

On June 13, 2002, Administrator Whitman sent a letter to the President transmitting EPA's Report to the President and a separate New Source Review Recommendations document summarizing actions to improve the NSR program.

On June 13, EPA described the scope of its action as follows:

Acting on the broad-based, bipartisan call for improving the New Source Review (NSR) program, the U.S. Environmental Protection Agency (EPA) today announced steps to increase energy efficiency and encourage emissions reductions. The EPA today submitted a report on NSR and recommendations for reform to President Bush to encourage pollution prevention projects, energy efficiency improvements, and investments in new technologies and modernization of facilities.

EPA's review found that the NSR program has impeded or resulted in the cancellation of projects that would maintain or improve reliability, efficiency or safety of existing power plants and

refineries. There is overwhelming support for reform from a diverse group of people and organizations.

The improvements that EPA is recommending today are the culmination of a 10-year process. During this period, EPA implemented pilot studies and received thousands of comments from state and local governments, environmental groups, private sector representatives and concerned citizens. Over the past year, EPA met with more than 100 environmental and consumer groups and public officials from across the political spectrum, held public meetings around the country, and evaluated more than 130,000 written comments to assess the effect of NSR on the energy sector. Last summer, the nation's governors and the state environmental commissioners — on a bipartisan basis — called for reform of the NSR program. Today's report and recommendations support this call for NSR reform. "EPA is taking actions now to improve NSR and thereby encourage emissions reductions," said EPA Administrator Christie Whitman. "NSR is a valuable program in many respects but the need for reform is clear and has broad-based support. Our review clearly established that some aspects of the NSR program have deterred companies from implementing projects that would increase energy efficiency and decrease air pollution."

The following reforms that EPA is moving to finalize were originally proposed during the previous Administration in 1996 and has been subject to extensive technical review and public comment:

- **Pollution Control and Prevention Projects:** To encourage pollution prevention, EPA will create a simplified process for companies that undertake environmentally beneficial projects. NSR currently discourages investments in pollution control and prevention projects, even if they reduce overall emissions.

- **Plantwide Applicability Limits (PALs):** To provide facilities with greater flexibility to modernize their operations without increasing air pollution, a facility would agree to operate within strict site-wide emissions caps called PALs. PALs provide clarity, certainty and superior environmental protection.
- **Clean Unit Provision:** To encourage the installation of state-of-the-art air pollution controls, EPA will give plants that install "clean units" operational flexibility if they continue to operate within permitted limits. Clean units must have an NSR permit or other regulatory limit that requires the use of the best air pollution control technologies.

- **Calculating Emissions Increases and Establishing Actual Emissions Baseline:** Currently, the NSR program estimates emissions increases based upon what a plant would emit if operated 24 hours a day, year-round. This makes it impossible to make certain modest changes in a facility without triggering NSR, even if those changes will not actually increase emissions. This common-sense reform will require EPA to evaluate how much a facility will actually emit after the proposed change. Also, to more accurately measure actual emissions, account for variations in business cycles, and clarify what may be a "more representative" period, facilities will be allowed to use any consecutive 24-month period in the previous decade as a baseline, as long as all current control requirements are taken into account.

EPA is also proposing three new reforms that will go through new rulemaking and public comment processes before they are finalized. These include:

- **Routine Maintenance, Repair and Replacement:** To increase environmental protection and

promote the implementation of necessary repair and replacement projects, EPA will clarify the definition of "routine" repairs. NSR excludes repairs and maintenance activities that are "routine," but a complex analysis must currently be used to determine what repairs meet that standard. This has deterred companies from conducting needed repairs, resulting in unnecessary emissions of pollution and hazardous conditions at these plants. EPA is proposing guidelines for particular industries to clearly establish what activities meet this standard.

"The NSR program needs to be clarified to adequately define the concept of "routine maintenance" to avoid the regulatory uncertainty facing industry. Such clarification would allow companies to repair their facilities and maintain reliable and safe electric service for consumers and workers without being subject to the threat of federal government lawsuits for allegedly violating vague NSR requirements." — Letter to Administrator Whitman, May 13, 2002, from a bipartisan group of 26 Senators.

· **Debottlenecking:** EPA is proposing a rule to clarify how NSR applies when a company modifies one part of a facility in such a way that throughput in other parts of the facility increases (i.e., implements a "debottlenecking" project). Under the current rules, determining whether NSR applies to such complex projects is difficult and can be time consuming.

· **Aggregation:** Currently, when multiple projects are implemented in a short period of time, a difficult and complex analysis must be performed to determine if the projects should be treated separately or together (i.e., "aggregated") under NSR. EPA's proposal will establish two criteria that will guide this determination.

"Reforming NSR will promote energy efficiency, plant safety and modernization at refineries, power plants, and other industrial facilities across the country," said Administrator Whitman. "Our common commitment to environmental protection need not be an obstacle to having the most modern and efficient energy infrastructure in the world. Unfortunately, some elements of NSR have discouraged modernization and the development of new technologies. These reforms will bring clarity and greater opportunities for pollution prevention and energy efficiency."

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**Notes:**

[1]Foundation for Clean Air Progress, Air Pollution Plummets as Energy Use Climbs (release of study results)(January 17, 2002), available at: [www.cleanairprogress.org/news/energy\\_01\\_02.asp](http://www.cleanairprogress.org/news/energy_01_02.asp). The study's state-by-state analysis tracks air quality and energy consumption during the 15-year period of 1985 to 1999. The data were drawn from the National Emission Trends (NET) database which is available from EPA.

[2]Venturi is quoted in the Statement of C. Boyden Gray, Hearings: Air Emissions from Power Plants, Senate Committee on Environment and Public Works, July 26, 2001.

[3]Id.

[4]U.S. Environmental Protection Agency, Automobile Emissions: An Overview, Factsheet OMS-5 (August 1994). With respect to Nox emissions, a comparison of reductions required of mobile sources and electric utilities shows that the utilities are pulling their own weight. Mobile sources contribute 58% of annual NOx emissions, more than double the 25% generated by electric utilities, and consequently would seem to have much more scope for emissions reduction.

[5]Vice President Al Gore, Creating A Government That Works Better and Costs Less (Chapter III - Creative Approaches to Environmental Protection)(September 1994).

[6]Vice President Al Gore, "The Environment" from 1996 Annual Report: The Best Kept Secrets in Government (report to President Clinton regarding Reinvention of Government and the National Performance Review).

[7]Alexander Volokh and Roger Marzulla, Environmental Enforcement: In Search of Both Effectiveness and Fairness, RPPI Policy Study No. 210 (Aug. 1996) at <http://www.rppi.org/environment/ps210.html>.

[8]Jonathan H. Adler, Anti-Environmental Enforcement (Feb. 1, 1997), at <http://www.cei.org/utills/printer.cfm?AID=1307>(citing a 1993 survey of 200 corporate general counsels conducted by the National Law Journal).

[9]The same source continues: "Federal agencies publish more than 65,000 pages of rules and interpretive statements in the Federal Register each year, and issue countless pages of regulatory guidance. Much of this "guidance" actually attempts to change the meaning of the regulations, or

to add new requirements not contained in the published rule. These thousands upon thousands of pages of regulations and interpretations often are inaccessible to most Americans, creating a welter of "private regulations" of which citizens are completely unaware. These memoranda, letters, and notes, prepared by thousands of separate government employees, are sometimes inconsistent with each other as well as with the regulation. Indeed, the more ambiguous the regulation, the greater the proliferation of interpretations and guidance, leaving the citizen to pick through them to ascertain at his peril what those regulations require of him. The results, in many instances, include ruinous penalties and the shattering of lives of ordinary, law-abiding Americans who tried to do the right thing."

[10]U.S. EPA, FY 2001 Enforcement and Compliance Results (Jan. 31, 2002), available at: <http://es.epa.gov/oeca/main/2001eoy/index.html>.

[11]Id.

[12]The Environmental Council of the States, State Environmental Agency Contributions to Enforcement and Compliance (April 2001), at 9.

[13]Id. at 14.

[14]Id. at 10.

[15]Becky Norton Dunlop, Environmental Enforcement: Supporting State Efforts to Encourage Voluntary Compliance at [http://www.adti.net/html\\_files/reg/dd/dddunlop.htm](http://www.adti.net/html_files/reg/dd/dddunlop.htm)

[16]Boilermaker Reporter, vol. 38, No. 1 (1999) SCR means selective catalytic reduction. SCR essentially consists of injecting ammonia into boiler flue gas and passing it through a catalyst bed where the NO<sub>x</sub> and ammonia react to form nitrogen and water vapor.

**Paper not submitted for this topic.**



## **BIOGRAPHICAL SKETCH**

### **Myron O. Knudson**

- Myron O. Knudson is the Director of the Superfund Division, Environmental Protection Agency, Region 6, Suite 1200, 1445 Ross Ave., Dallas, TX 75202-2733 (214)665-6701
- Mr. Knudson is a registered Professional Engineer in Texas, Massachusetts, and New Hampshire. He has served as an Engineer with the US Public Health Service from 1962 to 1966, with the Federal Water Pollution Control Administration from 1966 to 1970, and from 1970 until the present time with the U.S. Environmental Protection Agency. Mr. Knudson also served as Director, Surveillance and Analysis Division, Region 6, Dallas, Texas, from March 13, 1975 until May 19, 1979, and as Director, Water Management Division, Region 6, Dallas, Texas, from May 20, 1979 until July 22, 1995. He was appointed as Director, Superfund Division effective July 23, 1995.
- Mr. Knudson is a member of the American Society of Civil Engineers; the Water Environment Federation; the American Water Works Association; the North Texas Association of Environmental Professionals; and, the National Society of Professional Engineers.
- Mr. Knudson earned his Bachelor of Science in Civil Engineering in 1962 from the University of Texas at Austin, and his Master of Science in Civil Engineering (Environmental Option) in 1968 from Northeastern University in Boston.
- Mr. Knudson was born in Hamilton, Texas, June 16, 1939. He and his wife Doris, have a son and a daughter, Lars and Lisa.

### **BROWNFIELDS PANEL (Camel-lot)**

Myron O. Knudson, P.E., Director, Superfund Division  
U.S. Environmental Protection Agency, Region 6, Dallas, Texas

## **SMALL BUSINESS LIABILITY RELIEF AND BROWNFIELDS REVITALIZATION ACT**

### **Background**

- H.R. 2869 was introduced in the House of Representatives on September 10, 2001. It combined two bills (S. 350 and H.R. 1831) amending the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA or Superfund).
- H.R. 2869 passed the House of Representatives by voice vote on 12/19/01 and the Senate by unanimous consent on 12/20/01.
- H.R. 2869 incorporates S.350, the "Brownfields Revitalization and Environmental Restoration Act of 2001" which passed the Senate on April 25, 2001 by a vote of 99-0. S.350 contained three titles dealing with funding and liability for assessing and cleaning up contaminated properties. Title I codified and expanded EPA's current brownfields program by authorizing funding for assessment and cleanup of brownfields properties. Title II exempted from Superfund liability contiguous property owners, prospective purchasers, and clarified appropriate inquiry for innocent landowners. Title III authorized funding for State response programs and limited EPA's Superfund enforcement authority at sites cleaned up under a state response program. All three titles were combined into a single title in H.R. 2869.
- H.R. 2869 also incorporates H.R. 1831, the "Small Business Liability Protection Act" which passed the House on May 22, 2001 by a vote of 419-0. H.R. 1831 exempts de micromis contributors of hazardous substances and household, small business, and nonprofit generators of municipal solid waste from liability for Superfund response costs at national Priority List sites. Additionally, the bill provides for expedited settlements with certain persons based on a limited ability to pay.
- H.R. 2869 was signed into law by the President on January 11, 2002 and enacted as Public Law 107-118.

### **Section 102. Small Business Liability Relief**

- De Micromis Exemption

- Exempts persons from Superfund response cost liability at National Priorities List sites as generators and transporters if the person can demonstrate that
  - the total amount of the material containing hazardous substances they contributed was less than 110 gallons of liquid materials or 200 pounds of solid materials and
  - all or part of disposal, treatment, or transport occurred before April 1, 2001.
- Exceptions
  - materials contributed or could contribute significantly, either individually or in the aggregate, to the cost of the response action or natural resource restoration
  - the person fails to comply with an information request
  - the person impedes or impeded, through action or inaction, a response action or natural resource restoration at the facility
  - the person has been convicted of a criminal violation for conduct to which the exemption would apply
- Contribution Actions - Private parties seeking contribution bear the burden of proof that the exemption does not apply.
- Private party contribution plaintiffs are liable for costs and fees if the defendant is not liable under this exemption.

#### Municipal Solid Waste (MSW) Exemption

- Exempts persons from Superfund response cost liability as generators for the disposal of municipal solid waste if the person is
  - an owner, operator, or lessee of residential property
  - a business that employed on average not more than 100 individuals in the three years prior to notification of potential liability and is a 'small business concern' as defined by the Small Business Act
  - a nonprofit organization that employed not more than 100 individuals during the preceding year at the location from which the MSW was generated
- Exceptions
  - waste contributes or could contribute significantly, either individually or in the aggregate, to the cost of the response action or natural resource restoration
  - person fails to comply with an information request

- person impedes or impeded, through action or inaction, a response action or natural resource restoration at the facility
- Definition of Municipal Solid Waste
  - waste material generated by a household; and waste material generated by a commercial, industrial entity, to the extent that the waste material:
    - is essentially the same as waste normally generated by a house hold
    - is collected or disposed of with other MSW as part of normal MSW collection, and
    - contains a relative quantity of hazardous substances no greater than the relative quantity of hazardous substances contained in waste generated by a typical single family household.
  - examples: food and yard waste, paper, appliances, consumer product packaging, elementary and secondary school science lab waste, household hazardous waste
  - exclusions: combustion ash from resource recovery facilities or municipal incinerators and waste material from manufacturing and processing operations that is not the same as household waste.
- Burden of Proof - to establish applicability of MSW exemption in 107 and 113 actions
  - Private party bears the burden of establishing exemption does no apply for waste disposed of after April 1, 2001
  - Private parties and government bear the burden of establishing exemption does not apply for waste disposed of before April 1, 2001
- Bars contribution actions by a party other than a Federal, State or local government, against owners, operators, and lessees of residential property that generated MSW.
- Private party contribution plaintiffs are liable for costs and fees if the defendant is not liable under this exemption
- Expedited Settlements based on Limited Ability to Pay
  - Provides for conditional expedited settlements with eligible persons that demonstrate an inability or limited ability to pay response costs based on whether the settlor can pay and still maintain basic business operations, includes consideration of financial condition and ability to raise revenues
  - Includes government notification requirements and provisions requiring settlors to cooperate with EPA

### **Section 103. Effect on Concluded Actions**

- The amendments made by the small business title shall have no effect on settlements lodged or judgements issued by a federal court, or administrative settlements of administrative orders entered into or issued by the United States or a State before the date of enactment

## **TITLE II. BROWNFIELDS REVITALIZATION AND ENVIRONMENTAL RESTORATION ACT OF 2001**

### **Subtitle A. Brownfields Revitalization Funding**

#### **Section 211. Brownfields Revitalization Funding**

- Authorizes up to \$200 million per year for brownfields assessment and cleanup to carry out new section 104(k). Includes \$50 million per year or 25% of amount appropriated to carry out 104(k), for brownfields with petroleum contamination
- Definition of Brownfields Site: real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant or contaminant
- Additions for purposes of section 104(k)
  - land contaminated by petroleum or petroleum products
  - land contaminated by a controlled substance as defined in the Controlled Substances Act (21 U.S.C. 802)
  - mine-scarred land
- Exclusions
  - subject to a planned or ongoing CERCLA removal action
  - listed or proposed for listing on the National Priorities List
  - subject to a unilateral administrative order, court order, administrative order on consent, or consent decree under CERCLA
  - subject of a unilateral administrative order, court order, administrative order on consent, consent decree, or permit under RCRA, CWA, TSCA, SWDA
  - subject to corrective action under RCRA 3004(u) or 3008(h) to which a corrective action permit or order has been issued or modified requiring the implementation of corrective measures
  - land disposal units with closure notification submitted and closure plan or permit
  - subject to the jurisdiction, custody, or control of federal government
  - with PCB contamination subject to remediation under TSCA

- which have received assistance from the Leaking Underground Storage Tank for a response activity
- Provides authority to include some otherwise excluded sites on a site-by-site basis
- Eligible entities for brownfields funding include States, Tribes, local governments, land clearance authorities, regional councils, redevelopment agencies and other quasi-governmental entities created by states or local governments
- Imposes significant restrictions on charging administrative costs to grants
- Brownfields site characterization and assessment
  - authorizes grants of up to \$200,000 per site to eligible entities to inventory, characterize, assess and conduct planning at brownfields sites
  - authorizes targeted site assessments at brownfields sites
  - National Contingency Plan (NCP) requirements may be imposed only when relevant and appropriate to the program
- Brownfields remediation
  - authorizes grants of up to \$1 million to eligible entities to capitalize revolving loan funds to clean up brownfields
  - authorizes grants of up to \$200,000 per site to eligible entities or non-profit organizations to clean up brownfields owned by the grant recipient.
  - grants generally require a 20% match
  - construction, alteration and repair work funded all or in part with grant funds is subject to Davis Bacon Act
  - NCP requirements may be imposed only when relevant and appropriate to the program
- Brownfields program
  - establishes program to provide training, research and technical assistance to facilitate brownfields assessment and cleanup
  - limited to 15% of amount appropriated to carry out 104(k)

## **Subtitle B. Brownfields Liability Clarifications**

### **Section 221. Contiguous Properties**

- Exempts from owner or operator liability persons that own land contaminated solely by a release from contiguous, or similarly situated property owned by someone else if the person:
  - did not cause or contribute to the release or threatened release
  - is not potentially liable or affiliated with any other person potentially liable
  - exercises appropriate care in respect to the release
  - provides full cooperation, assistance, and access to persons authorized to undertake the response action and natural resource restoration
  - complies with all land use controls and does not impede the performance of any institutional controls
  - complies with all information requests
  - provides all the legally required notices regarding releases of hazardous substances
  - conducted all appropriate inquiry at time of purchase and did not know or have reasons to know of contamination

## **Section 222. Prospective Purchasers and Windfall Liens**

- Exempts bona fide prospective purchasers (and their tenants) from owner or operator liability so long as the person does not impede the performance of a response action or natural resource restoration
- Definition of a Bona Fide Prospective Purchaser
  - all disposal took place before the date of purchase
  - person made all appropriate inquiry
  - person exercises appropriate care with respect to any release
  - provides full cooperation, assistance, and access to persons authorized to undertake response actions or natural resource restoration
  - complies with land use restrictions and does not impede performance of institutional controls
  - complies with all information requests
  - provides all legally required notices regarding releases of hazardous substances
  - person is not potentially liable or affiliated with any other person potentially liable.
- Provides the U.S. with a lien on the property if the U.S. has unrecovered response costs and the response action increases the fair market value of the facility

## **Section 223. Innocent Landowners**

- Clarifies what actions landowners must take to satisfy the “all appropriate inquiries” requirement of the defense
- Directs EPA to promulgate within 2 years regulations establishing standards and practices for satisfying the all appropriate inquiries requirements.
- Until EPA issues the required regulations, two standards apply depending on the date the property was purchased
  1. Prior to May 31, 1997 - a court shall consider specialized knowledge of the defendant, relationship or purchase price to value of uncontaminated property, commonly known information, obviousness of contamination, ability of defendant to detect contamination by appropriate inspection
  2. After may 31, 1997 - ASTM “Standard Practice for Environmental Site Assessment: Phase 1 Environmental Site Assessment Process”
- In the case of a facility purchased for residential use by a person who is not a government or commercial entity, a facility inspection and a title search satisfy the appropriate inquiry requirement

### **Subtitle C. State Response Programs**

#### **Section 231. State Response Programs**

- Authorizes \$50 million per year for grants to assist States and tribes in the development of state response programs
- A state may be awarded funds if it is a party to a memorandum of agreement with EPA for its voluntary response program, or if the state includes, or is working toward including, the following elements in its program:
  - timely survey and inventory of brownfields sites
  - oversight and enforcement authorities to ensure protection of human health and environment
  - meaningful public participation
  - mechanism for approval of a cleanup plan and certification that response is complete
- Restricts Federal administrative or judicial enforcement action under 106(a) or cost recovery actions under 107(a) at any eligible response site at which there is a release, or threatened release, of a CERCLA-covered substance and at which a person is conducting



a response in compliance with a State program that specifically governs response actions for protection of human health and the environment

- This limitation applies only to response actions conducted after February 15, 2001
- “Eligible response site” is a brownfields site with the following additions:
  - certain LUST sites
  - certain sites covered by RCRA, CWA, TSCA, or SDWA excluded from the definition of a brownfield site, if as determined on a site-by-site basis, findings are made that not taking enforcement will still have limitations on enforcement are appropriate and will (1) protect public health and the environment and (2) promote economic development or open space
- The following sites are not eligible response sites, and federal enforcement or cost recovery restrictions are not applicable:
  - facilities at which Federal preliminary assessments or site inspections are conducted and are qualified for listing on the NPL
  - facilities determined to warrant particular consideration, as identified by regulation – e.g., threats to a drinking water aquifer or a sensitive ecosystem
- Federal enforcement actions may be brought at an eligible response site in the following cases (provided certain findings are made, generally related to risk at the site):
  - the State asks for Federal involvement
  - contamination has migrated, or will migrate, across a state line or onto federal property
  - considering response actions already taken, a release or threatened release may present an imminent and substantial endangerment to human health or the environment
  - new information, not in the record for the cleanup, indicates a threat requiring further remediation
- Administrative requirements
  - limitations only apply in States that publicly maintain a list of sites with response actions under the State response program
  - state must be notified of EPA enforcement action that may be otherwise barred and has 48 hours to reply
  - provisions exist for taking immediate Federal action, without awaiting State reply, under certain circumstances
  - EPA must report to Congress 90 days after initiation of enforcement action that may be otherwise barred

## **Section 232. Additions to National Priorities List**

- Requires deferral NPL listing if State or other party is cleaning up a site under a State program or if the State is pursuing a cleanup agreement
- President may list a deferred site after one year if State is not making reasonable progress toward completing a response action

## **PACE AND FUTURE DIRECTION OF SUPERFUND SITE LISTINGS**

- In 1980, Congress established the Superfund program to clean up the most heavily polluted hazardous waste sites in the country. Over the past 22 years, the program has cleaned up more than 800 Superfund sites, protecting the health of tens of thousands of Americans and restoring the environmental health in communities across the country.
- The Bush Administration is committed to the cleanup of America's remaining Superfund sites. Because the sites that remain are larger, require more cleanup construction, and thereby higher costs, Superfund is facing new challenges. That is why we want to work with the Congress to improve the existing program and carry out the mission the Superfund program has been meeting for more than two decades.
- EPA and the Administration strongly support the "polluter pays." The Superfund law puts the burden of paying for the cleanup of polluted sites where it should be on those responsible for creating the mess. Through aggressive action by the EPA, nearly 70 percent of all Superfund sites have been cleaned up by the responsible parties. Last year, this Administration raised a near record of \$1.7 billion in cleanup funds from responsible parties.
- EPA and the Administration support reform of the Superfund program to make it more effective and less costly. The EPA has asked the National Advisory Council on Environmental Policy and Technology to review the Superfund and suggest possible reforms. Among the issues NACEPT will be looking at are: the kinds of sites Superfund should address; alternatives to using Superfund to cleaning up sites; innovative methods for cleaning up the most heavily polluted and largest sites; and strategies to improve cooperation with state, tribal and local governments.
- President Bush's FY 2003 budget request provides \$1.3 billion for Superfund. In addition, the President has also requested \$200 million to help state and local governments cleanup brownfields, more than double last year's appropriation.

- The tax that funds the Superfund Trust Fund expired in 1995. While the Bush Administration has not proposed the renewal of this tax, it is examining the entire funding issue and expects to revisit the issue in its next budget request. Nevertheless, the expiration of the tax has not affected funding for Superfund cleanups. Since 1995, the annual appropriation for Superfund has been relatively steady. For more than five years, the previous administration was unsuccessful in renewing the Superfund tax and offered no alternatives.
- EPA's work in reviewing sites and readying them for cleanup is unaffected by the absence of the expired Superfund tax. EPA prioritizes sites for cleanup, considering such issues as the hazard posed to the community, the availability of contractors to perform the work to EPA's strict standards, the status of discussions with responsible parties, and the funds appropriated by Congress. In the current fiscal year, work will continue or start at more than 450 Superfund sites, and will be completed at 40 sites.
- The work we are doing now to improve Superfund will mean a cleaner, safer, and healthier America tomorrow. The Administration is committed to a Superfund program that effectively and efficiently achieves the environmental progress in which we so strongly believe.

May 31, 2002

**MEMORANDUM**

SUBJECT: Bona Fide Prospective Purchasers and the New Amendments to CERCLA

FROM: Barry Breen, Director /s/  
Office of Site Remediation Enforcement

TO: Superfund Senior Policy Managers (Region I - X)  
Regional Counsels (Regions I - X)

1. Introduction

Since 1989, EPA has negotiated agreements that provide a covenant not to sue for certain prospective purchasers of contaminated property prior to their acquisition, in order to resolve the potential liability due to ownership of such property. These agreements are known as Prospective Purchaser Agreements ("PPAs")<sup>1</sup>. In January 2002, CERCLA was amended through enactment of Public Law 107-118, titled the Small Business Relief and Brownfield Revitalization Act ("Brownfields Amendments"). Among other things, the Brownfields Amendments provide a limitation on liability for persons who qualify as bona fide prospective purchasers ("BFPPs"). Congress' intent in enacting this provision was to remove certain liability barriers to purchases of property and encourage redevelopment.

**EPA believes that, in most cases, the Brownfields Amendments make PPAs from the federal government unnecessary.** The following discussion describes when, primarily because

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<sup>1</sup> The PPA guidance is available at OSRE's Web page at <http://es.epa.gov/oeca/osre/ppa.html>. This guidance is titled "Guidance on Settlements with Prospective purchasers of Contaminated Property," dated May 24, 1995, which superseded earlier guidance issued June 6, 1989. The model PPA agreement was last revised on September 30, 1999. Additional guidance documents on the subject of prospective purchasers include a checklist, issued October 1, 1999, of documents likely to be requested from a prospective purchaser seeking a PPA, and a clarification, issued January 10, 2001, of PPA guidance titled "Support of Regional Efforts to Negotiate Prospective Purchaser Agreements (PPAs) at Superfund Sites and Clarification of PPA Guidance." The guidance listed is not being replaced by this memorandum, but is rather being supplemented.

of significant public benefit, EPA will consider providing a prospective purchaser with a covenant not to sue now that the Brownfields Amendments are law.

## 2. Background

Subtitle B of the new Brownfields Amendments, through the addition of CERCLA section 107(r), provides a limitation on liability for a “bona fide prospective purchaser” whose potential liability is based solely on the purchaser’s being an owner or operator of a facility, and provided that the purchaser does not impede the performance of a CERCLA action. New subsection 101(40) defines “bona fide prospective purchaser” as a person, or tenant of that person, who acquires ownership of a facility after the date of enactment of the Brownfields Amendments, January 11, 2002, and by a preponderance of the evidence establishes the following:

1. disposal at the facility occurred prior to acquisition;
2. the person made all appropriate inquiry into previous ownership and uses of the facility in accordance with generally accepted practices and in accordance with the new standards contained in section 101(35)(B);
3. the person provides all legally required notices with respect to hazardous substances found at the facility<sup>2</sup>;
4. the person exercises “appropriate care” with respect to the hazardous substances found at the facility by taking “reasonable steps” to:
  - a. stop any continuing releases;
  - b. prevent any threatened future release;
  - c. prevent or limit human, environmental or natural resource exposure to any previously released hazardous substance;
5. the person provides full cooperation and access to the facility to those authorized to conduct response;
6. the person is in compliance with any land use restrictions and does not impede the effectiveness or integrity of any institutional control;
7. the person complies with any information request or administrative subpoena under CERCLA; and
8. the person is not potentially liable for response costs at the facility or “affiliated” with any such person through
  - a. direct or indirect familial relationship or

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<sup>2</sup> This requirement is very site specific, and will depend on gaining an understanding of which hazardous substances if any are on the property, through making “all appropriate inquiry” into previous uses of the property. Once the nature of any contamination is more fully understood, then any required notices will be more evident.

b. any contractual, corporate or financial relationship (excluding relationships created by instruments conveying or financing title or by contracts for sale of goods or services).

The BFPP provisions represent a significant change in CERCLA. For the first time, a party may purchase property with knowledge of contamination and not acquire liability under CERCLA as long as that party meets the BFPP criteria<sup>3</sup>. The new Amendments should provide significant savings of time and transaction costs. Private parties will now be able to avoid the costs associated with negotiating PPAs, and the timing of the transaction will be within the control of the parties to the transaction and need not await federal government approval of the terms of a PPA.

A BFPP may be subject to a "windfall lien" under the newly added CERCLA Section 107(r), up to the amount of unrecovered response costs incurred by the United States at a facility for which the owner is not liable as a BFPP, and where the response action increases the fair market value of the facility. As to the amount and duration of any windfall lien, the Brownfields Amendments state that the amount is not to exceed the increase in fair market value attributable to the response action at the time of sale or other disposition of the property.<sup>4</sup> The windfall lien arises at the time response costs at the facility are incurred by the United States, and shall continue until the earlier of satisfaction of the lien by sale or other means, or, notwithstanding any statute of limitations under CERCLA Section 113, recovery of all response costs incurred at the facility.

### 3. Discussion

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<sup>3</sup> CERCLA section 107(q) creates another category of person, a contiguous property owner, who will not be considered to be an owner or operator of a facility so long as that person makes all appropriate inquiry into previous uses of the property and does not discover that it is contaminated. If such person has knowledge of contamination at the time of acquisition, he may qualify as a bona fide prospective purchaser under CERCLA section 101(40), so long as he meets the other requirements of that section.

<sup>4</sup> Therefore, where the lien arises, the lien shall not exceed the increase in fair market value attributable to the response action.

EPA's long-standing policy is not to become involved in purely private real estate transactions. The Brownfields Amendments reinforce the appropriateness of that policy. The Amendments provide a limitation on liability from CERCLA to persons who qualify as BFPPs thereby making a federal covenant not to sue under CERCLA unnecessary. In light of the new Amendments, effective as of the date of enactment, purchasers should no longer need PPAs with the federal government in order to complete the vast majority of real estate transactions involving contaminated property.

While EPA believes the necessity for PPAs has been largely addressed by congressional action, the Agency recognizes that in limited instances the public interest will be served by entering into PPAs or some other form of agreement<sup>5</sup>. First, where there is likely to be a significant windfall lien and the purchaser needs to resolve the lien prior to purchasing the property (e.g. to secure financing), EPA may consider entering into an agreement with the purchaser.<sup>6</sup>

Second, there may be projects in which a PPA is necessary to ensure that the transaction will be completed and the project will provide substantial public benefits to, for example, the environment, a local community because of jobs created or revitalization of long blighted, under-utilized property, or promotion of environmental justice. In these limited circumstances, the following examples may provide some general guidelines on when such an agreement may be considered:

1. Significant environmental benefits will be derived from the project in terms of cleanup, reimbursement of EPA response costs, or new use, and there is a significant need for a PPA in order to accomplish the project's goals.

Example: The purchasers are committing to perform significant cleanup as they develop the site for a new use and have concerns about facility "owner or operator" liability.

Example: There has been no facility cleanup, no viable potentially responsible party exists

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<sup>5</sup> EPA also recognizes that entering into an "agreement" is not necessary in every instance where a party acquiring contaminated property has concerns about managing liability risks. EPA issued its "Policy on the Issuance of EPA Comfort/Status Letters" on November 12, 1996, in an effort to help the public better understand the environmental status of certain properties and the likelihood that EPA would become involved there.

<sup>6</sup> In some cases, where a BFPP and the United States agree to resolve the United States' windfall lien claim in advance of the BFPP's purchase of the real property, such an agreement may be limited to a settlement of the Section 107(r)(2) lien claim. As stated above, Congress intended the new Section 107(r) to obviate the need for most PPAs and, therefore, settlement of the windfall lien claim may be limited to that one issue. It is EPA's present intent to discuss the windfall lien issue more fully in subsequent guidance.

who can be required to timely conduct the cleanup (the current owner may be in bankruptcy), and no potential developer is willing to undertake the entire cleanup in order to develop and use the facility, which, without a PPA, may sit idle for years.

2. The facility is currently involved in CERCLA litigation such that there is a very real possibility that a party who buys the facility would be sued by a third party.

Example: The United States has an enforcement case under CERCLA Sections 106 and 107 pending against potentially responsible parties, and the primary defendants have sued an additional number of third party defendants, and/or there is a private party contribution action ongoing, and a prospective purchaser has been threatened with contribution litigation.<sup>7</sup>

3. EPA will consider entering into a PPA or other settlement in unique, site-specific circumstances not otherwise addressed above when a significant public interest would be served by the transaction and it would not otherwise occur without issuance of a PPA.

#### IV. Conclusion

Subtitle B—Brownfields Liability Clarifications, of the Brownfields Amendments set out the limitations on liability that are now a part of CERCLA. It is the Agency's hope and expectation that most real estate transactions concerning acquisition of brownfields properties will now move forward with no need for EPA involvement. In those unusual circumstances discussed above, EPA remains committed to removing liability barriers to redevelopment of property where it may appropriately do so.

Case specific inquiries as well as general questions regarding this policy should be directed to Helen Keplinger in OSRE's Regional Support Division at (202) 564-4221.

*This memorandum is intended solely for the guidance of employees of EPA and the Department of Justice and it creates no substantive rights for any persons. It is not a regulation and does not impose legal obligations. EPA will apply the guidance only to the extent appropriate based on the facts.*

cc: Susan Bromm (OSRE)  
Paul Connor (OSRE)  
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<sup>7</sup> A party may have acquired property and otherwise qualify as a BFPP before being threatened with contribution action, but there is no prohibition against EPA entering into a settlement with that party after his acquisition of the property.



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# National Environmental Information Exchange Network

## Information Package

June 2001



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For further information, or to get the Blueprint or Fact Sheet on line, please see:

<http://www.epa.gov/oei/imwg>

or

<http://www.ecos.org>

## I. Introduction

Information technology is changing the way government is doing business. EPA and the States, along with many public and private sector organizations, are using information technology to streamline their business processes and to improve services. As part of this e-government evolution, EPA and the States have been working in partnership since 1998 to develop the National Environmental Information Exchange Network (the “Network”), which will transform the way States, EPA, and other partners exchange environmental data.

High-quality and timely information is essential to the work of environmental protection. Yet, many of the current government systems and approaches to exchanging environmental data are ineffective and burdensome and do not meet the needs of government or external users. The Network is a key part of the joint EPA-State vision of building “local and national access to environmental information.” The Network will facilitate the exchange of data between participating partners, using the Internet (and Internet-based protocols) and standardized data exchange formats. It is a voluntary, flexible, and secure Network that enables EPA, States, and other partners to address the environmental challenges of the future.

### **The State/EPA Shared Vision**

“The States and EPA are committed to a partnership to build locally and nationally accessible, cohesive and coherent environmental information systems that will ensure both the public and regulators have access to the information needed to document environmental performance, understand environmental conditions, and make sound decisions that ensure environmental protection.” (Information Management Work Group, March 1998)

The Network will improve the quality of environmental data, make the flows of data between EPA, States, and other partners more efficient, reduce reporting burden, and improve access to environmental data. Perhaps most importantly, this approach will provide secured flows of high-quality data that can be used to measure environmental results. As Agencies move toward performance and indicator-based management approaches, the Network will provide the critical infrastructure to provide transparency and accountability.

More broadly, the Network is an important step in embracing e-government and meeting the environmental challenges of the 21<sup>st</sup> century. These challenges are magnified by the significant changes in today’s business of environmental protection:

- < Technology enables us to access and use information faster.
- < The regulated community and the public expect faster and easier access to better information.

- < Today's complex environmental issues require collaboration across many different organizations and media, and integrated, multimedia information is needed to identify solutions to these complex issues.

The following table highlights key trends that, in addition to the three changes listed above, influence how EPA, States, and other partners manage and use environmental information.

#### **Key Trends in Managing Environmental Information**

- < Increasing public expectations for e-government
- < Increasing role of State, Tribal, and local governments in environmental programs
- < States investing in their own modern, integrated information systems and migrating away from primary use of EPA systems
- < EPA must accommodate a wider diversity of State and other data partner systems
- < Increased demand for real time and geospatial or locally based data.

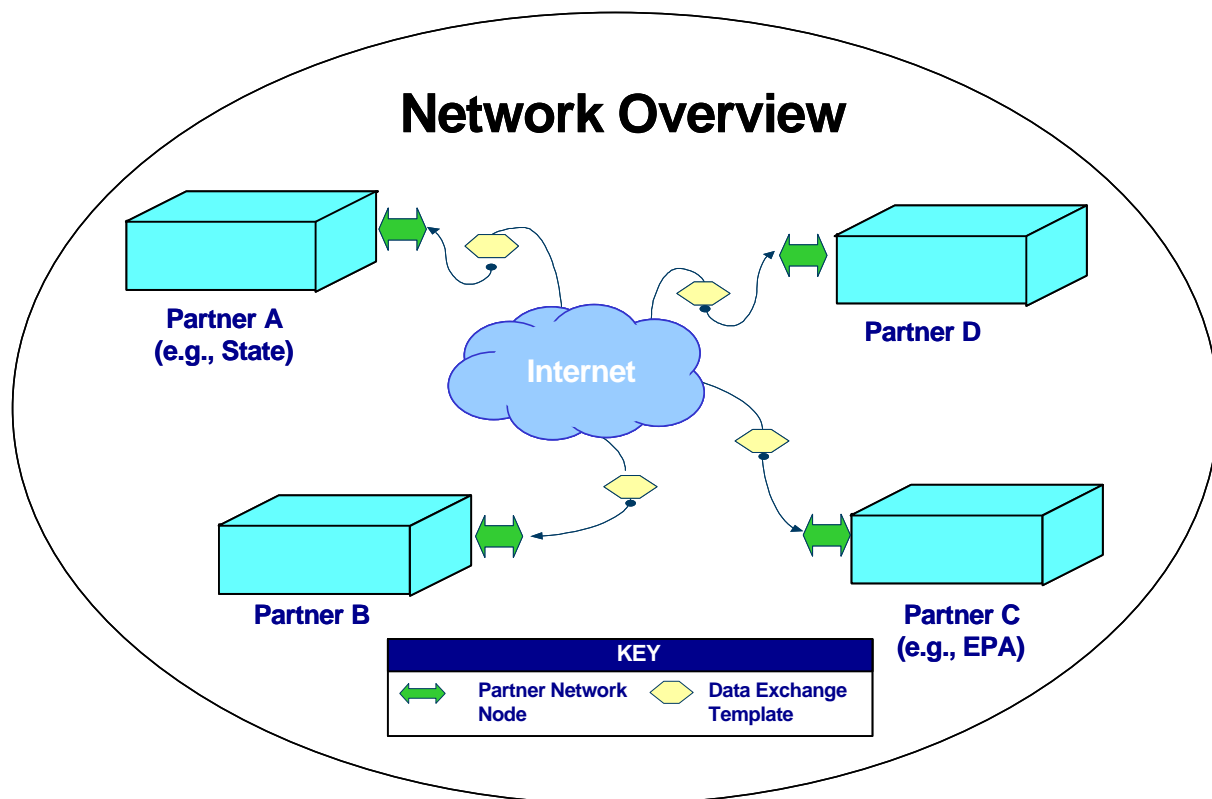
The Network concept recognizes the interdependence between and among data partners and the need to work together in sharing and using environmental data. In the process of developing the Network, EPA and the States have forged a truly collaborative approach to managing environmental information and have already made significant progress in developing the Network.

This information package will provide an overview of the Network, describe why EPA and the States are pursuing this effort, and highlight the accomplishments and future plans for the Network. The remainder of this package is organized in five sections:

- < Overview of the National Environmental Information Exchange Network
- < Accomplishments: what has been done
- < Program Plans: future activities and milestones
- < Proposed Network Grant Program: overview.

## II. Overview of the National Environmental Information Exchange Network

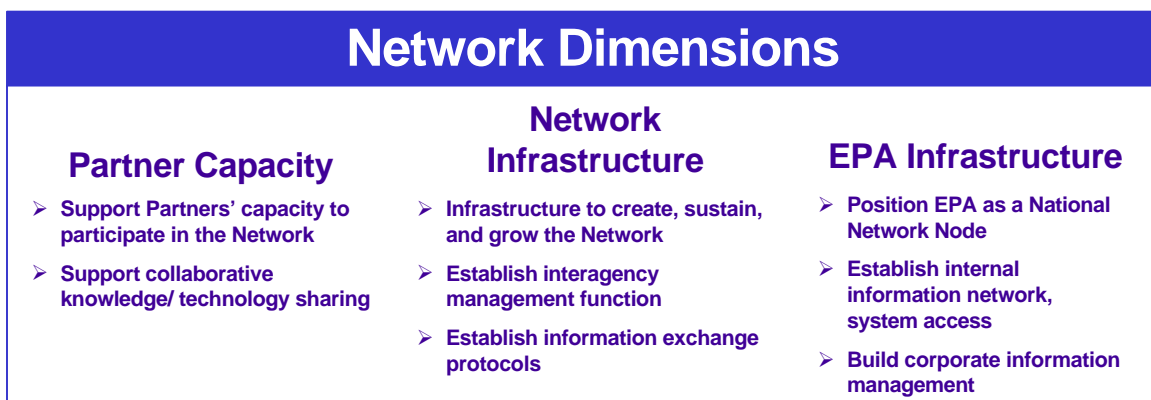
The National Environmental Information Exchange Network (the “Network”) is a new approach for exchanging environmental data between EPA, States, and other partners that uses the Internet and standardized data formats. As illustrated below, the Network consists of data exchanges between “nodes” or portals maintained individually by participating partners (initially envisioned as State environmental agencies and EPA). Once established, these data exchanges will replace and complement the traditional approach to information exchange that currently relies upon States feeding data directly to multiple EPA national data systems. In addition to these historical flows, new flows of additional data (e.g., facility identification) will be established. The Network concept is described in detail in the “Blueprint for the National Environmental Information Exchange Network.”



The Network strategy is based upon established best practices and technologies from the private sector in migration to e-commerce. These efforts are often organized into three interrelated areas: establishing the infrastructure for delivering services (e.g., the Internet), establishing an organization’s ability to deliver services (e.g., online ordering), and supporting customers/partners (e.g., customer relations).

In adapting this private sector experience to the public setting, EPA, States, and other partners have also organized the Network effort into three dimensions:

- A. Network Infrastructure—building the “backbone” of the Network
- B. Partner Capacity—enabling Network partners to participate in the Network.
- C. EPA Infrastructure—building the essential EPA infrastructure needed for EPA to participate, as a partner, in the Network.



Each of these dimensions has components that need to be developed if the Network is to function. This section outlines each of these dimensions and the associated components in more detail. It then summarizes the benefits of the Network.

## A. Network Infrastructure

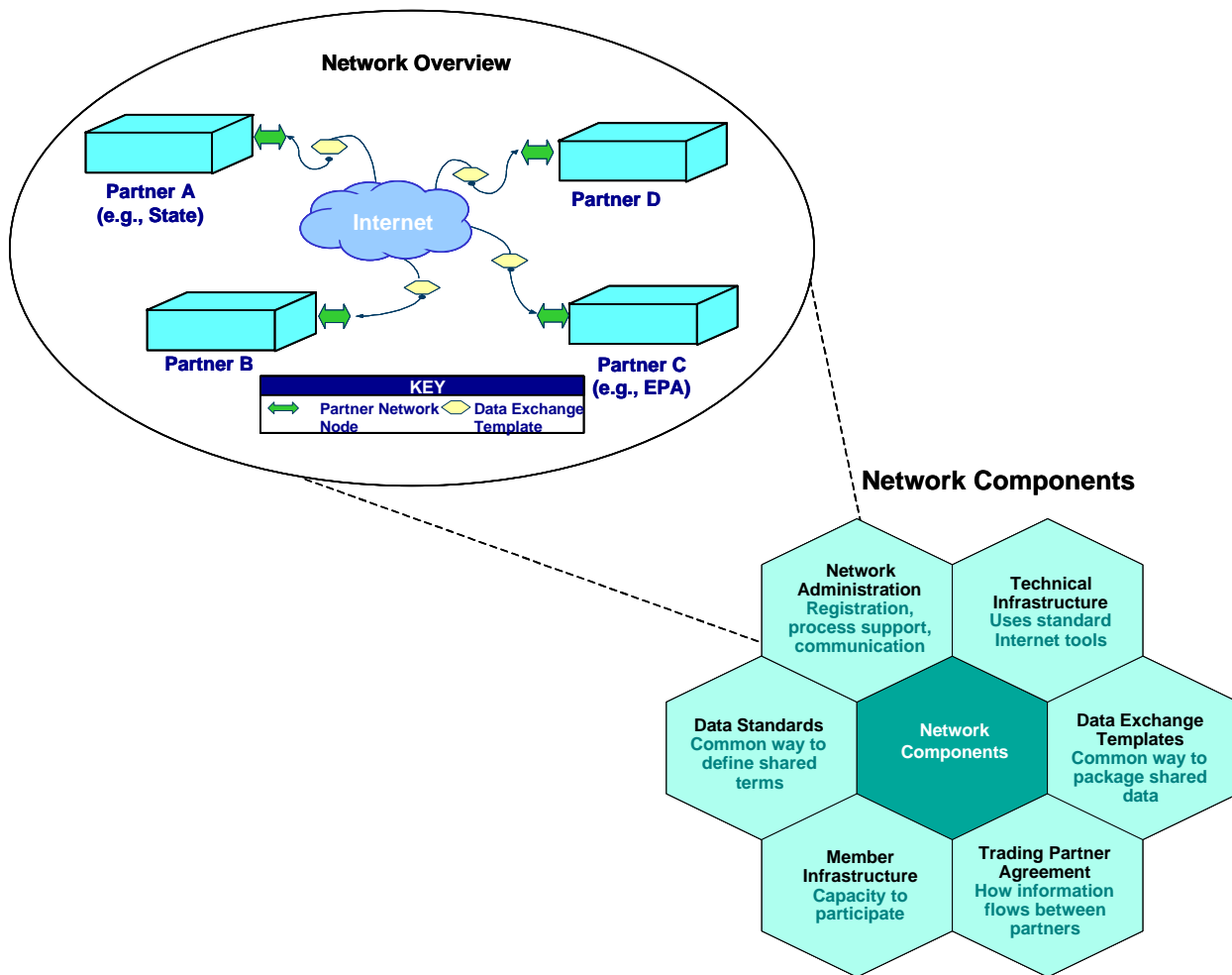
The Network “infrastructure” is the backbone, or the core components, needed for the Network. The States and EPA identified the basic core components that any collective system would have to contain in order to achieve the objective of the Network overall. These are:

- < A common language in which to express and evaluate environmental information. This language must allow for multiple uses of data, especially its aggregation, integration, and an assessment of its quality.
- < A common way to securely and easily provide access (locally, inter-governmentally or publicly) to this information.
- < A common way to establish and document the commitments and obligations about data that partners have with each other.
- < A common technical infrastructure that leverages the revolutionary developments of the Web and supports these functions but does not constrain partners in their internal operations
- < A common policy and program framework that supports these functions for current flows but pushes forward to expand and broaden them to new information and new partners.

The States and EPA then identified the best practices from the private sector to develop the six major components for the Network illustrated in the following figure.



Each of these Network components plays an important role in the functioning of the Network. As mentioned earlier, the Network facilitates data exchanges between “nodes” or portals, which is a participant’s single, managed point of interaction between trading partners on the Network.



These nodes use the Internet to exchange data via standardized **Data Exchange Templates** (DETs), using common Internet-based protocols. DETs define the format data must take prior to exchange. Established Data Standards are used to develop these DETs. **Data Standards** are documented agreements on formats and definitions of common data. These standards are established to bring better consistency and quality to the data that trading partners maintain.

Data exchanges, between partners, are governed by **Trading Partner Agreements** (TPAs). TPAs document the agreed upon data, exchange format, frequency of exchange, and related issues. They explicitly define the quality, timeliness, and format of the data. These data flows are supported by both the technical and member infrastructure. The **Technical Infrastructure** of the Network is the software, hardware, and protocols used to make it function. **Member Infrastructure** defines the roles and responsibilities required for Network participants. **Network Administration** coordinates these components and ensures that they are accessible to partners who wish to use them.

## **B. Partner Capacity to Participate in the Network**

The second critical dimension of the Network is the capacity of partners to participate in the Network. The activities in this dimension include information sharing and support to ensure that all data partners can effectively exchange information in the Network.

To participate in the Network, all partners need the following:

- Establishment and management of high-quality information systems that support Agency business functions and can act as Network information sources.
- Technical infrastructure capable of supporting these systems and the node.
- Managed linkage of these sources/systems, to the node.
- Node operation (e.g., servicing of authorized information requests).
- Enterprise management, including node operation and establishment of TPAs.

The initial focus of the Network activities in this area has been to build the capacity of States. As described in Section III, EPA and States have conducted many knowledge transfer activities to help build State capacity. Section IV describes a preliminary assessment of State readiness that was also completed. Future plans include expanding to provide capacity building activities for other data partners, including Tribes. Because of EPA's critical national role, EPA's infrastructure needed to participate, as a partner, in the Network is discussed as the third dimension of the Network effort.

## **C. EPA Infrastructure Needed to Participate, as a Partner, in the Network**

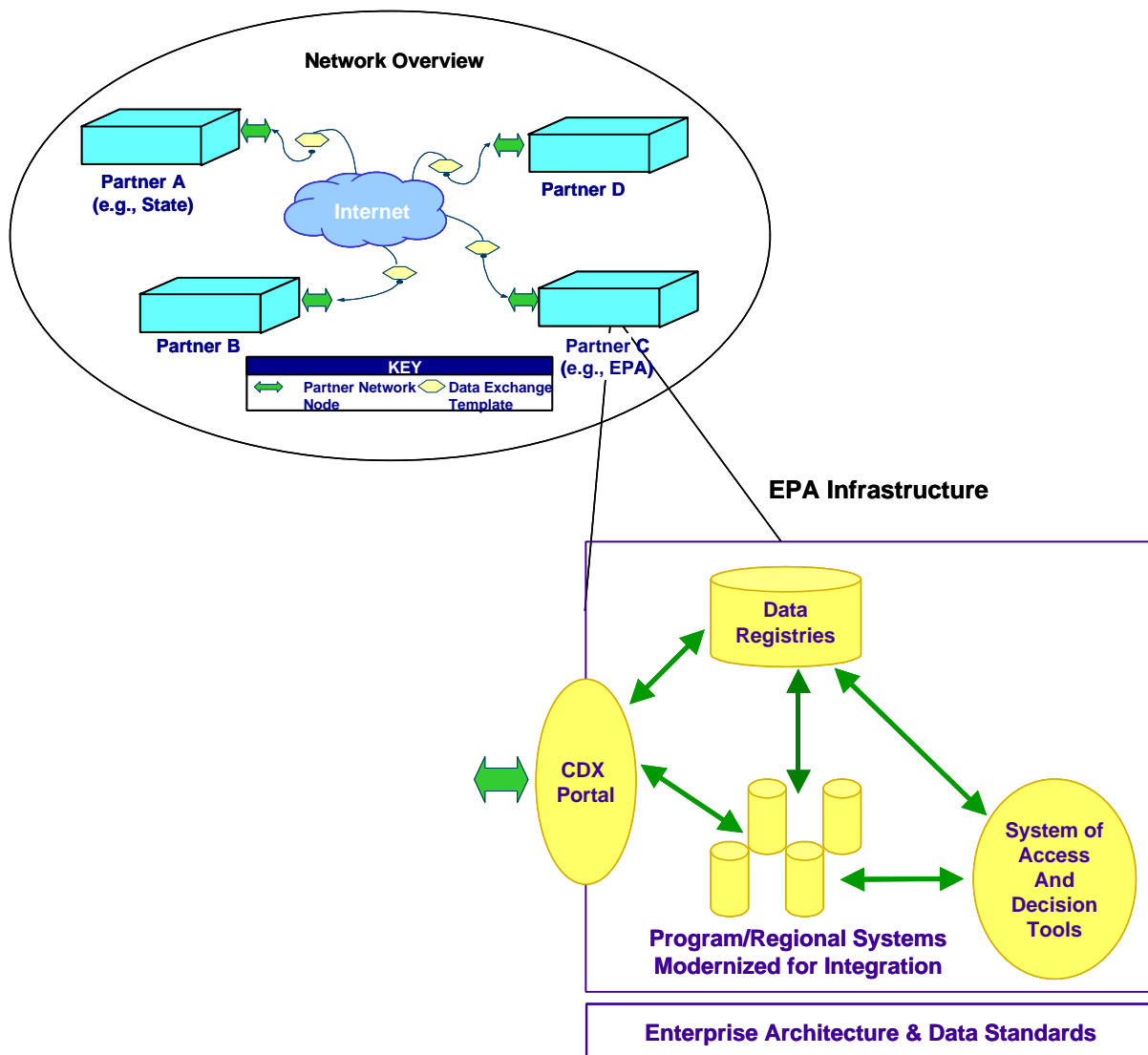
EPA Programs and Regions must play a significant role in the Network, because of the volume of information that, by law, the Agency is required to collect to effectively exercise its mandated functions (e.g., national policy setting, oversight of delegated programs and administration of national programs). The components of EPA's infrastructure that are key to EPA's effective participation in the Network include:

- < **Central Data Exchange (CDX)**, EPA's portal or node on the Network, through which data flows are routed and delivered to their destination.
- < **Data Standards** which are documented agreements on data elements and definitions of common data.
- < **Data Registries** documenting and organizing core data for cross-Agency business needs (e.g., facility information, place information, and chemical and other substance information).
- < **Program and Regional Systems modernized for integration** with the CDX, the registries, the access mechanisms, and decision support tools.
- < **System of Information Access Mechanisms and Decision Support Tools** that make the information more usable to EPA, its partners, and the public.
- < **Enterprise Architecture** is the framework used to guide overall investments and ensure that infrastructure and systems development are compatible with each other, and with the Network. This architecture defines the framework within which capabilities such as

access, decision support and security are implemented.

- < **Geospatial Program** planning, data acquisition, and database development enhances the ability to integrate and use geospatial information for environmental decision-making and for public access.

The following diagram illustrates the components of EPA's infrastructure. Data is exchanged through the CDX, and Agency-wide data (e.g., general facility data) is placed in the appropriate data registry. Program or region-specific information is placed in the relevant program or regional system. The "system of access" includes a "data warehouse" drawing data from the registries and program/regional systems, applications that use the data in the warehouse to address user needs, and interfaces that provide users appropriate access to the information generated by the applications. Decision tools provide tools for data analysis.



## Benefits of the Network

The Network is founded on principles of data stewardship, data quality, and agreement on broad technical standards. As such, it will provide a common approach to environmental data exchange that will yield many benefits. These benefits are highlighted below:

### Benefits of the Network

- Reduces Burden of Information Exchange
  - *Common principles, standards, formats, technologies allow more efficient exchanges*
- Increases Flexibility to Integrate & Manage Data
  - *Decouples information exchange from system design*
- Improves Data Quality, Availability, and Security
  - *Built-in quality reviews yield more consistent information*
- Enhances Dialogue on Information Issues
  - *Simplifies mechanics of data exchange, allowing a focus on broader information management issues*

While the Network will provide many benefits, it is not intended to address all of today's environmental information challenges. The Network focuses on improving *how* EPA, States, and other partners exchange and manage environmental data. Clearly, there are additional challenges not directly addressed by the Network regarding *what* information EPA, States, and Tribes should collect for improved decision-making and performance measurement.

For example, a key challenge facing all partners in the exchange of environmental information is how to reduce burden consistent with the responsibilities of all parties. The Network can address burden that arises from process problems—needing to supply data in a rigid, outmoded format, needing to supply similar data to multiple programs or levels of government, etc. The Network does not directly address burden that may result from unneeded data being required. The Network will address several aspects of the data quality issues (e.g., incompatible definitions) but is not a panacea for these complex issues.

To address these additional aspects of information issues, EPA and the States are pursuing other information planning activities. For example, EPA's Office of Environmental Information is working on an Information Plan that will help meld efforts to streamline information exchange processes, integrate information, improve data quality, and identify and meet environmental information needs.

### III. Accomplishments

EPA and the States already have made significant progress in developing the Network. The accomplishments are summarized below and highlighted in the timeline that follows this narrative.

#### A. Network Infrastructure

EPA and the States established a strong working partnership, developed the overall Network vision and concept, planned and built key components of the Network, and successfully demonstrated pilot data flows through the Network.

- < ***State/EPA Information Management Workgroup (IMWG)***—chartered to address management issues of concern to States and EPA. Created a partnership to foster the exchange of data, and developed a vision and operating principles. Established the Environmental Data Standards Council to develop and promote the use of data standards with EPA, States, Tribes and other partners.
- < ***Stakeholder Forums***—held a forum on environmental information issues with key stakeholders in November 1999, providing early input that contributed to the Network concept. Also held a forum in May 2001 with industry and public interest groups on the Network, and began broader agenda for outreach to stakeholders.
- < ***Shared Expectations for a National Environmental Information Exchange Network***—draft document defining expectations for how to share and manage environmental data in the future while addressing ways to reduce reporting burden, use standardized transaction sets, clarify data stewardship roles, and improve data quality.
- < ***Blueprint for a National Environmental Information Exchange Network***—outlines the conceptual design of the Network—a commitment to change the way environmental data is exchanged between States, EPA, and others.
- < ***Data Standards***—Six data standards have been finalized (industry classification, chemical, biological taxonomy, calendar date, facility identification, and latitude/longitude). Four new standards are being developed. Assistance program for information system managers across the Agency has been established.
- < ***Pilot Flows through the Network***—demonstrated EPA’s ability to retrieve air emissions inventory and facility data from a secure State server and process it through the Central Data Exchange (CDX) using Active Data Retrieval. Demonstrated State ability to send Permit Compliance System (PCS) data using a standardized extensible markup language (XML) format through EPA’s CDX to PCS.

## **B. EPA's Infrastructure Needed to Participate, as a Partner, on the Network**

The Agency created the Central Data Exchange (CDX), EPA's node or portal on the Network, and, working closely with the States, made significant progress on data standards and data registry development. The National Geospatial Program was also launched to advance the integration of Agency programmatic data by place/location and to increase the use of geospatial data tools and technologies to support the implementation of the Agency's business operations.

- < ***Central Data Exchange (CDX)**—was created and is now in interim operation mode. The Agency acquired core infrastructure to provide security, registration, batch file transfers, Web forms, archiving, and data transformations.*
- < ***The Facility Registry System (FRS)** was developed and populated with over 550,000 unique facility identification records.*
- < ***The National Geospatial Program** developed initial specifications for a Geospatial Data Index to identify which geospatial data is held Agency-wide and link into indexes/catalogues for all 50 states, other federal agencies and non-governmental organizations. Completed a comprehensive Geospatial Activities Baseline Assessment and Report and scalability assessment for the Integrated Geospatial Database.*
- < ***“Window To My Environment,”** a Web-based geospatial application that allows users to access information about environmental conditions in their community; was demonstrated with States in Region 3 (Virginia, Maryland, West Virginia, Pennsylvania, and Delaware).*

## **C. Partner Capacity to Participate in the Network**

States and EPA (both Headquarters and Regional Offices) have participated extensively in a variety of knowledge transfer activities over the past three years. Activities have been developed or supported that not only meet the needs of many, but also leveraged State and EPA resources. Knowledge Transfer accomplishments over the past three years have been generally directed toward State capacity building. A partial listing of these activities follows:

- < ***Many States, 25-35, are moving towards integrated information systems.***
- < ***Knowledge Transfer Meetings**—Six meetings held since 1998 to focus on integrating facility information, sharing lessons learned, and demonstrating successes.*
- < ***Knowledge Transfer Products**—these include Facility Identification Template for States (FITS); Web site for Ideas and Solutions on Environmental Information and Regulatory Innovations (WISER); Facility Identification Template for States update (FITS II); Ambient Environmental Information—A Report on State and EPA Data Integration Efforts; Guide for State Environmental Agencies on Planning and Hosting a Public*

*Information Forum:*

**S     *State Node Pilot***

*Nebraska, Utah, Delaware, and New Hampshire are developing pilot network nodes to share facility data over the Network.*

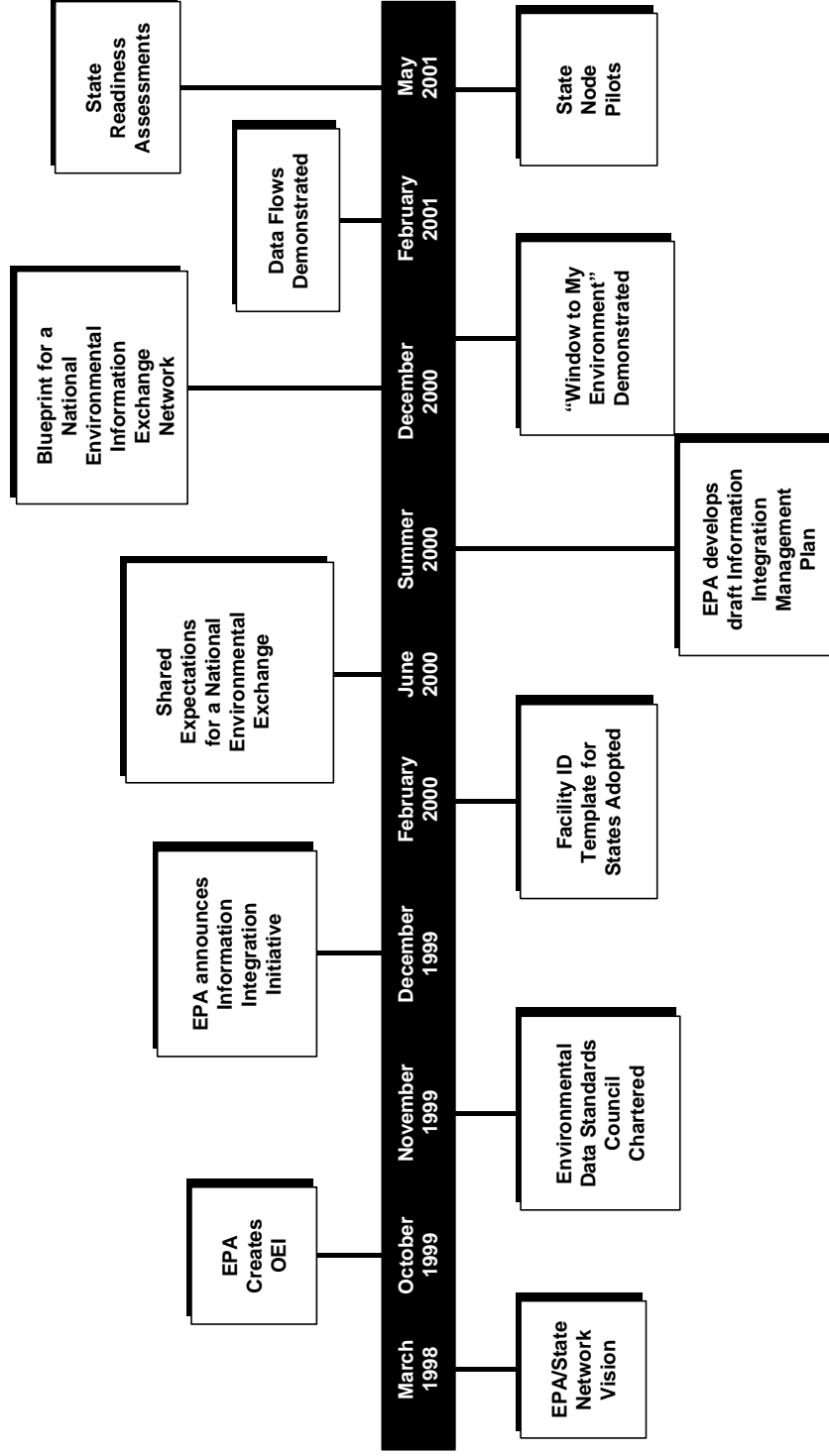
**S     *Facility Identification***

*The Facility Identification for States (FITS) data model was used by EPA to create the Facility Registry System (FRS) and has been used by many State agencies to create their systems that manage facility identification data and data integration. FITS II was prompted by the desire to continue to learn from the experiences of States and to incorporate the data elements and relationships of the facility standard into the template. EPA's FRS adopted the FITS II enhancements.*

*An XML template was developed to facilitate the data transfer of facility identification data to the FITS II model and FRS database; a model Trading Partner Agreement (TPA) was developed and the first Network TPA for the exchange of facility identification data was drafted and signed by Region 7 and the Nebraska Department of Environmental Quality.*

- <     *State Readiness Assessment***—*Completed a preliminary assessment to determine the readiness of States to participate in the Network and to become a node on the Network. (Preliminary results are discussed in Section IV.)*

# Network Milestones





## **IV. FY2001–FY2003 Program Plans for the Network**

### **Introduction**

This section provides a high-level overview of Network milestones for FY2001–FY2003. These milestones are presented by the three dimensions of the Network. Many of the Network projects cross the three dimensions and simultaneously support multiple objectives and progress towards multiple milestones. EPA/State success in meeting these milestones is dependent on adequate support for EPA and State program efforts.

EPA and the States recognize the importance of project planning to guide the Network effort. As such, EPA and the States are in the process of developing an overall program plan for the Network. This overall plan will build on draft planning documents completed on the Network activities that were completed over the past year.

### **Near Term Goals for the Network**

EPA and the States have made significant progress in developing the Network. To sustain and accelerate this progress, the States and EPA have established a set of near term goals for the overall development of the Network. These goals encompass all the Network dimensions outlined above and focus on results needed for each year. These goals are supported by the specific Network milestones for FY2001 - FY 2003 presented in Tables 4.1 and 4.2.

The near term goals, along with example milestones supporting the goals, are as follows:

#### **In FY 2001:**

- **Establish the technical and administrative foundations of the Network and validate the Network conceptual design.**  
*(e.g., Network Blueprint, pilot registry for common formats)*
- **Demonstrate EPA's capacity to participate in the Network.**  
*(e.g., CDX used for pilot data exchanges)*
- **States demonstrate ability to participate in the Network and provide knowledge transfer.**  
*(e.g., node prototypes in three States)*

#### **In FY2002:**

- **Expand Network infrastructure and increase number of data flows.**  
*(e.g., initial guidance on Trading Partner Agreements, common formats for five major data flows)*

- **Expand EPA's use of the Network.**  
*(e.g., CDX expanded to 40% of EPA's major systems, national rollout of Window to My Environment access tool),*
- **Expand State participation in the Network**  
*(e.g., at least 20 States have basic nodes on the Network).*

#### **In FY2003:**

- **Network Infrastructure nearly complete and major data flows occur on the Network.**  
*(e.g., Data Exchange Templates completed for all priority data flows)*
- **Network is part of EPA's routine business functions**  
*(e.g., CDX expanded to 80% of EPA's major systems, initial enterprise repository is operational)*
- **Achieve participation by a large number of States, and bring in new partners.**  
*(e.g., at least 35 States, and additional partners, have basic nodes on the Network)*

#### **A. Network Infrastructure**

Table 4-1 provides a summary of milestones for FY2001–FY2003. In addition to direct investments in the Network components, such as data exchange templates (DET), much of the work planned to advance these components will be flow-based. Early data flows are being used to systematically and proactively develop specific components and procedures that will be used by later flows. For example, the flow of air emissions monitoring data will provide an opportunity to pilot the development and use of a data exchange template for a large complex data set. This approach provides critical joint learning among EPA and its partners, and ensures that the infrastructure being developed is well grounded.

As these project tables indicate, most early FY2001 work consists of pilot projects to validate Network specifications and first generation implementation of data flows. FY2002 work shifts this emphasis to expansion of first generation flows to more flow partners, establishment of new flows, and development of second generation specifications. This approach also allows EPA and the States to test the components while incorporating advances in technologies in second generation specifications. Although not listed separately, these efforts include approximately 20 projects, coordinated by EPA's Office of Environmental Information and the State/EPA Information Management Working Group. Detailed workplans for these projects will be included in the larger Network program plan now under development.

## **B. EPA's Infrastructure Needed to Participate as a Partner in the Network**

As indicated in Section II, EPA's IT investments go well beyond those related to the Network alone. This discussion focuses on those aspects of EPA's Agency-wide IT projects that will enable EPA to integrate information across National Program systems, exchange data with States, and provide access over the Network. These EPA "component projects" are as follows: (1) a Central Data Exchange portal; (2) a linked set of data registries; (3) a linked system of information access, including an enterprise data repository; (4) decision support tools; (5) a Geospatial Program; (6) Enterprise Architecture planning; and (7) data standards.

Key 2001–2003 milestones for these component projects are highlighted in Table 4-2. By 2002, EPA is scheduled to complete the Agency's baseline enterprise architecture, the target architecture to implement the EPA infrastructure dimension of the Network vision, and a sequencing plan to transition EPA's major regulatory and ambient monitoring systems to the target architecture. By 2003, EPA will also implement a fully operational electronic exchange portal (CDX) that will be ready for data exchange with all States and ready to populate this data in 80 percent of EPA's major systems. Six key data standards, necessary for information exchange with States and information integration, will be implemented in EPA's regulatory and ambient monitoring systems. In addition, a complete system of data registries (facility, chemical, biological, and substance) will be fully operational. And finally, EPA will have an operational Agency-wide data repository and a geospatial tool, "Window to My Environment" (WME), that will allow users to access environmental information in their local community.

## **C. Partner Capacity to Participate in the Network**

Improved environmental decision making must be supported by more and better information. As discussed above, EPA and States increasingly depend on each other to share and exchange information. In effect, the success of the Network will depend on the success of its partners. While the concept of "partner support" may seem a uniquely governmental concern, several of the private sector initiatives studied during development of the Network Blueprint included explicit provisions for partner support as a critical success factor. Large firms/consortia found that only by assessing and supporting the capabilities of their suppliers and distributors (who were often much smaller entities) in implementing e-commerce approaches could they reap the efficiency returns of such systems. In particular, the RosettaNet (an electronics e-commerce initiative) defined the term "partner readiness assessment" as a systematic characterization of the preparedness (technical and otherwise) of the universe of partners to engage in e-commerce. Applying this concept to the Network, the EPA and the States have recently completed a preliminary State readiness assessment for the Network. This effort had three objectives:

1. Validate and refine the core requirements of Network participation for States.
2. Preliminarily assess each State's "readiness" and identify common issues, gaps, and opportunities.
3. Build interest and awareness about the Network among States by engaging them in the assessment and its findings.

Partner capacity activities for FY2001–FY2003 include continuing outreach and knowledge transfer activities to meet the needs of the States, Tribes, and other partners. Preliminary findings of the State Readiness Assessment are discussed below. They will be used to identify appropriate levels of partner support and to shape the Federal grant program described in Section V. It is anticipated that Territories and Tribes would be invited to participate in future readiness assessments.

Preliminary results from the State readiness assessment indicate that State information systems and enterprise management will require the most significant investment support. For States to be successful, each will need to establish and manage official information sources, have the ability to link these information sources to State portals or nodes, negotiate exchange agreements with EPA, assure appropriate data quality and construct the necessary linkages to the node with existing State systems, most likely as extensions to web/e-commerce infrastructures.

**Table 4-1 Key Milestones for Network Infrastructure**

Exchange Network Infrastructure Component	FY2001 Select Milestones	FY2002 Select Targets	FY2003 Select Targets
<b>Data Exchange Templates (DET)</b>  [Common formats for shared data]	<ul style="list-style-type: none"> <li>&lt; Common format for regulated facility data in use, and integrated with EPA's Facility Registry System.</li> <li>&lt; Common formats for national flows for point source water discharges and air emissions monitoring in use.</li> <li>&lt; Draft list of priority information flows completed.</li> <li>&lt; Joint Technical Resource Group established to recommend standards and guidance for common formats.</li> </ul>	<ul style="list-style-type: none"> <li>&lt; Common formats for 5 major flows of environmental information in use.</li> <li>&lt; Common formats for ambient water quality monitoring data in testing.</li> <li>&lt; Common <i>multi-media integrated</i> format for enforcement/ compliance/ permitting data under discussion.</li> </ul>	<ul style="list-style-type: none"> <li>&lt; Common formats established for all priority information flows.</li> <li>&lt; Common formats for 5 new flows which expand data available from existing national systems.</li> </ul>
<b>Trading Partnership Agreements (TPA)</b>	<ul style="list-style-type: none"> <li>&lt; First TPA established.</li> </ul>	<ul style="list-style-type: none"> <li>&lt; TPA established with 10 State partners for official flows.</li> <li>&lt; TPA established for 30% of major business flow areas.</li> <li>&lt; Version 1 TPA guidance and checklists published to support partners in drafting agreements.</li> </ul>	<ul style="list-style-type: none"> <li>&lt; At least one TPA established in all major business areas.</li> <li>&lt; v2.0 TPA Guidance published.</li> </ul>

**Table 4-1 Key Milestones for Network Infrastructure (continued)**

<b>Exchange Network Infrastructure Component</b>	<b>FY2001 Select Milestones</b>	<b>FY2002 Select Targets</b>	<b>FY2003 Select Targets</b>
<b>Technical Infrastructure</b>	<ul style="list-style-type: none"> <li>&lt; Fully operational Node prototypes in 3 States.</li> <li>&lt; Preliminary security assessment and recommendations completed.</li> <li>&lt; Library (registry) for common formats is in operational testing.</li> </ul>	<ul style="list-style-type: none"> <li>&lt; 20 States and EPA have operational basic nodes.</li> <li>&lt; Version 1 of Network technical specifications and “operating manual” drafted to support development of Nodes by all partners.</li> <li>&lt; Library (registry) for common formats is in full operation.</li> </ul>	<ul style="list-style-type: none"> <li>&lt; 35 States have operational basic nodes.</li> <li>&lt; Technical specifications from external initiatives (OASIS, ebXML, xml.gov) evaluated and adopted as appropriate.</li> <li>&lt; Additional partners (e.g., local governments and/or federal partners) have basic nodes operational.</li> <li>&lt; Network Steering Group and Network Administration functions evaluated and re-chartered.</li> </ul>
<b>Data Standards</b>	See Table 4-2 Data standards are a foundation of all three dimensions of the Network.		
<b>Organizational Infrastructure</b>	See sections following for EPA & State Organizational Infrastructure Projects		

**Table 4-2 Key Milestones for EPA Infrastructure Component Projects**

<b>EPA Infrastructure Component</b>	<b>FY2001 Select Milestones</b>	<b>FY2002 Select Targets</b>	<b>FY2003 Select Targets</b>
<b>Central Data Exchange (CDX) Portal</b> [EPA's common portal and connection to the Network]	- CDX portal interim production mode  -30% of major EPA's systems are in production or being tested  -20 to 30 states exchange data via CDX  Acquisition initiated for full-scale CDX operations	- CDX portal acquisition is complete  -40% of EPA's major systems are in production or being tested  -CDX ready for all State exchanges  Cross-Media Electronic Reporting and Record Keeping Rule is promulgated	CDX portal in full production  -CDX expanded to 80% of major Agency systems
<b>Data Registry Services</b> [Enterprise libraries of common authoritative information designed to improve quality and reduce duplication]	<b>Facility Registry System</b> - populated with 550,000 facility records  -6 EPA national systems completely represented  -exchange with 4-8 States  EPA enterprise registries for chemicals, substances, biological taxonomy, and the meta data established	<b>Facility Registry System</b> - populated with 750,000 facility records (@80% complete)  -9 national systems completely represented  -exchanges with 20 States  EPA enterprise registries begin integration with major EPA national systems and the Network	<b>Facility Registry System</b> populated with 950,000 facility records (@90% complete)  -13 national systems completely represented.  -exchanges with 30 States  The registries for facilities, chemicals, biological taxonomy, and substances will be linked to the Network to provide the most current set of Agency approved identification information
<b>Information Access Mechanism and Decision Support Tools</b>  [Enterprise data warehouse and tools for improved access and improved environmental decision- making]	Plan for developing an Enterprise Repository  Agency needs assessment for decision support tools  The Window to My Environment (WME) prototype will cover four EPA Regions	Conduct needs assessment for an Enterprise Repository  Develop a prototype Repository  Window to My Environment is made national	Initial version of the Enterprise Repository will be operational

**Table 4-2 Key Milestones for EPA Infrastructure Component Projects (continued)**

<b>EPA Infrastructure Component</b>	<b>FY2001 Select Milestones</b>	<b>FY2002 Select Targets</b>	<b>FY2003 Select Targets</b>
<b>National Geospatial Program</b> [Providing, “place” based services, access and tools for information users]	Version 1 of Geospatial Index will be released. Index provides a, “yellow pages,” of data  Core EPA geospatial service needs and opportunities identified in Geospatial Baseline assessment  Geospatial technical and information infrastructure assessment and alignment with enterprise architecture initiated	Version 2 of Geospatial Index will be released  Integrated Geospatial Database available and tested  Enterprise geospatial strategic plan completed and target infrastructure and architecture defined	Version 3 of Geospatial Data Index is released  Integrated Geospatial Database acquired, all core agency geospatial data made available  Enterprise geospatial infrastructure investments underway, per plan
<b>Data Standards</b> [common language for information exchange and integration]	Data standards will be developed for geolocation, permitting data, enforcement/ compliance data, and Tribal identifiers (Phase II standards)	Data standards for geolocation, permitting data, enforcement/ compliance data, and Tribal identifiers finalized and approved  Final stage of implementation for industry classification, chemical, bio taxonomy, calendar date, facility identification, and lat/longitude in EPA's major regulatory & ambient monitoring systems (Phase I standards)	Phase I standard implementation complete in EPA major regulatory and monitoring systems  Implementation of Phase II standards in EPA major regulatory and monitoring systems underway
<b>Enterprise Architecture</b> [EPA’s internal blueprint for this transition]	Complete baseline and target architecture for regulatory & ambient monitoring programs	Develop an Agency sequencing (transition) plan for regulatory and ambient monitoring programs  Complete architecture and draft sequencing plan for areas beyond regulatory and ambient	EA sequencing plan is implemented for major EPA regulatory & ambient monitoring systems.  Sequencing plan for business areas beyond regulatory and ambient is final.



## **V. Exchange Network Grants**

### **Introduction**

The President's FY2002 budget request to Congress proposes \$25 million for grants to be used in partnership with States and Tribes to advance the National Environmental Information Exchange Network and state data integration efforts. Working together over the past 16 months, EPA and the States have made tremendous strides toward achieving the State/EPA vision of building locally and nationally accessible, cohesive and coherent information systems.

### **The Exchange Network Grant Program**

The States and EPA have worked to develop a proposal for carrying out this new State and Tribal grant program and have agreed upon three broad key components. EPA, States and Tribes will continue to work collaboratively over the summer, to develop guidance criteria and policies for this grant program. Although funds will not be available until the FY 2002 appropriations are approved, EPA will finalize the grant process over the summer so that EPA may issue a request for applications as soon as possible.

### **Options for Use of Funds by States**

The three broad components of the proposed grant program, as envisioned by the States and EPA, are outlined below:

1. Core Capacity Building Grants - Proposed grant funds would be dedicated to advance state readiness to participate effectively in the Network. Components would include:
  - A. Continuation of One-Stop Grants - Would provide funding to five to six additional States in the first year of the grant program. Established in 1995, the unique role of the One Stop Program is to concentrate, at the State level, on implementing the basic elements of an effective environmental reporting and data management system. The 34 States that have received these one-time awards are generally better positioned to make investments in the Exchange Network because the funding has enabled them to build the essential internal capacity and support for environmental reporting and data management system reforms. Continuing such foundational efforts is important for the remaining 16 States to participate in the Exchange Network.
  - B. State Readiness Base Grants - Would provide funding to States to enhance their capacity to participate in the Exchange Network. All States would be eligible for these grants.

2. Challenge Grants - Would provide funding, through a competitive process, to support single or multi-state collaborative efforts to advance the Exchange Network through the development of Network-related components that have a broad benefit to all Network participants.

3. Network Administration - Would provide funds to support technical and administrative functions of the Exchange Network. These funds would support common or shared functions necessary for Network participation for participating agencies. Support for Network administrative functions would help move the Exchange Network forward and result in clear and broad benefits to all agencies participating on the Exchange Network.

### **Funds for use by Tribes and Territories**

As is customary with most EPA grant programs, proposed funds would be made available to both States and Tribes, US Trust Territories and the District of Columbia. A percentage of the funds would be set aside for grants to Tribes.

### **Future funding for support of the Exchange Network**

It is anticipated that multiple year funding would be necessary to achieve the proposed milestones for Exchange Network development.

1       **Draft Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity**  
2       **of Information Disseminated by the Environmental Protection Agency**

3       **BACKGROUND AND DISCUSSION**

4       **1       OMB Guidelines**

5       In Section 515(a) of the Treasury and General Government Appropriations Act for Fiscal Year 2001  
6       (Public Law 106-554; H.R. 5658), Congress directed the Office of Management and Budget (OMB)  
7       to issue government-wide guidelines that "provide policy and procedural guidance to Federal agencies  
8       for ensuring and maximizing the quality, objectivity, utility, and integrity of information (including  
9       statistical information) disseminated by Federal agencies..."

10      The OMB guidelines<sup>1</sup> direct agencies subject to the Paperwork Reduction Act (44 U.S.C. 3502(1)) to:

- 11      •       Issue their own information quality guidelines to ensure and maximize the quality, objectivity,  
12              utility, and integrity of information, including statistical information, by no later than one year  
13              after the date of issuance of the OMB guidelines;
- 14      •       Establish administrative mechanisms allowing affected persons to seek and obtain correction of  
15              information maintained and disseminated by the agency that does not comply with OMB  
16              guidelines; and
- 17      •       Report to the Director of OMB the number and nature of complaints received by the agency  
18              regarding agency compliance with OMB guidelines concerning the quality, objectivity, utility,  
19              and integrity of information and how such complaints were resolved.

20      OMB guidelines provide some basic principles for agencies to consider when developing their own  
21      guidelines including:

- 22      •       Guidelines should be flexible enough to address all communication media and variety of scope  
23              and importance of information products.
- 24      •       Some agency information may need to meet higher or more specific expectations for  
25              objectivity, utility, and integrity.
- 26      •       Ensuring and maximizing quality, objectivity, utility, and integrity comes at a cost, so agencies  
27              should consider using a cost benefit approach.
- 28      •       Agencies should adopt a common sense approach that builds on existing processes and  
29              procedures. It is important that agency guidelines do not impose unnecessary administrative  
30              burdens.

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<sup>1</sup> Office of Management and Budget, "Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by Federal Agencies." 67 Fed. Reg. 8452 (Feb. 22, 2002)  
[www.whitehouse.gov/omb/fedreg/reproducible.html](http://www.whitehouse.gov/omb/fedreg/reproducible.html)

## **2 EPA Mission and Commitment to Quality**

### **2.1 EPA's Mission**

The mission of the U.S. Environmental Protection Agency (EPA) is to protect human health and to safeguard the natural environment - air, water, and land - upon which life depends. The Agency is committed to making America's air cleaner, water purer, and land better protected and to work closely with its federal, state, tribal, and local government partners; with citizens; and with the regulated community to accomplish its mission.

### **2.2 Information Management in EPA**

The collection, use, and dissemination of information of known and appropriate quality is integral to ensuring that EPA achieves its regulatory and policy mission. Information about the environment -- environmental characteristics; physical, chemical, and biological processes; and chemical and other pollutants -- underlies all environmental management decisions. The availability of and access to information and the analytical tools needed to understand it are essential for assessing environmental and human health risks, designing appropriate and cost-effective policies and response strategies, and measuring environmental improvements.

To ensure that information collected and disseminated by EPA programs is of acceptable quality for its intended use, the primary responsibility for establishing appropriate standards for data quality, for developing and managing processes to assure and control information quality, and for complying with Agency-wide data quality requirements resides within EPA's Program and Regional offices. The EPA Office of Environmental Information (OEI) was created in 1999 to strengthen the Agency's ability to manage information resources and their public dissemination. OEI supports the Agency's mission to protect public health and the environment by working with stakeholders to provide reliable and useful information on environmental quality, status, and trends. Working in concert with EPA Program and Regional Offices, OEI develops policies for the Agency's Quality System and information security program, assuring the quality and integrity of EPA data and information. In addition, OEI establishes and oversees information-related policies and procedures that reflect the concerns of EPA; local, state, tribal and federal governments; the regulated community; interest groups; and the general public.

### **2.3 EPA's Commitment to Public Access**

EPA articulates its commitment to expanding and enhancing access to environmental information in its Strategic Plan<sup>2</sup>. EPA works every day to expand the public's right to know and understand their environment by providing and facilitating access to a wealth of information about local environmental

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<sup>2</sup>EPA Strategic Plan can be found at <http://www.epa.gov/ocfo/plan.htm>

issues and conditions. This expands citizen understanding and involvement and gives people tools to protect their families and their communities. Increased information transparency among scientists, public health officials, businesses, citizens, and all levels of government fosters greater knowledge about the environment and what can be done to protect it.

## **2.4 How EPA Uses Information**

EPA receives a large amount of information from external parties that provide information to the Agency both voluntarily and under statutory and other mandates. EPA also generates information and gathers information from various sources. Much of the environmental information that is collected and documented is processed and stored in Agency information management systems. The information is maintained in program-specific databases, many of which are managed by the National Program Offices within EPA.

Upon placement in EPA information management systems, information is then available for use by a variety of people and systems. Internally, users can include program managers, information product developers, or financial tracking systems. Depending on the extent of public release, users can also include city planners, homeowners, teachers, engineers, or community activists, to name a few. In order to satisfy the needs of this broad spectrum of users, it is critical that EPA information be presented in an unbiased context with thorough documentation.

EPA is moving beyond the administration of regulatory data and working in concert with States and other stakeholders to generate new information products that are responsive to identified user needs. Increasingly, information products are derived from data originally collected to support state or federal regulatory programs or management activities. Assuring the suitability of these data for new applications is of paramount importance.

## **2.5 EPA's Relationship with State, Tribal and Local Governments**

As mentioned in the previous section, EPA's mission is not achieved alone. In addition to the role of EPA's data providers, key government partners work with EPA to manage and implement programs and communicate with the public about issues of concern. Most of EPA's programs are not managed from Washington, DC. Instead, a vast network of federal, state, tribal and local governments implement programs required by law and even some voluntary programs. This same network collects, uses and disseminates a wide range of information. Therefore EPA needs to consult with these partners to ensure that the EPA Information Quality Guidelines are appropriate and effective.

## **3 Existing Policies and Procedures**

EPA is dedicated to the collection, generation, and dissemination of high quality information. The OMB guidelines encourage agencies to avoid the creation of "new and potentially duplicative or contradictory

processes.” Further, OMB stresses that its guidelines are not intended to “impose unnecessary administrative burdens that would inhibit agencies from continuing to take advantage of the Internet and other technologies to disseminate information that can be of great benefit and value to the public.” In this spirit, EPA has sought to enhance and integrate existing activities and programs to address the OMB guidelines. As illustrated with the four examples outlined below, the Agency has numerous systems and practices in place that address the quality, objectivity, utility, and integrity of information.

The EPA Agency-wide Quality System helps ensure that EPA organizations maximize the quality, objectivity, utility and transparency of information disseminated by the Agency. The Quality System is documented in EPA Order 5360.1 A2, “Policy and Program Requirements for the Mandatory Agency-wide Quality System” and the “EPA Quality Manual<sup>3</sup>.” To implement the Quality System, EPA organizations (1) Assign a quality assurance manager, or person assigned to an equivalent position, who has sufficient technical and management expertise and authority to conduct independent oversight of the implementation of the organization's quality system; (2) Develop a Quality Management Plan, which documents the organization's quality system; (3) Conduct an annual assessment of the organization's quality system; (4) Use a systematic planning process to develop acceptance or performance criteria prior to the initiation of all projects that involve environmental data collection and/or use; (5) Develop Quality Assurance Project Plan(s), or equivalent document(s) for all applicable projects and tasks involving environmental data; (6) Conduct an assessment of existing data, when used to support Agency decisions or other secondary purposes, to verify that they are of sufficient quantity and adequate quality for their intended use; (7) Implement all Agency-wide Quality System components in all applicable EPA-funded extramural agreements; and (8) Provide appropriate training, for all levels of management and staff.

The EPA Quality System requirements may also apply to non-EPA organizations. These requirements are defined in the applicable regulations governing extramural agreements. EPA Quality System requirements may also be invoked as part of negotiated agreements such as memoranda of understanding. Non-EPA organizations that may be subject to EPA Quality System requirements include: (a) Any organization or individual under direct contract to EPA to furnish services or items or perform work (i.e., a contractor) under the authority of 48 CFR 46, (including applicable work assignments, delivery orders, and task orders); (b) Institutions of higher education, hospitals, and other non-profit recipients of financial assistance (e.g., Grants and Cooperative Agreements) under the authority of 40 CFR 30; (c) State, local, and Tribal governments receiving financial assistance under the authority of 40 CFR 31 and 35; and (d) other government agencies receiving assistance from EPA through interagency agreements.

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<sup>3</sup>EPA Quality Manual for Environmental Programs 5360 A1. May 2000.  
<http://www.epa.gov/quality/qs-docs/5360.pdf>

129 In addition to the Quality System, EPA's Peer Review Policy provides that major scientifically and  
130 technically based work products (including scientific, engineering, economic, or statistical documents)  
131 related to Agency decisions normally should be peer-reviewed. For those work products that are  
132 intended to support the most important decisions or that have special importance in their own right,  
133 external peer review is the procedure of choice. Agency managers within Headquarters, Regions,  
134 laboratories, and field components determine and are accountable for the decision whether to employ  
135 peer review in particular instances and, if so, its character, scope, and timing. These decisions are made  
136 consistent with program goals and priorities, resource constraints, and statutory or court-ordered  
137 deadlines. For those work products that are intended to support the most important decisions or that  
138 have special importance in their own right, external peer review is the procedure of choice. Peer review  
139 is not restricted to the penultimate version of work products; in fact, peer review at the planning stage  
140 can often be extremely beneficial. The basis for EPA peer review policy is articulated in *Peer Review  
141 and Peer Involvement at the U.S. Environmental Protection Agency*.<sup>4</sup> The Peer Review Policy  
142 was first issued in January, 1993, and was updated in June, 1994. In addition to the Policy, EPA has  
143 published a Peer Review Handbook which provides detailed guidance for implementing the Policy. The  
144 Handbook was last revised December, 2000.

145 The Agency's Action Development Process also serves to ensure and maximize the quality of EPA  
146 disseminated information. Top Agency actions and OMB Economically Significant actions as  
147 designated under Executive Order 12866 are developed as part of the Agency's Action Development  
148 Process. The Action Development Process ensures the early and timely involvement of senior  
149 management at key decision milestones to facilitate the consideration of a broad range of regulatory and  
150 non-regulatory options and analytic approaches. Of particular importance to the Action Development  
151 Process is ensuring that EPA scientists, economists, and others with technical expertise are  
152 appropriately involved in determining needed analyses and research, identifying alternatives, and  
153 selecting options. Program offices and regional offices are invited to participate to provide their unique  
154 perspectives and expertise. Effective consultation with policy advisors (e.g., Regulatory Policy Council,  
155 Science Policy Council), co-regulators (e.g., states, tribes, and local governments), and stakeholders is  
156 also part of the process. Final Agency Review (FAR) generally occurs before the release of substantive  
157 information associated with these actions. The FAR process ensures the consistency of any policy  
158 determinations, as well as the quality of the information underlying that policy determination and its  
159 presentation.

160 The Agency's Integrated Error Correction Process<sup>5</sup> (IECP) is a method for reporting and resolving  
161 data errors identified by the public in EPA's information holdings. This process builds upon existing data  
162 processes through which errors in Agency data systems are reported to EPA. The IECP has made

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<sup>4</sup>Peer Review and Peer Involvement at the U.S. EPA. June 7, 1994.  
<http://www.epa.gov/osp/spc/perevmem.htm>

<sup>5</sup>Integrated Error Correction Process for Environmental Data. <http://www.epa.gov/cdx/iecp.html>

these tools more prominent, accountable and easier to use. Individuals who identify potential data errors on the EPA web site can contact EPA through the IECF by using the "Report Error" button or error correction hypertext found throughout EPA's web pages. EPA reviews the error notification and assists in bringing the notification to resolution with those who are responsible for the data. The IECF tracks this entire process from notification through final resolution.

EPA currently ensures the integrity of the information it disseminates in a variety of ways. EPA's Information Resources Manual<sup>6</sup> describes how the Agency maintains and ensures information integrity. Specifically, EPA believes that maintaining information integrity refers to keeping information "unaltered," i.e., free from unauthorized or accidental modification or destruction. All information has integrity standards; inappropriately changed or modified data, or system and application software, impacts information integrity and compromises the value of the information system. Because of the importance of the Agency's information to the decisions made by the Agency, its partners, and the public, it is EPA's responsibility to ensure that the information is, and remains, as accurate and credible as possible.

In addition to the Agency-wide systems and procedures described above, Program Offices and Regions implement many office-level and program-specific procedures to ensure the quality of individual activities which result in the distribution of information of the quality needed to meet its intended use. The guidelines recognize and build on those existing procedures and encourage EPA to provide increased transparency for the purpose of OMB guidelines and to better meet the EPA Mission.

## **4 EPA Guidelines Development**

EPA has created a new web site to serve as the home for the EPA Information Quality Guidelines through the development and implementation process. Please visit that site at <http://www.epa.gov/oei/qualityguidelines>. EPA's guidelines are a living document and may be revised as we all learn more about how best to address, ensure and maximize information quality.

### **4.1 On-line Public Comment Session held March 19-22, 2002**

EPA requested public comments during a March online comment session available via the EPA web site. The following seven topic areas were presented for public input:

- Basic standard of quality

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<sup>6</sup> EPA Directive 2100 Information Resources Management Policy Manual.  
<http://www.epa.gov/irmpoli8/polman/>



- "Influential" information
- Reproducibility
- Pre-dissemination review
- Administrative Mechanisms for timely correction
- Applicability of Guidelines to Third Party Information
- Other comments and/or suggestions regarding the EPA Information Quality Guidelines

EPA received approximately 100 comments. EPA considered these comments as it developed these draft guidelines. All comments submitted via the Online Comment Session are available for the public. EPA has established a public docket for these draft Information Quality Guidelines under Docket ID No. OEI-10014. The docket is the collection of materials available for public viewing at 401 M Street, Northeast Mall, Room B607, Washington, DC 20460, phone number: 202-260-0660. This docket consists of a copy of the guidelines, public comments received during the public comment period on these guidelines, and other information related to the guidelines. The docket is open from 12:00 PM to 4:00 PM, Monday through Friday, excluding legal holidays. An index of docket contents will be available at <http://www.epa.gov/oei/qualityguidelines>.

In the following sections, EPA will discuss the factors that were considered and how EPA developed key aspects of these draft guidelines.

## **4.2 Influential Information and Reproducibility**

OMB Guidelines call for agencies to define "influential" -- in relation to scientific, financial, or statistical information for which its dissemination will have or does have a clear and substantial impact on important public policies or important private sector decisions -- in ways appropriate for the agency in the context of its mission and duties, and given the nature and multiplicity of issues for which it is responsible. Influential information will be subject to a high degree of transparency about data and methods to facilitate the reproducibility of such information by qualified third parties, to an acceptable degree of imprecision. Within the class of information defined as influential, agencies are to distinguish between (1) analytic results, and (2) original and supporting data.

A high degree of transparency with respect to analytic results includes the following factors:

- source of the data used,
- various assumptions employed,
- analytic methods applied, and
- statistical procedures employed.

If sufficient transparency is achieved on each of these factors, then an analytic result should meet the "capable of being substantially reproduced" standard. The appropriate degree of rigor with which each of these factors is presented and discussed can be scaled as appropriate, but it is important that all be

presented. In addition, if access to data and methods will not occur due to other compelling interests such as privacy, trade secrets, intellectual property, and other confidentiality protections, the agency should apply especially rigorous robustness checks to analytic results and document what checks were taken.

Original and supporting data are not necessarily subject to the high and specific degree of transparency required of analytic results. Agencies may identify those particular types of original and supporting data that can practicably be subjected to a reproducibility requirement given ethical, feasibility, or confidentiality constraints. To help make that determination, agencies are to consult with relevant scientific and technical communities. If agencies apply the reproducibility test to specific types of original or supporting data, the associated guidelines should provide relevant definitions of reproducibility (e.g., standards for replication of laboratory data).

Several participants in the EPA online comment session expressed concern that the OMB reproducibility standard could expose confidential information and voiced concerns about privacy and security of information. Both OMB and EPA guidelines exclude confidential information and information that would compromise national security from the reproducibility standard. Rather, agencies are directed to develop and publish robustness checks to ensure a high degree of transparency in these special cases. Several additional comments emphasized the need for consultation with the scientific community on reproducibility. EPA intends to do so. EPA agrees with another comment provided that described the reproducibility concept as complicated and one that will be refined over time. The Agency does not intend to “categorically exclude” large amounts of influential information from a reproducibility guideline, as was expressed by a commenter during the online comment session. These comments were very useful to EPA. They helped to inform the Agency’s position on this issue at this time.

As a regulatory agency with a strong science program and function, EPA takes reproducibility of data and results very seriously and understands the importance of ensuring that data and methods are transparent and credible. EPA works to improve the quality of information it collects, stores, uses and disseminates through the development of new or revised orders, guidelines, and policies related in particular to quality assurance and peer-review procedures. In determining how to achieve a high degree of transparency about data and methods for influential scientific, financial, and statistical information disseminated by the Agency, consistent with the OMB Guidelines, EPA plans to draw heavily upon our existing quality assurance and peer review procedures.

In this draft, EPA has developed general language on this concept of reproducibility and intends to revise and add more detail throughout the guideline process after appropriate consultation with scientific and technical communities, as called for by OMB in its guidelines. The Agency has already begun to consult relevant scientific and technical experts within the Agency, and will soon begin to consult with those outside the Agency. These consultations will allow EPA to constructively and appropriately refine the application of existing policies and procedures, to the extent that they may not fully already provide

for the appropriate degree of transparency, so as to create guidelines that satisfy the reproducibility standard.

### 4.3 Risk Assessment

EPA conducts many risk assessments every year. These assessments are conducted and presented to EPA policy makers to inform their risk management decisions. EPA currently has numerous policies that direct internal risk assessors on how to conduct a risk assessment and characterize risk. The *EPA Risk Characterization Policy*<sup>7</sup> and associated guidelines are designed to ensure that critical information from each stage of a risk assessment is used in forming conclusions about risk and that this information is communicated from risk assessors to policy makers.

OMB stated that, with respect to influential information regarding health or safety, or environmental risk assessments, agencies should either adopt or adapt the quality principles applied by Congress in the Safe Drinking Water Act (SDWA) Amendments of 1996<sup>8</sup>. In reviewing EPA's experience with the SDWA principles, existing policies in place at EPA, and the applicability and appropriateness of the SDWA language with regards to the variety of risk assessments conducted by the Agency, EPA has decided to adapt the SDWA principles with minimal changes for use with all human health risk assessments that are disseminated as part of influential scientific EPA information. The Agency should ensure, to the extent practicable and in conformance with Agency guidelines, the use of (i) the best available, peer-reviewed science and supporting studies available at the time of the assessment, and (ii) data collected by accepted methods or best available methods. In the original SDWA language, Congress included both provisions: subparagraph (i) called for the use of "best available, peer-reviewed science" and subparagraph (ii) called for "data collected by accepted methods or best available methods." EPA has interpreted these provisions as being independently applied. The Agency's intention is to apply both principles to the extent practicable.

In preparing these draft Information Quality Guidelines, EPA primarily focused on human health risk assessments. EPA believes that it would be more appropriate to modify these SDWA principles to better target them for use with environmental or safety risk assessments conducted by EPA. During the online comment session on the Information Quality Guidelines that EPA held in March 2002, a commenter recommended that EPA adopt rather than to adapt the SDWA principles for risk assessment. However, the Agency intends to adapt the SDWA principles for human health assessments and work further to refine the applicability of these principles across program areas. The Agency is seeking public comment on an adaptation of the SDWA quality principles for use with environmental and safety risk assessments.

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<sup>7</sup>United States Environmental Protection Agency, Office of Research and Development, Office of Science Policy. *Science Policy Council Handbook, Risk Characterization*. EPA 100-B-00-002. December 2000 (pps. A1 - A7).

<sup>8</sup>Safe Drinking Water Act Amendments of 1996, 42 U.S.C. 300g-1(b)(3)(A) & (B)

#### 4.4 Sources of Information

During the development of these guidelines, EPA considered how to address information that is not generated by the Agency but is later disseminated by EPA in a publication or a regulatory or policy decision. For example, EPA receives and/or collects information from a variety of external sources including States and other governments, business and industry, and the research and academic community. Although this type of information may not be covered by the guidelines when it is first generated by outside parties (or external sources), it may be covered by the guidelines if EPA uses the State or third party information in a publication, policy, or regulatory decision at a later date. EPA recognizes that this issue is complex and requires more thought and collaboration with our key government partners and data/information providers to best ascertain how these guidelines may apply to external sources of information. EPA plans to consult with States and data/information providers during the 30-day public comment period in May 2002, and throughout the Guidelines development process to ensure the EPA Information Quality Guidelines are sufficiently flexible to encourage the appropriate use of information provided by external sources, yet also ensure and maximize the quality of information EPA disseminates.

EPA is taking, and will continue to take, steps to address the quality of data and information provided by outside parties so that the data and information are suitable for the purposes EPA intends to use them. Waiting until after the information is disseminated by EPA to address the quality of the information, can be difficult and may limit EPA's use of the information. It is, therefore, important for outside parties to know and consider the quality expectations associated with any information they gather or generate, especially for information which is subsequently submitted to EPA.

EPA has varying levels of quality controls over information developed or collected by outside parties. This information generally falls into one of four categories:

- Information collected through contracts with EPA. Examples of this information include studies and collection and analysis of data by parties that are under a contractual obligation with EPA. Since EPA is responsible for managing the work assigned to contractors, EPA retains varying degrees of control over the quality of this information.
- Information collected through grants and cooperative agreements with EPA. Examples of this information include scientific studies that are performed under research grants and data collected by State agencies or other grantees to assess regulatory compliance or environmental trends. Although EPA has less control over grantees than contractors, EPA can and does include conditions in grants and cooperative agreements requiring recipients to meet certain criteria.
- Information submitted to EPA as part of a requirement under a statute, regulation, permit, order or other mandate. Examples of this information include required test data for pesticides or chemicals, Toxics Release Inventory (TRI) submissions and compliance information submitted

to EPA by States and the regulated community. EPA ensures quality control of such information through regulatory requirements, such as requiring samples to be analyzed by specific analytical procedures and by certified laboratories. However, each EPA program has specific statutory authorities which may affect its ability to impose certain quality practices.

- The final category of information that is not included in any of the above three categories includes information that is either voluntarily submitted to EPA in hopes of influencing a decision or that EPA obtains for use in developing a policy or regulatory decision. Examples of this information include scientific studies published in journal articles and test data obtained from other federal agencies, industry, and others. EPA may not have any financial ties or regulatory requirements to ensure the quality of this type of information.

In general, EPA has considerable influence over the quality of information generated in the first three categories. EPA's Quality System and Peer Review Policy set out EPA's policies regarding the quality criteria information should meet when it is generated. Many other program-specific policies also apply. Existing language in contracts, grants, and regulations also gives EPA authority to require that this information meet quality criteria when it is generated. EPA's Quality System and Peer Review Policy also cover the fourth category at the time EPA uses the information from external sources. These policies do not, however, apply to this information when it is generated. EPA relies heavily on this type of information and when EPA obtains information that is not of sufficient quality or transparency, it may not be able to use the information in its decision making. As an example, EPA may receive many studies concerning a particular issue. In evaluating the studies, EPA may not be able to rely on some of the studies submitted because EPA cannot determine that the quality and transparency of the data are sufficient for their intended use. In making this evaluation of voluntary submissions to EPA or information that EPA has gathered for a decision, the Agency recognizes the need to take into consideration ethical, feasibility, and confidentiality constraints on the availability of the data underlying this information, and that obtaining and publicizing the data underlying all studies on which EPA relies would be impractical and unnecessary. For example, such data are often the property of scientific investigators and are often not readily available because of proprietary interests or confidentiality arrangements.

To address this issue, EPA intends to work with States and other governments, the scientific and technical community and other interested data providers to develop and publish factors that EPA would use in the future to assess the quality of voluntary submissions or information that the Agency gathers for its own use. Publishing the assessment factors early-on will enable external providers of information to be aware of EPA quality expectations as they develop and/or collect information that may later be used by EPA. Furthermore, to the extent practicable, EPA would publish the results of the suitability assessment to further increase the transparency of EPA assessments of information submitted by outside parties.

## **4.5 Complaint Resolution**

EPA looked to incorporate existing policies and procedures into the complaint resolution decision-making and reporting process called for by the OMB guidelines. Based on the existing infrastructure and tracking system already in place with the Integrated Error Correction Process managed by the OEI, EPA has developed an internal process to ensure timely response to complaints, appropriate resolution and annual reporting to OMB beginning in 2004. EPA focused a lot of attention on determining the best and most objective means of Agency decision-making on initial complaints and appeals.

EPA asked the public for their input on this issue during the March Online Comment Session. Comments received emphasized the need for EPA to provide an objective appeals process to enable external groups to feel confident that their concerns are being heard and addressed in an objective manner.

## **5 Schedule and Next Steps**

Based on the schedule presented in the OMB guidelines, EPA has adopted a guideline development schedule that includes opportunities for public involvement.

<b>Key events</b>	<b>Dates</b>
Public comment period on Draft EPA Information Quality Guidelines	May 1 - 31, 2002
Public Meeting held in Washington, DC	May 15, 2002
Consultation with Scientific Community and other Stakeholders	June 2002
Final EPA Information Quality Guidelines	October 1, 2002
Initiate Complaint Resolution Process	October 1, 2002

For more information on public involvement opportunities, please consult that EPA Information Quality Guidelines web site at <http://www.epa.gov/oei/qualityguidelines>.

## **DRAFT GUIDELINES**

### **Overview, Scope, and Applicability**

#### **1.1 What is the purpose of these guidelines?**

These guidelines describe EPA’s policy and procedures for reviewing and substantiating the quality of information before EPA disseminates it. They describe EPA’s administrative mechanisms allowing affected persons to seek and obtain, where appropriate, correction of information disseminated by EPA that they believe does not comply with these guidelines.

This document provides guidance to EPA staff and informs the public of EPA’s policies and procedures. These guidelines are not a regulation. They are not legally enforceable and do not create any legal rights or impose any legally binding requirements or obligations on EPA or the public. Nothing in these guidelines affects any otherwise available judicial review of EPA action. The guidelines may not apply to a particular situation based on the circumstances, and EPA retains discretion to adopt approaches on a case-by-case basis that differ from the guidelines, where appropriate. Any decisions regarding a particular case, matter or action will be made based on applicable statutes, regulations and requirements. Interested parties are free to raise questions and objections regarding the substance of the guidelines and the appropriateness of using them in a particular situation. EPA will consider whether or not the guidelines are appropriate in that situation. The guidelines are a living document and may be revised periodically to reflect changes in EPA’s approach or as we all learn more about how best to address, ensure and maximize information quality. EPA welcomes comments on the guidelines at any time and will consider those comments in any future revision of the guidelines.

#### **1.2 When do these guidelines apply?**

Materials that constitute “information” that EPA “disseminates” to the public would be covered by these guidelines and would be subject to complaints by affected persons who seek to obtain correction of information maintained and disseminated by EPA that they believe does not comply with EPA guidelines or OMB guidelines. Factors such as imminent threats to public health or homeland security, statutory or court-ordered deadlines, or other time constraints, may limit or preclude applicability of these guidelines.

These guidelines apply to “information” EPA disseminates to the public. “Information” for purposes of these guidelines generally includes any communication or representation of knowledge such as facts or data, in any medium or form. Preliminary information EPA disseminates to the public is also considered “information” for purposes of the guidelines. Information generally includes material that EPA disseminates from a web page. However not all web page content is considered "information" under these guidelines (e.g. certain information from outside sources).

EPA disseminates information to the public for purposes of these guidelines when EPA initiates or sponsors the distribution of information to the public.

- EPA initiates a distribution of information if EPA prepares the information and distributes it to support or represent EPA's viewpoint, to formulate or support a regulation, guidance, or other Agency decision or position.
- EPA initiates a distribution of information if EPA distributes information prepared or submitted by an outside party in a manner that reasonably suggests that EPA endorses or agrees with it, if EPA indicates in its distribution that the information supports or represents EPA's viewpoint, or if EPA in its distribution proposes to use or uses the information to formulate or support a regulation, guidance, policy, or other Agency decision or position.
- Agency-sponsored distributions may include instances where EPA reviews and comments on information distributed by an outside party, or adopts or endorses it.
- In general, distributions by outside parties are not considered to be "sponsored" by EPA unless the Agency is using the outside party to disseminate information on the Agency's behalf.

EPA may clarify whether distributions are initiated or sponsored by EPA by using disclaimers to explain the status of the information.

### **1.3 What is not covered by these guidelines?**

If an item is not considered "information," these guidelines do not apply. Items that are not considered information include but are not limited to:

- Internet hyperlinks and other references to information disseminated by others
- Opinions, where EPA's presentation makes it clear that what is being offered is someone's opinion rather than fact or EPA's views
- EPA may identify other materials that are not "information" for purposes of these guidelines

"Dissemination" for purposes of these guidelines does not include distributions of information that EPA does not initiate or sponsor. EPA may clarify whether distributions of information are initiated or sponsored by EPA by using disclaimers or notices to explain the status of the information. Under the following circumstances, information would not generally be considered disseminated by EPA to the public, and would not be covered by these guidelines.

- Distribution limited to government employees (EPA and non-EPA) or EPA contractors or grantees: Information distributed only to government employees would not generally



460 be covered by these guidelines because it is not directed to the public. This includes  
461 both intra- and inter-agency distribution of information. For example, if EPA wanted to  
462 get feedback from a number of other agencies regarding an action it is considering  
463 undertaking, the communications between the agencies would not be covered by the  
464 guidelines.

465 • Intra- or inter-agency use or sharing of government information: These guidelines do not  
466 apply to intra- or inter-agency use or sharing of government information. Intra-agency  
467 use of information includes use of information pertaining to basic agency operations,  
468 such as management, personnel and organizational information, even if the information  
469 becomes public at some point.

470 • EPA responses to requests for agency records: EPA's guidelines do not apply to  
471 EPA's release or other distribution of records, regardless of form or format, as a result  
472 of requests for agency records under the Freedom of Information Act (FOIA), the  
473 Privacy Act, the Federal Advisory Committee Act (FACA), or other similar laws.

474 • Distribution of information in correspondence with individuals or persons: These  
475 guidelines do not apply to any correspondence with individuals or persons, regardless  
476 of format. "Persons" for purposes of this provision includes any individual or person,  
477 including a partnership, association, corporation, business trust, legal representative,  
478 organized group of individuals, State, territorial, tribal, or local government or branch  
479 thereof, a political subdivision of a State, territory, tribal, or local government or a  
480 branch of a political subdivision, or any federal governmental branch including members  
481 of Congress and their staff.

482 • Distribution of information in press releases and similar announcements: These  
483 guidelines do not apply to press releases, fact sheets, press conferences or similar  
484 communications in any medium that announce, support the announcement or give public  
485 notice of information EPA has disseminated elsewhere.

486 • Distribution of background and outdated or superseded information: These guidelines  
487 do not apply to background information such as published articles, distributed by  
488 libraries or by other distribution methods that do not imply that EPA has adopted or  
489 endorsed the materials. The guidelines do not apply to outdated or superseded EPA  
490 information that is provided as background information but no longer reflects EPA  
491 policy or influences EPA decisions, where EPA indicates (in a disclaimer or otherwise)  
492 that the materials are provided as background materials and do not represent EPA's  
493 current view.

494 • Distribution of information by federal employees and recipients of grants, cooperative  
495 agreements, and contracts: These guidelines do not apply to information distributed by

recipients of contracts, grants, or cooperative agreements, unless the information is disseminated on EPA's behalf, as when EPA specifically directs or approves the dissemination. These guidelines do not apply to distribution of any type of research by federal employees and recipients of EPA grants, cooperative agreements, or contracts, where the researcher (not EPA) decides whether and how to communicate and publish the research, does so in the same manner as his or her academic colleagues, and distributes the research in a manner that indicates that the research does not represent EPA's official position (for example, by including an appropriate disclaimer). Distribution of research in this manner is not subject to these guidelines even if EPA retains ownership or other intellectual property rights because the Federal government paid for the research.

- Distribution of information in public filings: Public filings include information submitted to EPA by any individual or person (as defined above). The guidelines do not apply where EPA distributes this information simply to provide the public with quicker and easier access to materials submitted to EPA that are publicly available. This will generally be the case if EPA has not authored the filings, and is not distributing the information in a manner that suggests that EPA endorses or adopts the information, and EPA does not indicate in its distribution that it is using or proposing to use the information to formulate or support a regulation, guidance, or other Agency decision or position.

Examples of public filings submitted to EPA include:

- a Submissions of information under mandates or requirements, such as filings required by statutes, regulations, orders, permits, or licenses. This includes submissions of information by applicants for a permit, license, approval, authorization, grant, or other benefit or permission.
- b Information submitted voluntarily to EPA. Examples include information in submissions relating to an EPA program, process or activity, such as public comments submitted in a rulemaking; information submitted by a participant in a voluntary program; and other information voluntarily provided to EPA by third parties, such as data, studies, analyses, and other types of comments or input.

Information in public filings submitted by EPA to other agencies or governmental agencies, such as public comments EPA submits in a state rulemaking, also would not be covered by these guidelines.

- Distribution related to subpoenas or adjudicative processes: Distributions of information related to subpoenas or adjudicative process are not covered by these guidelines. An adjudication is a matter involving specific parties that determines the rights and liabilities of the parties to the action. Adjudications have well-established procedural safeguards

and rights to address the quality of adjudicatory decisions and provide persons with an opportunity to contest decisions. This includes:

- a Distribution of information in documents filed in a judicial case in any court.
- b For enforcement purposes, distribution of information in documents developed during the conduct of any criminal or civil action or administrative enforcement action, investigation, or audit involving an agency against specific parties.
- c Distribution of information in documents related to any formal or informal administrative action determining the rights and liabilities of specific parties, including documents that provide the findings, determinations or basis for such actions. Examples include the processing or adjudication of applications for a permit, license, registration, waiver, exemption, or claim; actions to determine the liability of parties under applicable statutes and regulations; and determination and implementation of remedies to address such liability.

- EPA may identify other instances where information is not “disseminated” by EPA because EPA does not initiate or sponsor the distribution of information.

#### **1.4 What happens if information is initially not covered by these guidelines, but EPA subsequently disseminates it to the public?**

If a particular distribution of information is not covered by these guidelines, the guidelines may still apply to a subsequent distribution of the information in which EPA adopts, endorses or uses the information to formulate or support a regulation, guidance, or other Agency decision or position. For example, if EPA simply makes a public filing (such as facility data required by regulation) available to the public, these guidelines would not apply to that distribution of information. However, if EPA later includes the data in a background document in support of a rulemaking, these guidelines would apply to that later dissemination of the information in that document.

#### **1.5 How does EPA ensure the objectivity, utility, and integrity of information that is not covered by these guidelines?**

These guidelines apply only to information EPA disseminates to the public, outlined in Section 1.2, above. Other information distributed by EPA that is not covered by these guidelines would still be subject to applicable EPA policies, quality review processes, and correction procedures. These include quality management plans for data systems, peer review, and other procedures that are specific to individual programs and, therefore, not described in these guidelines. It is EPA’s policy that, to the extent possible, all of the information it distributes meets a basic standard of information quality, and that its utility, objectivity, and integrity be scaled and appropriate to the nature and timeliness of the planned and anticipated uses. The need to ensure the quality of EPA information is not necessarily dependent upon any plans to disseminate the information. EPA continues to plan to produce, collect, and use information that is of the appropriate quality, irrespective of these guidelines or the prospects for dissemination of the information.

## **Defining Information Quality**

### **2.1 What is “quality” according to the guidelines?**

Consistent with the OMB guidelines, EPA is issuing these guidelines to ensure and maximize the quality, including objectivity, utility and integrity, of disseminated information. Objectivity, integrity, and utility are defined here, consistent with the OMB guidelines. “Utility” refers to the usefulness of the information to the intended users. “Objectivity” focuses on whether the disseminated information is being presented in an accurate, clear, complete, and unbiased manner, and as a matter of substance, is accurate, reliable, and unbiased. “Integrity” refers to security, such as the protection of information from unauthorized access or revision, to ensure that the information is not compromised through corruption or falsification.

## **Ensuring and Maximizing Information Quality**

### **3.1 How does EPA ensure and maximize the quality of disseminated information?**

EPA ensures and maximizes the quality of information by using policies and procedures well established within the Agency as appropriate to the information product. There are many tools that the Agency uses such as the Quality System<sup>9</sup>, review by senior management, peer review process<sup>10</sup>, communications product review process<sup>11</sup>, the web guide<sup>12</sup>, and the error correction process<sup>13</sup>. The Agency uses a graded approach and uses these tools based on the intended use of the information and the resources available. As part of this graded approach, EPA recognizes that some of the information it disseminates includes influential scientific, financial, or statistical information, and that this category should meet a higher standard of quality.

### **3.2 How does EPA define influential information for these guidelines?**

“Influential,” when used in the phrase “influential scientific, financial, or statistical information,” means that the Agency can reasonably determine that dissemination of the information will have or does have a clear and substantial impact on important public policies or important private sector decisions. For the

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<sup>9</sup>EPA Quality Manual for Environmental Programs 5360 A1. May 2000.  
<http://www.epa.gov/quality/qs-docs/5360.pdf>

<sup>10</sup>Science Policy Council Handbook Peer Review, U.S. EPA. EPA 100-B-00-001. December 2000.  
<http://www.epa.gov/osp/spc/prhandbk.pdf>

<sup>11</sup>EPA's Print and Web Communications Product Review Guide. <http://www.epa.gov/dced/pdf/review.pdf>

<sup>12</sup>Web Guide. U.S. EPA. <http://www.epa.gov/webguide/resources/webserv.html>

<sup>13</sup>Integrated Error Correction Process. <http://www.epa.gov/cdx/iecp.html>

purposes of the EPA's Information Quality Guidelines, EPA will generally consider the following classes of information to be influential, and, to the extent that they contain scientific, financial, or statistical information, that information should adhere to a higher standard of quality:

- Information disseminated in support of top Agency actions (i.e., rules, substantive notices, policy documents, studies, guidance) that demand the ongoing involvement of the Administrator's office and extensive cross-Agency involvement; issues have the potential to result in major cross-Agency or cross-media policies, are highly controversial, or provide a significant opportunity to advance the Administrator's priorities. May also include precedent setting or controversial science or economic issues.
- Information disseminated in support of OMB Economically Significant actions: As defined in Executive Order 12866, entitled *Regulatory Planning and Review* (58 FR 51735, October 4, 1993), Agency actions that are likely to have an annual effect on the economy of \$100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal governments or communities.
- Work Products Undergoing Peer Review: As called for under the Agency's Peer Review Policy, major scientific and technical work products and economic analysis used in decision making. Scientific and technical work products that are used to support a regulatory program or policy position and that meet one or more of the following criteria are candidates for peer review: establishes a significant precedent, model, or methodology; addresses a significant controversial issue; focuses on a significant emerging issue, has significant cross-Agency implications; involves a significant resource investment; uses an innovative approach; or has a statutory or other legal mandate for peer review. Also includes major economic analyses such as internal Agency guidance for conducting economic and financial methodologies that will serve as a principal method or protocol used to conduct economic analyses within a program; unique or novel applications of existing economic or financial methodologies; broad-scale economic assessments of regulatory programs such as those required by Congressional mandates; and, new stated preference or revealed preference surveys developed to assist in the economic analysis of a regulation or program.
- Case-by-case: The Agency may make determinations of what constitutes "influential information" beyond those classes of information already identified on a case-by-case basis for other types of disseminated information that will have or do have a clear and substantial impact (i.e. change or effect) on important public policies or important private sector decisions.

### **3.3 How does EPA ensure and maximize the quality of “influential” information?**

EPA recognizes that influential scientific, financial, or statistical information should be subject to a high degree of transparency about data and methods to facilitate the reproducibility of such information by qualified third parties, to an acceptable degree of imprecision. It is important that analytic results have a high degree of transparency regarding (1) the source of the data used, (2) the various assumptions employed, (3) the analytic methods applied, and (4) the statistical procedures employed. It is also important that the degree of rigor with which each of these factors is presented and discussed be scaled as appropriate, and that all factors be presented and discussed. In addition, if access to data and methods cannot occur due to compelling interests such as privacy, trade secrets, intellectual property, and other confidentiality protections, EPA should to the extent practicable, apply robustness checks to analytic results and document what checks were taken. Original and supporting data may not be subject to the high and specific degree of transparency required of analytic results; however, EPA should apply relevant Agency policies and procedures to achieve reproducibility to the extent practicable, given ethical, feasibility, and confidentiality constraints.

EPA has several Agency-wide and Program- and Region-specific policies and processes which the Agency applies to ensure and maximize the quality of influential information. Agency-wide processes of particular importance to ensure the quality, objectivity, and transparency of influential information are the Agency's Quality System, Action Development Process, Peer Review Policy, and related procedures. Many influential information products may be subject to more than one of these processes.

### **3.4 How does EPA ensure and maximize the quality of “influential” scientific risk assessment information?**

In its dissemination of human health risk assessments that have been categorized as influential, EPA should ensure that the risk assessment adheres to the quality principles listed below. In applying these principles to human health risk assessments, the nature of the risk assessment will depend upon the information available, the regulatory application of the risk information, and the resources (including time) available. The level of effort and complexity of detail of a risk assessment should balance the information needs for decision making and the effort needed to develop such information.

With respect to influential scientific information regarding human health risk assessments, EPA should ensure, to the extent practicable and in conformance with Agency guidelines, the objectivity of this information disseminated by the Agency by adapting the quality principles found in the SDWA Amendments of 1996:

- (A) The substance of the information is accurate, reliable and unbiased. This involves the use of,
  - (i) the best available, peer-reviewed science as appropriate, and supporting studies conducted in accordance with sound and objective scientific practices; and
  - (ii) data collected by accepted methods or best available methods (if the reliability of the method and the nature of the decision justifies the use of the data).

- (B) The presentation of information on human health effects, is comprehensive, informative, and understandable. In a document made available to the public, EPA should specify –
- (i) each population addressed by any estimate of applicable human health effects;
  - (ii) the expected human health risk or central estimate of human health risk for the specific populations affected;
  - (iii) each appropriate upper-bound or lower-bound estimate of human health risk;
  - (iv) each significant uncertainty identified in the process of the assessment of human health effects and studies that would assist in resolving the uncertainty; and
  - (v) peer-reviewed studies known to the Administrator that support, are directly relevant to, or fail to support any estimate of human health effects and the methodology used to reconcile inconsistencies in the scientific data.

In applying these principles, "best available" refers to the availability at the time an assessment was made, and that in some situations, the Agency may need to weigh the resources needed and the potential delay associated with gathering additional information in comparison to the value of the new information in terms of its potential to improve the substance of the assessment. In an effort to expand these guidelines to apply to environmental and safety-related risk assessments, the Agency intends to seek input from appropriate stakeholders and the scientific community.

### **3.5 Does EPA ensure and maximize the quality of information from external sources?**

EPA recognizes that the State and other governments and third party information issue is complex and requires more thought and collaboration with States, the scientific and technical community and other external data providers. Consultation is needed to best ascertain and address how these guidelines may apply to external sources, and to ensure the guidelines are sufficiently flexible to encourage the appropriate use of external information while also ensuring and maximizing the quality of information EPA disseminates. Therefore, EPA is taking and will continue to take steps to ensure that the quality and transparency of data and information provided by external sources is sufficient for the intended use.

For information that is either voluntarily submitted to EPA in hopes of influencing a decision or that EPA obtains for use in developing a policy or regulatory decision, EPA plans to work with States and other governments, the scientific and technical community and other interested data providers to develop and publish factors that EPA would use to assess the quality of this type of information provided by external sources and used by EPA for specific purposes.

## **Pre-dissemination Review**

### **4.1 What are the administrative mechanisms for pre-dissemination reviews?**

Each EPA office and region will incorporate the information quality principles outlined in these guidelines into their existing pre-dissemination review procedures as appropriate. Offices and regions may develop unique and new procedures, as needed, to provide additional assurance that the information disseminated by or on behalf of their organizations is consistent with these guidelines.

## **Correction of Information**

### **5.1 What are EPA's Administrative Mechanisms for Affected Persons to Seek and Obtain Appropriate Correction of Information?**

OEI manages the administrative mechanisms which enable affected persons to seek and obtain, where appropriate, correction of information maintained or disseminated by the Agency that does not comply with EPA or OMB Information Quality Guidelines. Working with the program offices, regions, labs and field offices, OEI will receive complaints (or copies) and distribute them to the appropriate EPA information owners. "Information owners" are the responsible persons designated by management in the applicable EPA program, or those who have responsibility for the quality, objectivity, utility and integrity of the information product or data disseminated by EPA.

### **5.2 Who may request a correction of information from the Agency?**

Any individual or person may request a correction of information from EPA, if that individual or person is an "affected person". For the purposes of these guidelines, "affected persons" are persons who may benefit or be harmed by the disseminated information.

### **5.3 What Should be Included in a Request for Correction of Information?**

Persons requesting a correction of information should include the following information in their requests:

- An indication that the person is seeking correction of information disseminated by EPA that the person believes does not comply with EPA or OMB Information Quality Guidelines.
- Name and contact information. Organizations submitting a complaint should identify an individual, to serve as a contact.
- A description of the information the person believes does not comply with EPA or OMB guidelines, including specific citations, if applicable.
- An explanation of how the information does not comply with EPA or OMB guidelines and, if possible, a recommendation of corrective action.

### **5.4 Will EPA consider all requests for correction of information?**

EPA seeks public and stakeholder input on a wide variety of issues, including the identification and resolution of discrepancies in EPA data and information. EPA will review every request for correction under these guidelines and consider it for correction unless:

- The request itself is deemed "frivolous," including those made in bad faith or without



justification, deemed inconsequential or trivial, and for which a response would be duplicative of existing processes, unnecessary, or unduly burdensome on the Agency. More information on this subject may be found in the Federal Register (66 Fed. Reg. at 49721).

- It pertains to EPA actions, where a mechanism by which to submit comments to the Agency is already provided. For example, EPA rulemakings include a comprehensive public comment process and impose a legal obligation on EPA to respond to comments on all aspects of the action. These procedural safeguards assure a thorough response to comments on quality of information. EPA believes that the thorough consideration required by this process meets the needs of the request for correction of information process. A separate process for information that is already subject to such a public comment process would be duplicative, burdensome, and disruptive to the orderly conduct of the action.

If EPA cannot respond to a complaint in the response to comments for the action (for example, because the complaint is submitted too late to be considered along with other comments or because the complaint is not germane to the action), EPA will consider whether a separate response to the complaint is appropriate. EPA may consider frivolous any complaint which could have been submitted as a timely comment in the rulemaking or other action but was submitted after the comment period.

- The party that submitted the complaint for EPA consideration is not an "affected person." For the purposes of these guidelines, "affected persons" are persons who may benefit or be harmed by the disseminated information. This includes persons who are seeking to address information about themselves as well as persons who use information.

## **5.5 How will EPA respond to a request for correction of information?**

If a request for correction of information is deemed appropriate for consideration, EPA will make a decision on the request on the basis of the information in question. If a request is approved, EPA will take corrective action. Whether a request is approved or not, EPA will send an explanation to the requester. EPA may elect not to correct some completed information products on a case-by-case basis due to Agency priorities, time constraints, or resources. OEI will submit reports to OMB on an annual basis beginning January 1, 2004 regarding the number, nature and resolution of complaints received by EPA.

## **5.6 Will EPA reconsider its decision on a request for the correction of information?**

If requesters of corrective actions are dissatisfied with an EPA decision regarding their request, they may appeal the decision. These appeals for reconsideration should contain the following information:

769                   •       An indication that the person is seeking an appeal of an EPA decision on a previously  
770                   submitted request for a correction of information, including the date of the original  
771                   submission and date of EPA decision.

772                   •       Name and contact information. Organizations submitting an appeal should identify an  
773                   individual, as a contact.

774                   •       An explanation of why the appealing entity disagrees with the EPA decision, and, if  
775                   possible, a recommendation of corrective action.

776                   •       A copy of the original request for the correction of information.

777       **5.7     How does EPA process requests for reconsideration of EPA decisions?**

778       The requests for reconsideration of EPA decisions will be logged and tracked by OEI. These appeals  
779       will be sent to the appropriate EPA program office or region, that has responsibility for the information  
780       in question. Within the responsible EPA office or region, the Assistant Administrator or Regional  
781       Administrator will work with OEI to form an executive panel to review the appeal. This panel will be  
782       chaired by the EPA Chief Information Officer. The responsible EPA Assistant Administrator or  
783       Regional Administrator, informed by the executive panel's recommendation, will make the final decision  
784       on the appeal.

## REQUEST FOR PUBLIC COMMENTS

EPA requests public comment and input on the following questions. EPA appreciates your input on these and other aspects of the draft EPA guidelines that are not listed below. Please visit <http://www.epa.gov/oei/qualityguideline> to learn more about how to submit your comments to EPA. At that web page you may also submit your comments online and view other comments that will be submitted to EPA during the 30-day public comment period throughout May 2002. There is also an opportunity for you to share your comments with EPA orally at the EPA public meeting in May. Please visit that web page to register by May 3, 2002. EPA thanks you for providing your input on these draft guidelines.

### Influential Information

“Influential,” when used in the phrase “influential scientific, financial, or statistical information,” means that the Agency can reasonably determine that dissemination of the information will have or does have a clear and substantial impact on important public policies or important private sector decisions. Consistent with OMB’s guidance, EPA has chosen to identify influential information in terms of specific classes of information that are developed and reviewed through Agency-wide processes.

- Is this an appropriate approach?
- Is the scope of information too broad?
- Are there other classes of information that should be included?

EPA intends to develop experience implementing its definition of influential information over the first year, and then potentially broaden it to incorporate other classes of information disseminated by EPA.

- Is this an appropriate approach and consistent with the goal to continually improve Agency information?

### Reproducibility

Influential scientific, financial, or statistical information generally has a higher degree of quality, in particular, transparency that facilitates the reproducibility of the information by qualified third parties.

- What comments do you have on the Agency’s approach to facilitating the reproducibility of influential information?
- Is it appropriate for the influential scientific, financial, and statistical information EPA disseminates?
- What types of original and supporting data do you believe should or should not be subject to a reproducibility requirement given ethical, feasibility, or confidentiality constraints?
- What suggestions do you have for performing and reporting robustness checks of influential analytic results in cases where public access to data and methods will not occur due to other compelling interests such as privacy, trade secrets, intellectual property, and other

- confidentiality protections?
- In particular, how might such robustness checks be applied to third party data that are used in analyses included in influential scientific, financial, and statistical information disseminated by EPA?

### **Influential risk assessment**

EPA has adapted the SDWA quality principles for influential scientific risk assessments regarding human health risks and would like to hear from you on this issue.

- What suggestions do you have with respect to the EPA adaptation of the SDWA principles for influential scientific risk assessments regarding human health risks?
- Do you think that an adaptation of the SDWA quality principles is appropriate for most influential scientific risk assessments regarding human health risks disseminated by EPA?

EPA has decided to adapt the SDWA quality principles in the future for environmental and safety risk assessments. This will enable EPA to inform its decisions on how to best address this issue based on public input.

- What suggestions do you have for how EPA should address environmental and safety risk assessments?
- How do you think EPA should adapt the SDWA principles to accommodate these different risk assessments?
- Or, if you do not believe that EPA should adapt these principles, how would you suggest EPA address environmental and safety risk assessments in its quality guidelines?

### **Sources of Information Disseminated by EPA**

During the development of these guidelines, EPA considered how to address information that is not generated by the Agency, but is later disseminated by EPA in a publication or through a regulatory or policy decision. Although this information may not be covered by these guidelines when it is first generated by outside sources, it may be covered by the guidelines if the Agency subsequently decided to use the information in a publication or policy decision.

- EPA would like you to suggest specific assessment factors that the Agency should consider using when assessing specific kinds of information submitted to EPA by outside sources, or information EPA obtains from outside sources.
- EPA also requests your input on how it should properly consult with the scientific and technical community in establishing these assessment factors.

### **Complaint Resolution**

EPA has developed a complaint resolution process. That is, your initial complaint would be heard by

what EPA calls the "information owner". That "information owner" is the EPA person designated by management in the EPA program, or who has the responsibility for the quality, objectivity, utility and integrity of the information disseminated by EPA. Next, should you appeal the initial decision, your appeal would be heard by the Assistant Administrator (AA) or Regional Administrator (RA) for that program or region. The AA and RA are the highest ranking official for those organizations. They are political appointees. That appeal would be decided in collaboration with a standing panel. That panel would consist of other AAs and RAs to ensure that your appeal is taken to a most senior level right away. The EPA Chief Information Officer would chair that panel. There are many more details that EPA has yet to decide and the Agency encourages your input as it develops this proposal.

- Specifically, what suggestions do you have regarding the receipt of the initial complaint through the Office of Environmental Information? Do you think a central point of entry is useful or problematic?
- What are appropriate time periods for this process?
- Once an appeal is submitted it would be decided by a top EPA official in collaboration with an executive panel. Do you think this is sufficiently objective and efficient to ensure a timely and appropriate response to an appeal?

Implementing the  
President's Management Agenda for E-Government

# ***E-Government Strategy***



***Simplified Delivery of Services to Citizens***

February 27, 2002

E-Government Strategy

EXECUTIVE OFFICE OF THE PRESIDENT  
OFFICE OF MANAGEMENT AND BUDGET  
WASHINGTON, D.C. 20503

February 27, 2002

TO: Mitchell E. Daniels  
Director, Office of Management and Budget

In your July 18, 2001 Memo (OMB Memorandum M-01-28), you established an E-Government Task Force to identify priority actions that achieve strategic improvements in government and set in motion a transformation of government around citizen needs.

We launched that Task Force on August 9, 2001, and by mid-September it had completed its work and recommendations. At the October 3, 2001 meeting of the President's Management Council, the recommendations were considered and approved. Subsequently, multi-agency project teams and OMB staff have developed the implementation roadmap.

Attached is the federal government's *E-Government Strategy*, including a implementation roadmap that implements the Task Force's findings. It represents the work of the 81 Task Force members from 46 agencies and bureaus, as well as subsequent decisions made in preparing the FY 2003 Budget. The initiatives are targeted at improving the quality of services to citizens, businesses, governments and government employees, as well as the effectiveness and efficiency of the federal government. Managing partner agencies are currently leading efforts to implement each initiative in a phased approach that builds on the re-launch of the FirstGov portal.

I look forward to your continuing support as we continue the development and implementation of these E-government initiatives. I would also like to thank all who participated for their contribution.



Mark Forman  
Associate Director for Information Technology and E-Government

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### 1. Executive Summary

We live in an increasingly interconnected society, where the Internet has spawned tremendous improvements in efficiency and customer service. People use the telephone and the Internet to get service 24 hours a day, seven days a week.

More than 60 percent of all Internet users interact with government websites. E-Government will save taxpayers a significant amount of money, while adding value to citizens' experience with government and better serving their needs. Consequently, the President has made "Expanding E-Government" integral to a five-part Management Agenda for making government more focused on citizens and results.

Federal information technology (IT) spending in the United States will exceed \$48 billion in 2002 and \$52 billion in 2003. That level of IT spending provides enormous opportunities for making the transformation government into a citizen-centered E-Government. Indeed, a good portion of current federal IT spending is devoted to Internet initiatives, yielding over 35 million web pages online at over 22,000 web sites. But past agency-centered IT approaches have limited the government's productivity gains and ability to serve citizens. As highlighted in this report, the federal government is poised to transform the way it does business with citizens through the use of E-Government.

This report presents the federal government's action plan for E-Government. The primary goals for the President's "Expanding E-Government" initiative are to:

- Make it easy for citizens to obtain service and interact with the federal government;
- Improve government efficiency and effectiveness; and
- Improve government's responsiveness to citizens.

OMB Director Mitchell E. Daniels initiated an interagency E-Government Task Force (see Appendix A) to identify the action plan for implementing the President's E-Government initiative. Under the leadership of Mark Forman, Associate Director of Information Technology and E-Government, about 80 federal employees from across the federal government made up the Task Force (see Appendix B).

The E-Government Task Force found that the federal government could significantly improve customer service over the next 18 to 24 months by focusing on 23 high-payoff, government-wide initiatives that integrate agency operations and IT investments (subsequently, payroll processing was added as the 24th E-Government initiative). These initiatives could generate several billion dollars in savings by reducing operating inefficiencies, redundant spending and excessive paperwork. The initiatives will provide service to citizens in minutes or hours, compared to today's standard of days or weeks. Moreover, by leveraging IT spending across federal agencies, the initiatives will make available over \$1 billion in savings from aligning redundant investments.

The E-Government Task Force identified significant federal performance problems that could be addressed by E-Government and E-Business concepts. The Task Force's analysis found that redundant and overlapping agency activities have been major impediments to creating a citizen-centered electronic government. Of 28 lines of business found in the federal government, the assessment revealed that, on average, 19 Executive Departments and agencies are performing each line of business (see Figure 5.1). Each agency typically has invested in both online and traditional approaches, regardless of other departments' redundant efforts. That translates into many duplicative reporting requirements, while requiring citizens to wade through thousands of Web sites and dozens of call centers to find and obtain service. For example, a community attempting to obtain economic development grants could file over 1,000 forms at more than 250 federal bureaus, each form containing much similar data. The Task Force found that this "business architecture" problem creates underlying redundant activities and processes, resulting in unnecessary burdens and costs on citizens, state and local governments, businesses and federal employees.

Indeed, the Task Force found a number of unofficial groupings of federal employees who meet frequently to figure out ways to work together across traditional agency boundaries and better serve citizens. Through e-mails and interviews, the Task Force found that many government employees want to use E-Government tools that enable teamwork in their daily work.

The Task Force also identified key barriers that must be mitigated for success in federal E-Government efforts. The barriers identified concerned culture, architecture, trust, resources and stakeholder resistance. Several recommendations for leadership actions were made to overcome these barriers. In addition, two efforts—the e-Authentication initiative and the Enterprise E-Government Architecture Project—were added to address key barriers.

- The e-Authentication initiative will build and enable mutual trust to support wide spread use of electronic interactions between the public and government and across government by providing common solutions to establish 'identity'. These solutions will address authentication security, privacy, and electronic signature needs of the E-Government initiatives.
- The E-Government Architecture project will carry out two major concurrent activities. One of the activities will be the development of a architecture, toward the development of a Federal Enterprise Architecture, for each of the current E-Government initiatives, as well as a core set of standardized technology models to facilitate technology solutions. The second activity will be the collection and analysis of business and data architecture information across the federal government to identify new opportunities for E-Government initiatives and elimination of redundancy. Initially this effort will focus on four key areas including Homeland Security, economic stimulus, social services, and back office operations.

The President's Management Council approved the E-government initiatives and the action plan in their October 3, 2001, meeting. Through December 2001, agencies developed detailed business cases and formed partnerships for investment and implementation of the initiatives.

## E-Government Strategy

The results of the business cases were incorporated into the Fiscal Year 2003 budget, and agencies are currently integrating planned FY 2002 efforts into the 24 E-Government initiatives.

Information on this E-government effort may be found on the Internet at, <http://www.firstgov.gov>, <http://www.whitehouse.gov/OMB>, or <http://www.cio.gov>, including an electronic copy of this report.

## 2. STRATEGIC VISION

The President's vision for reforming government emphasizes that "government needs to reform its operations—how it goes about its business and how it treats the people it serves." The vision is guided by three principles:

- **Citizen-centered**, not bureaucracy-centered;
- **Results-oriented**; and
- **Market-based**, actively promoting innovation.

Electronic government is one of the five key elements in the President's Management Agenda and Performance Plan (August 2001) for achieving the vision. E-Government is critical to meeting today's citizen and business expectations for interaction with government. It will enable agencies to align efforts as needed to significantly improve service and reduce operating costs. When E-Government initiatives deploy effectively, conducting business with the government is easier, privacy is protected and security provided. Citizens and businesses can visit one point-of-service online or by telephone that reflects the "United States Government."

Our vision combines successful online operating practices with the federal government's human capital and physical assets to build a "click and mortar" enterprise. In this vision, organizations serve citizens, businesses, other government and federal employees. Our goal is that services and information will rarely be more than three clicks away when using the Internet. Achieving this vision requires that agencies integrate and simplify their operations.

## 3. THE STRATEGY

The Administration is committed to advancing the E-Government strategy by supporting multi-agency projects that improve citizen services and yield performance gains. With that objective, the Task Force developed a roadmap for the implementation of E-Government. OMB Director Mitchell E. Daniels initiated an interagency E-Government Task Force (see Appendix A) to identify the action plan for implementing the President's E-Government initiative. The Task Force's objectives were to:

- Recommend highest payoff cross-agency initiatives that can be rapidly developed;

- Identify key barriers to the federal government becoming a citizen-centered E-Government, and implement actions needed to overcome these barriers; and
- Develop a technology framework that provides for the integration of government services and information.

***What is the value of E-Government?***

E-Government provides many opportunities to improve the quality service to the citizen. Citizens should be able to get service or information in minutes or hours, versus today's standard of days or weeks. Citizens, businesses and state and local governments should be able to file required reports without having to hire accountants and lawyers. Government employees should be able to do their work as easily, efficiently and effectively as their counterparts in the commercial world.

An effective strategy will result in significant improvements in the federal government, including:

- Simplifying delivery of services to citizens;
- Eliminating layers of government management;
- Making it possible for citizens, businesses, other levels of government and federal employees to easily find information and get service from the federal government;
- Simplifying agencies' business processes and reducing costs through integrating and eliminating redundant systems;
- Enabling achievement of the other elements of the President's Management Agenda; and
- Streamlining government operations to guarantee rapid response to citizen needs.

This focuses on four citizen-centered groups, each providing opportunities to transform delivery of services.

- Individuals/Citizens: Government-to-Citizens (G2C); Build easy to find, easy to use, one-stop points-of-service that make it easy for citizens to access high-quality government services.
- Businesses: Government-to-Business (G2B); Reduce government's burden on businesses by eliminating redundant collection of data and better leveraging E-business technologies for communication.
- Intergovernmental: Government-to-Government (G2G); Make it easier for states and localities to meet reporting requirements and participate as full partners with the federal government in citizen services, while enabling better performance measurement, especially for grants. Other levels of government will see significant administrative savings and will be able to improve program delivery because more accurate data is available in a timely fashion.
- Intra-governmental: Internal Efficiency and Effectiveness (IEE); Make better use of modern technology to reduce costs and improve quality of federal government agency administration, by using industry best practices in areas such as supply-chain management, financial management and knowledge management. Agencies will be able to improve

effectiveness and efficiency, eliminating delays in processing and improving employee satisfaction and retention.

#### 4. THE PROBLEM

While the federal government is the world's biggest spender on information technology, it has not experienced commensurate improvements in productivity, quality and customer service. In many companies, major gains have come from leveraging the technology to transform old business practices. There are at least four major reasons that the federal government has been unable to increase productivity:

- **Program Performance Value:** Agencies typically evaluate their IT systems according to how well they serve the agency's processes and needs—not how well they respond to citizens' needs. Systems are often evaluated by the percentage of time they are working, rather than the internal and external performance benefit they deliver to the programs they support.
- **Technology Leverage:** In the 1990s, government agencies used IT to automate existing processes, rather than to create more efficient and effective solutions that are now possible because of commercial E-business lessons learned.
- **Islands of Automation:** Agencies generally buy systems that address internal needs, and rarely are the systems able to inter-operate or communicate with those in other agencies. Consequently, citizens have to search across multiple agencies to get service, businesses have to file the same information multiple times, and agencies cannot easily share information.
- **Resistance to Change:** Budget processes and agency cultures perpetuate obsolete bureaucratic divisions. Budgeting processes have not provided a mechanism for investing in cross-agency IT. Moreover, agency cultures and fear of reorganization create resistance to integrating work and sharing use of systems across several agencies.

Better leveraging technology investments will require that government managers look beyond the current ways of doing work. Today's IT solutions incorporate more productive ways of doing work, either through eliminating paperwork or integrating activities across longstanding organizational silos. Consequently, affected program officials need to be involved in strategic IT investment decisions. These investments need to be based on valid business cases that clearly articulate the value to both the citizen and the government, and provide for privacy and security that is critical to successful e-government.

A fundamental barrier to getting productivity from federal government IT is government's inherent resistance to change. E-Government uses IT to improve federal productivity by enabling better interactions and coordination. But each opportunity requires substantial changes in current bureaucratic procedures. Success will depend on breaking down the resistance to such change. A holistic approach is needed, and each E-Government initiative

must include results oriented performance measures, policy alignment, training, communications, and organizational change milestones.

## **5. APPROACH AND FINDINGS**

### ***Overview***

The E-Government Task Force conducted 71 interviews with more than 150 senior government officials during the process to gather and identify strategic E-Government opportunities (See Appendix C). In addition, nearly 200 projects were identified from e-mails sent primarily by federal employees. The overall findings were that agency executives and line professionals want the government to:

- Use the Web to provide services such as benefits, recreational opportunities, and educational materials;
- Share information and integrate federal, state and local data where appropriate and possible;
- Reduce burden on businesses by adopting streamlined processes that promote and enable consolidation in data collection;
- Adopt commercial best practices to reduce operating costs and make it simpler for government employees to perform their jobs, especially in the areas of finance, human resources and procurement; and
- Define measures of success and regularly monitor and measure performance.

### ***Reducing Overlap and Redundancy to Make It Easier for Citizens to Get Service and to Reduce Costs***

One of the most significant findings of the Task Force came from a review of the federal government's enterprise architecture. An enterprise architecture describes how an organization performs its work using people, business processes, data, and technology. Since E-Government opportunities affect how agencies do their work and employ technology, it was necessary to evaluate the projects identified against the current enterprise architecture. The assessment applied the approach of the Federal Chief Information Officers Council, using the enterprise architecture to establish a "roadmap to achieve an agency's mission through optimal performance of its core business processes within an efficient IT environment." The Task Force began the assessment by creating a clear framework of the federal government's business architecture, detailing how the federal government interfaces with citizens, what functions and lines of business the government performs and the key business processes used.

The Task Force's major finding was that there was significant overlap and redundancy, with multiple agencies performing each of 30 major functions and business lines in the Executive Branch of government. The review clearly identified the current federal enterprise architecture as "the architecture that isn't". The final analysis indicated that each line of business is being performed by 19 agencies (average) and that each agency is involved in 17 business lines

## E-Government Strategy

(average) (See figure 5.1). The Task Force found that this “business architecture” redundancy creates excessive duplicative spending on staff, IT and administration. Moreover, the Task Force assessment determined that the redundancy makes it hard to get service, while generating duplicative reporting and paperwork burdens. Consequently, the Task Force focused on E-Government initiatives that provide significant opportunities to transform the way the government interacts with its citizens, through the elimination of redundancy and creating simpler ways for citizens to get service.

As the Task Force evaluated potential projects relative to the business architecture, the assessment focused on the opportunities to integrate operations and simplify processes within a line of business across agencies and around citizen needs. Activities of the federal government can be viewed in four primary functions: policymaking, program administration, compliance, and enforcement and internal operations and infrastructure. Policy making activities generally determine programs and compliance efforts. Internal operations are administrative functions, such as financial management, that support day-to-day activities needed to carry out policy making, program administration and compliance activities. E-Government offers the opportunity to streamline activities, improving productivity by enabling agencies to focus on their core competencies and mission requirements. E-Government initiatives eliminate unnecessary redundancy, while improving service quality by simplifying processes and unifying agency islands of automation.

E-Government Strategy

Figure 5.1: Agency Activity on Lines of Business Across Government

Data compiled for Agency's Budget Exhibits and Agency Websites (this is not intended as a full accounting)		Total																													
		Econ. Dev.	Natl Sec. Def. & Ops	Regulation Creation	Public Safety	Diplomacy	Disaster Prep. & Response Mgmt	Energy Production	Asset Mgt	Permits & Licensing	Grants & Loans	Transportation	Insurance	Consumer-Protect	Social Services	Accounts Payable and Receivable	Rec & Natl Res	R&D Science	Import/ Exports	Environmtl Mgmt	Labor	Regulation Compl	Tax Collection	HR	Finance	Procurement	Travel	Logis tics	Admin		
AF																															
AR																															
DefAg																															
DOC																															
DOE																															
DOI																															
DOJ																															
DOL																															
DOS																															
DOT																															
Ed																															
EPA																															
FEMA																															
FCC																															
FTC																															
FRB																															
GSA																															
HHS																															
HUD																															
NASA																															
NAVY																															
NRC																															
NSF																															
OPM																															
SBA																															
SSA																															
Treas																															
USAID																															
USDA																															
VA																															
		24	10	29	21	3	31	4	29	16	21	2	7	8	14	30	7	11	6	22	6	30	2	30	30	30	30	30	30	495	



## An Integrated Government-wide Business Architecture

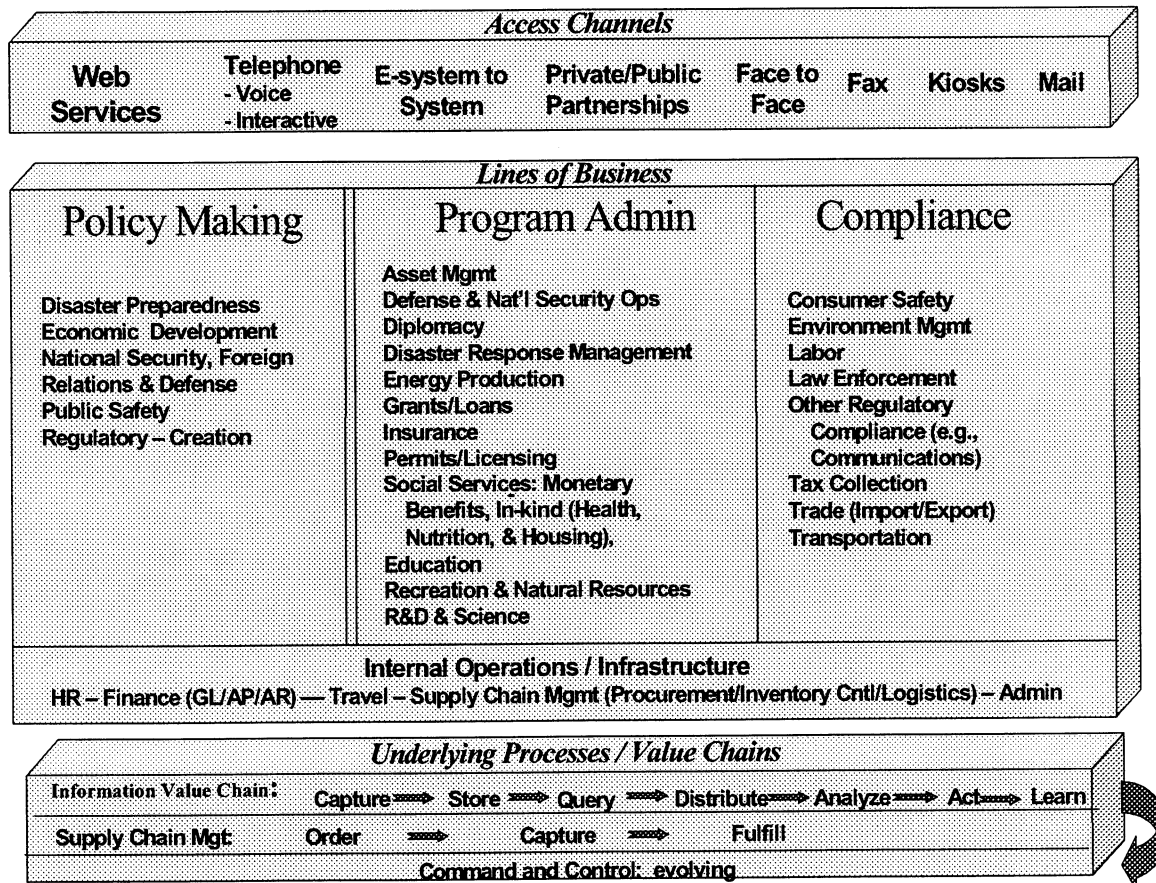


Figure: 5.2: *The Business Architecture*

### Prioritizing Initiatives

The 24 E-Government initiatives were selected using two rounds of prioritization. Overlaying the 350 plus projects that the taskforce gathered from the interviews and e-mails against the architecture assessment yielded 30 potential E-Government initiatives. The most promising initiatives were selected on the basis of value to citizens, potential improvement in agency efficiency and likelihood of deploying within 18 to 24 months.

Initial business cases were developed for each of the 30 initiatives, yielding estimates of benefits, costs and risks. Twenty-four of the 30 would derive significant benefits from simplifying the underlying processes, and 17 of the 30 would derive significant benefits from unifying infrastructure and operations across agency silos. Overall, the 30 initiatives provide an opportunity to improve response to citizens by an order of magnitude (e.g. days instead of

weeks). They provide the opportunity to better use billions of dollars in redundant IT investment and operating costs. They could reduce government's burden on citizens, businesses and state and local governments by well over a billion dollars. Using this data from the business cases, the 20 most promising initiatives were recommended for deployment, with initiatives addressing each citizen-centered group (citizens, businesses, state and local governments and internal efficiency and effectiveness). In addition, two initiatives were selected for further business case development: healthcare informatics and e-Vital. Finally, e-Authentication was selected to address the authentication security needs that cut across federal E-Government initiatives.

The selections were made by a steering group comprised of the members of the President's Management Council under the leadership of the OMB Director. The full President's Management Council approved 23 initiatives at the October 3, 2001 meeting. Subsequently, payroll processing was added as the 24<sup>th</sup> initiative.

Figure 5.3 *Summary of E-Government Portfolios*

<p><b>G2C</b></p> <ul style="list-style-type: none"> <li>• Use the web for accessing services such as benefits, loans, recreational sites &amp; educational material</li> <li>• Key lines of business: social services, recreation &amp; natural resources, grants/loans, taxes</li> </ul>	<p><b>G2B</b></p> <ul style="list-style-type: none"> <li>• Reduce burden on businesses by adopting processes that enable collecting data once for multiple uses &amp; streamlining redundant data</li> <li>• Key lines of business: regulation, economic development, trade, permits/licenses, grants/loans, asset management</li> </ul>
<p><b>G2G</b></p> <ul style="list-style-type: none"> <li>• Share &amp; integrate federal, state &amp; local data</li> <li>• Key lines of business: economic development, recreation &amp; natural resources, public safety, law enforcement, disaster response management, grants/loans</li> </ul>	<p><b>IEE</b></p> <ul style="list-style-type: none"> <li>• Adopt commercial best practices in government operation (supply chain management, HR document workflow)</li> <li>• Key lines of business: supply chain management, HR, finance</li> </ul>

## 6. RECOMMENDATIONS AND OVERVIEW OF THE HIGH PAY-OFF INITIATIVES

The President's Management Council selected the E-Government initiatives on the basis of potential value identified in the initial business cases. The initiatives selected provide the most value to citizens, while generating cost savings or improving effectiveness of government. The 24 projects achieve these results by simplifying and unifying agency work processes and information flows, providing one-stop services to citizens and enabling information to be collected online once and reused, versus re-collected many times.

Managing partners were selected along with other agency partners to lead the new efforts. Subsequent work by the managing partners and their agency partners has yielded more detailed business cases, generally building on current related initiatives (e.g., the International Trade Process Streamlining initiative led by the Commerce Department). With the goal of realizing the business case for each initiative within 24 months, the managing partners will oversee deployment of modules for each initiative in six-month increments as modules become operational.

Additional information about the projects is available in Appendix D, Initiative Summaries.

## **7. BARRIERS AND MITIGATION STRATEGIES**

The Task Force identified key barriers that may prevent the successful implementation of each initiative. Recurring barriers included agency culture, lack of federal architecture, trust, resources, and stakeholder resistance. The Task Force then worked with the Steering Group to define actions for overcoming the barriers. Table 7-1 lists the actions endorsed by the President's Management Council for overcoming each chronic barrier.

One barrier frequently cited is the need to ensure adequate security and privacy. A successful E-Government strategy must deploy effective security controls into government processes and systems. E-Government must also ensure privacy for personal information that is shared with the Federal Government. The e-Authentication project will enable mutual trust to support widespread use of electronic interactions between the public and government and across government by providing common solutions to establish 'identity'. It will provide a secure, easy to use and consistent method of proving identity to the federal government that is an appropriate match to the level of risk and business needs of each initiative. In addition, project teams will address privacy concerns regarding the sharing of personal information. E-government depends on confidence by citizens that the government is handling their personal information with care. Agencies are working on building strong privacy protections into the E-Government initiatives and OMB is focusing on government wide privacy protections by all agencies.

Table 7-1 *Actions for Overcoming Barriers to E-Government*

<b>Barrier</b>	<b>Mitigation</b>
<b>Agency Culture</b>	<ul style="list-style-type: none"> <li>• Sustain high level leadership and commitment</li> <li>• Establish interagency governance structure</li> <li>• Give priority to cross-agency work</li> <li>• Engage interagency user/stakeholder groups, including communities of practice</li> </ul>
<b>Lack of Federal Architecture</b>	<ul style="list-style-type: none"> <li>• OMB leads government-wide business and data architecture rationalization</li> <li>• OMB sponsors architecture development for cross-agency projects</li> <li>• FirstGov.gov will be the primary online delivery portal for G2C and G2B interactions</li> </ul>
<b>Trust</b>	<ul style="list-style-type: none"> <li>• Through e-Authentication E-Government initiative, establish secure transactions and identity authentication that will be used by all E-Government initiatives</li> <li>• Incorporate security and privacy protections into each business plan</li> <li>• Provide public training and promotion</li> </ul>
<b>Resources</b>	<ul style="list-style-type: none"> <li>• Move resources to programs with greatest return and citizen impact</li> <li>• Set measures up-front and use to monitor implementation</li> <li>• Provide online training to create new expertise among employees/contractors</li> </ul>
<b>Stakeholder Resistance</b>	<ul style="list-style-type: none"> <li>• Create comprehensive strategy for engaging Congressional committees</li> <li>• Have multiple PMC members argue collectively for initiatives</li> <li>• Tie performance evaluations to cross-agency success</li> <li>• Communicate strategy to stakeholders</li> </ul>

## 8. IMPLEMENTATION

### *The E-Government Management Action Plan*

Today, the federal government has only scratched the surface of the E-Government potential. Most current efforts merely move decades old agency practices onto the Internet. Consequently, there are more than 35 million federal Web pages available at over 22,000 federal Web sites. While agencies have spent two years considering how to move 6,600 types of paper-based transactions online (representing millions of individual transactions per year), only hundreds are online today. Given the redundant and outdated activities inherent in the 6,600 transactions, the Task Force identified that successful E-Government implementation would have to significantly streamline interactions. The Task Force identified several hundred opportunities each requiring significant change from traditional bureaucratic approaches.

## E-Government Strategy

The Task Force determined that successful implementation will be difficult without prioritizing opportunities and engaging federal leaders to focus resources on initiatives that give the greatest results. Consequently, the 24 initiatives chosen represent a balance of initiatives and resources across the four key citizen groups (individuals, businesses, intergovernmental and internal). The initiatives will integrate dozens of overlapping agency E-Government projects that would have made worse the confusing array of federal Web sites. Additionally, the 24 initiatives represent the priorities of the members of the President's Management Council, who can provide the key leadership support needed to overcome resistance to change.

The 24 initiatives will be managed using a portfolio management process, which manages risk within the range of initiatives for improving service to a given citizen-centered grouping. The four portfolios and their strategic foci are:

- The Government to Citizen (G2C) initiatives will fulfill the vision of one-stop, online access to benefits, and services (such as "Recreation.gov"). They will also bring modern relationship management tools to improve the quality and efficiency of service delivery.
- The Government to Business (G2B) initiatives will reduce burden on businesses by adopting processes that dramatically reduce redundant data collection, provide one-stop streamlined support for businesses, and enable digital communication with businesses using the language of E-business (XML).
- The Government to Government (G2G) initiatives will enable sharing and integration of federal, state and local data to facilitate better leverage of investments in IT systems (e.g. geographical information) and to provide better integration of key government operations, such as disaster response. The G2G initiatives also improve grant management capabilities, as required by the Federal Financial Assistance Improvement Act (P.L 106-107). These initiatives will also support "vertical" (i.e., intergovernmental) integration requirements for Homeland Security.
- The Internal Efficiency and Effectiveness (IEE) initiatives bring commercial best practices to key government operations, particularly supply chain management, human capital management, financial management and document workflow.

Overall, the initiatives represent an opportunity to more effectively use billions of dollars of federal funds, while accelerating government response times from weeks down to minutes. In addition, the initiatives provide an opportunity to save billions of dollars currently spent by citizens, businesses and state and local governments to comply with paperwork-intensive government processes.

However, the pay-off will not result from automating current processes, but rather through the transformation of how the government interacts with its citizens and customers. Only through changing how we do business internally—that is, streamlining work processes to take advantage of modern IT systems—will citizens experience the transformation envisioned. OMB will work closely with the lead and partner agencies to establish appropriate and equitable implementation and resource plans for these initiatives.

## E-Government Strategy

**Figure 8-1 Timeline for Deployment**

*This is non-exhaustive list that will grow or be modified as the initiatives evolve.*

Project	Milestone	Date
<b>Government to Citizen</b>		
Recreation One Stop	Revised Recreation.gov deployed	Completed
	First version of Volunteer.gov online	4/31/02
	RFPs or agreements with private sector reached on implementation of new recreation online projects	TBD
	Additional recreation projects (reservations, searchable maps, more recreation information, etc.) available online	TBD
Eligibility Assistance Online	Initial release of online screening tool for 20 benefit programs	4/31/02
	Online screening tool for 100 benefit programs	9/30/02
	Targeted consolidation of online benefit application and customer relationship management	TBD
Online Access for Loans	Deploy "seek and find" methodology to make it easier for the public to find loan information	TBD
USA Services	Enable citizens to personalize the combination of services they obtain across multiple programs	TBD
	Enable a case to be created and acted upon by multiple agencies	TBD
	Implement a multi-channel contact center to facilitate easy access to information and service	TBD
EZ Tax Filing	Internet fact of filing and refund	4/31/02
	Initial deployment of industry partnership free e-filing solution for 2003 season	12/31/02
<b>Government to Business</b>		
Online Rulemaking Management	Develop capability assessment of "top ten" rulemaking agencies' docket systems – who has the best existing solution	3/30/02
	Create a page, through FIRSTGOV, that links to all agency's docket sites	4/15/02
	Complete study of requirements for moving rulemaking agencies to an integrated online rulemaking system	8/30/02
	Deploy unified cross-agency public comment site	TBD
	Deploy a single on-line rulemaking docket's application to include integration with the RISC/OIRA Consolidated Information System (ROCIS)	TBD
Expanding Electronic Tax Products for Businesses	Begin deployment of filing of W2s on the internet	2/01/02
	Complete XML or non EDI formats (schemas) for electronic filing of 94x	8/31/02
	Begin deployment of the interim solution for online EIN by November 2002 (IRS)	11/31/02
	By January 2004 target initial implementation of 1120 efile for business to facilitate end to end tax administration	1/15/04

## E-Government Strategy

Federal Asset Sales	Re-host Federal Sales	3/31/02
	Develop pilot business integration	9/30/02
	Pilot transaction platform	3/31/03
International Trade Process Streamlining	Complete EX-IM Working Capital Automation Project and integrate into Export.gov	4/15/02
	Deploy on-line collaborative workspace that consolidates all of the information gathering by trade specialists and disseminates it through export.gov to SMEs.	8/15/02
	Simplify EX-IM Insurance filing processes and products and integrate them into Export.gov	1/15/03
One-Stop Business Compliance Information	Pilot/test prototype content management tool for Businesslaw.gov. Conduct full inventory/registry of regulatory agency's "plain language" compliance assistance tools	8/1/02
	Prototype seamless intergovernmental licensing and permitting tool to include Internet EIN	11/30/02
	Complete 30 expert tools (from multiple agencies to include OSHA, EPA, IRS, INS, DOT, DOE) designed to help businesses to comply with relevant regulations in the environment, health and safety, employment, and taxes.	5/1/03
<b>Government to Government</b>		
Geospatial Information One-Stop	Complete draft standards for critical spatial data themes (framework data)	9/30/02
	Identify Federal inventories of framework data	9/30/02
	Deploy first iteration of the Geospatial One-Stop	TBD
e-Grants	Finalize the E-Grants business case in support of partner requirements and other participant input	4/15/02
	Evaluate the use or expansion of interagency and agency specific capabilities for discretionary grant programs	6/1/02
	Pilot a simple, unified way to find federal grant opportunities via the Web	7/1/02
	Define application data standards	10/1/02
	Deploy simple, unified grant application mechanism	10/1/03
Disaster Assistance and Crisis Response	Finalize the business case in support of partner requirements and other participant input	05/15/02
	Deploy a single portal for citizens, public and private institutions that provides access to information and services relating to Disaster and Crisis Management	TBD
Wireless Public Safety Interoperable Communications – Project SAFECOM	Define the communications concept of operations for interaction that identifies the communications requirements to address the two highest probable threat scenarios: Bio terrorism and natural disasters.	05/31/2002
	Develop an integrated public safety response solution that addresses the top two threat scenarios by using existing infrastructure augmented by available commercial capability.	09/30/02
	Complete a gap analysis of existing inventories of public safety wireless communications at federal, state, and local level.	12/31/02
	Implement Priority Wireless Access.	TBD

## E-Government Strategy

e-Vital	Finalize the business case in support of partner requirements and other participant input, and submit to the PMC	05/15/02
	Deploy electronic process for Federal and State agencies to collect, process, analyze, and disseminate Electronic Verification of Vital Events (EVVE) records.	TBD
	Deploy an electronic process for Federal and State agencies to collect, process, analyze, and disseminate Electronic Death Registration (EDR) records	TBD
<b>Internal Efficiency &amp; Effectiveness</b>		
E-Training	Initial e-Training system operational with mandatory Government courses (module 1)	10/15/02
	Expanded e-Training system with fee-for-service courses (Module 2)	4/30/03
	Enhanced e-Training system contains user and managerial tools (such as virtual classrooms and evaluation tools (Modules 2 and 3)	11/01/03
Recruitment One-Stop	Implement simple front-end – Improved appearance and usability that mirrors popular private sector internet recruiting sites	6/30/02
	Applicant status applicant database mining, intake of paper resumes/applications, and capability to link to Federal agency's assessment tools.	1/31/03
	Integration with agency assessment tools.	6/30/03
Integrated Human Resources	HR Logical Data Model including metadata, extended markup language (XML) tags, including proposal for standard Federal HR data	9/30/02
	Prototype Analytical Tools Enabling Integrated Resource Management, Workforce Planning, and Policy Analysis	12/31/02
	Design national architecture for HR initiatives integration to include financial management	11/30/02
E-Clearance	Clearance Verification System which creates a common, source of investigative info to support employee assignment	12/31/02
	Implement e-QIP to reduce error rejection rate, eliminate manual data transfers	6/30/03
	Connect OPM & DoD security clearance indexes	12/31/02
e- Payroll/HR (Payroll Processing Consolidation)	Complete and submit business case to the PMC	3/31/02
	Integrated Enterprise Architecture	TBD
	Strengthening Payroll Service Delivery	TBD
e-Travel	Government wide web-based end to end solutions initial capabilities assessment (ICA)	10/01/02
	E-Travel Customer Care Implemented	12/01/02
	Web Travel Authorization and Voucher System (TAVS)	6/30/03
	Integrated Solution	12/30/03
Integrated Acquisition Environment	Integrated Vendor Profile Network – IVPN Single point of vendor registration, initial capability	6/30/02
	Consolidated eCatalog –implement a directory of GWAC and MAC contracts to simplify selection and facilitate leverage of Government buying, initial capability	9/30/02
	Federal Acquisition Management Information System – FAMIS Implement a new web-based Federal Management Information System that is integrated with legacy	9/30/03



## E-Government Strategy

Electronic Records Management	systems and provides useful real-time data, initial capability	5/31/02
	With partners, finalize ERM initiative work plan and types of ERM guidance and tools to be developed in initiative	9/30/02
	Issue first ERM guidance product (subsequent products to be identified with their timelines under the first milestone)	9/30/02
	Issue first lessons learned/best practices model	2/28/03
	Complete RM and archival XML schema	04/30/03
	Develop ERM requirements that agencies can incorporate in their system designs	9/30/03
<b>Cross Cutting Initiatives</b>		
E-Authentication	Define operational concept including critical success factors and requirements for 12 of the projects.	7/1/02
	Initial authentication gateway prototype	9/30/02
	Full deployment	9/30/03
	Government-wide authentication guidance	TBD
	Produce a set of generally accepted, component-based technology models to guide the target and transition architectures of the currently approved E-government initiatives	3/15/02
Federal Enterprise Architecture	Identify opportunities, based upon agreed criteria measuring impact and value to the citizen, for additional e-Government initiatives (Budget Year 2003/2004)	4/30/02
	Deliver a Federal EA repository with high level business and data architecture in 4 focus areas: Homeland Security, Social Services, Economic Stimulus, and Back Office Operations	4/30/02

## 9. GOVERNANCE AND MANAGEMENT OF CHANGE

In implementing the Action Plan, the daily management and leadership will be provided by:

- Senior agency officials who comprise the President's Management Council;
- The Office of the Associate Director of OMB for IT and E-Government and other OMB staff;
- Members of the CIO, CFO, and Procurement Executive and Human Resources Councils.

One of the most significant barriers to successful implementation of E-government is the resistance of organizations to change. In her recent book, *Evolve*, Rosabeth Moss Kanter, noted author on the successful transformation of organizations, characterized failed, halfhearted attempts at E-business as like "putting lipstick on a bulldog". She goes on to say, "Success requires systemic change, a shift in the organizational way of life." E-Government, like E-business, is about fundamental change in the way organizations and processes work to take advantage of opportunities the technology offers.

To succeed will require an effective governance structure to overcome the barriers and implement the changes necessary. This includes substantial, long-term commitment by senior management. The Administration is using the President's Management Council (PMC) to ensure this management commitment.

PMC members volunteered to be "managing partners" for each of the initiatives. Other members volunteered to participate in those efforts as partners. The managing partners are establishing program offices to ensure that the initiatives are implemented, and the partners will cooperate in the planning and implementation of the initiative. OMB is overseeing this process and working with the agencies on adequate funding for the initiatives. Consequently, OMB has hired four Portfolio Managers, reporting to the Associate Director for IT and E-Government, who are responsible for overseeing progress in the E-Government initiatives.

The PMC will also focus on organizational and process changes across government agencies to facilitate citizen-centered transformation. As such, the Council will be a key component of governance for the transformation of the federal government to E-Government. To help this transformation, the CIO Council, with participation from the other federal management councils, will form portfolio steering groups to focus on E-Government in each of the four citizen segments: G2C, G2B, G2G, and Internal Efficiency and Effectiveness. Portfolio Steering Group members will be from agencies that make up the project teams for each of the initiatives. In addition, the G2G Steering Committee will include representation from official state and local government organizations. The steering committees will advise agency program

## E-Government Strategy

managers concerning their initiatives and help remove barriers to the implementation of the initiatives. The Committees will also support their corresponding portfolio manager, an OMB employee who is responsible for making government more citizen-centered through daily interaction with the managing partners who they oversee.

Metrics will be used to track progress both for the agency and the cross-agency E-Government. The President's Management Council will be closely involved and track E-Government progress at its regular meetings. OMB will be working with Department and agency E-Government leaders, as well as their CIOs, to ensure success. Progress will be tracked for each E-Government initiative, and agency success and cooperation will be documented in the President's Management Agenda Scorecard.

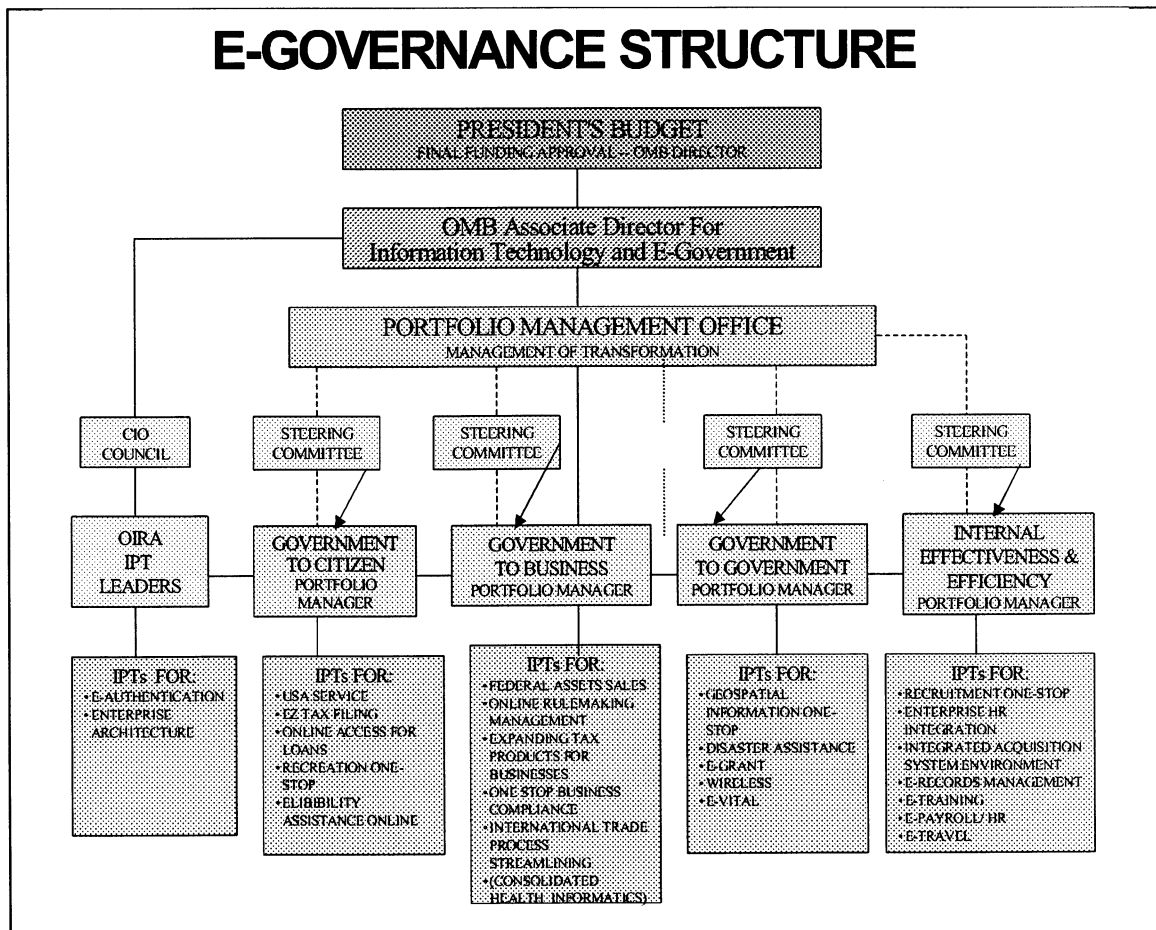


Figure 9.1 Governance Structure  
Key to acronyms: CIO- Chief Information Officer, HR- Human Resources;  
IPT Integrated Project Team

## **10. INITIATIVE'S RELATIONSHIP TO PRESIDENT'S MANAGEMENT AGENDA**

The E-Government Task Force initiatives described in this report not only address the "Expanding E-Government" directions of the President's Management Agenda, but also are key enablers for the President's other reform initiatives. The President's Management Agenda (PMA) FY 2002 can be found at <http://www.firstgov.gov>, <http://www.whitehouse.gov/OMB> or <http://www.cio.gov>. Key elements of the initiatives that drive other parts of the Management Agenda are discussed below.

### ***Strategic Management of Human Capital***

- Accelerate recruitment and hiring, as well as hiring college graduates in a manner commensurate with their job search approach (Recruitment One-Stop)
- Reduce time to make better decisions (all initiatives, for example e-Training)
- Adopt IT systems to capture knowledge of retiring employees (e-Records)
- Make better use of e-Training to leverage scarce training funds and develop government-wide competencies within job skill needs (e-Training)
- Integrate commercial best practices in Enterprise Resource Management (ERP) regarding workforce (Enterprise HR Integration, Payroll Processing)
- Attract Internet savvy graduates from top schools and provide modern work environment with HR systems that facilitate employees doing their work (all initiatives)

### ***Competitive Sourcing***

- Accomplish E-government through adoption of best commercial practices and systems/implicit (all initiatives, for example Integrated Acquisition Systems/e-Contract Services)
- Use rule-based decision systems inherent in IT to facilitate outsourcing of commercial activities currently performed in-house (Business Compliance One-Stop and Federal Asset Sales)

### ***Improved Financial Performance***

- Eliminate erroneous benefit and assistance payments (Online Eligibility Assistance, e-Vital, Consolidated Health Informatics)
- Generate accurate, timely and integrated financial information (Enterprise HR Integration, Payroll Processing, Integrated Acquisition Environment, e-Grants)
- Improve timelines: Re-engineer reporting process and expand uses of Web-based processes; accelerate end of year reporting; measure systems compliance with agency's ability to meet OMB and Treasury requirements (Enterprise HR Integration, e-Grants, Expanding Electronic Tax Products for Businesses)
- Enhance usefulness: Integrate financial and performance information (Enterprise HR Integration)

***Budget and Performance Integration***

- Standardize integrated budgeting performance and accounting information systems at the program level to provide timely feedback for management and roll-up to government-wide view and decisions (Enterprise HR Integration as a component)
- Improve productivity focus for E-Government initiatives with new initiatives being identified in the federal architecture work

## Appendix A

EXECUTIVE OFFICE OF THE PRESIDENT  
OFFICE OF MANAGEMENT AND BUDGET  
WASHINGTON, D.C. 20503

M-01-28

July 18, 2001

### MEMORANDUM FOR THE HEADS OF EXECUTIVE DEPARTMENTS AND AGENCIES

FROM: Mitchell E. Daniels, Jr. /s/

SUBJECT: Citizen-Centered E-Government: Developing the Action Plan

Electronic government is one of the five key elements in the President's Management and Performance Plan. The President's Budget outlined how we will focus our E-Government initiatives on reforming the government so that it is citizen-centered. This memorandum describes our plan to establish a Task Force to begin implementing the President's initiative and asks for your assistance and support in these efforts.

Within our organizations, staff already know of many potential opportunities for using information technologies to improve the service we provide to citizens. Our approach, modeled on the best practices of the private sector, is to tap into that knowledge and use it to identify applications of Internet technologies to reform the way our organizations do business.

Because E-Government is at the core of the President's management agenda, I recently created the position in the Office of Management and Budget (OMB) of Associate Director for Information Technology and E-Government to lead the effort in achieving the President's E-Government vision. I have asked Mark Forman, the new Associate Director, to lead an interagency to define an action plan and road map. We ask your help in establishing this Task Force of knowledgeable individuals to identify high payoff E-Government opportunities and set in motion a transformation of government around customer needs. The Task Force will identify priority actions to achieve strategic improvements the following four areas of service:

- Service to *individuals*: deploy easy to find one-stop shops for citizens, including single points of easy entry to access high quality government services;
- Service to *businesses*: reduce burden on businesses by using Internet protocols and consolidating the myriad of redundant reporting requirements;

## E-Government Strategy

- *Intergovernmental affairs*: make it easier for States to meet reporting requirements, while enabling better performance measurement and results, especially for grants; and
- *Internal efficiency and effectiveness*: improve the performance and reduce costs of federal government administration by using e-business best practices in areas such as supply chain management, financial management, and knowledge management.

The Task Force will operate as an interagency working group over a period of five to six weeks, beginning later this month. I have asked Mark Forman to act as the project executive for the Task Force and report progress to me and an executive steering committee. The Task Force will be successful only if it comprises individuals knowledgeable in their agency programs and experienced in government reform initiatives.

To assist in this effort, I ask that you identify a senior E-Government leader who reports directly to you, to work with Mark in establishing the Task Force. Specific time commitments for individuals participating from your Department or agency will be determined on the basis of a discussion between your E-Government leader and Mark. Please have your Department or agency provide names and contact information for your E-Government leader to Mr. Alex Wilson ([wwilson@omb.eop.gov](mailto:wwilson@omb.eop.gov)) at 202-395-3787. If you would like more detailed information, Mark Forman can be reached at 202-395-1148.

## Appendix B: Task Force Members

<b>Agriculture:</b> MacDonald, Robert Niedermayer, Chris	Diaz, Deborah Dorris, Martha Freebairn, Tom Gross, Tanya Koses, Jeffrey Mitchell, Mary Murphy, Roxie Petersen-Parker, Wanda Royal, Marion Sindelar, John Taylor, Ron Timchak, Steve Temoshok, David Thurston, Keith	Cudd, Karen
<b>Central Intelligence Agency:</b> Reid, Jim		<b>Office of Management and Budget:</b> Basile, Julie Chenok, Daniel Forman, Mark Frater, Anthony McVay, William Seehra, Jasmeet Springer, Edward Swab, Sandy White, Kamela Williams, Jerry Womer, Jonathan
<b>Commerce:</b> Guarguilo, John Hogan, Karen Lyons, Kevin Marshall, Jack Mehlman, Bruce Quintero, Richard Sade, Mike		
<b>Defense:</b> Adolphi, Ronald Carey, Rob DePalma, Evelyn Groeber, Ginger Rider, Melissa Romney, Lisa	<b>Health and Human Services:</b> Godesky, Doug Mahaney, Steve Markovitz, Paul Reester, Heidi Roach, Joseph Williams, Maureen	<b>Small Business Administration:</b> Nillson, Ernst
	<b>Housing and Urban Development:</b> Eden, Donna	<b>Social Security Administration:</b> Trenkle, Tony
<b>Education:</b> Burrow, Bill Cavataio, Tony Luigart, Craig Zeiher, Jacqueline	<b>Interior:</b> Brownell, Peter Haycock, Bob Leshner, Sky Mahoney, John	<b>State:</b> Sheerin, Dan
<b>Energy:</b> Warnick, Walter		<b>Transportation:</b> Mercier, Larry. Powers-King, M. Preston, Phyllis
<b>Environmental Protection Agency:</b> Nelson, Kimberly P. Shaw, Denise	<b>Justice:</b> Evans, Karen Hutchinson, Selena McElhaney, Bill	<b>Treasury:</b> Arnold, Jo Lynn Canales, Mayi Fletcher, Jackie Kotelnicki, Donna Curry, Bernadette
<b>Federal Emergency Management Agency:</b> Jones, Yolanda	<b>Labor:</b> Moritz, Russell	<b>US Agency for Internal Development:</b> Mazer, Bernie Tashjian, Steve
<b>Federal Energy Regulatory Commission:</b> Russo, Tom	<b>National Aeronautics Space Administration:</b> Holcombe, Lee Stepka, Ken	<b>Veteran's Administration:</b> Russell, Lois
<b>Federal Reserve Bank:</b> Madine, Charles	<b>National Endowment for the Humanities:</b> Boble, Brett	
<b>General Services Administration:</b> Barr, Marcerto Boddie, Tisha	<b>Nuclear Regulatory Commission:</b> Clayman, Lew	



## Appendix C: Task Force Process

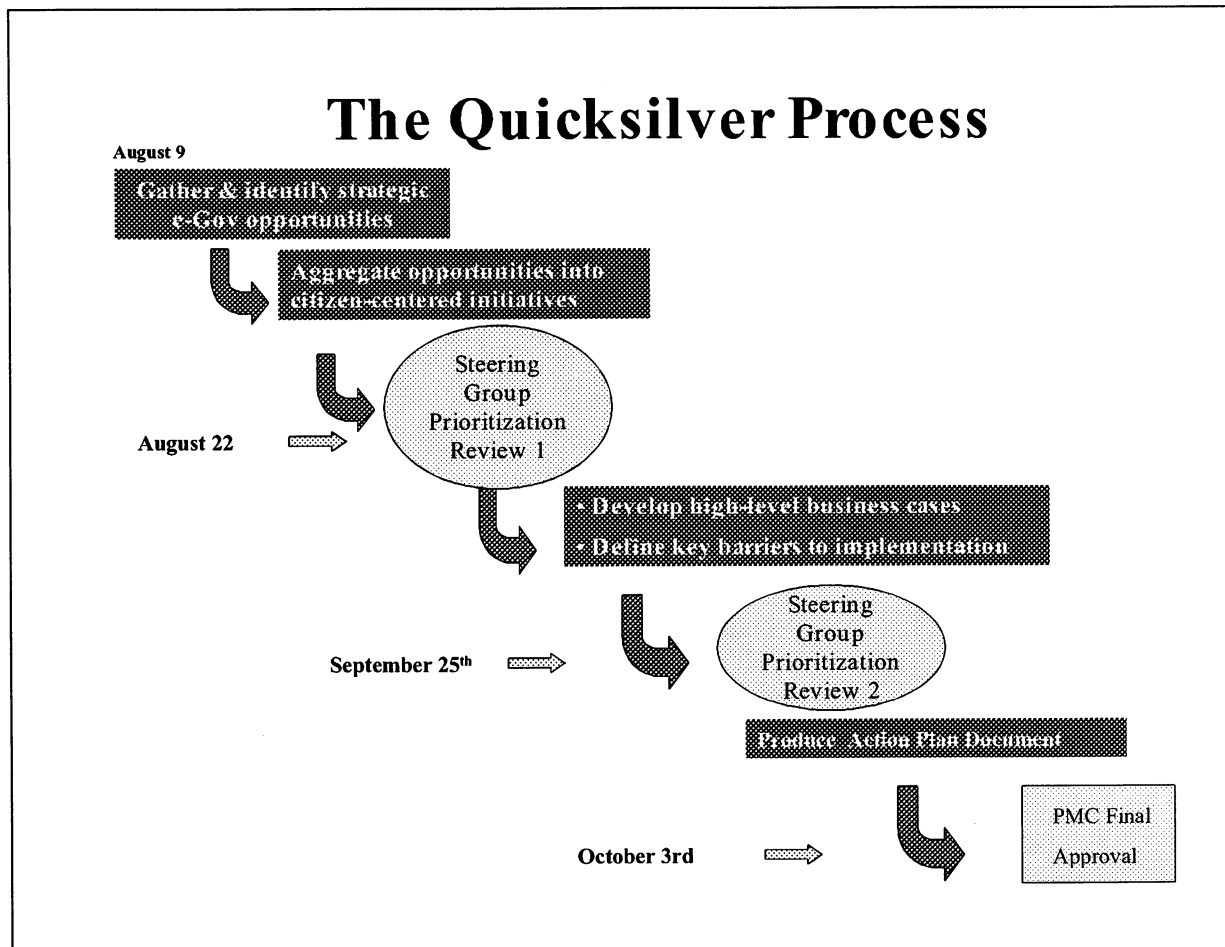


Figure C-1: An Overview of the "Quicksilver Process" Used by the Task Force.

## **Appendix D. Initiative Summaries**

### **Government to Citizen**

#### **Recreation One-Stop**

##### **Proposed Agency Managing Partner: DOI**

This initiative will build upon "Recreation.gov" and will provide a one-stop, searchable database of recreation areas nationwide, featuring online mapping and integrated transactions, including online campground reservations and the purchase of recreational passes, maps and other products. The project will include links to recreational opportunities provided by all levels of government.

**Value to Citizen:** A single source of information through a simpler and more user-friendly site will reduce search time and provide better service to citizens. The value of the service will increase through more detailed information and the ability to conduct transactions online. Users will be able to find information and conduct transactions at a single site, rather than searching through multiple agency Web sites.

**Value to the Government:** Through reduced duplication, increased sales and employee timesavings, this project should save federal agencies approximately \$5 million annually in avoided costs.

#### **Eligibility Assistance Online**

##### **Proposed Agency Managing Partner: Labor**

Through a common Internet portal, citizens (with a focus on high-need demographic groups) will have an online tool for identifying government benefit programs from which they may be eligible to receive assistance.

**Value to Citizen:** Each citizen attempting to determine benefits eligibility should save approximately 50 minutes by using this service over current services. Citizens can also learn about benefits they were eligible to receive but might not know about.

**Value to the Government:** Customer service calls will be reduced by approximately 750,000 a year, and the government will save approximately \$4 million a year through eliminating redundancy.

#### **Online Access for Loans**

##### **Proposed Agency Managing Partner: Education**

The Online Access for Loans initiative allows citizens and businesses to find the loan programs that meet their needs.

**Value to Citizen:** Citizens will have faster, easier access to loan information and transactions.

**Value to the Government:** Employees will save time in managing the loan process.

#### **USA Services**

##### **Proposed Agency Managing Partner: GSA**

The USA Service initiative will use best practices in customer relationship management to enable citizens to quickly obtain service online, while improving responsiveness and consistency across government agencies. This initiative would

enable citizens to personalize the combination of services they obtain across multiple programs and agencies in a privacy-protected environment.

**Value to Citizen:** More timely and helpful customer service and more consistent customer service across lines of communication and government programs.

**Value to the Government:** Redundancy of operation will be eliminated across agencies and employees will save time operating customer relationship management tools.

### **EZ Tax Filing**

**Proposed Agency Managing Partner: Treasury/IRS**

The initiative would make it easier for citizens to file taxes in a Web-enabled environment.

**Value to Citizen:** Citizens will no longer have to pay for basic, automated tax preparation. Refund checks will be delivered sooner, online security will be increased and customer service will be improved.

**Value to the Government:** More information is delivered electronically, reducing data errors. A higher percentage of tax forms are filled out correctly, reducing customer follow-up. Call center receives fewer calls, reducing staffing costs.

### **Government to Business**

#### **Online Rulemaking Management**

**Proposed Agency Managing Partner: DOT**

This initiative would provide access to the rulemaking process for citizens anytime, anywhere. An existing “e-Docket” system would be expanded and enhanced to serve as a government-wide system for agency dockets. Other agency systems would use the system by creating “storefronts” consistent with statutory requirements for each agency under the Administrative Procedures Act. Comments would be organized using knowledge management tools to improve the quality of rules.

**Value to Citizen:** A single portal for businesses and citizens to access the rulemaking process, creating a more collaborative and transparent atmosphere in which to make policy and public safety decisions. It will also improve the quality of policy decision-making by increasing citizen and business participation in the rulemaking process. Public participation is estimated to increase by 600 percent.

**Value to the Government:** Elimination of duplicative and redundant systems that currently exist or are being developed. Estimated \$9.75 million in savings from consolidating space and FTE costs for 57 rulemaking agencies. Without a government-wide e-Docket system, the federal government will expend nearly \$1 billion in development and annual operational costs.

#### **Expanding Electronic Tax Products for Businesses**

**Proposed Agency Managing Partner: Treasury /IRS**

This initiative’s goals include decreasing the number of tax-related forms that an employer must file, providing timely and accurate tax information to employers,

increasing the availability of electronic tax filing and modeling simplified federal and state tax employment laws.

**Value to Citizen:** Reduce the burden of compliance with tax laws for businesses.

Upon implementation, this initiative offers cost savings of up to \$182 per year, per small business. Aggregated, small businesses stand to save up to \$6.4 billion over six years. Benefits to large and mid-sized companies should be greater as they tend to spend considerably more time and effort on tax preparation.

**Value to the Government:** Increases the accuracy and reliability of tax data, as well as the costs associated with paper processing. IRS and SSA may save \$16 million annually in staff and printing/mailing costs. It also reduces the costs to states for processing wage and tax data by 5.6 percent.

### **Federal Asset Sales**

#### **Proposed Agency Managing Partner: GSA**

Prospective customers will be able to find assets that they are interested in, regardless of the agency that holds those assets. Customers will be able to bid and/or make purchases electronically for financial, real and disposable assets.

**Value to Citizen:** The creation of a single, easy-to-find point of access, rather than 150 disparate sites, will lower transaction costs and make it easier to do business with the government.

**Value to the Government:** An estimated \$15 million may be saved by consolidating 150 federal Web sites. Additional potential cost savings of approximately \$750 million annually associated with the costs of excess building space could be achieved.

### **International Trade Process Streamlining**

#### **Proposed Agency Managing Partner: DOC**

The initiative would create a single customer-focused site where new or existing exporters could be assisted electronically through the entire export process. The 20 current Web sites would be organized and accessed through a single entry point.

**Value to Citizen:** The average export transaction by small to medium exporters (SME) is \$400,000. If 224,000 SMEs increase even by a small amount, exports might increase by a billion dollars or more.

**Value to the Government:** Could streamline 19 agencies involved in trade promotion.

### **One-Stop Business Compliance Information**

#### **Proposed Agency Managing Partner: SBA**

This initiative would provide information on laws and regulations that can help users understand compliance information. It would also offer wizards and tutorials to help users determine if rules apply to them and how to proceed. To the maximum extent possible, permits would be completed, submitted and approved online.

**Value to Citizen:** Currently, the regulatory burden on small business is \$7,000 per employee. The creation of a single, cross-agency, business compliance portal will reduce the regulatory burden on the private sector.

**Value to the Government:** Streamlined business processes and economies of scale would reduce agency costs for achieving business compliance. Government-wide savings of an estimated \$10 to \$20 million could be realized after full implementation. Additional savings would be realized as a result of staff reductions from online permitting.

**Consolidated Health Informatics (business case)**

**Proposed Agency Managing Partner: HHS**

The initiative would provide the basis for a simplified and unified system for sharing and reusing medical record information among government agencies and their private healthcare providers and insurers. It would enable a single mechanism for making those records accessible.

**Value to Citizen:** Reduce private sector healthcare expenditures for administration (accounts for \$57 billion) and improve healthcare for one-half of the population of the United States.

**Value to the Government:** Order of magnitude savings (from days to minutes) are possible in the area of managing, transporting, copying and exchanging paper medical records. Upon full implementation, this initiative could result in savings of up to \$100 million.

**Government to Government**

**Geospatial Information One-Stop**

**Proposed Agency Managing Partner: DOI**

The Geospatial Information One-Stop will provide access to the federal government's spatial data assets in a single location and help make state and local spatial data assets more accessible. federal agencies will also make their planned and future spatial data activities available to state and local governments to promote collaboration and reduce duplicative efforts. Data standards developed through an intergovernmental process will result in data that can be used multiple times for multiple purposes, saving taxpayer money. It will also help empower the private sector by communicating the characteristics of a desired standardized data product.

**Value to Citizen:** Standardized and reliable spatial data can help save hundreds of millions of dollars annually through consolidation and coordination of spatial data acquisition and maintenance. It will reduce search time for geospatial assets from weeks to minutes. Lastly, it can help improve and expedite citizen service by making data more readily available to agencies requiring that information to perform their governmental functions.

**Value to the Government:** Full deployment will result in easier, more reliable access to spatial data that should result in hundreds of millions of dollars saved annually by eliminating redundant data collection and increasing opportunities for cost-sharing partnerships. Consolidation and coordination of spatial data assets are critical enablers for other E-Government initiatives, as well as for the Homeland Security effort.

### **e-Grants**

#### **Proposed Agency Managing Partner: HHS**

This initiative will create an electronic grants portal for grant recipients and the grant-making agencies that will streamline, simplify and provide an electronic option for grants management across the government. This effort will include the work of the 26 federal grant-making agencies to implement P.L.106-107.

**Value to Citizen:** A single grant portal will simplify the application process and increase awareness of grant opportunities resulting in a reduction of time spent preparing and searching for grants.

**Value to the Government:** Save \$1 billion in federal funds currently devoted to the administration of grants. Consolidated Web site will save as much as \$20 million in postage costs.

### **Disaster Assistance and Crisis Response**

#### **Proposed Agency Managing Partner: FEMA**

This initiative involves a public, one-stop portal containing information from applicable public and private organizations involved in disaster preparedness, response, recovery and mitigation. This portal will also serve as a single point of application for all disaster assistance programs.

**Value to Citizen:** Accurate and timely data may result in saved lives and reduction in property damage. Tens of millions of dollars will be saved in the reduction of insurance costs and lawsuits. A single point of application for disaster assistance will save time during the application and disbursement process.

**Value to the Government:** Elimination of redundant programs and administrative costs in agencies that provide disaster assistance.

### **Wireless Public SAFETY Interoperable COMMUNICATIONS/ Project SAFECOM**

#### **Proposed Agency Managing Partner: Treasury**

For public safety officials to be effective in their daily responsibilities, as well as before, during and after an emergency event, public safety agencies throughout all levels of government, i.e. federal, state and local, must be able to communicate with each other. This initiative would address the Nation's critical shortcomings in efforts by public safety agencies to achieve interoperability and eliminate redundant wireless communications infrastructures. At the same time, it would assist state and local interoperability and interoperability between federal public safety networks.

**Value to Citizen:** Coordinated public safety/law enforcement communication will result in saved lives, as well as better-managed disaster response. Consolidated networks will yield cost savings through reduction in communication devices, management overhead of multiple networks, maintenance and training.

**Value to the Government:** Billions of dollars could be saved through a right-sized set of consolidated, interoperable federal networks, linked to state wireless networks,

resulting in a reduction in communications infrastructure, overhead, maintenance and training.

**e-Vital (business case)**

**Proposed Agency Managing Partner: SSA**

This initiative would expand the existing vital records online data exchange efforts between federal agencies and state governments.

**Value to Citizen:** Elimination of burden imposed on citizens to obtain and deliver vital record information from local government to the federal government. Enables more efficient and effective benefit qualification.

**Value to the Government:** Save millions of dollars annually through fraud detection from computer matching programs as well as from reductions in erroneous payments.

**Internal Efficiency and Effectiveness**

**e-Training**

**Proposed Agency Managing Partner: OPM**

The vision is to provide a repository of government-owned courseware to be made available to all governments (federal, state and local), to provide high interest and government-required training to government employees at economies of scale pricing. In addition, this would foster development of communities of practice. This initiative supports achievement of the President's Human Capital initiative.

**Value to Citizen:** Easy one-stop access to just-in-time training with more effective development and retention of high-quality, diversified work force

**Value to the Government:** Low-cost delivery of effective training

**Recruitment One-Stop**

**Proposed Agency Managing Partner: OPM**

This initiative would improve the federal hiring process by improving the functionality of the federal automated employment information system. It would provide job seekers with streamlined resume submission, online feedback about their status in the employment process and integration with automated assessment tools. The initiative will provide federal employers with a searchable resume database.

**Value to Citizen:** This process will allow job seekers to enter their resume information once to apply for multiple federal vacancies and to receive up-to-the-minute information regarding the status of their application(s).

**Value to the Government:** This process will give agencies broader and faster access to resumes and the automated tools needed to select candidates. It makes the government a competitive player with the private sector in the recruitment market.

### **Enterprise HR Integrations**

#### **Integrated Human Resources and e-Clearance**

##### **Proposed Agency Managing Partner: OPM**

This initiative will eliminate the need for paper employee records, enable strategic decisions regarding the use of human capital and financial resources to improve agency performance and address emerging needs. It will also allow for the electronic transfer of HR data throughout the federal sector, better protect the rights and benefits of the federal workforce and streamline and improve government-wide reporting and data analyses. It will reduce the time required to seek and access employee and contractor security clearance information.

**Value to Citizen:** Improves services and protects the rights and benefits of the federal workforce and provides faster security clearances.

**Value to the Government:** Streamlines reporting, reduces dependency on paper-based processes, while improving HR capabilities and communications, all at a lower cost.

### **e- Payroll/HR (Payroll Processing Consolidation)**

##### **Proposed Agency Managing Partner: OPM**

The vision is to simplify and unify elements of the Payroll/HR process in order to consolidate and integrate HR and payroll systems across government. This effort will provide several hundred million dollars of savings to organizations and significantly reduce future information technology (IT) investments and could foster direct privatization. This initiative supports achievement of the five dimensions of the President's Management Agenda.

**Value to Citizen:** A government that works more efficiently is one that better serves its citizens.

**Value to the Government:** Allows the federal government to consolidate payroll operations to simplify and unify processes, thus saving dollars that would be spent on multiple facilities, systems and management.

### **e-Travel**

##### **Proposed Agency Managing Partner: GSA**

Agencies will use a common travel management system throughout the federal government. Existing travel management resources will be consolidated and processes will be simplified for cheaper, more efficient operation.

**Value to Citizen:** One-stop integrated travel services for all federal employees

**Value to the Government:** Reduced cycle time and improved travel and budget information at a lower cost.



### **Integrated Acquisition Environment**

#### **Proposed Agency Managing Partner: GSA**

Agencies will begin sharing common data elements to enable other agencies to make more informed procurement, logistical, payment and performance assessment decisions. It will also allow agencies to make maximum use of E-market approaches.

**Value to Citizen:** Cost savings to the taxpayer based on a more effective process that leverages scale with more supplier opportunities.

**Value to the Government:** Will make the purchase of goods and services faster and less expensive, while providing more access to small business.

### **Electronic Records Management**

#### **Proposed Agency Managing Partner: NARA**

This initiative will provide the tools that agencies will need to manage their records in electronic form, addressing specific areas of electronic records management where agencies are having major difficulties. This project will provide guidance on electronic records management applicable government-wide and will provide tools for agencies to transfer electronic records to NARA in a variety of data types and formats so that they may be preserved in for future use by the government and citizens.

**Value to Citizen:** Easier process for creating information, with more reliable storage, that is also in compliance with the Federal Records Act

**Value to the Government:** More efficient operations that meet the statutory requirements of the Federal Records Act.

### **Initiatives That Address Barriers to E-Government Success**

#### **e-Authentication**

##### **Proposed Agency Managing Partner: GSA (Infrastructure)**

e-Authentication will build and enable the mutual trust needed to support wide spread use of electronic interactions between the public and government and across governments. This will establish a method for satisfactorily establishing 'identity,' without which the promise of E-Government will never reach its full potential. The project will establish common interoperable authentication solutions for all of the E-Government initiatives.

**Value to Citizen:** Secure, consistent method of proving identity to the federal government.

**Value to the Government:** Eliminate redundancy in electronic signature technology and policy operations, thereby reducing costs and employee time required.

**Federal Architecture**

**Proposed Agency Managing Partner: OMB**

This activity, which supports all of the initiatives, will map government processes by line of business. It will develop information, data and application interface standards to eliminate redundancies and yield improved operating efficiency and effectiveness.

**Value to Citizen:** Citizens are best served by an efficient and effective government.

**Value to the Government:** A well architected federal information system will provide a more efficient and effective government by eliminating redundancies.

Renee Carlson  
Publishing Manager  
TNRCC Agency Communications

With over 20 years of State of Texas employment, Renee Carlson has served as the TNRCC's publishing manager for the past six years. She is a writer/editor by trade and her 16-person staff provides or arranges editing, graphics, printing, Web development, publications distribution, and library services for the agency. Her section is part of the Agency Communications Division, which also handles media relations.

Besides keeping up with the agency's publishing activities, Renee also tries to keep up with her husband and two teenage daughters.

## **The TNRCC Web site: What's up with that?**

- Renee Carlson, Publishing Manager, TNRCC Agency Communications

At the TNRCC, soon to be the TCEQ, we have many forces driving the continuous improvement of our public Web site.

- Name Change
- Web Content Management System
- New Site Design
- Other Directives

### **Name Change**

First, the obvious: we have to change our name throughout the site to the Texas Commission on Environmental Quality.

We'll begin by posting a brand new home page this coming September 1, and then we will slowly change the rest of our pages by January 1, 2004. So in the interim, you can expect to see both old and new pages, because we have to make the change manually, page by page.

(Note: Through the wizardry of our IT folks, both [www.tnrcc.state.tx.us](http://www.tnrcc.state.tx.us) and [www.tceq.state.tx.us](http://www.tceq.state.tx.us) will take you to the same Web pages, now and in the future!)

For those of you concerned about the advisability of spending time and money simply to change our name, changing all our pages was going to happen anyway – when we implement new software to manage our Web content.

### **Web Content Management System**

We currently have over 13,000 static HTML pages on our Web site. This doesn't count text files and many of our database searches. Maintaining this many pages manually is a huge task.

So during the last legislative session, we included funding provisions in our legislative appropriations request to purchase a content management system for our Web site – And in fact, we received sufficient funds to make this happen. This past May, we awarded a contract to have an open-source system configured for our agency – “Open Source” means the software itself is free; “configured” means we are paying someone who knows the software to optimize it for our needs and to train us in how to use it.

During the coming year, this sophisticated software will provide us with better site management tools, such as allowing us to automate changes to our page design and the processes we use to post pages.

For you, our customers, we foresee this improved site management simplifying your use of our site. We want you to encounter fewer broken links and more straightforward ways to drill down to the pages you need.

## **New Site Design**

Because we are implementing a new content management system – and as it turns out, changing our name – we are taking the opportunity to change our site design, both in how it looks and how it functions. The goal is to improve how people get to our information.

To do this, we took a look at the kinds of questions we get around the agency from people day-to-day, everything from “How do I get a permit?” to “What is the air quality in my city?” to “How do I report a problem?”

We turned these into additional navigation options on the home page. For example:

- Select “Rules, Policy, and Legislation,” and you will find links to our current and proposed rules, our progress on implementing legislation, etc.
- Select “Permits, Registrations, and Licenses,” and you will find links to how to get various authorizations, data on who currently has these authorizations, and so on.
- Select “Reporting,” and you will find links to how to file a complaint or report pollution, what reports we require from various companies, and what we have to report to entities such as EPA and the Texas Legislature.

For those who like our site as it is, we are also keeping some of the old navigation options and just moving them around a bit or adding functionality. For example, we are:

- Adding a search field directly to the home page and in the header of lower pages.
- Keeping our subject index option, but also providing air, water, and waste breakdowns of this index.
- Adding a link directly to a list of the database searches available on our site.
- Maintaining our option to access our site via office or division.

We are still providing direct links to auxiliary navigation options such as “About TCEQ,” “Forms and Publications,” and “Contact Us.” And if you are interested in our hot topics, news releases and environmental articles from our newsletter Natural Outlook, we’re still providing links to these on the home page.

## **Other Directives**

Like all government agencies, we are seeing increased interest by our legislature and others to add information to our Web site.

For instance in May, to help us implement legislation regarding data collected on forms (HB 1922), we expanded our search function for TNRCC forms. If you type in a key word on our forms search page, you now get a list of forms that will either link to online files for you to download, or will include a phone number for you to call to obtain a copy of the form if it isn’t on

our site. We don't have many true online forms, where you fill the form out online and hit a submit button to transmit to us, but these will increase in the future. Most of our forms are posted in Portable Document Format (PDF), WordPerfect, and some Microsoft Word.

Coming out of the last session, we received directives in our enabling legislation, HB 2912, on adding public information to our site. As a result, you can now find a page that lists all the TNRCC's advisory groups, with links to upcoming meetings and minutes of past meetings. (See [www.tnrcc.state.tx.us/advisorygroups.html](http://www.tnrcc.state.tx.us/advisorygroups.html))

And then there is data: HB 2912 directs us to post pending permits and enforcement actions, compliance histories, and emissions inventories, for search by county and facility. Because of where we are in our information technology infrastructure, this is a tall order. For one, we have security layers that keep our databases secure from hackers, but which also slow down data transfer. (For more, see the attached document on our Web architecture.) We also have many disparate databases throughout the agency.

But we've been steadily consolidating and interconnecting these data systems over the past years and we have and can add much useful data.

For instance, emissions inventory data is already on the Web site. There are also a number of searches currently available on several types of pending permits, with others to be loaded over the next few months.

Once our consolidated compliance and enforcement data system (CCEDS) is fully up and running, we will use it to load pending enforcement action data. As we currently envision it, for purposes of loading to the Web, an enforcement action begins the date that the Notice of Enforcement (NOE) is mailed, and ends the date an enforcement order is issued or the enforcement is administratively resolved. These dates will drive the loading of data such as county, case number, action dates, etc. – Memos and other hard copy information will not be online.

Providing compliance history data is more difficult because of the sheer volume of information and the firewalls between this data and our public Web site. Therefore, using CCEDS, our current plans are to load basic company information along with the entity's compliance history classification.

For more detail and updates on implementing HB 2912's public information provision, please see our Web site at [www.tnrcc.state.tx.us/exec/communication/sunset/1.13\\_stakeholder.html](http://www.tnrcc.state.tx.us/exec/communication/sunset/1.13_stakeholder.html)

If you have questions regarding our Web site, please contact me:  
Renee Carlson, [rcarlson@tceq.state.tx.us](mailto:rcarlson@tceq.state.tx.us), 512/239-3639

## TNRCC Web Architecture and Data Publication

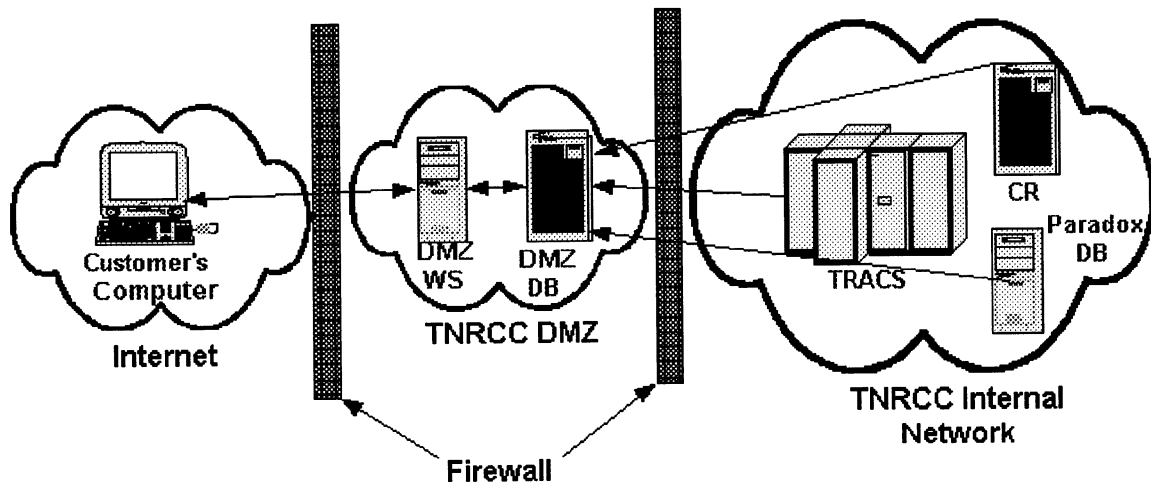
Greg Nudd, P.E.

TNRCC Web Architect

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The TNRCC's Web architecture allows us to publish data from most of the agency's databases. However, some databases are easier to publish from than others and real-time data is almost impossible to provide. The purpose of this document is to explain some of the complications associated with making the agency's data available over the Internet.

### Diagram of Basic Web Architecture



### Description of Architecture

When an Internet user asks for and receives data from the TNRCC Web site, three different networks are involved. These three networks are shown in the graphic above.

Reading from left to right, the Internet is the public network that our customers connect to through their Internet Service Provider (ISP).

The TNRCC's network is protected from the public Internet by a two layer firewall. Inside the first layer of the firewall is the TNRCC's Security Network, known in the computer industry as the "demilitarized zone," or DMZ. The DMZ is a protected network that is partially accessible from the Internet. This is where the agency's public Web servers (DMZ WS) and Web databases (DMZ DB) reside.

The final network in this process is the TNRCC Internal Network. This network of computers is completely isolated from the public Internet for security reasons. No computer on the public network can connect directly to the computers on the TNRCC Internal Network.

The TNRCC's data resides on computers inside the protected TNRCC network. This data can be in an Ingres database, such as TRACS, an Oracle database such as the Central Registry (CR) system; and in some cases the data is in the Paradox database application. This Paradox data can reside on an employee's personal computer or on the network server.

In order to make this information available to the public, it must be placed on a computer in the TNRCC DMZ. In some cases, a static Web page is created directly from the database and that report is placed on the TNRCC Web server. In some cases the data is transferred to the DMZ database server. If the data is on the DMZ database server, then information must be converted to a Web page by a program that resides on the TNRCC Web server.

### **Process for Publishing Data on the Internet**

1. Data is extracted from a database as either raw data or as a complete Web page (HTML format).
2. Data is moved to the DMZ database server, or to the DMZ Web server if it's already formatted as HTML.
3. Data is requested by a user from the Web site. If it is a simple HTML page, then that page is returned to the user. If the data is in not in HTML format, then a program on the Web server must query the database and return the response as an HTML page.

The difficulty of making data available on the Internet is governed by the difficulty of these three processes.

In some cases getting the data extracted is a serious problem. For example our Ingress database, TRACS, was not designed for Web access. As a result, it is very difficult and time consuming to extract the data from it.

In other cases, moving the data to the DMZ is a problem. For example, it would be nice to have real-time air quality monitoring data on the Web site. However, that would involve repeating step 2 constantly, which would slow down the Web server too much.

In yet other cases, the problem is with step 3. For example, you wouldn't want to scroll through a list of all the leaking petroleum storage tanks in Texas to find the one or two that interest you. You would want to only see particular tanks, so you would need a program to query that database. Developing these programs requires time and expertise, and of course funding.

Each of these three steps may pose a challenge, depending on what kind of data is needed, how often it must be updated, where it currently resides on the TNRCC network, and how extensive of a query interface is required to make the data useful.



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Andrew Strong represents corporate clients on matters involving federal and state environmental permitting, compliance and enforcement, natural resource protection and damages, and sites affected by spills or releases of hazardous substances and/or oil. He provides strategic legal counsel, agency negotiation expertise and litigation defense in cases involving human health and ecological risk management issues and natural resource damages. He presently represents Chevron and Texaco in one of the largest natural resource damage cases in the country (*State of New Mexico v. General Electric, et al.*, D. NM).

Mr. Strong has represented clients on cases with complex legal/technical litigation issues, and has led settlement negotiations for several high-profile matters. He represents clients and trade associations on both the national and state levels to advocate reasonable changes to environmental and natural resource laws and regulations and serves in various capacities with industry/agency work groups to develop guidance and policies for the management of human health and ecological risks at federal and state sites. In addition, he has worked on numerous asset and real property [acquisition/divestiture](#) matters in the U.S. and Latin America.

He is the 2002-2003 President of the Texas Young Lawyers Association (TYLA), a 20,000 plus member organization, and a member of the State Bar of Texas Board of Directors and Executive Committee. In 2000, he received the TYLA President's Award of Merit, the Houston Bar Association (HBA) President's Award of Outstanding Service, and the Houston Young Lawyers Association President's Award of Achievement - the first time anyone has received all three awards in the same year. He was recently recognized by the HBA for his work in directing legal services to victims of the 2001 Tropical Storm Allison. Among many other volunteer activities, Mr. Strong is on the Board of Directors for the HBA's Environmental Law Section and has been on the Environmental Superconference Planning Committee for the past 4 years. He also serves on the Executive Committee of the Board of Directors for Aspiring Youth of Houston, an after school program for at-risk middle school youth.

Mr. Strong holds a Doctorate of Jurisprudence from South Texas College of Law, and a Bachelors of Science in Civil Engineering from Texas A&M University. He is licensed to practice law in Texas and Louisiana, and is a licensed Professional Engineer (P.E.). Mr. Strong has published several articles and speaks frequently on environmental and natural resource legal matters.

***Sweet Charity: Eating Humble Pie!***

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14<sup>th</sup> Annual Texas Environmental Superconference  
August 2, 2000 – 8:45 am to 9:15 am  
Austin, Texas

## Sweet Charity: Eating Humble Pie!

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Whether you are a litigation, transactional, government, or corporate attorney, all roads meet at the same point when it comes to the ethical requirements and decisional case law involving client confidentiality and privileges. Add to that a vaguely written statute or regulation that seems to require a disclosure of some sort and, presto, you are now on the “horns of a dilemma.” The topics addressed in this paper are certainly not new, but are often the source of much confusion. Anytime the ethical requirements and obligations of an attorney intersect with the tried and true attorney-client privilege and work product doctrine, you are confronted with issues that are not easily resolved. And, in fact, most of the time you are not even aware that there is a problem until it is too late. In these cases, corrective action may be the only recourse. Eating humble pie? Maybe that and more.

We address below the four primary areas that practitioners must always be mindful of when representing their clients and preparing work product on behalf of those clients. These are:

- Attorney-Client Privilege
- Attorney Work Product Doctrine
- Client Confidentiality
- Conflict of Interest

These are addressed in no particular order since all of them carry equal weight when considering client representation.

### I. Attorney-Client Privilege:

The concept of an “attorney-client privilege” dates as far back as Roman times, its more modern interpretation taking shape in England under Elizabeth I.<sup>2</sup> In its earliest form, the privilege was rooted in the oath and honor of an attorney to keep a client’s secrets.<sup>3</sup> During the early 1700’s however, a new basis for the privilege evolved, one “concerned with encouraging candor between the client and the attorney.”<sup>4</sup> In modern practice, the attorney-client privilege is officially recognized in Rule 26 of the Federal Rules of Civil Procedure (“FRCP”). FRCP Rule 26 states that “[p]arties may obtain discovery regarding any matter, not privileged, that is relevant to the claim or defense of any party...”<sup>5</sup> There are separate rules governing disclosure as it applies to information obtained from testifying experts versus consulting experts. While certain information regarding a testifying expert is subject to discovery,<sup>6</sup> the rules of civil procedure clearly state that “a party is not required to disclose the identity, mental impressions, and opinions of consulting experts.”<sup>7</sup>

In the corporate context, Texas courts generally determine the scope of the attorney-client privilege by using the “subject matter” test. The “subject matter” test was adopted by the United States Supreme Court in *Harper & Row Publishers, Inc. v. Decker*.<sup>8</sup> The “subject matter test” states that an employee’s communication is privileged if “the employee makes the communication at the

direction of his superiors in the corporation and where the subject matter upon which the attorney's advice is sought by the corporation and dealt with in the communication is the performance by the employee of the duties of his employment.”<sup>9</sup> Texas officially began using the “subject-matter” test when it adopted the 1998 version of Texas Rule of Evidence 503.<sup>10</sup> The attorney-client privilege under Tex. R. Evid. 503 reads:

(1) “General Rule of Privilege. A client has a privilege to refuse to disclose...confidential communications made for the purpose of facilitating the rendition of professional legal services to the client:

- (A) between the client or a representative of the client and the client’s lawyer or a representative of the lawyer;
- (B) between the lawyer and the lawyer’s representative;
- (C) by the client or a representative of the client, or the client’s lawyer or a representative of the lawyer, to a lawyer or a representative of a lawyer representing another party in a pending action and concerning a matter of common interest therein;
- (D) Between representatives of the client or between the client and a representative of the client; or
- (E) among lawyers and their representatives representing the same client.”<sup>11</sup>

Further, Rule 503 defines a “representative” as:

- (a) “a person having authority to obtain professional legal services, or to act on advice thereby rendered, on behalf of the client, or
- (b) any other person who, for the purpose of effectuating legal representation for the client makes or receives a confidential communication while acting in the scope of employment for the client.”<sup>12</sup>

A consultant arguably falls under Rules 503’s definition of “representative” if they are retained on behalf of the client by the lawyer, and their communications and reports are generated “for the purpose of effectuating legal representation for the client.”<sup>13</sup> It is important to remember, however, that for the attorney client privilege to apply to a communication certain prerequisites must be met. Namely, 1) the communication must be confidential; 2) it must be made for the purpose of facilitating the rendition of professional services; (3) it must be made between or amongst the client, lawyer and their representatives; and (4) the privilege must not be waived.<sup>14</sup> Consultant work product can be protected after certain precautions are taken. First, consultants can be covered by the attorney-client privilege if they are retained by an attorney to assist in providing legal advice.<sup>15</sup> Therefore, an attorney should take pains to carefully document that all “communications between the client and the consultant will take place to give information to the attorney, who will use that information to provide legal advice to the client.”<sup>16</sup>

To ensure that the communication will qualify as “legal advice” the client should officially request advice from the attorney, and authorize the attorney to retain whatever experts he or she feels are necessary to secure that advice.<sup>17</sup> The attorney should then, in turn, ensure that the consultant only prepares documents in response to this request.<sup>18</sup> It is important to note, however, that the underlying facts of the communication are not protected by the privilege. “Consequently, ‘a consultant’s report and an attorney’s analysis of the potential liability for an unpermitted discharge could be protected, while the fact of the unpermitted discharge could not.’”<sup>19</sup> Once these precautions are taken it is important that the client does not inadvertently waive the privilege.<sup>20</sup> This could occur a number of ways. First, if a corporation provides the information to others in response to information requests, subpoenas or statutory self-reporting requirements, the client can waive the privilege.<sup>21</sup> Be especially careful to remember that a waiver can occur even when the request is made for a purpose that will benefit the client.<sup>22</sup> A client can also potentially waive the privilege if a consultant’s report is widely disseminated within the company or a corporation. Thus, it is important to ensure that the report is not reviewed by anyone outside of the attorney-client relationship.<sup>23</sup>

## II. Attorney Work Product Doctrine

The attorney work product doctrine was introduced to American jurisprudence through the case *Hickman v. Taylor*.<sup>24</sup> The privilege was formerly adopted into the Federal Rules of Civil Procedure in 1970.<sup>25</sup> Rule 26(b)(3) states:

“a party may obtain discovery and tangible things otherwise

discoverable...and prepared **in anticipation of litigation** or for trial...only upon a showing that the party seeking discovery has substantial need of the materials in the preparation of the party’s case and that the party is unable without undue hardship to obtain the substantial equivalent of the materials by other means.”<sup>26</sup>

The work product privilege is generally regarded as being broader in its application than the attorney-client privilege,<sup>27</sup> and protects all materials prepared in anticipation of trial including “counsel’s research, analysis, legal theories, and mental impressions.”<sup>28</sup> The rationale behind protecting attorney work product doctrine was aptly explained by the Texas Supreme Court in *In Re Kenneth George*. In this case the Court said because “[t]he attorney is the agent of the client, and the work product generated by the attorney in representing the client belongs to the client... Thus, a court should not deprive a client of his or her property without a compelling reason.”<sup>29</sup> The most important factor in determining whether a communication is protected as work product is whether the communication was prepared “in anticipation of trial.” WRIGHT, MILLER & MARCUS’ FEDERAL PRACTICE & PROCEDURE describes the term “anticipation of litigation” as follows:

“Prudent parties anticipate litigation, and begin preparation prior to the time suit is formally commenced. Thus the test should be whether, in light of the nature of the document and the factual situation in the particular case, the document can be fairly said to have been prepared or obtained because of the prospect

of litigation. But the converse of this is that even though litigation is already in prospect, there is no work-product immunity for documents prepared in the regular course of business rather than for purposes of the litigation.”<sup>30</sup>

“To clearly show that the consultant or expert is generating materials in anticipation of litigation, the best practice is for the attorney to select and retain the consultant or expert.”<sup>31</sup> As well, the consultant should only prepare reports upon the attorney’s request.<sup>32</sup> It is important to note, also, that routine environmental audits prepared in the normal course of business may not be covered under the work product doctrine.<sup>33</sup> Rather, for an environmental audit to be covered under the privilege “the corporation must be legitimately concerned that some environmental, health, or safety violation or condition is about to be discovered and that, as a consequence, the government or some private party will bring enforcement proceedings or suit in the near future.”<sup>34</sup>

### III. Client Confidentiality

The attorney client privilege is not the only confidentiality protection afforded a client in modern jurisprudence. Rule 1.6 of the American Bar Association Model Rules of Professional Conduct also recognizes the need for confidentiality between the attorney and client.<sup>35</sup> Similarly, in Texas, rules on client confidentiality are included in Rule 1.05 of the Texas Disciplinary Rules of Professional Conduct.<sup>36</sup> Client confidentiality is emphasized in modern legal practice because such confidentiality “facilitates the full development of facts essential to proper representation of the

client but also encourages people to seek early legal assistance.”<sup>37</sup> There are limits to this confidentiality requirement, however. Specifically, the Model Rules state:

“A lawyer may reveal information relating to the representation of a client to the extent the lawyer reasonably believes necessary: (1) *to prevent reasonably certain death or substantial bodily harm...*”<sup>38</sup>

The Texas Disciplinary Rules echo this position. Texas Rule 1.05 (e) mandates the disclosure of confidential information “[w]hen 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 ... to the extent revelation reasonably appears necessary to prevent the client from committing the criminal or fraudulent act.”<sup>39</sup>

A review of the textual rules suggests that an attorney will always know when disclosure is warranted. In practice, however, such clarity is often elusive. An attorney has to effectively balance two competing interests. On one side, an attorney must remember that it is necessary to maintain confidentiality in the interest of promoting full disclosure on part of the client. Such disclosure is necessary for a properly functioning legal system.<sup>40</sup> On the other hand, however, “where the client is planning or engaging in criminal or fraudulent conduct or where the culpability of the lawyers conduct is involved, full protection of the client information is not justified.”<sup>41</sup>

Deciding when to disclose a client's criminal act is difficult in the environmental context, as well, given the reporting requirements of many of the statutes and regulations and the fines and possible imprisonment terms that accompany criminal sanctions. For instance, under the Resource Conservation and Recovery Act ("RCRA"), individuals or companies must properly follow specific requirements as to their generation, transport, and storage or disposal of hazardous waste, including maintaining proper records of the hazardous waste generated, treated or stored by the individual or company.<sup>42</sup> Failure to follow the "cradle to grave" requirements of RCRA can result in criminal sanctions, including "a fine of up to \$50,000 for each day of the violation, or imprisonment from two to five years or both."<sup>43</sup> In addition, should the client "knowingly endanger" others, that fine may increase to \$250,000, and the accompanying imprisonment prison could increase to 15 years.<sup>44</sup> The Comprehensive Environmental Response Compensation and Liability Act ("CERCLA") as well "imposes an affirmative and ongoing duty on corporate or natural persons to report unauthorized releases of hazardous waste to appropriate government authorities."<sup>45</sup> Should such a notification not be made, the sanctions could include a fine or a prison sentence.<sup>46</sup>

Given the Texas Disciplinary Rules disclosure requirements and the sanctions that could possibly accompany such disclosure, what should an attorney do if he or she finds him or herself in the position where they learn that their client has committed a crime, or is in the process of committing a crime? Obviously the answer to this question turns on the facts of

each individual case. First, it should be noted that if the client's criminal conduct occurred in the past, attorneys are generally prohibited from revealing the conduct without the client's consent.<sup>47</sup> The lawyer is under a duty, however, to "persuade the client to take corrective actions."<sup>48</sup> According to the Texas Disciplinary Rules disclosure is required when the attorney is in the position to prevent a crime or fraud that will clearly result in death or substantial bodily harm.<sup>49</sup> There are circumstances however, where it is left to the attorney's discretion as to whether the attorney will disclose a client's confidential information. For example, an attorney may disclose confidential information "in order to avoid assisting a client's criminal or fraudulent conduct" and coming in violation of Rule 1.02(c).<sup>50</sup> The attorney may also disclose a client's confidential information if the lawyer was innocently involved in past criminal conduct on the part of the client.<sup>51</sup> Third, an attorney may disclose confidential information when the "revelation reasonably appears necessary to rectify the consequences of a clients criminal or fraudulent act in the commission of which the lawyers services had been used."<sup>52</sup> Finally, an attorney may "reveal both privileged and unprivileged information in order to prevent the clients commission of any criminal or fraudulent act."<sup>53</sup> In exercising their discretion, the comments suggest that attorneys should consider "such factors as the magnitude, proximity, and likelihood of the contemplated wrong, the nature of the lawyers relationship with the client and with those who might be injured by the client, the lawyers own involvement in the transaction, and factors that may extenuate the client's conduct in question."<sup>54</sup> The comments also indicate that an attorney should disclose only

enough information the lawyer feels necessary to rectify or prevent the criminal conduct and “no greater.”<sup>55</sup> It should be noted, however, that Rules 1.02(d) states that should an attorney decide that disclosure is not warranted, the attorney is still under a duty to “make reasonable efforts...to dissuade the client from committing the crime or fraud.”<sup>56</sup>

How does such disclosure requirements play out in the environmental context? For instance, if the client reveals that they have not affirmatively reported a release, in violation of CERCLA, should the attorney disclose this fact? An argument can be made that the attorney should not. This position is based mainly on the fact that CERCLA’s affirmative requirement rests on the client. “A client’s failure to disclose a release is a crime regardless of whether the crime is in the past or present.”<sup>57</sup> An attorney’s disclosure requirement is arguably different, however, in that an attorney is expected to violate their client’s confidentiality only if the attorney is in a position to prevent a crime that will result in death or substantial bodily harm.<sup>58</sup> Thus, if an attorney learns that his or her client has not reported a release, the attorney arguably should not disclose this fact unless the attorney has “clearly established” that the release is “likely” to result in death or substantial bodily harm.<sup>59</sup> If the attorney determines, however, that the release will not result in such grave consequences, then the attorney must dissuade his client from not reporting the release. Should such persuasion prove ineffective, it up to the attorney’s discretion as to whether he or she feels disclosure is warranted.<sup>60</sup>

#### **IV. Conflict of Interest**

The Texas Disciplinary Rules of Professional Conduct regarding conflict of interest are contained in Rules 1.06 – 1.09. Rule 1.06, the general rule regarding conflict of interest, states:

- (a) A lawyer shall not represent opposing parties to the same litigation.
- (b) In other situations and except to the extent permitted by paragraph (c), a lawyer shall not represent a person if the representation of that person:
  - (1) involves a substantially related matter in which that persons interest are materially and directly adverse to the interests of another client of the lawyer of the lawyers firm; or
  - (2) reasonably appears to be or become adversely limited by the lawyers or law firm’s responsibilities to another client or to a third person or by the lawyers or law firms own interest.<sup>61</sup>

The rule prohibiting a lawyer to represent parties with materially adverse interests is based in the belief that “loyalty is an essential element in the lawyers relationship to a client.”<sup>62</sup> This belief helps form the bedrock in American jurisprudence, and mandates that should a conflict of interest present itself prior to representation, then the lawyer must decline taking the case. “If such a conflict arises after representation has been undertaken ... the lawyer must take effective action to eliminate the conflict, including withdrawal if necessary to rectify the situation.”<sup>63</sup> The exception to the rule rests in two prerequisites: an



attorney can represent a client in a conflicting matter only if the lawyer reasonably believes the client will not be materially affected and only after the client consents after full disclosure.<sup>64</sup> The comments state that “directly adverse” should be interpreted as the following:

“[I]f the lawyers independent judgment on behalf of a client or the lawyers ability or willingness to consider, recommend, or carry out a course of action will be or is reasonably likely to be adversely affected by the lawyers representation of, or responsibilities to, the other client.”<sup>65</sup>

A conflict of interest extends not only to parties to a matter, but also to the attorney himself.<sup>66</sup> Comment 4 to Rule 1.06 states that “[l]oyalty ...is impaired not only by the representation of opposing parties ... but also in any situation when a lawyer may not be able to consider, recommend or carry out an appropriate course of action for one client because of the lawyers own interests or responsibilities to others.”<sup>67</sup>

Common areas where conflict of interest issues arise in the environmental context are when an attorney is hired to represent multiple defendants in an action brought under CERCLA or when information is shared among “Potentially Responsible Parties” (PRPS).<sup>68</sup> “Before a multiple representation of PRPs ever reaches litigation, an attorney assessing the reasonableness of such a representation must consider the probability that the various interests of the clients will become adverse.”<sup>69</sup> Conflict of interest issues can also arise during the damage apportionment phase that often

accompanies CERCLA claims. “Claiming that damages should be apportioned...can create a conflict of interest when parties retaining joint counsel attempt to separate themselves from their co-defendants.”<sup>70</sup> Finally, an attorney can find him or herself in the middle of a conflict of interest issue during the settlement phase “when large generators settle and then seek contribution from *di minimis* contributors who settled at an earlier time.”<sup>71</sup> Where the attorney once thought the interests of the *di minimis* contributors were aligned with that of the large generator, once contribution is sought, those interests may become divergent. At this point the counsel must withdraw, and both parties must seek new representation.<sup>72</sup> It should be noted, however, that the risk of running a conflict of interest “should be balanced against the relative benefits of the representation, such as a coordinated defense strategy, enhanced negotiations, reduced legal expenses and a greater likelihood that the defendants will agree on a settlement proposal.”<sup>73</sup>

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<sup>1</sup> Andrew L. Strong, partner, and Jennifer S. Cook, associate, are located in the Houston, Texas office of Campbell, George & Strong, LLP. The focus of the firm’s practice is environmental, natural resource and energy law. See [www.cgs-law.com](http://www.cgs-law.com)

<sup>2</sup> Fred A. Simpson, *Has the Fog Cleared? Attorney Work Product and the Attorney-Client Privilege: Texas’s Complete Transition into Full Protection of Attorney Work in the Corporate Context*, 32 ST. MARY’S L. J. 197, 204 (2001); see also Clint Langer, Note, *The Attorney-Client Privilege: Nearly Breached. Swidler & Berlin v. United States*, 118 S. Ct. 2081 (1998), 34 LAND & WATER L. REV. 479, 480 (1999).

<sup>3</sup> See Langer, *supra* note 2, at 480.

<sup>4</sup> See Langer, *supra* note 2, at 481.

<sup>5</sup> FRCP Rule 26 (b) (2002).

<sup>6</sup> Rule 192.3 Scope of Discovery. COOPER, HENSLEY & MARSHALL’S TEXAS RULES OF CIVIL PROCEDURE ANNOTATED (West Group 2002). Indicating that the following are discoverable: “(1)

the expert's name, address, and telephone number; (2) the subject matter on which a testifying expert will testify; (3) the facts known by the expert that relate to or form the basis of the expert's mental impressions and opinions formed or made in connection with the case in which the discovery is sought, regardless of when and how the factual information was acquired; (4) the expert's mental impressions and opinions formed or made in connection with the case in which discovery is sought, and any methods used to derive them; (5) any bias of the witness; (6) all documents, tangible things, reports, models, or data compilations that have been provided to, reviewed by, or prepared by or for the expert in anticipation of a testifying expert's testimony; (7) the expert's current resume and bibliography." Note also that a party may discover information regarding a consulting expert whose impressions or opinions have been reviewed by a testifying expert. *Id.*

<sup>7</sup> *In Re the City of Georgetown and George Russell*, 53 S.W.3d 328 at \*16 – 17 (Tex. 2001).

<sup>8</sup> *Simpson, supra* note 2, at 210; *see also Harper & Row Publisher, Inc. v. Honorable Benard M. Decker*, 423 F.2d 487, 494 (7<sup>th</sup> Cir. 1970).

<sup>9</sup> *National Tank Co. v. The 30th Judicial Dist. Court*, 851 S.W.2d 193, 198 (Tex. 1993); *see also Harper & Row*, 423 F.2d at 494.

<sup>10</sup> *Simpson, supra* note 2, at 256.

<sup>11</sup> TEX. RULE OF EVIDENCE 503 (2002); *see also In Re the City of Georgetown and George Russell*, 53 S.W.3d 328 at \*16.

<sup>12</sup> TEX. RULE OF EVIDENCE 503(b), *see also Simpson, supra* note 2, at 256.

<sup>13</sup> TEX. RULES OF EVIDENCE 503(a)(2)(b).

<sup>14</sup> TEX. RULES EVIDENCE 503(b); *see also Seibu Corp. v. KPMG L.L.P.*, 2002 U.S. Dist. LEXIS 906 at \*5 (N.D. Tex., January 18, 2002).

<sup>15</sup> William H. Croutch, *Environmental Audits: Should a New Evidentiary Privilege be Formulated or Do Existing Privileges Provide Adequate Protection?*, 46 DRAKE L. REV. 425, 431 (1997); Rebecca Fiechtl, *Know When to Hold 'Em: Minimizing Disclosure of Corporate Environmental Information*, 31 ENVTL. L. 951, 964-65 (2001).

<sup>16</sup> Fiechtl, *supra* note 15, at 965.

<sup>17</sup> Fiechtl, *supra* note 15, at 966.

<sup>18</sup> Fiechtl, *supra* note 15, at 966.

<sup>19</sup> Croutch, *supra* note 15, at 433.

<sup>20</sup> Fiechtl, *supra* note 15, at 967; Croutch, *supra* note 15, at 432.

<sup>21</sup> Fiechtl, *supra* note 15, at 967.

<sup>22</sup> Fiechtl, *supra* note 15, at 970.

<sup>23</sup> Croutch, *supra* note 15, at 432.

<sup>24</sup> *See National Tank Co. v. The 30th Judicial Dist. Court*, 851 S.W.2d at 200; *see also Simpson, supra* note 2, at 222.

<sup>25</sup> *Simpson, supra* note 2, at 224.

<sup>26</sup> FRCP 26 (b)(3)(emphasis added).

<sup>27</sup> Croutch, *supra* note 15, at 433.

<sup>28</sup> Fiechtl, *supra* note 15, at 970.

<sup>29</sup> *In Re Kenneth George*, 28 S.W.3d 511, 516 (Tex. 2000).

<sup>30</sup> *Seibu Corp. v. KPMG L.L.P.*, 2002 U.S. Dist. LEXIS 906 at 13 (Tex. App. – Dallas, January 18, 2002)(quoting 8 C. Wright, Miller & Marcus, FEDERAL PRACTICE AND PROCEDURE § 2024 at 343-46 (2d ed. 1994)).

<sup>31</sup> Fiechtl, *supra* note 15, at 972.

<sup>32</sup> Fiechtl, *supra* note 15, at 976.

<sup>33</sup> Croutch, *supra* note 15, at 434.

<sup>34</sup> Croutch, *supra* note 15, at 434.

<sup>35</sup> MODEL RULE 1.6 CONFIDENTIALITY OF INFORMATION (2002); *see also* TEX. DISCIPLINARY R. PROF'L CONDUCT 1.05; Because Texas has adopted the Model Rules as its standard, this paper discusses the Model Rules interpretation of client confidentiality. Other states have adopted the Model Code as its standard for professional responsibility, including New York, Massachusetts, Ohio, Vermont and Virginia. Nicholas Targ, *Attorney Client Confidentiality in the Criminal Environmental Law Context: Blowing the Whistle on the Toxic Client*, 14 PACE ENVTL. L. REV. 227, 248 n. 145 and 146 (1996).

<sup>36</sup> TEX. DISCIPLINARY R. PROF'L CONDUCT 1.05. The Texas Center for Legal Ethics and Professionalism, [www.txethics.org](http://www.txethics.org); The PREAMBLE indicates that these rules "define proper conduct for purposes of professional discipline...[t]he Comments [] frequently illustrate or explain applications of the rules, in order to provide guidance for interpreting the rules and for practicing in compliance with the spirit of the rules." TEX. DISCIPLINARY R. PROF'L CONDUCT, PREAMBLE ¶ 10. The PREAMBLE goes on to state: "these rules do not undertake to define standards of civil liability of lawyers for professional conduct. Violation of a rule does not give rise to a private cause of action nor does it create any presumption that a legal duty to the client has been breached." *Id.* at ¶ 15; *see also* David S. Beck, *Legal Malpractice in Texas*, 50 BAYLOR L. REV. 697, 698 (1998).

<sup>37</sup> MODEL RULES OF PROF'L CONDUCT R. 1.6, cmt. 2 (2002).

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By: Andrew L. Strong & Jennifer S. Cook

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<sup>38</sup> MODEL RULES OF PROF'L CONDUCT R. 1.6 (b).

<sup>39</sup> TEX. DISCIPLINARY R. PROF'L CONDUCT 1.05 (e) (2002)(emphasis added).

<sup>40</sup> TEX. DISCIPLINARY R. PROF'L CONDUCT 1.05, cmt. 1.

<sup>41</sup> TEX. DISCIPLINARY R. PROF'L CONDUCT 1.05, cmt.10.

<sup>42</sup> 42 U.S.C. § 6922 – 6924 (2002).

<sup>43</sup> 42 U.S.C. § 6928 (d); *see also* Nicholas Targ, *supra* note 35, at 236-37.

<sup>44</sup> 42 U.S.C. 6928 (e); *see also* Nicholas Targ, *supra* note 35, at 236-37. In *United States v. Baytank*, the Fifth Circuit echoed the United State Supreme Court's finding in *United States v. International Minerals & Chemical Corp.*<sup>44</sup> that the "knowingly" standard "pertained to knowledge of the facts, and where, ... dangerous products were involved, anyone who was aware that he was in possession of or dealing with them must be presumed to have been aware of the regulation." *United States of America v. Baytank*, 934 F.2d 599, 612 (5<sup>th</sup> Cir. 1991).

<sup>45</sup> 42 U.S.C. § 9603(a) (2002); *see also* Nicholas Targ, *supra* note 35, at 237.

<sup>46</sup> 42 U.S.C § 9603(b); *see also* Nicholas Targ, *supra* note 35, at 237.

<sup>47</sup> David J. Beck, *supra* note 26, at 710.

<sup>48</sup> TEX. DISCIPLINARY R. PROF'L CONDUCT 1.02(e) (2002).

<sup>49</sup> TEX. DISCIPLINARY R. PROF'L CONDUCT 1.05, cmt. 13.

<sup>50</sup> TEX. DISCIPLINARY R. PROF'L CONDUCT 1.05 cmt. 11. To qualify as "assistance" requires knowledge on the part of the attorney that the client is committing the criminal act. TEX. DISCIPLINARY R. PROF'L CONDUCT 1.05 cmt. 12.

<sup>51</sup> TEX. DISCIPLINARY R. PROF'L CONDUCT 1.05, cmt. 12.

<sup>52</sup> TEX. DISCIPLINARY R. PROF'L CONDUCT 1.05 (c)(8).

<sup>53</sup> TEX. DISCIPLINARY R. PROF'L CONDUCT 1.05, cmt. 13.

<sup>54</sup> TEX. DISCIPLINARY R. PROF'L CONDUCT 1.05, cmt. 14.

<sup>55</sup> TEX. DISCIPLINARY R. PROF'L CONDUCT 1.05, cmt. 14.

<sup>56</sup> TEX. DISCIPLINARY R. PROF'L CONDUCT 1.02(d).

<sup>57</sup> Nicholas Targ, *supra* note 35, at 260.

<sup>58</sup> TEX. DISCIPLINARY R. PROF'L CONDUCT 1.05(e).

<sup>59</sup> TEX. DISCIPLINARY R. PROF'L CONDUCT 1.05(e).

<sup>60</sup> TEX. DISCIPLINARY R. PROF'L CONDUCT 1.05, cmt. 18.

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<sup>61</sup> TEX. DISCIPLINARY R. PROF'L CONDUCT 1.06 (2002).

<sup>62</sup> TEX. DISCIPLINARY R. PROF'L CONDUCT 1.06, cmt. 1.

<sup>63</sup> TEX. DISCIPLINARY R. PROF'L CONDUCT 1.06, cmt. 1.

<sup>64</sup> TEX. DISCIPLINARY R. PROF'L CONDUCT 1.06.

<sup>65</sup> TEX. DISCIPLINARY R. PROF'L CONDUCT 1.06, cmt. 6.

<sup>66</sup> TEX. DISCIPLINARY R. PROF'L CONDUCT 1.06, cmt. 4.

<sup>67</sup> TEX. DISCIPLINARY R. PROF'L CONDUCT 1.06, cmt. 4.

<sup>68</sup> Christopher M. Jaarda, *CERCLA the Wagons, Our Attorney Just Switched Sides and Now Fights for Apache: GTE North, Inc. v. Apache Products Co.*, 8 VILL. ENVTL. L. J. 599, 599 (1997).

<sup>69</sup> Patrick E. Donovan, *Serving Multiple Masters: Confronting the Conflicting Interest that Arise in Superfund Disputes*, 17 B.C. ENVTL. AFF. L. REV. 371, 400 (1990).

<sup>70</sup> Donovan, *supra* note 69, at 387.

<sup>71</sup> Donovan, *supra* note 69, at 393-94.

<sup>72</sup> Donovan, *supra* note 69, at 393-94.

<sup>73</sup> Donovan, *supra* note 69, at 400.

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Mr. Porter has more than 20 years of experience in commercial, construction, intellectual property and environmental litigation, as well as representation of utilities at state and federal agencies.

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Mr. Mazzone is licensed to practice in both Texas and Massachusetts as well as in all of the federal courts in Texas, the United States Court of Appeals for the Fifth Circuit, and the United States Supreme Court. Mr. Mazzone is Board Certified in Civil Trial Law and has tried numerous jury and non-jury cases in both state and federal court.

Mr. Mazzone frequently represents energy companies in environmental contamination and toxic tort cases.

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Mr. Mazzone is also an arbitrator and an advocate in arbitration matters. Mr. Mazzone has presided over numerous arbitration matters and, as a member of the American Arbitration Association's National Panel of Arbitrators, is regularly called on to preside over arbitrations.

Mr. Mazzone has given speeches and written papers on trial advocacy, arbitration, and environmental litigation. Mr. Mazzone has also been a speaker at the AAA's National and Regional Panel Retreats, seminars providing training to AAA arbitrators.

For five years, Mr. Mazzone taught pre-trial litigation at the University of Houston Law School as an adjunct professor of law. Mr. Mazzone also served for a number of years on the Editorial Board of the Houston Lawyer magazine, the publication of the Houston Bar Association.

Mr. Mazzone was born in Boston, Massachusetts. He received his undergraduate degree in Business Administration in 1977 from the University of South Carolina, attended graduate school at the University of Michigan, and obtained his law degree in 1983 from Suffolk University Law School in Boston finishing in the top 10% of his class.

**Recent Publications**

*"Toxic Tort Litigation,"* Government Institutes Division ABS Group, Inc., Houston, September 2000; *"The Measure of Damages in Environmental Contamination Cases,"* Strategic Research Institute, Houston, September 2000

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## **The Full Monty Toxic Tort Litigation Demo**

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Michael Mazzone, Partner, Haynes and Boone, LLP  
Gary R. Krieger, MD, MPH, DABT, Principal, New Fields Courtroom Sciences, Inc.  
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Fourteenth Annual Texas Environmental Superconference  
Austin, TX  
August 2, 2002

### **Case Abstract**

At approximately 4:30 am on April 1, 2001, a freight train operated by the “Rails that Fail” Transporters derailed 2 miles west of Austin, Texas. Three tanker cars ruptured and released xylenes, toluene and urethane resin. Within ten minutes of the rupture, a fire occurred. Several other tankers derailed but did not rupture; however, they were in immediate proximity to the burning rail cars. State and federal agencies, including fire and hazardous materials teams immediately responded. Due to the intense heat of the fire, the precarious position of the adjacent non-ruptured cars and the difficulty of positioning fire-fighting equipment, a command decision was made to allow the burning cars to self-extinguish while simultaneously cooling and protecting the derailed but non-ruptured tankers. Video news film at the scene taken at sunrise demonstrated an intense, rapidly rising black plume spreading in a generally southeasterly direction towards Austin.

Standard perimeter hot and command zones were established and air-monitoring stations were established within 4 hours. Evacuation zones of 500m were established based on initial air –monitoring. Additional portable, real-time air-monitoring was performed at various locations in concentric circles at distances of 500 meters, 1 km, 1500m, 2 km and 5 km. Air samples were obtained for total hydrocarbons, xylenes, toluene, isocyanates (a thermal breakdown product of urethane resin) and particulate matter less than 10 micron size (PM10).

Later that morning at around 7:30 am, state legislator Don Prince (accompanied his 8 year old son Will), was visiting his 78 year old mother, Gladys Prince, at the Happy Acres Nursing Home located 1.5 Km (1500m) southeast of the derailment. Legislator Prince was initially unaware of the fire until he saw the local news report on his mother’s TV. Mrs. Prince was a frail 78-year-old African American female with longstanding hypertension, diabetes and heart disease. She had been in the nursing home for 8 months. Will Prince was an 8-year-old African American male who was moderately overweight and had a longstanding history of allergies and eczema (skin rash). After a one-hour visit, Mr. Prince left

the nursing home and dropped his son off at a nearby elementary school. While leaving the nursing home, Mr. Prince noticed the distant black plume from the burning tank cars. Mr. Prince thought he noticed an unusual odor; his son began sneezing and complained of "itchy skin."

After 36 hours, the tanker fire was extinguished. Perimeter air monitoring, taken continuously during the fire, revealed background levels of total hydrocarbons. Isocyanate levels were at the detection limit. Twenty-four hour PM10 levels were widely variable, but were up to 70 ug/M3 depending upon the distance and direction.

On April 3, 2001 at 5:00 am, Mrs. Prince was found unresponsive by the morning nursing shift. After a brief and unsuccessful attempt at resuscitation, she was pronounced dead due to "cardiac failure." Three days later while at the funeral service for his beloved grandmother, Will Prince complained of shortness of breath and difficulty breathing. His pediatrician subsequently diagnosed asthma and he was placed on inhalers and oral bronchodilators. One week later, Don Prince filed a lawsuit relating both his mother's death and the new onset asthma of his son to the tanker fire.

## **Contemporary Jury Research on Environmental Litigation**

**David A. Giles, Ph.D.**

**Jason S. Bloom, M.A.**

Over the last ten years, much jury research has been conducted in the field of environmental litigation.

Jury research that includes mock trials, focus groups, mirror juries and post-trial interviews with actual jurors reveals an abundance of information that details how jurors problem-solve cases involving environmental issues. Essentially, these case-specific research projects have identified a predictable cognitive roadmap that jurors use to decide these complex cases. The first three components of that roadmap are consistent among all jurors: character of the parties, fulfillment of duties, and conduct of the parties.

### **Jurors' Cognitive Roadmap**

The cognitive roadmap begins in jury selection with impressions about the character of the parties, who they are. From the moment that prospective jurors come in contact with the parties involved in the lawsuit, the character assessment process begins. These assessments can be somewhat influenced by pre-disposed beliefs and life experiences that jurors bring into the courtroom with them. For instance, popular corporations have reputations attached to them. Big corporations typically have stereotypes associated with them. These dynamics are difficult to overcome, as many pre-disposed beliefs are deeply embedded within jurors' thinking patterns. Additionally, it is at this stage that jurors try to determine whether the parties and their respective representatives are trustworthy and can be considered to be reliable sources of information.

Next along the cognitive roadmap is the jurors' perception of the duties of the parties involved in the lawsuit. Without external guidance, jurors typically self-assign duties to the parties, and then determine whether those duties were fulfilled in the proper fashion. They develop standards of care and conduct, outside of the law but based on their perceptions, and then judge the parties by them. It is not unusual for these standards to be entirely inconsistent with the law or even regulatory guidelines established by the government. Post-trial jury research has shown that it is the failure of defendants to live up to these perceived duties that produces adverse verdicts, especially in environmental litigation. Companies who engage with environmental controls are held



to extremely high standards or care and conduct by jurors. It is almost as if jurors create a zero tolerance standard of care for these entities.

The third stop on the roadmap is a jury-level assessment of the conduct of the parties. After learning the issues in the dispute, jurors ask themselves if the behavior of the parties is fair and honest. They internally deliberate whether the parties have played by the rules. It is important to note that corporate conduct and citizenship have been widely shown to influence verdicts.

It is clear from the jury research that all three of these jury dynamics are explored by jurors at the beginning of trial. Jurors' mental impressions and conclusions formulate a cognitive filter for ensuing testimony and evidence. After the jury selection process, jurors continue to progress along their cognitive roadmap throughout the course of trial. Ultimately, the jury panel, as a whole, ends at the same point after deliberations. The final points along these cognitive maps are less defined due to individual differences; however, the first three components: character, duties and conduct are universally incorporated into the jury decision-making process.

Further along the roadmap, one can find a handful of common sense themes and theories that jurors use when deliberating environmental cases. These themes and theories are found in mock trial data well as post-trial interview data. The following data set was generated by a community attitude survey conducted for various environmental matters in South Texas. These are attitudes expressed by those voting for the plaintiff, when subjected to a vignette that parallels many of the environmental cases in the courts today. These sentiments were factors in the respondents' decision-making.

**Issue:**        ***Relationship between chemical exposure and toxicity.***

- |            |  |
|------------|--|
| <b>89%</b> | Agreed every chemical differs in its degree of toxicity, and that some chemicals are more toxic than others. |
| <b>86%</b> | Agreed chemical exposure does not have to be dangerous if you take the necessary safety precautions.         |
| <b>86%</b> | Agreed that the Plaintiffs were exposed to dangerous levels of chemicals.                                    |
| <b>75%</b> | Agreed all chemicals are dangerous, and anyone who thinks otherwise is ignorant.                             |

**67%** Agreed it is possible to be exposed to harmful levels of chemical exposure by just being around the chemicals.

**67%** Agreed that chemicals can harm you if the exposure levels are high enough and long enough in duration.

**Issue:** ***Impact of negligence allegations.***

**86%** Agreed with the statement, "I see how Company A could be negligent since they had an idea that low-level exposure to chemicals might cause damages."

**81%** Agreed that Company A was too lax in its safety procedures.

**78%** Agreed Company A was aware of the fact that its employees did not always follow safety procedures.

**72%** Agreed that Mr. Smith complained numerous times to Company A's supervisors about contamination and that they ignored his concerns.

**72%** Agreed Company A valued production/profits more than employee and customer safety.

**58%** Agreed Company A does not care about its employees.

**Issue:** ***Effect of long-term exposure.***

**94%** Agreed with the statement, "I think chemicals are responsible for a lot of problems like cancers and birth defects that science just does not know anything about yet."

**89%** Agreed with the statement, "I understand how a father's exposure to chemicals can cause birth defects in his offspring."

**89%** Agreed paternal exposure to toxic chemical agents is likely to cause birth defects.

**86%** Agreed the studies of painters and printers in other job types "sounds like strong evidence to me" that chemicals cause defects.

**69%** Agreed that serious disorders can come from unknown causes.

It is apparent from the jury research data that there are many general sentiments, life experiences, and pre-disposed beliefs surrounding environmental issues that jurors bring to the courtroom with them. These inherent attitudes and beliefs influence their decision-making strategies.

### **Role of the Expert Witness**

Expert witnesses are key in environmental cases. They have the ability to diffuse these pre-disposed beliefs and general attitudes regarding environmental issues that are so pervasive in the general population. In order to achieve a favorable verdict, the defendant's witnesses must maintain a high level of professionalism, yet have the ability to allow jurors to identify with them in a positive fashion. It will also be important for the trial team to define a "party platform" for each of the witnesses to use as a guide. Therefore, it is suggested that the live witnesses be thoroughly trained and prepared to "tell the truth effectively." On top of that, witnesses should be knowledgeable of the trial themes and theories of both sides in order to eliminate surprises. Witness training includes education and attention to the following for each witness:

- Communication skills;
- Protocol for effective testimony;
- Dynamics of the courtroom setting;
- Education as to the rights of a witness;
- Defining the persona and objective desire of each witnesses' testimony;
- Educating the witness as to overall trial strategy so the witnesses can anticipate the impact of their answers;
- Identification of the "safe harbors" for the witness to rely upon during cross-examination;
- Construction of testimony that is communicated at a jury-consumable level;
- Acknowledgement that the jury is analyzing testimony with a high-school level education;

- Understanding of the jurors' expectancies.

Time spent preparing the expert witness is invaluable. Far too often, expert witnesses are unaware of the decision-making strategies of jurors and thus do not know where the goal lines lie for their testimony. The result is testimony that is scientifically sound, yet inconsumable by jurors, who ultimately vote on the case.

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## **Particulate Toxicology: Risk Assessment Applications**

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Fourteenth Annual Texas Environmental Superconference  
Austin, TX  
August 2, 2002

### **Abstract**

There has been increasing focus on the potential health effects from both short- and long-term exposures to particulate matter of less than 10-micrometer size. In particular, recent studies suggest that fine ( $\leq 2.5$  micrometers) and ultrafine ( $\leq 0.1$  micrometer) particles may be more potent than coarse particles (*i.e.*, the 10-micrometer minus 2.5-micrometer fraction). A wide variety of health effects have been associated with particulate exposure, including short- and long-term increases in mortality rates due to cardiovascular and respiratory diseases and increased morbidity, including asthma attack rates, lower and upper respiratory symptoms, hospital and emergency room visits, and impaired lung development. The current risk assessment method of calculating potential non-cancer hazard quotients and indices and cancer risks does not fully address the potential toxicological impacts of particulate matter, particularly those effects associated with sensitive subgroups such children with asthma and elderly people with pre-existing cardiopulmonary disease. Given the diversity of affected health endpoints and susceptible subpopulations, comparison with simple particulate matter standards lacks specificity and transparency. More accurate characterization of the potential health impacts from incremental increases in particulate matter concentrations has broad applications for facility permitting, facility modifications and exposures from short-term release events such as fires and explosions. There are published data for the concentration-response relationships for particulate matter and a variety of morbidity and mortality endpoints. Using these published equations, we have analyzed a variety of potential community impacts from various short and long-term impacts to changes in particulate matter levels. This approach could be useful in providing a more transparent quantitative evaluation of potential particulate matter impacts in U.S. communities. Both applications and limitations are discussed.

### **1.0 Introduction**

The recent scientific literature contains a large number of studies that address the effects of various size airborne particulate matter (PM) on rates of death and disease. Respirable particulate matter is conventionally classified based on aerodynamic diameter. Typical values of the mass median aerodynamic diameters are 0.05 to 0.07 micrometers ( $\mu\text{m}$ ) for the nuclei mode, 0.3 to 0.7  $\mu\text{m}$  for the accumulation mode, and 6 to 20  $\mu\text{m}$  for the coarse mode. Particles between 2.5 and 10  $\mu\text{m}$  ( $\text{PM}_{10-2.5}$ ) are termed coarse, those less than 2.5 but greater than 0.1  $\mu\text{m}$  ( $\text{PM}_{2.5}$ ) are termed fine, and those less than 0.1  $\mu\text{m}$  are termed ultrafine. Because the concentration-response relationship

between PM and a given health effect (e.g., mortality) is related to particle size, these size differences are significant from both toxicological and clinical medical perspectives. Therefore, when the PM literature is reviewed, it is important to understand that the concentration-response relationship is associated with both a particular PM size and a specific exposure duration (e.g., annual average, 24-hour average).

A number of large population-based PM studies have been used by regulatory agencies (U.S. EPA in particular) in setting ambient air quality standards for particulate matter in the United States. Environment Canada (2000) and the World Health Organization (WHO) (2000) have developed similar (but not identical) approaches. For risk assessment purposes, it is important to appreciate both the strengths and limitations of these studies. Large ecological studies are not designed for individual causation analysis; that is, they have predictive power for effects of average ambient concentrations of PM on *populations* consisting of diverse individuals rather than on any of the individuals comprising the populations. In contrast, the standard Superfund risk assessment methodology calculates chemical-specific cancer risk and/or non-cancer hazard for sensitive individuals with under default (usually “reasonable maximum”) chemical exposure assumptions. For example, a  $1 \times 10^{-4}$  calculated cancer risk signifies that, if an individual were exposed to the assumed daily dose of the chemical, he or she is at a mathematically increased cancer risk of 1 per 10,000 (0.0001). Traditional non-cancer risk assessment methodology is based on comparison of estimated chemical exposure with a “safe” (threshold) exposure level, with no calculation of the risk of the adverse endpoint occurring. However, although most of the health effects associated with PM are non-carcinogenic, none of the epidemiological functions relating PM to various health endpoints incorporate thresholds.

Using concentration-response relationships derived from epidemiological studies, an incremental increase in size-specific PM concentration can be associated with population-level changes in endpoints such as short or long-term mortality and cardiopulmonary diseases. These relationships, typically expressed as “% change in health effect vs. change in PM,” are approximately linear within a certain concentration range (Abt 2000; WHO 2000). However, in using these relationships it must be recognized that they are specific to the type of population studied, the measure of PM used, and the characterization of the health endpoint considered. Thus, it devolves on the user to ensure that these inputs are appropriate for the selected concentration-response function.

We used a hypothetical scenario involving impacts from a proposed gas-fired power plant to examine effects on three different health outcomes: (1) acute (short-term) effects on mortality, (2) chronic (long-term) effects on mortality, and (3) morbidity (disease) effects (e.g., asthma, bronchitis, lower and upper respiratory disease, and pneumonia). Data from the California Children’s Health Study regarding possible

impacts on infants were also evaluated. As illustrated in the examples provided below, such calculations can provide valuable information on the expected incidence of various effects on specific population groups, providing valuable support for informed and effective risk management.

## **2.0 Health Effects of Particulate Matter**

### **2.1 Mortality**

The relationship between PM and premature mortality (some measurable shortening in lifespan) has been the subject of numerous scientific investigations. Both acute (short-term), *i.e.*, exposure on a given day or within a few days, and chronic (long-term), *i.e.*, exposure over a period of a year or more may result in premature mortality.

Long-term studies relate annual mortality to some measure of annual average pollutant level. Long-term studies are not strongly impacted by day-to-day fluctuations in pollutant levels, since a high-concentration day could be followed by a low-concentration day. In contrast, daily studies are designed to relate daily levels of the pollutant to daily mortality. A short-term study cannot detect chronic changes; however, a long-term study may detect some short-term exposure effects. In general, while the long-term study design is scientifically preferred, these types of studies are difficult and expensive to perform.

#### **2.1.1 Short-Term Mortality**

Short-term mortality impacts due to the average 24-hour increase in PM<sub>10</sub> concentration can be analyzed using a conservative concentration-response factor of 0.68 percent daily increase in cardiopulmonary mortality for every 10- $\mu\text{g}/\text{m}^3$  increase in PM<sub>10</sub> based on recently published work by Samet *et al.* (2000). The Samet *et al.* study, which included data from the largest 90 U.S. cities, is the largest and most sophisticated daily time series study yet published. The Samet *et al.* data agree closely with those of the largest similar European study, which found a 0.6 percent increase per 10  $\mu\text{g}/\text{m}^3$  of PM<sub>10</sub> increase (Environment Canada 2000). A recent analysis based on the results from 29 studies in 23 locations in Europe and North and South America showed a 0.7 percent per 10  $\mu\text{g}/\text{m}^3$  daily effect (Levy, 2001). Environment Canada concluded that the daily increase in PM<sub>2.5</sub>-related risk of mortality is about twice that for PM<sub>10</sub> (Environment Canada 2000, page 31). They quantified the daily mortality increase associated with PM<sub>2.5</sub> as 1.5 percent per 10  $\mu\text{g}/\text{m}^3$  increase in the ambient air concentration, or roughly double the 0.68 percent used in the original Samet *et al.* (2000) paper. However, on May 30, 2002 the Health Effects Institute (HEI) (the sponsor of the Samet *et al.* study) released a letter of advance notice regarding recalculation of the concentration-



response relationship for total mortality (HEI, 2002) due to inadequacy of the default convergence criteria in the statistical software used (S-plus) to perform the model calculations. . The researchers have re-done their analyses and found that the estimate of the average particulate pollution effect across all the cities changed from a 0.41% increase to a 0.27% increase in daily mortality per 10  $\mu\text{g}/\text{m}^3$  of  $\text{PM}_{10}$  ([http://biosun01.biostat.jhsph.edu/biostat/research/nmmaps\\_faq.htm](http://biosun01.biostat.jhsph.edu/biostat/research/nmmaps_faq.htm)). That is, the estimated effect of  $\text{PM}_{10}$  on mortality decreased by around 35%.

### **2.1.2 Long-Term Mortality**

Two large long-term mortality studies have been exhaustively evaluated in the scientific community: (1) American Cancer Society (ACS) study published by Pope *et al.* in 1995, and (2) the Harvard Six Cities Study published by Dockery *et al.* in 1993. Both of these studies were extensively reanalyzed by an independent scientific panel formed by the HEI (Krewski *et al.* 2000). Krewski *et al.* presented a comparison of the two papers that illustrates some of their important differences (see Table 1). Pope *et al.* recently published an update of their original study of cardiopulmonary mortality (Pope *et al.* 2002). This update (a) doubled the follow-up time from the original study to more than 16 years and tripled the number of deaths available for analysis, (b) substantially expanded the exposure data, particularly for  $\text{PM}_{2.5}$ , and (c) calculated a concentration-response relationship for  $\text{PM}_{2.5}$  and lung cancer mortality.

As Table 1 illustrates, there are substantial differences between the two studies. The ACS study is significantly larger and includes more cities and a more diverse population. The Six-Cities study has a much longer follow-up period, but has a substantially smaller population that was not racially diverse. The benchmark long-term study consistently selected by the scientific community has been the ACS paper (e.g., Environment Canada 2000). This observation was also recognized in the October 2000 Abt Associates *et al.* paper entitled "The Particulate-Related Health Benefits of Reducing Power plant Emissions," prepared for the Clean Air Task Force. Finally, supplemental calculations were performed using the data from the Pope *et al.* 2002 update. The data from this update are quite similar to the original 1995 paper and subsequent reassessment by Krewski *et al.* in 2000, further justifying the selection of the ACS study as the benchmark paper for risk assessment applications.

## **2.2 Morbidity**

The relationships between PM and a variety of cardiopulmonary diseases such as bronchitis, pneumonia, and upper and lower respiratory diseases have been analyzed. Many of the morbidity endpoints are related to exacerbation of pre-existing respiratory problems (e.g., asthma) in children. Asthma incidence has been shown not to be associated with air pollution in several studies that have attempted to establish such a

link, including Dockery's Six-Cities study (1993). Therefore, while studies have shown that high levels of air pollution, including PM, may worsen existing cases of asthma, neither PM<sub>2.5</sub> nor PM<sub>10</sub> have been shown to be a significant factor in producing new cases of asthma. This observation has been found in a variety of studies throughout the world.

## 2.3 Concentration-Response Relationships

### 2.3.1 Mortality

Typically, the PM epidemiological studies assume that the relationship between PM and health effects follows either a linear or log-linear (exponential) function. The log-linear concentration-response function can be generalized as,

$$y = Be^{\beta X} \quad [1]$$

where  $y$  is the incidence of the health effect under consideration,  $B$  is the incidence of  $y$  when the concentration of PM is zero,  $\beta$  is the coefficient of ambient PM concentration, and  $X$  is the ambient concentration of PM. Typically, epidemiological studies report a relative risk (RR) for a given  $\Delta PM$ , as opposed to the  $\beta$  coefficient in the concentration-response function. However, this coefficient can be derived from the reported RR and the  $\Delta PM$ :

$$\beta = \frac{\ln(RR)}{\Delta PM} \quad [2]$$

Since it is the incremental change from baseline that is the focus of interest for predicting potential impacts, Eq. [1] can be rewritten to express the change in endpoint effect (e.g., long-term mortality) as a function of incremental change in PM concentration of a given size (i.e.,  $\Delta PM_{2.5}$  or 10):

$$\Delta \text{Mortality} = -\left[ y_0 \times \left( e^{-\beta \Delta PM} - 1 \right) \right] \times \text{Pop} \quad [3]$$

where  $y_0$  is the specific baseline mortality rate before the change in PM,  $\beta$  is the PM coefficient,  $\Delta PM$  is the change in mean (annual or 24-hour average) PM concentration, and Pop is the population defined (Abt 2000).

### 2.3.2 Morbidity

Several epidemiological studies have estimated the relationship between certain morbidity endpoints and PM using various mathematical forms:

- Log-linear (per Eq.[3])

- Changes in chronic bronchitis (Abbey 1995)
- Changes in COPD hospital admissions (Samet 2000)
- Changes in pneumonia hospital admissions (Samet 2000)
- Changes in asthma hospital admissions (Sheppard 1994)
- Changes in asthma ER visits (Schwartz 1993)
- Logistical regression
  - Changes in upper respiratory symptoms (Pope 1991)
  - Changes in lower respiratory symptoms (Schwartz 1994)
  - Changes in acute bronchitis (Dockery 1996)
  - Changes in chronic bronchitis (Schwartz 1993)

The logistical regression form of the concentration-response relationship is:

$$\Delta \text{Health Endpoint} = - \left[ \frac{y_0}{1 - y_0 \times e^{\Delta \text{PM} \beta} + y_0} - y_0 \right] \times \text{Pop} \quad [4]$$

where  $y_0$  is the specific incidence rate of a health endpoint before the change in PM,  $\beta$  is the PM coefficient,  $\Delta \text{PM}$  is the change in mean (annual or 24-hour average) PM concentration, and Pop = population defined.

In order to perform the analyses relating PM concentration to morbidity, we used the concentration-response equations published by Abt *et al.* (2000). These equations were also recently used in a widely publicized report by Cifuentes *et al.* (2001). Data from both the ongoing Children's Health Study were also reviewed (Avol 2001; Gauderman 2000; Gilliland 2001; McConnell 2002; Ostro 2001; Ritz 2002). However, none of the concentration-response relationships from these studies were used in this analysis.

### 3.0 Hypothetical Health Impacts of a Proposed Gas-Fired Power Plant

For this example, we have assumed a residential population of 175,000 with a standard age demographic pyramid (typical for a large metropolitan area). Incremental PM emissions ( $\Delta \text{PM}$ ) were assumed to be  $0.78 \text{ ug/m}^3$  as a 24-hour average, and  $0.05 \text{ ug/m}^3$  on an annual basis. These values are typical of large, modern gas-fired facilities.

#### 3.1 Results: Acute and Chronic Mortality

The hypothetical long-term mortality impacts were calculated according to Eq.[3], using a number of calculated  $\beta$  values and an annual estimated mortality rate of 872 per 100,000 (per Abt 2000). Short-term calculations were performed using the concentration-response relationships derived by Samet *et al.* (2000) for  $\text{PM}_{10}$  (adjusted based on the 30 May 2002 HEI notification).

As shown in Table 2, impacts of plant emissions on chronic mortality are extremely low under the hypothetical permitting scenario, less than one per 100,000 exposed population. The short-term impacts are even lower, regardless of whether the “original” or corrected Samet *et al.* (2000) value is used. Thus, this level of potential impact is within EPA’s traditional range of  $10^{-4}$  to  $10^{-6}$  for “acceptable” incremental cancer incidence.

### **3.2 Results: Morbidity**

Table 3 presents the results of calculations for different morbidity impacts due to the same hypothetical power plant scenario. The exposed populations were scaled for specific high-risk groups such as young children with asthma.

As shown in Table 3, impacts on a variety of short-term morbidity effects were also less than one per 100,000 exposed population. As noted above for mortality, this level of potential impact is within EPA’s “acceptable” cancer risk range.

## **4.0 Conclusions**

Concentration-response relationships derived from high-quality epidemiological studies can be used to estimate incremental mortality and morbidity risks associated with PM under permitting and sudden release scenarios. Of course, increments in PM corresponding to pre-determined “acceptable” risk levels for selected endpoints could also be derived. Properly applied, the available concentration-response relationships are easily as strong, if not stronger, than many of the dose-response relationships for chemicals used in the performance of standard EPA Superfund risk assessments. Because the availability of relationships for a variety of endpoints allows consideration of risks to specific population sectors of concern, *e.g.*, children and the elderly, this approach may be a useful tool for reaching informed risk management decisions that are acceptable and comprehensible to stakeholders.

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**Table 1****Comparison of Six-Cities and American Cancer Society Studies**

<b>Study Variable</b>	<b>Harvard Six-Cities</b>	<b>American Cancer Society PM<sub>2.5</sub> Cohort</b>
Number of cities	6	50
Number of subjects (adults)	8,111	295,223
Number of deaths	1,430	20,765
Mean age at enrollment	49.7	58.6
% of women	54.8	35.9
Race: % white/black/other	100%/0%/0%	94%/4.1%/1.9%
Total years of follow-up	14-16	Approx. 7
PM <sub>2.5</sub> levels: mean differences between low and high in $\mu\text{g}/\text{m}^3$ <sup>(a)</sup>	18.6 (11.0-29.6)	24.5 (9.0-33.5)
All-cause mortality relative risk <sup>(b)</sup> (Krewski <i>et al.</i> 2000 reanalysis)	1.28 (1.10, 1.48)	1.18 (1.10, 1.27)

a) The range from low to high is given in parentheses.

b) The first number is the 95% confidence level; the confidence interval is given in parentheses.

**Table 2**

**Hypothetical Example: Mortality Impacts**

<b>Cause of Mortality</b>	<b>Mortality Change (additional deaths per 100,000 due to plant emissions)</b>	<b>Basis</b>
All Cause	0.20	1
All Cause	0.23	2
All Cause	0.26	3
All Cause	0.44	4
All Cause	0.27	5
All Cause, Short Term	0.00035	6
All Cause	0.30	7
Cardiovascular	0.13	8
Lung cancer	0.04	9

**Notes:**

Annual death rate = 872 per 100,000

1. Abt 2000, Section F.1.1,  $y_0$  from U.S. CDC 2001 2000 death rate (age-adjusted) for population 30 and over of 101,436.
2. Abt 2000, Section F.1.2,  $y_0$  same as Basis 1.
3. Abt 2000, Section F.1.3,  $y_0$  same as Basis 1.
4. Abt 2000, Section F.1.4,  $y_0$  same as Basis 1.
5. Abt 2000, Section F.1.5,  $y_0$  same as Basis 1.
6. Calculated based on the May 30 2002 letter of advance notice from the Health Effects Institute (HEI 2002).
7. Pope 2002, Beta =  $\ln(1.04)/10 \mu\text{g}/\text{m}^3$  PM<sub>2.5</sub> increase,  $y_0 = 0.00882$ . Total population of 175,400.
8. Pope 2002, Beta =  $\ln(1.06)/10 \mu\text{g}/\text{m}^3$  PM<sub>2.5</sub> increase,  $y_0 = 0.00265$ . Total population of 175,400.
9. Pope 2002, Beta =  $\ln(1.08)/10 \mu\text{g}/\text{m}^3$  PM<sub>2.5</sub> increase,  $y_0 = 0.0005$ . Total population of 175,400.

All except Basis 6 used the arithmetic average increase in annual PM<sub>2.5</sub> of  $0.05 \mu\text{g}/\text{m}^3$ . Basis 6 used the modeled daily PM<sub>2.5</sub> increase of  $0.78 \mu\text{g}/\text{m}^3$ .

**Table 3**

**Hypothetical Example: Morbidity Impacts**

<b>Health Effect</b>	<b>Morbidity Change (additional occurrence per 100,000 population)</b>	<b>Basis</b>
Chronic Bronchitis	0.226	1
Chronic Bronchitis	0.260	2
Chronic Obstructive Pulmonary Disease Admissions	0.014	3
Pneumonia Admissions	0.002	4
Asthma Admissions	0.001	5
Asthma Emergency Room Visits	0.003	6
Acute Bronchitis	0.635	7
Lower Respiratory Symptoms	0.301	8
Upper Respiratory Symptoms	0.582	9
Asthma Attacks	0.367	10

Source: Abt (2000), Appendix F.

**Bases:**

1. Section F.2.1 (Schwartz) Using actual annual average PM increase and population over 30 of 99,426.
2. Section F.2.2 (Abbey) Using annual average PM increase and population over 27 with chronic bronchitis of 104,191.
3. Section F.3.1. (Samet) Using actual daily average PM increase and population 65 and over of 21,236.
4. Section F.3.2 (Samet) Using daily average PM increase and population 65 and over of 21,236.
5. Section F.3.3 (Sheppard) Using daily average PM increase and population under 65 of 154,036.
6. Section F.4.1 (Schwartz) Using daily average PM increase and population under 65 of 154,036.
7. Section F.5.1 (Dockery) Using annual average PM increase and population ages 8 to 12 of 11,110.
8. Section F.5.2 (Schwartz) Using daily average PM increase and population ages 7 to 14 of 17,774.
9. Section F.5.3 (Pope) Using daily average PM increase and population ages 9 to 11 of 6,664 and 13.82% asthma incidence, twice amount specified.
10. Section F5.6 (Whittenmore) Using daily average PM increase, total population of 175,400, and asthma incidence of 7.1% per Mann.

Arithmetic average increase in annual PM of  $0.05 \mu\text{g}/\text{m}^3$  assumes all PM is  $\text{PM}_{2.5}$ .

Arithmetic average increase in daily PM of  $0.78 \mu\text{g}/\text{m}^3$  assumes all PM is  $\text{PM}_{2.5}$ .

Scottie C. Aplin  
Advanced Micro Devices

Scottie has worked in the Regulatory Affairs group at Advanced Micro Devices since February of 2001. Prior to AMD, she worked at the Texas Natural Resources Conservation Commission as a staff attorney for the Office of Legal Services in the water quality division and as the SEP/Audit Coordinator for the litigation division. Before joining the state, Scottie worked for the Department of Defense as an environmental protection specialist with a DOD Center for Environmental Initiatives and Hands on training and Fort Sill's Directorate of Environmental Quality.

## **Jerry E. Hendon**

Jerry Hendon is a senior consultant with Pilko & Associates, LP. Pilko & Associates is a consulting firm to senior executives of leading chemical & energy companies to provide innovative solutions and advice on strategic EH&S issues critical to their business success. Jerry has expertise, both domestically and internationally, in the development, implementation and assessment of environmental, health, and safety management systems in power plants, mines, pipelines, refineries and similar facilities. Jerry primarily assists clients with developing, implementing, reviewing and assessing EHS management systems. He also assists clients with improving their compliance audit programs including teaching auditing skills.

Jerry is certified as an Environmental Management Systems and Environmental Compliance Auditor by BEAC, RAB, and IEMA. He also has experience in safety and health auditing including process safety management.

In addition to Jerry's management systems knowledge, he has had assignments that give him a solid understanding of the issues faced in day-to-day field operations. These assignments include responsibilities for operating and maintaining oil recovery, wastewater, and solid waste facilities.

Jerry is effective in leading and working with others to identify problems and find solutions. He also has experience in organizational change management, operations reliability, meeting management skills, personnel skills development, group skills training and group dynamics. He is an effective group facilitator and mentor in helping others to succeed.

Before joining Pilko & Associates, Inc, Jerry had thirty years of diversified staff and supervisory assignments in the petroleum industry for Exxon Company USA (now ExxonMobil). Jerry conducted numerous E&S management system reviews and compliance audits for Exxon including assessments in Alaska, Canada, Columbia, Australia, New Zealand, and Hong Kong. Jerry's assignments also included EHS incident analysis and reporting, environmental operations, hazard communication improvements, engineering support, computer systems support, reliability engineering, procurement, records management, and quality control laboratory management. His responsibilities included assignments at both field operations and company headquarters.

Jerry received his M.S. in chemistry from Murray State University at Murray, Kentucky.

# Environmental Management Systems

## *How to Succeed in Business without Really Trying*

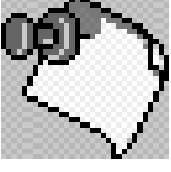
Texas Environmental Superconference

August 2, 2002

Scottie Aplin, Advanced Micro Devices

Jerry Hendon, Pilko & Associates, LP

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# Why We Need A Disclaimer!





# Topics

- Succeeding in Business
- Effective Environmental Management Systems
- Knowing What Success Looks Like

# How to Succeed in Business without Really Trying

- Prevent problems
- Identify systemic causes
- Eliminate systemic causes
- Avoid undesirable media attention
- Gain confidence of stakeholders
- Spend money wisely on counsel to stay ahead

How to Succeed in Business without  
Really Trying?

Implement Effective  
Environmental Management  
Systems

# Typical Management Systems

## Understanding

- Evolves from “clueless” about EMS to believer in their value
- Requires multiple exposures to understand and see the value of EMS
- Exposures 1-6 identify different levels of understanding of and valuing environmental management systems

# Typical Management Systems

## Mindset Evolution

Exposure #0 “I don’t know what it is, but I don’t want it!”

Exposure #1 “What is this EMS stuff?”

Exposure #2 “We don’t need this stuff! –“It’s won’t work here; it costs too much!”

Exposure #3 “Ok - Tell me more.”

Exposure #4 “I still don’t get it, we are already doing that.”

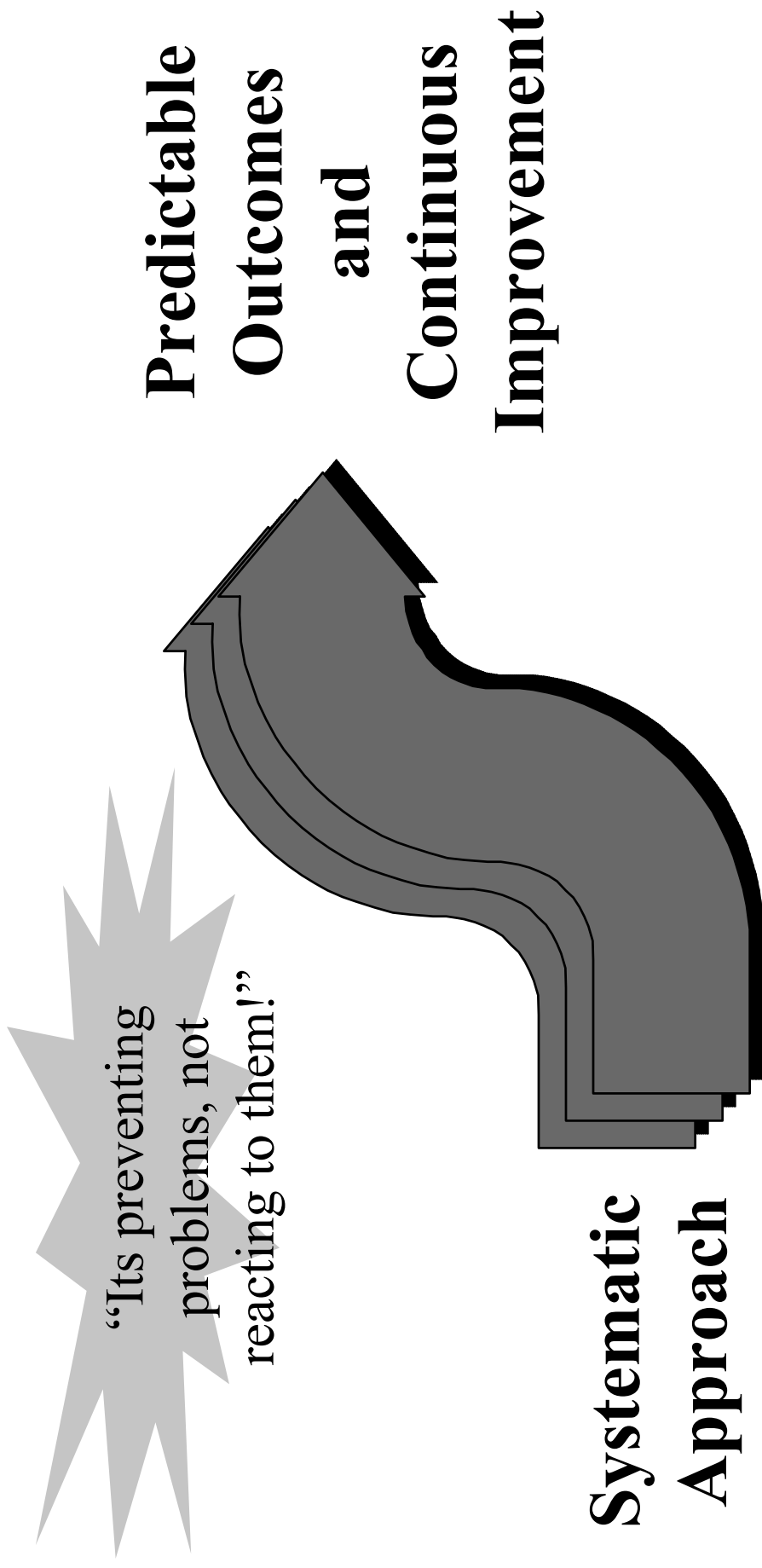
Exposure #5 “Hey-This actually makes sense!”

Exposure #6 “This EMS stuff really works!”

Exposure 0 - “I don’t know what it is,  
but I don’t want it!”

- Very few companies and individuals still at Exposure 0
- Most have heard of environmental management systems - or knows someone who has
- The 60’s EHS mindset isn’t sufficient anymore

# Exposure 1 - “What is this EMS stuff?”



# Who Defines Management Systems?

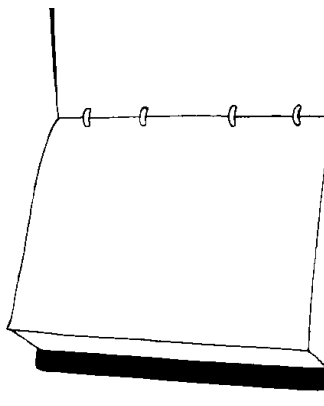
- Everybody
- Types of Standards
  - International (ISO 14001, EMAS)
  - Trade Associations (ACC, API)
  - Governmental (Federal, State)
  - Companies (OIMS, GHSER)



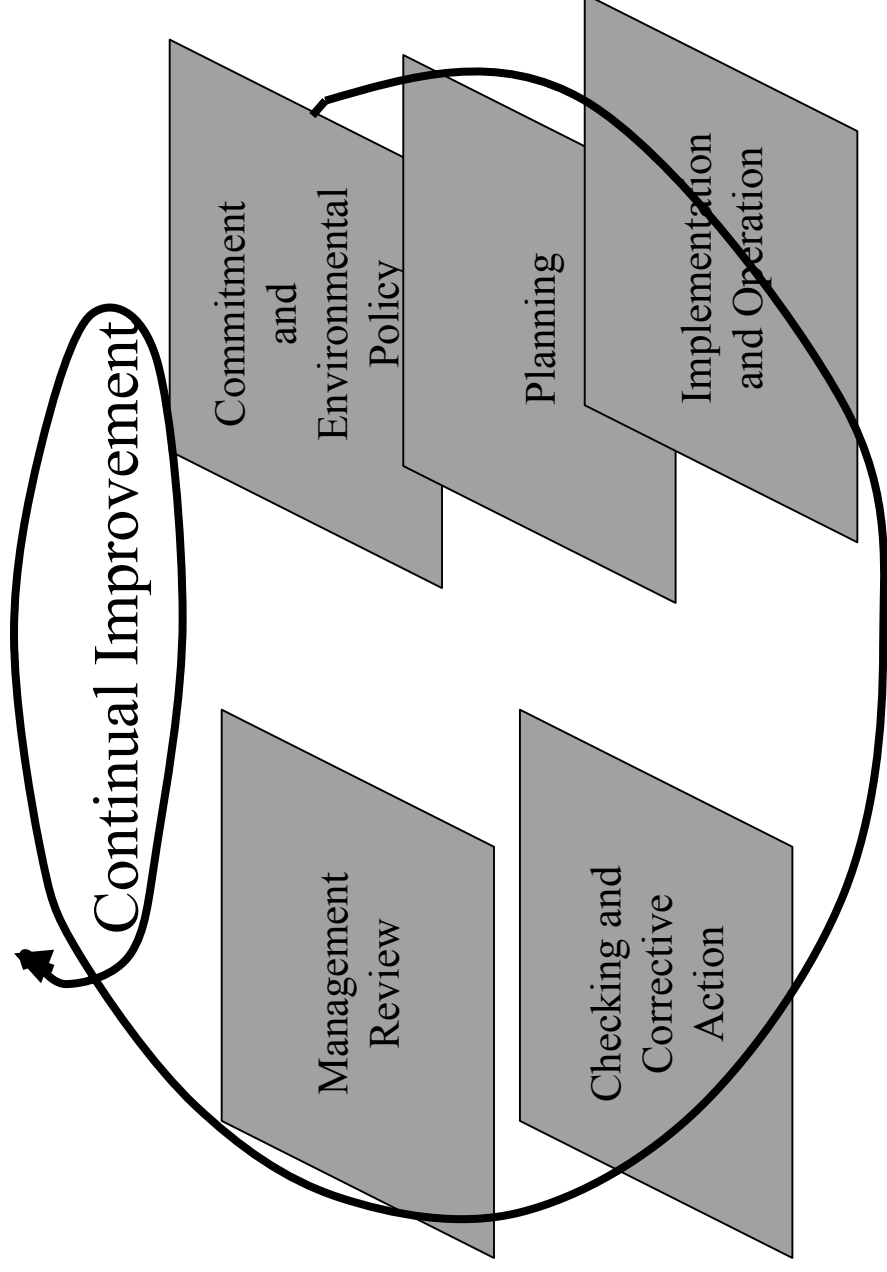
# EHS Management System

## Definition

- That part of the overall Company's management system which includes:
  - organization structure, planning activities, responsibilities, practices, procedures, processes and resources
- for developing, implementing, achieving, reviewing and maintaining the organization's EHS policy



# ISO 14001 EMS Model



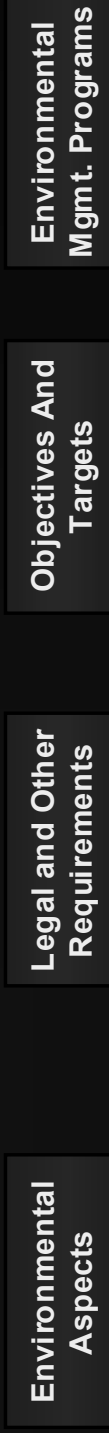
Note the Plan, Do, Check, Act Model

# ISO 14001 Specification Standard Architecture

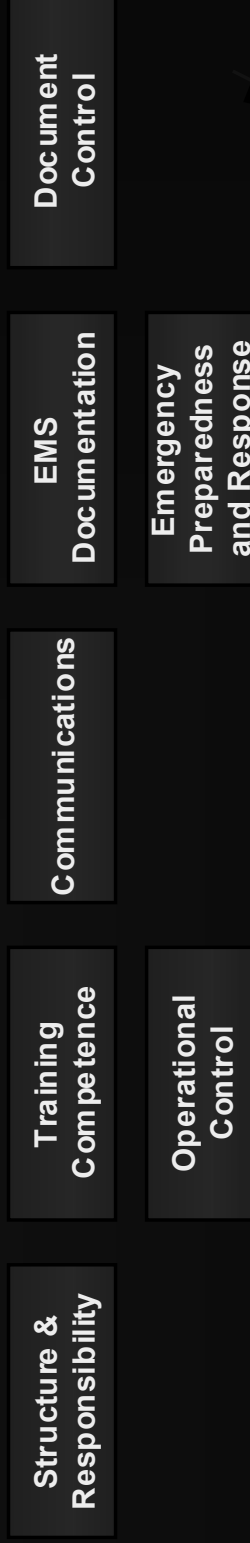
## 4.2 Commitment and Policy

Policy

### 4.3 Planning



### 4.4 Implementation



### 4.5 Measurement and Evaluation



### 4.6 Management Review

Management Review

Exposure 2 - “We don’t need this stuff! - “It’s won’t work here; it costs too much!”

- False Assumptions
  - About Management Systems
  - By the Organization
  - About the Organization’s Situation

# False Assumptions About Management Systems

- Start-from-Scratch Initiative
- Deforestation Effort
- Bureaucrat's Haven
- Replacement for Clear Thinking and Common Sense
- Barrier to Creativity, Change and Improvement

# False Assumptions By The Organization

- A pervasive belief of we are unique!
- You just don't understand our situation
- And if you did try to understand and help us prevent problems, it would cost too much
  - Note: Implicit assumption that problem solving is cheaper than problem prevention

# False Assumptions About The Organization's Situation

- We already have one
- “We are in good shape, we are not having any problems.” - Note emphasis on “no problems”
- Crudely put, systems experts sometimes refer to this belief as the “we haven’t killed anybody yet syndrome!”

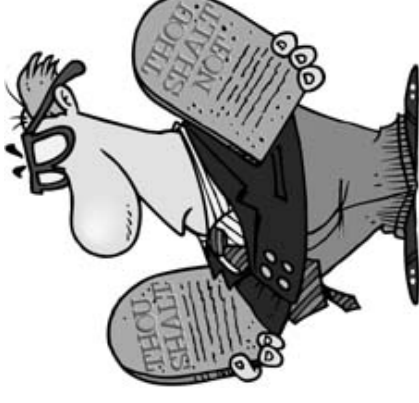
# Exposure 3-“Ok - Tell me more.”

- Important Topics
  - Key Concepts
  - Drivers
  - Benefits
- Things To Know
  - It is not rocket science, but there are some critical principles to understand and apply
  - You can’t just read a book and be an effective management systems practitioner



# Key Concepts

- “We say what we are going to do.”
  - Appropriate Documentation
    - » Provides the structure for doing specific activities
    - » Level of detail is based on risk
- “We do what we say.”
  - Effective Performance
    - » Requires organizational and individual discipline to do as documented



# Drivers

- Internal
  - Ensuring consistent performance
  - Improved performance
  - Predictable HES outcomes
  - Reduced costs
- External
  - Governments’ emphasis on use of an EMS
  - Regulations have become increasingly complex
  - Remain competitive in marketplace

# Benefits

- Improved Effectiveness
  - Environmental Performance
  - Environmental Compliance
  - Increased Operating Reliability
  - Improved Relations with the Community
- Improved Efficiency (Cost Avoidance)
  - Reduced Operating costs
  - Reduced Cost of Compliance

# Exposure 4 - “I still don’t get it, we are already doing that.”

- Everyone’s Got One
  - Most companies have an environmental program which has some elements of an EMS.
    - » Don’t adopt a system....adapt your existing program.
- Don’t know they don’t know
  - Not addressing all of the elements of an EMS
  - Not performing as designed
- Thinking “checking” is getting done

# EMS: New and Improved

- EMS escalates management focus from crisis management to problem prevention.
  - An ounce of prevention is worth a pound of cure
- EMS incorporates elements of the standards that many systems are missing
  - Documentation
  - Communication
  - Written procedures for key system tasks

# Exposure 4 - “I still don’t get it, we are already doing that.”

- Common organization’s situation is a bias for action
  - do... do... do.../ do... oops... redo... oops/
  - do.... oops.... check... redo.... oops.... Plan?
- This is the
  - Don’t Plan, Do, Don’t Check, React Model
  - Also the How to Succeed by Really Trying Model

# Exposure 4 - “I still don’t get it, we are already doing that.”

- Companies still have problems
  - When they get big enough, organizations take a systems approach
    - » The How to Succeed Without Really Trying Model
- Why wait for big problems, implement an effective EMS now and prevent problems

# Consider Integrated Systems

- Possible existing systems
  - health & safety
  - quality, operations integrity, reliability
- Benefits
  - Similarity of standards and/or systems
  - Cross application of resources
  - Cohesiveness of overall management system



# Consider Integrated Systems

## (cont'd)

- Integrate EMS into overall business strategy
  - Improve profit/cost margins
  - Increase cycle time
  - Improve market access
  - Identify opportunities to differentiate product
- Full integration goes beyond legal compliance & risk management. It goes to sound business.
- Integration can be a good idea, but be careful - consider scope, effectiveness of existing systems, etc.

# Exposure 5 - “Hey, This Actually Makes Sense”

- It’s easy as 1-2-3-4
  - 1. Decide which standard(s)
  - 2. Design the management system first
  - 3. Implement second
  - 4. Audit last
- Don’t Forget to
  - Develop a glossary to define common terms
  - Address Regulatory Compliance and Assurance

# Decide Which Standard(s)

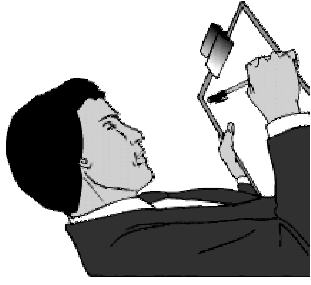
- Organization chooses which standard(s)
- There is no regulatory requirement to have one
- Consider generally accepted standards
  - Example is ISO 14001

# Design Second

- Design a system that is fit for purpose
- Align the design with the base business
  - Integrate as much as possible
  - Do not duplicate what is in place and working
  - Implies designers understand base business
- Okay to do it yourself, but don't “practice law without a license”

# Implement Third

- Create a system that fits company's culture
  - Don't "adopt" someone else's
  - Sweat equity & invention = ownership
  - Make it do what you want done
  - Make if "fit for purpose"
- Set an aggressive but not unrealistic pace
  - Must allow for systems "evolution"

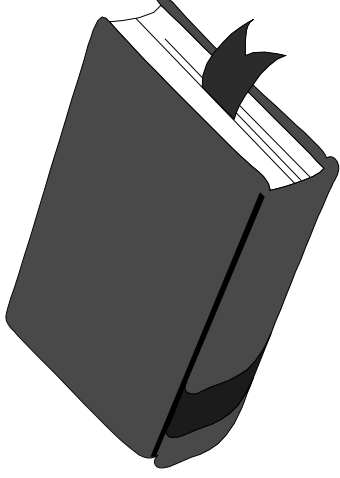


# Audit Last

- All auditing is against a standard
  - Auditing against an unclear standards yields unclear results
- If auditing precedes design and implementation, get cart before the horse
  - Auditing unduly drives the management system's design and implementation

# Glossary is Critical

- Define key components of a “management system”
  - Management System
  - System
  - Policy
  - Process
  - Procedure
  - Program
  - Practices



# Regulatory Compliance and Compliance Assurance

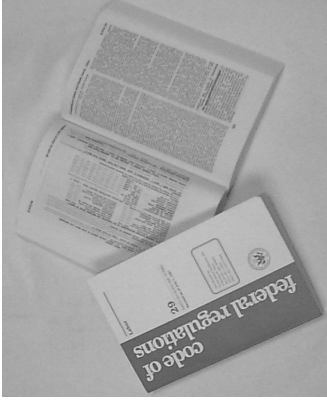
- Key Elements to Address
  - Identification of Legal Requirements
  - Environmental Programs/Procedures
  - Training & Awareness
  - Operating Procedures
  - Regulatory Required Plans (Emergency Response)
  - Monitoring and Measurement
  - Documentation
  - Record keeping
- Compliance assurance is more than auditing



# Critical Success Factors

- Do You Really Want To Do This?
- Management Commitment + Line Ownership (company wide)
- Management role must be complete
  - Set clear expectations
  - Allocate resources
  - Understand EMS
  - Get involved in EMS

# Role of Legal



- Knowledge of EMS is necessary to adequately represent client.
- EMS are not regulatorily driven legal impacts, however, they must be considered
  - Reporting of issues under permits & regulations
  - SEC Disclosures
  - Confidentiality of audits

# Role of Legal

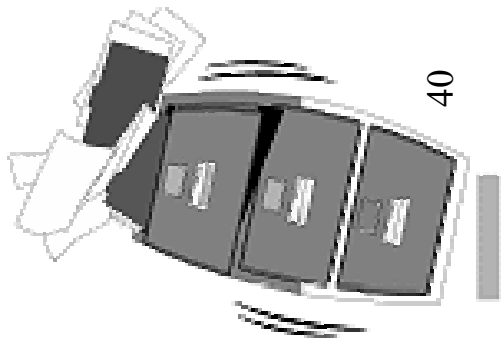
- Legal must:
  - Know what the legal or potential legal impacts are
  - Appreciate the impacts that and EMS will have on the clients legal status
  - Understand that EMS is broader than just regulatory compliance

# Legal Considerations

- Increasing emphasis on EMS by regulatory agencies
  - Incentives for EMS
  - Penalty reductions for auditing
  - Use of EMS in settlement of enforcement cases
- International interest in EMS, as a tool to enhancing environmental protection.
- Creation of Paper Trail

# The Paper Trail

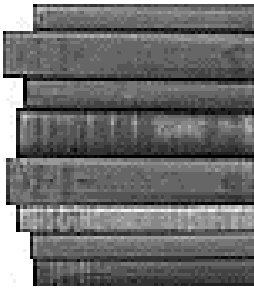
- Documents are the guidance, i.e., “What We Are Going To Do”
  - Example include procedures, work instructions, blank forms, policies, etc.
- Records are the artifacts of the business, i.e., “Did We Do What We Said?”
  - Examples include completed forms, letters, emails, etc.



# Generally documentation is required for the following:

- Policy
- Objectives & Targets
- *Roles & Responsibilities*
- Communications from External Interested Parties
- *Operational Control Procedures*
- *Monitoring and Measuring*
- *Compliance with laws*
- *Training*
- Changes in system
- *Management review*
- Record Retention
- Core Elements of the system

# Documentation – Good & Bad



- The Good:
  - Established concrete standards and expectations for compliance which enhance implementation and continual improvement of a system.
  - Provides for records of compliance
  - Provides consistent method of tracking compliance
  - Helps ensure viability of system through time

# Documentation – Good & Bad

## ■ The Bad

- Can frustrate folks who don't like documentation
- Can undermine system's effectiveness if not kept current
- Can undermine system's effectiveness if not fit for purpose
  - » not enough detail, too much detail, incorrect guidance





# Records – Good & Bad

- The Good:
  - Creates and demonstrates record of compliance
  - Can be used to prove due diligence and good faith efforts
  - Provides consistent verification of compliance

# Records – Good & Bad

- The Bad
  - Can create evidence of non-compliance
  - In the absence of an effective system, can lead to a false sense that issues are being addressed
  - Can support claims of negligence or intent if no corrective action is taken



# Records – The Ugly



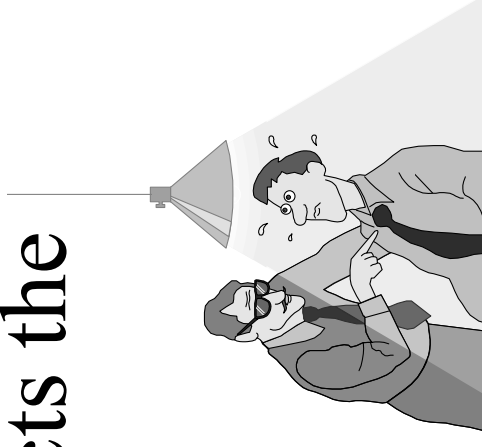
- The Ugly
  - Can send individuals to jail
  - Can cost companies millions of dollars
    - » If no records, fraudulent records, wrong records
  - Critical to have and follow the records management system
    - » This is where “Say what you do, and do what you say” is crucial

# Standard of Care

- EMS as a standard of reasonable care:
  - Within industry
  - Within a company

# Liability Issues

- EMS as evidence of responsibility of violations of environmental laws
  - Company liability
  - Individual liability
- How a company's EMS affects the application of the Sentencing Guidelines standard



# Exposure 6 - “This EMS stuff really works!”

- Good News - Other Companies Have Successfully Wrestled With Same Challenges
- Those who do it best are getting results
- Legal counsel plays important role
- Results are fewer and less severe incidents
- You can succeed without really trying



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#### - Gregg Cooke - Regional Administrator

Gregg Cooke was appointed as Regional Administrator for the U.S. Environmental Protection Agency's Region 6 in May 1998. He has made it his mission to strengthen partnerships to ensure a sustainable environment for communities in the Central-South states of Arkansas, Louisiana, New Mexico, Oklahoma and Texas.

Mr. Cooke has a long history of working to protect communities along the U.S. and Mexico Border. Earlier, he served as the Texas' North American Free Trade Agreement Environmental Liaison, assisting the Border Environment Cooperation Commission in Ciudad Juárez, Chihuahua, Mexico, as interim general counsel.

During his tenure at EPA, he has led the effort to strengthen federal, state, non-profit and public alliances to address environmental challenges in the Central-South states and has been a dedicated leader in transforming EPA into a modern, results-oriented organization. As a result, a new type of relationship (based on cooperation, flexibility and trust) has been forged between the public, community leaders, non-profit organizations, state agencies and EPA.

Mr. Cooke has strengthened the states role as co-regulators - while ensuring the nation's health-based standards are met. During his tenure, much of the delegation of federal programs to the Central-South states has occurred - demonstrating Cooke's strong commitment to federal/state partnership.

He has worked to build a sustainable environment - one that balances jobs and environmental protection - by promoting voluntary, incentive-based solutions and has led the effort to strengthen region 6 state's voluntary clean-up programs under Brownfields, to provide regulatory relief and innovation under eXcellence in Leadership projects to create financial and priority setting flexibility using performance partnership agreements, and to streamline and reduce reporting under One Stop Reporting.

Mr. Cooke has worked to create an open dialogue among business, industry, environmental organizations, elected officials and citizens on important environmental and public health problems. Each year, he makes himself available

at small town hall meetings with citizens, on-site tours and large conventions, to discuss and learn about important issues. He has worked to reinvent environmental protection using Alternative Dispute Resolution to achieve solutions.

Previously, Mr. Cooke practiced environmental law as a partner with a major Austin law firm. He also served as an Assistant Attorney General for the State of Texas for three years, first as Chief of the Environmental Protection Division and later as Chief of the Natural Resources Division.

Current as of February 2002

For more information, please  
contact the EPA Region 6  
Office of External Affairs at 214  
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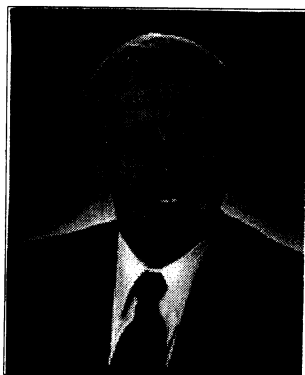
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## Robert J. Huston



Gov. George W. Bush appointed Robert J. Huston chairman of the Texas Natural Resource Conservation Commission on Jan. 7, 1999. He was confirmed by the Texas Senate Feb. 2, 1999.

Most recently, Huston was chief financial officer of the Bonner Carrington Corporation-European market and co-owner of the Durham Trading and Design Co.

He is best known as co-founder of Espey, Huston & Associates Inc., an engineering and environmental consulting firm, where he served as executive vice president and chief operating officer. Planet Pacific Inc. (PPI) of Mission Viejo, Calif., acquired the firm in 1989. Huston moved to California to serve as vice president of operations for PPI from 1991 to 1993.

Huston, who holds a mathematics degree from the University of Texas at Austin, has long been active in the Texas Water Conservation Association (TWCA), where he has served as president and board chairman. He resides in Austin with his wife Shirley, and has two grown children, Stacey and Scott.

Huston's term will end Aug. 31, 2003.

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Last Modified: April 29, 2002

**Paper not submitted for this topic.**

## BIOGRAPHY OF DAVID CABE

David Cabe is a Vice President and the Principal Engineer of Zephyr Environmental Corporation, a multi-disciplinary environmental consulting firm with offices in Austin, Houston, and Baltimore. Beginning his career as an air pollution meteorologist for the Tennessee Valley Authority, Mr. Cabe was in charge of the meteorologically forecasted programs for the control of sulfur dioxide emitted from TVA's coal-fired power plants. As an air pollution consultant since 1974, he has prepared air quality permit applications, environmental impact statements, air dispersion modeling studies, and air quality monitoring plans for a full range of industrial clients. He has also served as an expert witness in the fields of air pollution emissions and controls, atmospheric dispersion modeling, and air pollution meteorology.

Mr. Cabe holds the degrees of Bachelor of Engineering Science and Master of Science in Environmental Health Engineering from the University of Texas at Austin and has authored numerous papers in the areas of air pollution meteorology and dispersion modeling. He is a licensed Professional Engineer in Texas and a Qualified Environmental Professional.

**A Consultant's Perspective  
On  
Environmental Reporting Ethics**

***Cat on a Hot Tin Roof***

by

David Cabe, P.E., QEP  
Zephyr Environmental Corporation  
1515 Capital of Texas Highway South, Suite 300  
Austin, Texas 78746

The Fourteenth Annual Texas Environmental Law Superconference  
Austin, Texas  
August 1 & 2, 2002

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# A Consultant's Perspective on Environmental Reporting Ethics

## *Cat on a Hot Tin Roof*

by

David Cabe, P.E., QEP  
*Zephyr Environmental Corporation*

### **Introduction**

"Beware Legal Cover-Ups" reads the title of an article in the March 2002 issue of EM, the Air & Waste Management Association's (A&WMA) magazine for environmental managers<sup>1</sup>. The author, an environmental consultant and the chairman of the A&WMA's Ethics Committee, poses the following ethical dilemma: an environmental consultant has been directed by the client's lawyer to withhold information about a toxic chemical release that the consultant believes is threatening to the public. To drive home the point, the lawyer unequivocally reminds the consultant that he is bound by a confidentiality agreement from talking about the release, stating, "Don't discuss it with anyone! It is not your concern. You do your job (i.e., investigate) and I will do mine. If I need any additional information, I will ask for it."

Is this article a realistic characterization of the debate between a lawyer and the consultant about the reporting of a potentially harmful release? Hopefully not. In my experience, I have never encountered this kind of challenge by an attorney. However, does this article raise an ethical dilemma that many consultants are unprepared for but may very well face at some point in their careers? Unfortunately, yes. It's usually a surprise to the consultant when he suddenly becomes the "cat on a hot tin roof".

### **What is an Environmental Professional?**

The consultant is seldom qualified to advise the lawyer about the ethical responsibilities of the legal profession to the client or to the public. However, the consultant must be well grounded in the ethical obligations of his or her own profession to avoid being burned when the heat is on. In other words, the consultant must understand what it means to be "professional".

According to "A Professional Guide for Young Engineers"<sup>2</sup>, a booklet that the Engineer's Council for Professional Development provided to engineering graduates for many years, a "professional" is one who

- ☐ Renders a specialized service
- ☐ Maintains a confidential relationship with the client or employer
- ☐ Is charged with a substantial degree of public obligation
- ☐ Enjoys a common heritage of knowledge, skill, and status

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<sup>1</sup> Talback, Hal. "Beware Legal Cover-ups". *EM*, March, 2002.

<sup>2</sup> Wickenden, William. *A Professional Guide for Young Engineers*. Council for Professional Development, 1967.

- ❑ Performs services to a substantial degree in the general public interest
- ❑ Is bound by a distinctive ethical code

Although it would be difficult to argue that each of these characteristics is not desirable in a consultant, the dilemma raised in the EM article is readily apparent from a quick reading of the list. Specifically, how does the consultant meet the obligations to both maintain confidentiality and protect the public? If a conflict arises, which ethical obligation takes precedence?

### **What the Codes of Ethics Say**

Members of almost every recognized scientific and engineering professional organization are bound by codes of ethics. In Texas, the practice of engineering is regulated by the Texas Board of Professional Engineers (TBPE), a state agency authorized to license professional engineers under the Texas Engineering Practice Act.<sup>3</sup> Each of the approximately 47,000 engineers licensed in Texas is expected to be familiar with the rules concerning the practice of engineering, including Subchapter I – Professional Conduct and Ethics. At the very top of its ethical practices list, the TBPE states “engineers shall be entrusted to protect the health, safety, property, and welfare of the public in the practice of their profession.” The Board goes on to say that “the engineer may reveal confidences and private information only with a fully informed client’s or employer’s consent, or when required by law or court order, or when those confidences, if left undisclosed, would constitute a threat to the health, safety or welfare of the public.” Whether or not these rules are open to legal interpretation, the message to professional engineers practicing in Texas is clear: maintaining confidences is important, but protecting the public is essential. And when the two obligations compete, the welfare of the public comes first.

Not surprisingly, this ethical position is hardly unique to the Texas Board of Professional Engineers; the message in the codes of ethics of the American Society of Civil Engineers, National Society of Professional Engineers, the Institute for Professional Environmental Practices, the National Institute for Engineer Ethics, and numerous other professional and technical organizations is consistent: the health and welfare of the public is paramount.

Not all practitioners in the field of ethics hold as tightly to the view that is broadcast in the various engineering codes of ethics. According to Richard T. De George, Director of the International Center for Ethics in Business at the University of Kansas<sup>4</sup>,

“The myth that ethics has no place in engineering has been attacked, and at least in some corners of the engineering profession has been put to rest. Another myth, however, is emerging to take its place – the myth of the engineer as moral hero. A litany of engineering saints is slowly taking form. The saints of the field are whistle blowers, especially those who have sacrificed all for their moral convictions. The zeal of some preachers, however, has gone too far, piling moral responsibility upon moral responsibility on the shoulders of the engineer. The emphasis, I believe is misplaced. Though engineers are members of a

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<sup>3</sup> *The State of Texas Engineering Practice Act and Rules Concerning the Practice of Engineering and Professional Engineering Licensure*. Texas Board of Professional Engineers. Rev, 11-11-2001.

<sup>4</sup> De George, Richard T. *Business and Professional Ethics Journal*, Vol.1, No.1, 1981.

profession that holds public safety paramount, we cannot expect engineers to be willing to sacrifice their jobs each day for the principle and to have a whistle ever by their sides ready to blow if their firm strays from what they perceive to be the morally right course of action.”

How then should a consultant reconcile the message in the various codes of ethics with the view point of De George? Perhaps the best way to arrive at an answer to this question is to view the ethical obligation to communicate threats to the public as a process – one that is driven by sound professional judgment. The purpose of the remainder of this paper is to examine that process.

### **Understanding the Consultant's Role**

The role of the consultant is unique in engineering. Compared to engineers who provide essentially the same type of service for a limited number of companies during a lifetime, the engineering consultant may work for scores of industry categories, hundreds of different companies, and may have to answer to hundreds or even thousands of different bosses during his or her career. Flexibility and adaptability are traits that he or she must possess to be successful.

According to the Engineer's Council for Professional Development, “of all engineering groups, it is likely that the weight of professional responsibility falls most heavily upon the consulting engineer. An examination of the codes of professional ethics shows that this group has generated more rules of conduct than any other, even though it constitutes but a small percentage of the whole engineering body.”<sup>5</sup>

To properly understand the ethical obligations in the context of revealing or reporting information about the client, the consultant must recognize the boundaries of his or her responsibilities; where does public protection end and legal interpretation begin? Lawyers frequently criticize consultants for practicing law without a shingle. In some cases, this criticism is unfair; an environmental consultant would be ineffective if he or she were not conversant in the environmental laws and rules and their common interpretations. However, any consultant who is dedicated to the best interests of his client is going to be reluctant to step too far across the line into the field of rule interpretation, especially if the meaning of a rule is unclear in a specific situation.

From an ethics standpoint, it is not the environmental consultant's role to ensure that his client complies with the law. This doesn't mean that compliance is unimportant or that the consultant can't inform his client what is required by regulatory rule or policy. However, legal compliance is ultimately a matter that should be managed by someone trained in the law. By the same token, the client's legal counsel should not attempt to represent the client on technical grounds – unless, of course, the lawyer is also qualified in the appropriate technical area.

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<sup>5</sup> Alger, Philip L., N.A. Christiansen, and Sterling P. Olmsted. *Ethical Problems in Engineering*. New York: John Wiley & Sons, Inc., 1965.



## **What Does It Mean to Harm the Public?**

Due to their specialized knowledge and experience and the high level of trust that the public places in them, consultants may, at some time in their career, be forced to decide whether to release information about public risks that their clients may be creating. As is clearly stated or implied in almost all of the codes of professional ethics, engineering and other scientific professionals have an obligation to the public that exceeds the obligation of non-professionals. However, knowing where public obligation begins and ends is not always a simple matter. For example, the lawyer may have instructed the client to delay informing the regulatory agency of a noncompliance situation. Or, the client may have elected to continue operating a unit out of compliance until an effective corrective action plan can be implemented. In both cases, the consultant may feel compelled to report his client's noncompliance to the regulatory agency, citing his ethical responsibility to protect the public from harm. However, the well-meaning consultant, accustomed to seeing things in black and white, may not be making the best decision.

In the ideal world that many consultants would like to practice in, everyone would agree on what constitutes harm. Looking at the concept of harm from one extreme, De George holds that an engineer is permitted to go public with information about the safety of a product only "if the harm that will be done by the product to the public is serious and considerable."<sup>6</sup> He further states that if engineers cannot persuade their clients to release information about harmful products, "they are morally *permitted* to make public their views; but they are not morally *obligated* to do so." A more moderate view is presented by Gene James, a professor and lecturer on ethics in the Department of Philosophy at the University of Memphis. According to James, "if we fail to put any limitations on the idea of harm, it seems to shade into the merely offensive or distasteful and thus offers little help in resolving moral problems. But, on the other hand, if we restrict harm to physical injury as De George does, it then applies to such a limited range of cases that it is of minimal help in most of the moral situations which confront us."<sup>7</sup>

Because recognized experts can disagree on what constitutes "harm" and "public protection" - concepts that are subjective at best - engineering societies and government bodies have attempted to reach a consensus regarding good engineering practice, drawing on the broad wisdom and expertise of their professional memberships. This has resulted in the codification of rules for acceptable engineering practice into standard codes – an activity that did not begin in earnest until the early 1900s.<sup>8</sup> Fortunately for both the engineering profession and the public, these codes have taken some of the guesswork out of what constitutes "protection".

For the civil and electrical engineer, protection of the public is, in many situations, synonymous with compliance with building codes and electrical codes. However, in the environmental arena, public protection is not always tied to regulatory or code compliance. Take for example, the case of ongoing emissions of sulfur dioxide (SO<sub>2</sub>) from a particular stack that exceed the limit established in the air quality permit. In this situation, does noncompliance constitute an endangerment to public? Not necessarily. The permit limit may have been established based on the application of best available control technology (BACT) and may, in fact, have no direct correlation to public exposure

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<sup>6</sup> De George

<sup>7</sup> Johnson, Deborah G. *Ethical Issues in Engineering*, Englewood Cliffs, New Jersey: Prentice Hall, 1991.

<sup>8</sup> Alger, et al.

to unacceptable concentrations of SO<sub>2</sub> in the atmosphere. To determine if the public could be harmed by the excess emissions, the environmental consultant might decide to conduct an atmospheric dispersion modeling study for the purpose of estimating SO<sub>2</sub> concentrations in the air that the nearest neighbors breathe. However, even though the modeling shows that certain ambient air quality standards are exceeded, the concentrations in the vicinity of the nearest exposed populations may still be far less than the levels known to result in harm.

The foregoing discussion raises the question: how does the consultant determine if his client's actions are harmful to the public? The failure of a bridge with resultant injuries and deaths is clearly a harmful event. But what levels of air pollution should be considered harmful? Is a nuisance odor or a transient and non-recurring irritation harmful? Should high, short-term exposures to a pollutant be of concern when adverse health effects are only associated with long-term (chronic) exposure? Statistically speaking, what is an acceptable level of risk – one excess cancer death in a million or one in 500,000? Is a release harmful only when there is a chance for death or irreversible injury?

The environmental consultant has an assortment of tools in his box to help in making informed judgments and answering these kinds of questions. These tools include

- ❑ Process Data – What is the nature of the release? What is its magnitude and how has it varied with time? How long has it lasted, and when is it expected to end?
- ❑ The Model – How does the release disperse, and how do concentrations vary downwind/downstream?
- ❑ The EPA Criteria Document – What is the basis for the applicable environmental standard, what are the averaging times or exposure periods of concern, and what levels of conservatism or safety are built-in?
- ❑ Health Effects Studies – What do authoritative scientific studies say about acute and chronic effects of exposure and at what concentrations do these effects occur?
- ❑ Exposure Analyses – What is the land-use in the surrounding area? How close and in what direction are the nearest houses, recreational areas, schools, hospitals, nursing homes, and other sensitive locations? Under what circumstances would the most vulnerable individuals in the community be exposed to concentrations that could cause significant discomfort or irreversible injury?

The last and most useful tool in the box is the consultant's own professional judgment. Implicit in the meaning of the word "professional" is the concept of drawing on specialized knowledge and experience to make sound judgments about the proper analysis and interpretation of information. If the consultant is not able to competently evaluate and interpret the available data, others more capable should be consulted before the decision is made to either withhold or release information about a potentially harmful event.

### **Effective Reporting**

Codes of ethics make a clear case for the need to report information when the public is endangered; they are less explicit about how to go about it. However, certain common

themes, recognizable from a reading of various codes and canons of professional engineering and scientific organizations, provide a basis for identifying the elements of effective reporting. The list presented below embodies many of the principles incorporated into the various codes of ethics. However, it must be emphasized that the difficult and delicate job of reporting negative information about a client is not one that can be reduced to a single checklist. The consultant must be willing to exercise good judgment every step of the way:

- ❑ Can the data supporting the position be verified and documented? Before the consultant makes the decision to report, the data upon which this decision is based must be sound. In addition, the consultant must be able to thoroughly document the basis for reporting; otherwise, his credibility will be open to challenge and his opinions may not be taken seriously.
- ❑ Does the situation warrant reporting? The consultant should weigh and balance the facts and make a decision based on the data available, filtered by his or her own training and experience. In situations when the potential for harm is less than clear, the consultant must be willing to take on the burden of exercising judgment and following his or her conscience, not allowing personal considerations to influence the decision.
- ❑ Are competing priorities being considered? This is, perhaps, the consideration that requires the greatest amount of judgment on the part of the consultant. Protection of the public may not merely be a matter of stopping the activity that causes a release of excess emissions. In a larger context, the uninterrupted operation of the facility may be more beneficial to the public welfare than ending the release. And shutting down a process to end a release may expose the public to a greater threat during subsequent start-up activities. When the consultant judges that the threat to the public is not significant, such competing priorities should carry greater weight.
- ❑ Do other experts concur that a potential for harm exists? Consultants typically have access to professional colleagues in their company, through professional associations, or through other relationships to proof their work and critique their analyses. With the potentially significant ramifications of either reporting or not reporting, the prudent consultant will seek the advice of those who are qualified to provide it. However, the consultant should also keep in mind any confidentiality agreements to which he may be bound in seeking such advice.
- ❑ Is the situation being effectively communicated to the decision-makers? The ability to effectively communicate is not a strong point for some engineers and scientists. However, when the consultant believes that a threat of harm to the public exists, he or she must be able to use the necessary tack, timing, and tone, and demonstrate a high degree of credibility to make a convincing case to the client and others involved in the decision to report. Emotional arguments are rarely effective; a dispassionate and well-documented exposition of the case typically carries more weight.
- ❑ Are the right people in the organization being informed? Typically, the entity best equipped to release information about potential harm due to a release to the environment is the client or company itself. Especially in larger companies,

public information personnel can manage the flow of information to the public so that it is accurate and not mishandled. As a result, the potential for collateral problems arising is minimized. Respecting the client's right to manage sensitive information, the consultant should begin the reporting process by following whatever protocol may exist in the organization. Disregarding the organization's line of command can cause more harm than good.

It's sometimes easy to think that you're off the hook if you have passed your concerns on to the next person up the line, even if that person is not the right person. However, if the consultant believes that no action is being taken because someone in the organization is stonewalling or has made a decision that would allow the harmful event to occur or continue, he or she is ethically obligated to take his concerns to a higher level. If the technical or management staffs of the company are not responding appropriately, the corporate legal staff is the logical next point of contact.

- ❑ Should the information be released to the public? A number of factors should be considered at this crucial step in the decision-making process. De George would have the consultant consider his own job and career before "blowing the whistle". However, personal considerations should be the least of the consultant's worries at this point. More important, the consultant should have confidence that the public will be better protected as a result of releasing the information than if the information were withheld.

Information can be misrepresented by the media and by individuals that don't understand the situation. Regulatory agencies, because they are more informed, are more likely to handle the information correctly. In either case, the consultant must ask himself, "Will the collateral damage resulting from mishandling the information be greater than the harm I am trying to prevent?"

### **The Challenger Incident: A Case Study in Reporting**

It's said that hindsight is better than foresight. Many of the engineers involved in the project leading up to the launch and disastrous explosion of the Space Shuttle Challenger on January 28, 1986, undoubtedly wished that they could have recognized the significance of the O-ring problem. Yet, Roger Boisjoly, a Morton Thiokol design engineer and senior member of the project team, believed that the risk for significant harm was high; he had data confirming that the O-rings would malfunction at low ambient temperatures (less than 53°F), resulting in the blow-by of hot gases and, possibly, a catastrophic explosion. Boisjoly strongly made the case to his colleagues and supervisors that the launch, scheduled for a morning on which the temperature was forecast to drop to 18°F, should be postponed until the O-ring problem was fixed. According to Boisjoly<sup>9</sup>, the night before the launch, NASA made its historic decision.

"The managers were struggling to make a pro-launch list of supporting data but unfortunately for them the data actually supported a decision not to launch. During the closed manager's discussion, Jerry Mason asked in a low voice if he

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<sup>9</sup> Boisjoly, Roger M. *Ethical Decisions: Martin Thiokol and the Space Shuttle Challenger Disaster*. The Online Ethics Center for Engineering and Science at Case Western University ([www.onlinethics.org](http://www.onlinethics.org)).

was the only one who wanted to fly. The discussion continued, then Mason turned to Bob Lund, the vice-president of engineering, and told him to take off his engineering hat and put on his management hat. The decision to launch resulted from the yes vote of only the four senior executives since the rest of us were excluded from both the final decision and the vote poll. Joe Kilminster read the launch support rationale from a handwritten list and recommended that the launch proceed. NASA promptly accepted their recommendation to launch without any probing discussion and asked Joe to send a signed copy of the chart.”

“The change in decision so upset me that I don’t remember Stanley Reinhartz of NASA asking if anyone had anything else to say over the telecom. The telecom was then disconnected so I immediately left the room feeling badly defeated. I wrote the following entry in my notebook after returning to my office. ‘I sincerely hope that this launch does not result in a catastrophe. I personally do not agree with some of the statements made in Joe Kilminster’s written summary stating the SRM-25 is okay to fly.’”

Although the Challenger incident does not fall into the category of environmental reporting ethics, there are many useful parallels to the ethical dilemmas that environmental consultants can face. What then can be learned from the Challenger disaster that can be applied to the debate over a consultant’s reporting obligations? First, a summary of the facts, at least as Roger Boisjoly recounts them:

- ❑ Scientific test data strongly pointed to O-ring failure at lower ambient temperatures.
- ❑ The probability of significant harm (injury and death) was high due to this failure.
- ❑ He reported this problem to supervisors and management on several occasions.
- ❑ He recommended to management that the January 28, 1986, launch be scuttled because of the low forecasted temperatures.
- ❑ Other engineers on the project team supported his recommendations.
- ❑ NASA management decided to override the engineering recommendation and make a management decision to launch.
- ❑ In light of unyielding opposition, he finally gave up on trying to change the decision.

Did Boisjoly fulfill his ethical obligations as a professional engineer, especially with respect to the handling and reporting of information? Was the course of action that he pursued effective in reducing the risk to the Challenger astronauts? One way to answer these questions is to work through the list presented in the preceding section of this paper:

- ❑ Were the data supporting the position verified and documented? Morton Thiokol conducted tests on the O-rings and the results of these tests, which directly related to the potential for malfunction of the O-rings during launch conditions, were well documented and presented to the NASA decision-makers.
- ❑ Did the situation warrant reporting? In Boisjoly’s judgment, the data were sound and overwhelmingly supported the conclusion that there was a significant probability that harm would result.

- ❑ Were competing priorities considered? In the Challenger situation, the threat of harm was so extreme that no competing priorities affected Boisjoly's recommendations.
- ❑ Was the potential for harm independently corroborated by other experts? Boisjoly consulted his engineering colleagues at Morton Thiokol, and they agreed with him that the O-rings posed a serious risk.
- ❑ Was the situation communicated effectively to the decision-makers? Here, it is difficult to assess the effectiveness of Boisjoly's communications. A review of his article shows that he and other members of the engineering team were specific and clear in their reporting of the risk. There was no question what message they were trying to send. Although the situation was extremely emotional and some of the discussions were heated, Boisjoly appears to have stayed with the facts and avoided personal attacks.
- ❑ Were the right people in the organization informed? Prior to the incident it appeared that the engineering team was reaching the right people – the final decision-makers. Boisjoly and his colleagues didn't simply document their concerns to protect themselves; they made sure that the decision-makers heard and understood their concerns. Unfortunately, the final decision by management about how to interpret the O-ring evidence and, consequently, the final decision to go ahead with mission came only hours before the launch. In hindsight then, it could be argued that too little was done too late.
- ❑ Ultimately, was information effectively and appropriately communicated to those potentially affected? Neither Boisjoly nor other members of the engineering team went public with the information, at least before the disaster occurred. From a reading of his account of the event, it doesn't appear that Boisjoly alerted the individuals most vulnerable to the threat posed by NASA's final launch decision – the astronauts themselves. Nor was the media informed of what Boisjoly believed to be a dangerous decision. It is important to note that the O-ring flaw only evolved from a design problem to a real threat when NASA management decided to place greater weight on management considerations than engineering ones. And this decision was made very late in the game.

Once again, did Boisjoly act ethically in his reporting of this situation? By all accounts he did; but in spite of his best judgment and intentions, a catastrophe occurred.

## **Conclusion**

Strident disagreements such as the one described in the introduction to this paper should be rare occurrences for the environmental consultant. And, hopefully, no consultant will be placed in the "life or death situation" in which the Challenger project engineers found themselves. However, environmental engineers and scientists, lawyers, and other professionals may reasonably disagree on the proper and ethical course of action in a "borderline" situation – for example, when opposite, but defensible conclusions are reached about the hazards posed by an ongoing environmental release or the degree of risk that is acceptable. The competing pressures of confidentiality and contractual obligation may strongly influence the consultant's decision. And the specter of unemployment may hang over the consultant turned whistle-blower. However, the

consultant must always remember that protection of the public is paramount and must take seriously the obligation to exercise sound judgment. Regardless of the consequences, the consultant is ultimately bound by the fundamental principle of professional ethics in any decision that he or she makes.



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Ms. Longroy is a partner with Carrington, Coleman, Sloman and Blumenthal, L.L.P. and has focused her legal practice on environmental and real estate law. In her environmental law practice, Ms. Longroy has advised landowners and prospective purchasers related to environmental site assessments, subsurface investigations, remediation agreements, and permitting requirements, often in connection with commercial real estate or capital transactions. She also counsels landowners and business owners concerning compliance issues, voluntary self-audits, and agency-ordered or voluntary cleanups. She has maintained an active docket of federal and state environmental litigation, including toxic tort, cost-recovery actions and environmental insurance defense, and has defended administrative enforcement actions and criminal investigations.

Ms. Longroy=s real estate practice primarily focuses on commercial, industrial, and residential subdivision building and development, which has periodically involved issues concerning land use, water rights, and resolving landowner disputes. She offers counseling to both buyers and sellers of real estate, landlords and tenants concerning commercial leases, including build-to-suit, pad site and ground leases, and has assisted borrowers in negotiating mortgage loan documents.

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**A LAWYER'S PERSPECTIVE**  
**ON**  
**ENVIRONMENTAL REPORTING ETHICS**

*Cat on a Hot Tin Roof*

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State Bar of Texas -  
The Fourteenth Annual Texas  
Environmental Superconference  
August 1-2, 2002  
Austin, Texas

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**A LAWYER'S PERSPECTIVE  
ON  
ENVIRONMENTAL REPORTING ETHICS**

***Cat on a Hot Tin Roof***

By: Sally A. Longroy<sup>1</sup>  
Carrington, Coleman, Sloman & Blumenthal, L.L.P.

**I. INTRODUCTION**

Friction between the many environmental reporting and disclosure requirements and the Texas Disciplinary Rules of Professional Conduct's confidentiality obligations creates one of the principal ethical tensions for lawyers in environmental practice. By the nature of their professional duties, attorneys (and technical professionals) are privy to highly sensitive information about their clients. The information may deal with compliance with applicable laws, or with the presence or release of contamination at property owned or operated by clients.

Traditionally, a professional relationship has been recognized as creating special responsibilities to the client. One of the hallmarks of that relationship has been the professional's duty of confidentiality. Ethical codes addressing an attorney's confidentiality responsibilities have been in place for some time. However, the explosion of environmental regulation over the past few decades has triggered new debate over the traditional balancing of the duty of confidentiality on the one hand with the need to protect the public health and safety on the other hand.<sup>2</sup>

By virtue of his recent article entitled *Beware Legal Cover-Ups*, which appeared in the March 2002 issue of EM, the Air & Waste Management Association's magazine for environmental managers, Hal Taback revived debate about consultants' and attorneys' roles upon discovery of releases that may threaten public health.<sup>3</sup> In the article, Mr. Taback considers a consultant's ethical obligations to disclose client confidences. He presents a scenario in which a consultant, engaged by legal counsel, discovers during an environmental compliance audit the release of toxic chemicals that the consultant is certain will threaten public health. The lawyer directs the consultant to stop work and not submit his finding in writing, then reminds the

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<sup>1</sup> With the permission of West Publishing Company, this paper includes an update to and expansion of a portion of Chapter 32 of 46 TEXAS PRACTICE ENVIRONMENTAL LAW §§ 32.2-32.8 (Jeff Civins et al. eds., 1997), authored by Bonita C. Barksdale, Charles C. Jordan, and John S. Slavich.

<sup>2</sup> See generally Walker, *Ethical Problems in the Solid and Hazardous Waste Management Practice*, 22 ST. B. TEX. ENV'T'L. L.J. 1-9 (Summer 1991); Dotterer, *Attorney-Client Confidentiality: The Ethics of Toxic-Dumping Disclosure*, 35 WAYNE L. REV. 1157 (Spring 1989).

<sup>3</sup> Hal Taback, *Beware Legal Cover-Ups*, EM (March 2002).

consultant of his contract which obligates the consultant to maintain confidentiality. The lawyer informs the consultant that he will handle any reporting and resists providing the consultant information about how or whether the release will be reported. While the consultant's ethical obligations are beyond the scope of this paper, this paper should provide some insights on the basis for the attorney's actions that may appear to the consultant to be secretive or callous towards the public.

For resolution of ethical dilemmas, the environmental practitioner must consider the primary law of professional responsibility including:

1. The Texas Disciplinary Rules of Professional Conduct ("TDRPCs");<sup>4</sup>
2. The American Bar Association's Model Rules of Professional Conduct ("Model Rules");<sup>5</sup>
3. The Texas Lawyer's Creed;<sup>6</sup>
4. Applicable rules of civil procedure;<sup>7</sup> and
5. Statutes legislating particular conduct in the face of ethical considerations.<sup>8</sup>

In addition to these codifications, a small but growing body of common law focuses on ethical concerns of the environmental practitioner.

## II. DISCLOSURE REQUIREMENTS IMPOSED ON OWNER/OPERATORS

An attorney's ethical disclosure obligations must be considered in the context of the client's disclosure obligations. The owner and operator of a facility permitted for air emissions, wastewater discharge, or waste disposal are commonly subject to record retention and reporting

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<sup>4</sup> TEX. DISCIPLINARY R. PROF'L CONDUCT, *reprinted in* TEX. GOV'T CODE ANN., tit. 2, subtit. G app. A (West 1998) (TEX. STATE BAR R. art. X, § 9). Useful secondary sources include Robt. F. Schuwerk and John F. Sutton, Jr., A GUIDE TO THE TEXAS DISCIPLINARY RULES OF PROFESSIONAL CONDUCT (1990) and Charles F. Herring, Jr., TEXAS LEGAL MALPRACTICE & LAWYER DISCIPLINE (1991).

<sup>5</sup> MODEL RULES OF PROFESSIONAL CONDUCT (ABA 2002). A useful secondary source is ABA/BNA LAWYER'S MANUAL ON PROFESSIONAL CONDUCT (ABA/BNA).

<sup>6</sup> *See* Joint Order dated November 7, 1989, of the Texas Supreme Court and the Court of Criminal Appeals, *reprinted* 52 TEX. B.J. 1302 (1989).

<sup>7</sup> *See, e.g.*, TEX. R. CIV. P. 13 (bad faith or groundless pleadings); TEX. R. CIV. P. 215 (discovery abuse); FED. R. CIV. P. 11 (pleadings unfounded in fact or law); FED. R. CIV. P. 60 (misconduct as grounds for relief from court order).

<sup>8</sup> *See, e.g.*, TEX. GOV'T CODE ANN. § 2001.061 (West 2000) (*ex parte* communications in agency proceedings); TEX. GOV'T CODE ANN. § 572.054 (West 1994) (revolving door limitations).

requirements by virtue of permit conditions. Such requirements may be imposed by statute or regulation, as well. In addition to routine reporting of operations-related data, the owner/operator may be required to report extraordinary events. For example, the Texas Natural Resource Conservation Commission, to be known as the Texas Commission on Environmental Quality on September 1, 2002 (“TCEQ”), mandates immediate reporting of major upset conditions causing excessive contaminant emissions.<sup>9</sup> The owner/operator suffering an accidental discharge or spill causing pollution must notify the TCEQ immediately, as well.<sup>10</sup> More specifically, tank owners or operators must report confirmed spills and releases from underground storage tanks (and other suspicious tank conditions) to TCEQ immediately.<sup>11</sup> Operators at well sites and pipeline facilities must report leakage as well as other potentially harmful circumstances.<sup>12</sup> Criminal sanctions are imposed for the intentional or knowing failure by a person to notify or report to the TCEQ in accordance with a rule, permit or order issued by the appropriate agency.<sup>13</sup>

### III. DUTIES OF CONFIDENTIALITY UNDER THE DISCIPLINARY RULES

The TDRPCs define two classes of confidential information learned in the course of representing a client that a lawyer must maintain in confidence, in the absence of cause for discretionary or mandatory disclosure. “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 by the principles of attorney-client privilege governed by Rule 501 of the Federal Rules of Evidence.<sup>14</sup> “Unprivileged client information” refers to all information relating to a client or furnished by a client (other than privileged information) acquired during the course of or by reason of the representation of a client.<sup>15</sup>

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<sup>9</sup> 30 TEX. ADMIN. CODE § 101.6 (West 2002).

<sup>10</sup> TEX. WATER CODE ANN. § 26.039 (West 2000).

<sup>11</sup> 30 TEX. ADMIN. CODE § 334.72 (West 2002).

<sup>12</sup> 16 TEX. ADMIN. CODE § 3.20 (WEST 2002).

<sup>13</sup> TEX. WATER CODE ANN. § 7.150 (West 2000).

<sup>14</sup> TEX. DISCIPLINARY R. PROF’L CONDUCT 1.05(a). TDRPC 1.05(a) has not been updated to reflect the combination of the Texas Rules of Evidence and the Texas Rules of Criminal Evidence and continues to include in the definition of “privileged information,” that information protected by the lawyer-client privilege under Rule 503 of the Texas Rules of Criminal Evidence. Order, TEX. R. EVID., Court of Criminal Appeals of Texas, Feb. 25, 1998, *available at* WL 13839. *See also*, Order, TEX. R. EVID., Supreme Court of Texas, Feb. 25, 1998, *available at* WL 13838.

<sup>15</sup> TEX. DISCIPLINARY R. PROF’L CONDUCT 1.01(a).

## A. Disclosures of Confidential Information

### 1. Permitted Disclosure of Confidential Information

Disclosure of confidential information is allowed, but not required, under several different provisions of the TDRPCs. The TDRPCs, of course, permit such disclosure with the client's express authorization<sup>16</sup> or consent after consultation.<sup>17</sup> Attorneys may also disclose confidential information to the client's representatives and members, associates, and employees of the lawyer's law firm (unless otherwise instructed by the client).<sup>18</sup>

The TDRPCs permits disclosure of confidential information by the lawyer "[w]hen the lawyer has reason to believe it is necessary to do so in order to comply with a court order, a Texas Disciplinary Rule of Professional Conduct, *or other law*."<sup>19</sup> This rule gives leeway for the disclosure of confidential information when counsel determines that governing law requires it. The rule is silent, however, as to whose compliance obligation is addressed -- the client's or the lawyer's. If counsel determines that substantive law imposes a duty of disclosure *on counsel*, then it appears that the TDRPCs will allow the lawyer to disclose confidential information without threat of sanction. However, it is less clear that the provision authorizes the lawyer to disclose confidential information (e.g., the occurrence of a reportable spill) merely because the lawyer determines that *the client* is obligated by law to disclose such information, but fails or refuses to do so.<sup>20</sup>

Although it provides no clear answers, Comment 14 to TDRPC 1.05 offers some guidance to lawyers contemplating a discretionary disclosure. The comment suggests that a lawyer consider such factors as "the magnitude, proximity, and likelihood of the contemplated wrong, the nature of the lawyer's relationship with the client and with those who might be injured by the client, the lawyer's own involvement in the transaction, and factors that may extenuate the client's conduct in question."<sup>21</sup>

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<sup>16</sup> *Id.* at 1.05(c)(1).

<sup>17</sup> *Id.* at 1.05(c)(2).

<sup>18</sup> *Id.* at 1.05(c)(3).

<sup>19</sup> *Id.* at 1.05(c)(4) [emphasis added].

<sup>20</sup> See Section III.D. for a discussion of ABA Comm. on Ethics and Professional Responsibility, Formal Op. 93-375 (1993) (observing that the duty to disclose takes precedence over the duty to keep client confidences under MODEL RULES OF PROFESSIONAL CONDUCT Rule 3.3 (adjudicative proceeding) or 3.9 (legislative or administrative tribunal)).

<sup>21</sup> TEX. DISCIPLINARY R. PROF'L CONDUCT 1.05 cmt. 14; see also MODEL RULES OF PROFESSIONAL CONDUCT Rule 1.6 cmt. 13.

## 2. Mandatory Disclosure of Confidential Information

Mandated disclosure of confidences have created substantially more controversy than discretionary ones. The TDRPCs *require* disclosure when a lawyer has confidential information clearly establishing that a client is likely to commit a criminal or fraudulent act likely to result in death or substantial bodily harm to a person.<sup>22</sup> TDRPC 1.05 holds special interest for the environmental practitioner. Activities of members of the regulated community may on occasion endanger human health (unlike clients' business activities in many other civil practice fields). There also is frequently a potential for the regulated client to commit crimes without apparent *mens rea*, because the burden of proof on criminal intent is relatively low, or sometimes non-existent.<sup>23</sup> An example is the client who confesses an intention not to report or respond to the spill of a toxic substance, raising the questions whether (a) the conduct would be criminal and (b) whether the conduct would "likely" result in "substantial bodily harm," given variables such as waste toxicity and degree of human exposure.

A key concern to the practitioner is determining when the duty under TDRPC 1.05 to prevent human endangerment overrides the lawyer's duty to maintain his or her client's confidences. The TDRPCs' requirement that client confidences be disclosed under qualifying circumstances is a rare example of mandated disclosure, focusing attention on the precise scope of this duty. A comparison of the Texas rule with the ABA's analogous Model Rule 1.6 is instructive. There are two substantial distinctions: (1) Assuming the predicates of the rule are satisfied, the Texas rule *requires* lawyer disclosure when the Model Rule only permits it; and (2) the Texas rule is triggered only when the conduct is criminal or fraudulent. Although the former Model Rule required *imminence* of health effects, it was amended to be triggered whenever necessary to prevent "reasonably certain death or substantial bodily harm."<sup>24</sup> The omission of the imminence standard from both the Model Rule and the TDRPCs suggests the drafters' intent that a circumstance like the presence of released carcinogens or toxicants which are predicted to cause some increased risk of death or illness with exposure over time should trigger the endangerment exception to the presumption of confidentiality. New Comment 6 to the Model Rule makes clear that imminence of the threat is unnecessary and that a lawyer may make a disclosure "if there is a present and substantial threat that a person will suffer [death or substantial bodily] harm at a later date if the lawyer fails to take action necessary to eliminate the

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<sup>22</sup> TEX. DISCIPLINARY R. PROF'L CONDUCT 1.05(e), reading in pertinent part:

(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.

<sup>23</sup> See, e.g., TEX. WATER CODE ANN. §§ 7.154, 7.155 (West, 2000).

<sup>24</sup> MODEL RULES OF PROFESSIONAL CONDUCT Rule 1.6(b)(1) (2002).

threat.”<sup>25</sup> The Comments to TDRPC 1.05(e) do not shed much light on the question, but a bias against breaking a confidence was clearly intended. Like the Model Rules, the Comments to the TDRPCs recite emphatically that “the lawyer’s decisions . . . should not constitute grounds for discipline unless the lawyer’s conduct . . . was unreasonable under all existing circumstances.”<sup>26</sup>

While the substantive law of professional responsibility does not offer much help in assessing the application of TDRPC 1.05(e) in this setting, under the Clean Air Act, Clean Water Act, Resource Conservation and Recovery Act, and federal Sentencing Guidelines, certain conduct, undertaken knowingly, which places another person in “imminent danger of death or serious bodily injury,” subjects the actor to criminal penalties.<sup>27</sup> Cases addressing the issue of when a defendant’s conduct results in “knowing endangerment” furnish some guidance, by analogy, in interpreting TDRPC 1.05(e), even if these precedents are concerned with criminal culpability rather than a civil standard for professional discipline. The few reported cases suggest that remote health effects of toxic exposure may be relevant in determining whether such exposure amounts to “endangerment.”<sup>28</sup> If TDRPC 1.05(e) were so interpreted, it would raise numerous questions. Unlike murder or assault, threats of toxic exposures are less capable of identification, much less quantification. However, with the omission of any requirement that “substantial bodily harm” immediately follow the client’s act, and mandated disclosure of confidential information related to the client’s criminal concealment, the TDRPCs offer reason to consider carefully the long-term health consequences of a client’s activities where criminal conduct is known or suspected.

## **B. Crime-fraud exceptions to confidentiality**

The TDRPCs contain two additional provisions mandating disclosure of client confidences.

The first so-called “crime-fraud” exception to an attorney’s obligation to retain client confidences is found in TDRPC 4.01(b), which requires the Texas practitioner to disclose *any*

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<sup>25</sup> MODEL RULES OF PROFESSIONAL CONDUCT Rule 1.6 cmt. 6.

<sup>26</sup> TEX. DISCIPLINARY R. PROF’L CONDUCT 1.05 cmt. 20; MODEL RULES OF PROFESSIONAL CONDUCT Rule 1.6 cmt. 13.

<sup>27</sup> The knowing endangerment provisions of these statutes are at 42 U.S.C. § 7413(c)(5)(a), 33 U.S.C. § 1319(c)(3)(a), and 42 U.S.C. § 6928(e), respectively. *See also*, TEX. WATER CODE ANN. Ch. 7, Subch. E (West 2000 and West Supp. 2002). The applicable Sentencing Guideline is guideline § 2Q1.1; *See* U.S. Sentencing Comm., FEDERAL SENTENCING GUIDELINES MANUAL (West 1994).

<sup>28</sup> *See United States v. Villegas*, 784 F.Supp. 6. (S.D.N.Y. 1991), *rev’d, remanded sub nom, United States v. Plaza Health Lab.*, 3 F.3d 643 (2d Cir. 1993), *cert. denied*, 512 U.S. 1245 (1994) (Clean Water Act knowing endangerment prosecution stemming from waterfront dumping of specimens of hepatitis B-infected blood samples); *United States v. Protex Indust., Inc.*, 874 F.2d 740 (10th Cir. 1989) (RCRA knowing endangerment prosecution of steel drum reconditioner based on defendant’s failure to provide adequate safety precautions in the workplace). *See also U.S. v. Borowski*, 977 F.2d 27 (1st Cir. 1992).



material fact to a third person when disclosure is necessary to avoid making the lawyer *a party* to a criminal or fraudulent act perpetrated by a client.<sup>29</sup> Strict compliance is dictated for obvious reasons, including (but by no means limited to) the ethical ramifications.

The other “crime-fraud” exception is in TDRPC 3.03(a), requiring disclosure of confidences to avoid *assisting* a criminal or fraudulent act specifically in the practitioner’s representation of a client before a “tribunal,” where a failure to disclose would be knowing and *regardless* of the materiality of the undisclosed fact (though the commission of a crime or fraud itself would imply that materiality is essential).<sup>30</sup> Where substantive laws require provision of information or data to a regulatory agency and impose criminal sanctions for violations,<sup>31</sup> the practitioner must not only attempt to avoid complicity in a client’s criminal act predicated on the withholding of relevant information, but also must consider when disclosure of confidential information under TDRPC 3.03 is required. This section focuses on the interpretation of TDRPC 3.03 in the contexts of administrative practices and litigation.

The environmental practitioner representing a client before a regulatory agency may, from time to time, be required to furnish information to the agency relating to the representation. In an administrative proceeding, an issue to consider is whether the agency is a “tribunal.” The definition in the Preamble of the TDRPCs explicitly includes “administrative agencies when engaging in adjudicatory or licensing activities.”<sup>32</sup> By implication, the agency performing a

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<sup>29</sup> TEX. DISCIPLINARY R. PROF’L CONDUCT 4.01. Materiality of the undisclosed fact is not directly relevant under TDRPC 4.01. Materiality may be required, however, as an element of the criminal offense which counsel is alleged to be assisting.

<sup>30</sup> TEX. DISCIPLINARY R. PROF’L CONDUCT 3.03(a)(2).

<sup>31</sup> A wide range of federal and state statutes may apply. *See, e.g.*, 42 U.S.C. § 6928(d)(3) (knowing omission of material information from or false statement in document required to be maintained or submitted under RCRA); 18 U.S.C. § 1001 (knowing falsification or concealment of material fact in any matter within the jurisdiction of any department or agency of the United States); TEX. WATER CODE ANN. § 7.155 (West 2000) (failing to report spills or discharge on discovery); TEX. WATER CODE ANN. § 7.162(a)(3) (West 2000) (intentional or knowing false representation in or omission of material information from document required to be maintained under the Texas Solid Waste Disposal Act); TEX. WATER CODE ANN. § 7.162(a)(8) (West 2000) (failing to notify or report to TCEQ under Texas Solid Waste Disposal Act); TEX. WATER CODE ANN. § 7.180 (West 2000) (intentional or knowing failure to notify or report under the Texas Clean Air Act); *See also* Eva M. Fromm, *Commanding Respect: Criminal Sanctions for Environmental Crimes*, 21 ST. MARY’S L.J. 821 (1990) (hereinafter “Fromm”).

<sup>32</sup> The tribunal is generally defined as the “seat of a judge.” *Black’s Law Dictionary* (West 5th ed. 1979). The Preamble to the TDRPCs, however, is much more explicit, defining a “tribunal” as:

... [A]ny governmental body or official or any other person engaged in a process of resolving a particular dispute or controversy. “Tribunal” includes such institutions as courts and *administrative agencies when engaging in adjudicatory or licensing activities* as defined by applicable law or rules of practice or procedure, as well as judges, magistrates, special masters, referees, arbitrators, mediators, *hearing officers* and comparable persons empowered to resolve or to recommend a resolution of a particular matter ... but it does not include ... governmental bodies when acting in a legislative or rule-making capacity.

purely regulatory function (for example, a facility inspection or maintenance of agency files concerning regulated parties) is *not* a tribunal. The practitioner obviously must be alert to the possibility that the environmental agency overseeing a permit application, or determining liability in an enforcement proceeding, or performing similar functions, might be a “tribunal” within the meaning of the TDRPCs.

Where the criminal act of concern is a failure to report data as required by permit or rule, the agency’s function is not adjudicatory and its role is not that of a tribunal. Accordingly, the lawyer’s ethical obligations should not be governed by TDRPC 3.03. When, however, there is a possibility that the agency is a “tribunal,” TDRPC 3.03 clearly requires no disclosures by counsel unless the failure to do so would “assist” a criminal act. Whether counsel’s silence must rise to the level of “aiding and abetting” the criminal act in question is not clear from either the rule itself or the Comments to the rule, which concern themselves primarily with perjury. Where the criminal act of concern is a failure to respond completely or accurately to the agency’s request for information in the course of a permit, enforcement, or similar adjudicatory proceeding,<sup>33</sup> the person responsible for reporting such data will be subject to the law, but others will not; if counsel does not assume responsibility for reporting, arguably counsel is not capable of committing the crime.<sup>34</sup>

Conversely, where the client “hides behind” his or her lawyer and the lawyer’s silence would amount to actionable concealment, Rule 3.03 obligates the lawyer to make curative disclosures if unable to persuade the client to do so. The ultimate difficulty is in assessing when silence will be construed to be fraud, a question for which there is no all-purpose answer. If, however, the lawyer has not taken the unusual step of assuming reporting or disclosure duties on behalf of a client, interceding between client and agency, the agency cannot reasonably claim reliance on the lawyer’s silence.

### **C. The Threat of Civil Sanctions by Agencies**

Public agencies other than the EPA have aggressively claimed reliance, however, on lawyers’ failure to disclose regulatorily sensitive information.<sup>35</sup> To address some of the ethical

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TEX. DISCIPLINARY R. PROF’L CONDUCT Terminology [emphasis supplied]. The Comments to TDRPC 3.03 mention only courts, and not agencies, in referring to tribunals.

<sup>33</sup> See TEX. WATER CODE ANN. § 7.149 (West 2000).

<sup>34</sup> TDRPC 3.03 and the comments to the rule do not, however, negate the possibility that disclosure obligations may be triggered by the potential for “conspiracy” or “aiding and abetting” liability arising from counsel’s representation of his or her client.

<sup>35</sup> Most prominently, the United States Office of Thrift Supervision has pursued a prominent national law firm in an administrative action for alleged reporting improprieties under federal regulations applying in the context of bank examinations. *In the Matter of Peter M. Fishbein*, OTS AP No. 92-27 (Office of Thrift Supervision, Department of Treasury, March 11, 1992). The administrative case settled with the target law firm agreeing to a \$41,000,000 payment to OTS.

issues presented by the claim that duties of disclosure may be owed to public agencies *by counsel*, the ABA Standing Committee on Ethics and Professional Responsibility has issued a Formal Opinion.<sup>36</sup> Opinion 93-375 expressly directs itself to omissions and false statements in the context of the banking examination.<sup>37</sup> The opinion initially concludes that the bank regulatory agency should not be regarded as a “tribunal” within the meaning of Model Rule 3.3.<sup>38</sup>

Similarly, the opinion concludes that a routine bank examination should not be treated as an “adjudicative proceeding” under Model Rule 3.3, and thus should not bring into play the duty of candor imposed by that rule.<sup>39</sup> The opinion states that because of the overriding importance of protecting client confidences, the applicable rules should be interpreted to protect confidences, “even if the result is to allow the client to engage in fraud.”<sup>40</sup>

With respect to the more subtle aspects of the problem, where no affirmative misstatement of fact by client or counsel is involved, the opinion suggests that counsel’s omission to state a material fact concerning the subject matter of the examination could “be tantamount to an affirmative false statement” if the context is such that counsel knows that the omission “is likely to mislead” the examiners.<sup>41</sup> The opinion is clear that such conclusion does not rest on an abstract characterization of the lawyer’s role in representing the client (as agent, for instance).

Opinion 93-375 does not firmly establish a precedent on which environmental agencies might rely in making a claim for breach of ethics against counsel to members of the regulated community. First, it is difficult to draw a parallel between a bank examination by banking authorities and the commonplace inspection by an environmental agency. The examination, it may be argued, is essential to the banking authority’s guarantee of an institution’s deposits for the public’s benefit; the environmental agency regulates by permit and enforcement action, but does not so directly “underwrite” legal compliance of members of its regulated community. This

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<sup>36</sup> ABA Comm. on Ethics and Professional Responsibility, Formal Op. 93-375 (1993).

<sup>37</sup> Opinion 93-375 presents and discusses the issues of the lawyer’s duties to the client and to the examiner in the context of a banking examination, including the lawyer’s obligations to his client if he believes certain disclosures by the client are legally required; the lawyer’s duty to correct false statements made by his client in the lawyer’s presence; the lawyer’s omission of material information from a response by the lawyer to the examiner; and other related issues.

<sup>38</sup> See Section III.B. for a discussion of the relevance of this determination.

<sup>39</sup> See Section III.B. for a discussion of the duty of candor in adjudicative proceedings under the TDRPCs and the Model Rules.

<sup>40</sup> See Op. 93-375, *supra* note 36 at 4.

<sup>41</sup> *Id.* at 6.

distinction argues against a literal application of the guidelines in Opinion 93-375 to the commonplace agency inspection, or even to the more formal context of the permit application.

Information gathering by the environmental agency in the permitting process is perhaps somewhat more akin to the bank examination. While it is conceivable that counsel to the permit applicant might assume an inappropriately high degree of control over communications with an agency, a key distinction is the fact that the process of bank examination is not exposed to the public (raising the importance of full voluntary disclosure by the regulated institution); the permitting process in contested cases is apt to involve protestants and an adversarial component.

There is undoubtedly some policy justification for discipline of lawyers whom the client succeeds in “hiding behind,” *assuming* it can be established that the lawyers’ actions or omissions amounted to misrepresentations of fact as suggested in Opinion 93-375. If the private practitioner’s dealings with an environmental agency are so motivated, then it is reasonable to expect that the agency might very well attempt a direct action against the practitioner. Such actions would, of necessity, be based on violations by the attorney of substantive laws or rules administered by the agency and *not* on allegations of ethical misconduct.

#### **D. The Threat of Civil Sanctions by the Court**

Ground-breaking law establishing the parameters of the litigator’s duty to disclose problematic privileged information has been made in the environmental case law.<sup>42</sup> The *Shaffer* litigation dealt with a U.S. Attorney’s duty to inform a trial court of the perjury of a material witness through falsification of academic credentials -- a fitting ethical subject for a practice area demanding frequent support from technical experts.

The *Shaffer* case was a CERCLA cost recovery action brought in 1990 by the Department of Justice. The action related to a polychlorinated biphenyl (PCB) removal action in West Virginia overseen by a Robert E. Caron, the EPA’s On-Scene Coordinator. In addition to directing on-site activity by the EPA’s contractors, Mr. Caron participated substantially in the formation of the administrative record leading up to the institution of litigation by the U.S. against various potentially responsible parties (“PRPs”). Government counsel planned for him to be a material fact witness for the U.S. It appears that Mr. Caron had misrepresented his credentials in applying for his position at the EPA; instead of the undergraduate degree from Rutgers in environmental sciences and master’s degree from Drexel in organic chemistry which his application to EPA disclosed, the evidence in the case established that he attended college without graduating and had never enrolled in graduate school.

Notwithstanding the fact that attorneys involved in the *Shaffer* litigation at both the EPA and Department of Justice were aware of Mr. Caron’s misrepresentations, and certain of those same lawyers were also aware of a pending criminal investigation of Mr. Caron’s alleged

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<sup>42</sup> *U.S. v. Shaffer Equip. Co.*, 796 F. Supp. 938 (S.D. W.Va. 1992); *aff’d in part, rev’d in part, vacated and remanded*, 11 F.3d 450 (4th Cir. 1993).

perjury, neither the court nor counsel for the defendants in the action were advised. After Justice elected to file a motion for summary judgment including affidavits by Caron and involving an administrative record in which Caron participated substantially, the defendants moved for dismissal of the case with prejudice and sanctions against several participating assistant U.S. Attorneys, based on violation of the duty of candor as set forth in the local version of Model Rule 3.3.

The trial court granted both motions, holding that lead counsel for the U.S., his supervisors, and counsel at EPA involved in preparing the case for trial had all violated the duty of candor. The court seems to have been particularly moved by lead counsel's failure, for a period in excess of four months, to inform the court of a pending criminal investigation being carried out by the Office of the Inspector General regarding Caron's testimony in a 1988 criminal case (unrelated to the case at bar). The court also was affronted that the government's lawyers had elected to file a motion for summary judgment predicated on Mr. Caron's affidavit, without allusion to the substantial questions about his credibility raised by Justice's own client agency.

On appeal, the Fourth Circuit found that the evidence supported an award of sanctions and emphatically endorsed the trial court's exercise of its inherent powers, but vacated the dismissal.<sup>43</sup> The case was remanded for the imposition of sanctions short of dismissal. The Fourth Circuit's decision seems to have been premised on the overriding concern that trial courts must exercise inherent powers with great restraint due to the absence of statutory or other articulated limits.<sup>44</sup>

Whether the duty of candor of the government's representatives is higher than that of private practitioners is not clear. Neither TDRPC 3.03 nor the opinions in *Shaffer* mention that factor. The trial court's opinion suggests, however, that if the situation were reversed, the defendants' counsel would have been sanctioned with equal force.

Whether the practitioner practices in the public or private sector, the tension between the duty of candor and duties to the client must be carefully weighed at every turn. The courts may be slow to reach beyond the rules regulating the interrelationships of lawyers with clients and adversaries to the duty of candor and the exercise of inherent powers. But as is evident from the reaction of the court in *Shaffer*, once the rule is invoked, lawyers (and their clients) may be at substantial risk where the boundaries established by the duty of candor have not been adequately observed.

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<sup>43</sup> *U.S. v. Shaffer Equip. Co.*, 11 F.3d 450, 463 (4th Cir. 1993).

<sup>44</sup> *Id.* at 461-2.

## E. The Threat of Criminal Sanctions

Beyond the threat of professional disciplinary action or civil liability for inappropriate concealment lies a more serious possibility: the characterization of a lawyer's refusal to breach confidentiality as criminal concealment. There exists a difficult tension between the obligations of confidentiality imposed by the TDRPCs and Texas' reporting and disclosure laws, some of which carry criminal sanctions. The principal statutes in Texas defining criminal conduct in the context of environmental reporting and disclosure fail to define with much precision the parties who are potentially culpable under the law.<sup>45</sup> One exception is § 7.155 of the Water Code, which makes only persons operating, in charge of, or responsible for a facility or vessel that causes a discharge criminally liable for failure to report such a discovery.<sup>46</sup> Under other law, the ambitious prosecutor may argue that any party who controls the preparation of a submission to a regulatory agency may be subjected to liability for a faulty or incomplete submission, at least to the extent of control by such person. While the practitioner is agent and not principal, the lawyer can exert substantial influence in preparing communications and presentations on his or her client's behalf.

On the other hand, counsel cannot easily be accused of endangerment offenses<sup>47</sup> under normal circumstances. The law expressly negates the attribution of culpable intention or knowledge to the accused.<sup>48</sup> The client's state of mind may not be attributed to the lawyer, even assuming the highly unusual circumstance that the lawyer could be proven to have committed the remaining elements of a statutory endangerment offense.

## IV. MANAGING DISCLOSURES

Getting back to the ethical dilemma presented by Mr. Taback, an attorney may remind an environmental consultant of confidentiality obligations and refrain from providing much

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<sup>45</sup> See, e.g. TEX. WATER CODE ANN. § 7.162(a)(3) (West 2000), providing in relevant part:

A person commits an offense if the person, acting intentionally or knowingly with respect to the person's conduct: omits or causes to be omitted material information, makes or causes to be made a false material statement or representation in any application, label, manifest, record, report, permit, plan, or other document, filed, maintained, or used to comply with any requirement of Chapter 361, Health and Safety Code, applicable to hazardous waste.

See *supra* note 31, for citations to other potentially relevant statutes criminalizing reporting violations.

<sup>46</sup> TEX. WATER CODE ANN. § 7.155 (West 2000).

<sup>47</sup> Endangerment offenses are defined as the discharge or allowance of the discharge of a waste or pollutant, resulting in human endangerment. See, e.g., TEX. WATER CODE ANN. §§ 7.152, 7.153, 7.154, and 7.163 (West 2000).

<sup>48</sup> *Id.*

information to the consultant about when or whether a release of toxic chemicals will be reported for a number of reasons, many of which are neither sinister nor wrongful. A lawyer professional responsibilities contemplate zealously pursuing a clients' best interests within the bounds of the law.<sup>49</sup> This may involve managing disclosures of information adverse to a client in such a way as to minimize any damage to the client or its reputation. Although a lawyer, bound by its ethical obligations to the client, may not be at liberty to discuss the lawyer's advise concerning applicable laws or any other client confidences with the consultant, the lawyer will likely be charged with the responsibility to take appropriate steps intended to manage and control the disclosure of damaging information, including the prevention of an environmental consultant's preemptive disclosure. Disclosures can be made while exploiting the full benefit of laws specifically designed to encourage disclosures and compliance, while minimizing the client's liability. For example, if the environmental compliance audit in Mr. Taback's example were done in accordance with Texas' Environmental Health, and Safety Audit Privilege Act, the client could be entitled to claim immunity from administrative or civil penalties related to the release of toxic chemicals if the disclosure were made properly to the appropriate authority and the appropriate steps were taken to correct the violation.<sup>50</sup> To the contrary, a preemptive disclosure by an environmental consultant to the regulatory authorities could potentially subject the client to substantial penalties and adversely affect the client's relationship with the regulatory authorities and perception by the public. In addition, a client will likely have a considerable interest in managing such a disclosure to the public through the media, with hopes of putting its actions taken in response to a potentially damaging discovery in the best light.

## V. CONCLUSION

To maintain the proper functioning of the legal system and encourage free discussion between a lawyer and a client, a lawyer's primary obligation must be to retain confidential information of his or her client. Only a few situations give a lawyer the discretion, and fewer still the obligation, to make disclosures adverse to a client's interest. As illustrated by the discussion above, many factors must be considered in weighing a lawyer's fiduciary obligations against preventing criminal or fraudulent acts and protecting public health and safety.

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<sup>49</sup> TEX. DISCIPLINARY R. PROF'L CONDUCT Preamble.

<sup>50</sup> TEX. REV. CIV. STAT. ANN. art. 4447cc (West Supp. 2002).

**Mark R. Vickery**

**Deputy Director  
Office of Permitting, Remediation and Registration  
Texas Natural Resource Conservation Commission**

Mark Vickery serves as Deputy Director for the Office of Permitting, Remediation and Registration of the Texas Natural Resource Conservation Commission. The Office is comprised of six divisions, including Air Permits, Remediation, Registration, Review and Reporting, Waste Permits, Water Quality, and Water Supply. The Office also houses the Toxicology and Risk Assessment program of the agency.

Mark Vickery previously served as Deputy Director for the Office of Compliance and Enforcement of the Texas Natural Resource Conservation Commission. The Office of Compliance and Enforcement is comprised of four divisions, including Field Operations, which includes more than a third of the TNRCC workforce.

Before assuming his duties as Deputy Director, Mr. Vickery served as Director of the Field Operations Division for two years. Other positions held by Mr. Vickery include Manager of the Waste Tire Recycling Program and management positions in the agency's regulatory enforcement programs. He has been with the TNRCC for 14 years.

Mr. Vickery is a native Texan and attended Texas Tech University in Lubbock, Texas where he received a Bachelor of Science Degree in Geology. Prior to joining the TNRCC, Mr. Vickery worked as an exploration geologist in Midland, Texas.



# Permit Timeframe Reduction Project

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Mark Vickery  
Deputy Director  
OPRR

Fourteenth Annual  
Texas Environmental Superconference  
“Give our Regards to Broadway”  
August 1-2, 2002

# What is Permit Timeframe Reduction (PTR)?

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A project designed to improve the efficiency of the permitting process by shortening uncontested permit review and processing times for the major types of permits TNRCC reviews.

# What TNRCC Programs are Affected by PTR?

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## All permitting programs including:

- Air - PBR, NSR, standard, and site and general operating permits
- Waste - IHW, MSW, and UIC
- Water Quality - agricultural, industrial, municipal, sludge, and stormwater
- Water Supply - CCNs, water districts, and water rights

# Who is Affected by PTR?

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**Any entity (person, company, corporation, etc.) making application to the TNRCC to receive:**

- A new or renewal permit,
- A permit amendment, modification, and/or revision,
- A CAFO registration, and/or
- A water district creation or conversion.

# TNRCC Believes

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- That identifying efficiencies in the permit review process will serve the environment.
- That process improvements will not reduce the environmental protectiveness that currently exists in application reviews.
- That any resulting policy or regulatory changes to reduce processing times will not sacrifice environmental protection.

# PTR Goals

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- Complete backlogged applications designated as Priority 1 by December 31, 2002
- Identify and eliminate barriers in order to process permits more timely and efficiently

# What is a Backlog?

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During initial development of the PTR project, TNRCC calculated the historic time it took to process permits then set new aggressive time frames for processing each type of permit. The new processing time frames are significantly shorter than the historic time frames. Permits that exceed these new time frames are considered to be backlogged.

# The goals TNRCC has set are aggressive.

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## **Achieving the goals will require:**

- Focused commitment by TNRCC staff and management, and
- Cooperation by the permit applicants.



# PTF Project Exceptions

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- Applications that are contested
- Applications involving review or approval processes outside the control of TNRCC procedures

# PTR Project Categories

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- **Priority 1** - Includes applications for new authorizations or amendments for construction and/or operation.
- **Priority 2** - Includes applications for renewals and all other authorizations.

# PTR Implementation Schedule

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- January 2002 - Executive discussions commenced
- February 2002 - Goals set & action plans developed
- March 2002 - Project implemented at program level
- April 2002 - Trend charts posted on Web
- June 2002 - Funding transferability approved
- July 2002 - EPA contracts commence

# Streamlining Ideas from Staff

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- Improve process training
- Expand use of interns
- Develop resource needs lists
- Improve templates and guidelines
- Adjust technical and support tasks
- Provide overtime compensation
- Pursue EPA contract partnership

All of these ideas have been implemented by the permitting divisions.

# Constraints Identified to Date

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## **Statutory and/or Regulatory**

- When in the process is public notice published
- When public comment is responded to by staff
- When in the process is the public hearing conducted

## **Policy and/or Guidance**

- Process mechanics, is there an easier way?
- Provide and/or update existing documents
- Develop Standard Operating Procedures

# Constraints Identified to Date

(continued)

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## Agency Infrastructure and Staff Culture

- Database limitations
- Completeness of applications
- Resources

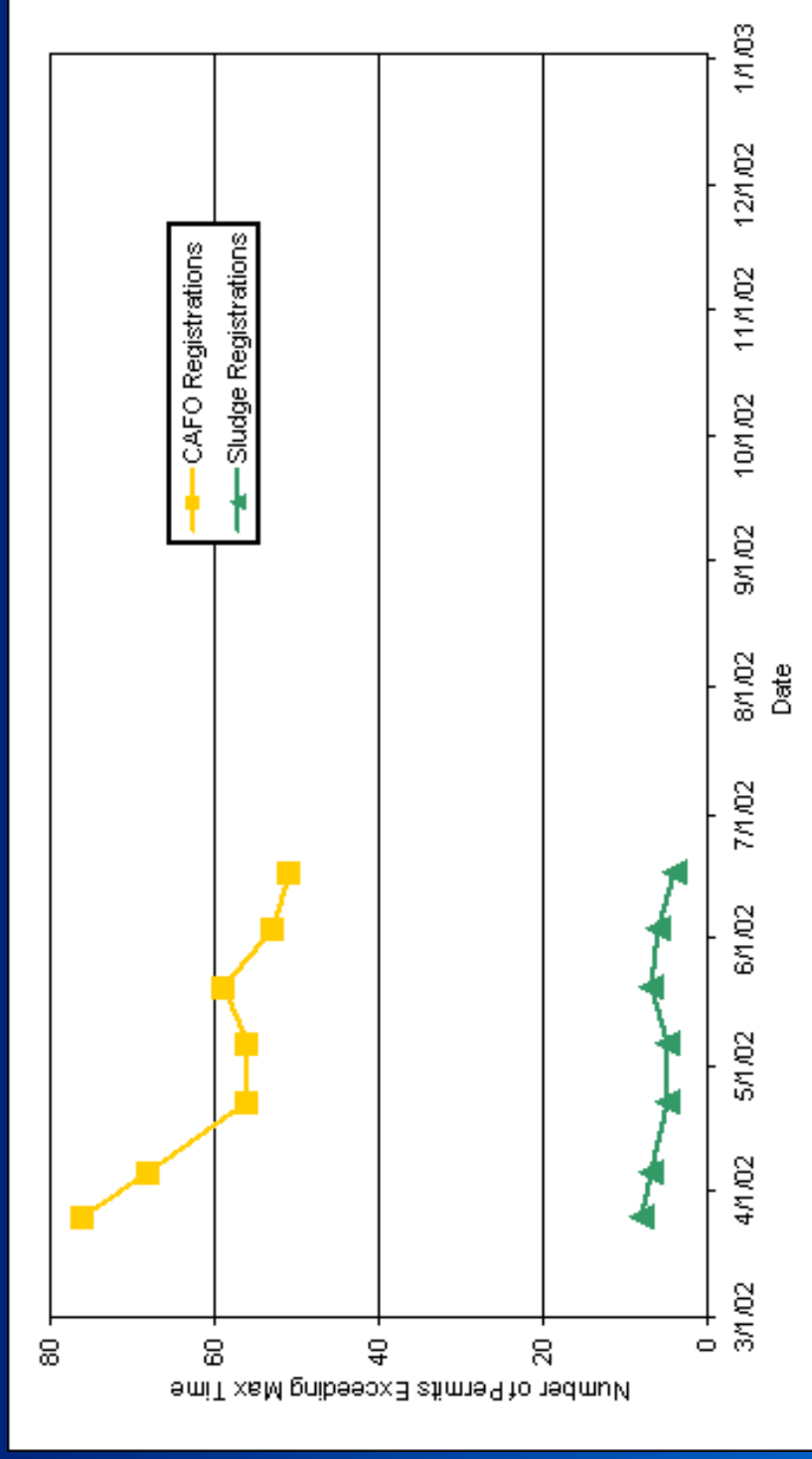
# Awareness/Accountability

Example of Priority 1 Table (Water Quality)

Project Type	Average Processing Time	Total Under Review	Target Maximum	Number Under Review Exceeding Target
Wastewater New Permits (Major Facility)	511	1	330	0
Wastewater Major Amendments (Major Facility)	652	55	330	31
Wastewater/Concentrated Animal Feeding Operations (CAFO) New Permits (minor facility)	427	180	330	30
Wastewater/Concentrated Animal Feeding Operations Major Amendments (minor facility)	551	138	300	51
Concentrated Animal Feeding Operations Registrations	220	128	330	51
Sludge Registrations/Permits	228	15	270	4

# Awareness/Accountability

## Example of Priority 1 chart (Water Quality)





# Visit Us on the Web

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[www.tnrcc.state.tx.us](http://www.tnrcc.state.tx.us)

## **J. D. HEAD**

J. D. Head is an equity partner with the firm of Fritz, Byrne, Head & Harrison, LLP in Austin, Texas. Mr. Head concentrates his practice in the areas of administrative and environmental law. Prior to joining Fritz, Byrne, Head & Harrison, Mr. Head served as general counsel to the Texas Water Commission. He additionally served as the director of the Commission's Legal Division before his appointment as general counsel. As director of the Legal Division, Mr. Head supervised the Commission's legal staff in the areas of water utilities, water rights, water quality and solid and hazardous waste. Mr. Head participates in both the State Bar of Texas and American Bar Association sections on administrative and environmental law matters.

Mr. Head was born and raised in Houston, Texas. He graduated from Stanford University with a bachelor's degree in Psychology in 1976, and obtained a law degree from the University of Texas in 1980.

## **TNRCC PERMITTING**

### **BY J. D. HEAD**

Presenting a paper on the broad topic of Texas Natural Resource Conservation Commission (“TNRCC”) permitting is indeed a daunting task. The TNRCC, our state’s environmental agency, is statutorily empowered to issue permits on the entire spectrum of environmental media. The agency’s jurisdiction encompasses permitting of hazardous waste treatment, storage and disposal facilities,<sup>1</sup> municipal solid waste (“MSW”) facilities,<sup>2</sup> non-hazardous industrial solid waste facilities,<sup>3</sup> underground injection wells,<sup>4</sup> municipal and industrial wastewater discharges,<sup>5</sup> water rights,<sup>6</sup> and air emission sources,<sup>7</sup> among others. Within the permitting scheme are individual permits, general permits, permits-by-rule, consolidated permits, flexible permits, and standard permits.<sup>8</sup> Given the breadth of the TNRCC’s permitting program, it is not feasible to comprehensively address all its various aspects in this paper.

The scope of this paper is, to some extent, a reflection of the writer’s experience in TNRCC permitting matters from both the applicant’s and protestant’s perspective. The first section herein is an endeavor to suggest practical advice on procuring TNRCC permits, with the emphasis on potentially contested matters. Many of these observations are common sense; others are derived from recent permitting actions before the agency. The second section discusses recent statutory and regulatory changes germane to the permitting process. This section analyzes the pros and cons of the House Bill 801 public participation process versus direct referral to the State Office of Administrative Hearings (“SOAH”). Finally, this section summarizes modifications to agency permitting processes based on provisions in the TNRCC’s recent Sunset Legislation, House Bill 2912, i.e., consideration of compliance histories in permitting decisions and Executive Director participation in contested case hearings.

## **I. PRACTICAL TIPS FOR TNRCC PERMITTING**

### **A. Location, Location, Location**

#### **1. Regulatory Siting Requirements**

The siting of a facility or project, be it a landfill, confined animal feeding operation, sludge application site, wastewater treatment plant, or air emission

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<sup>1</sup> § 361.082 Texas Health & Safety Code

<sup>2</sup> § 361.061 Texas Health & Safety Code

<sup>3</sup> § 361.061 Texas Health & Safety Code

<sup>4</sup> § 27.011 Texas Water Code

<sup>5</sup> § 26.027 Texas Water Code

<sup>6</sup> § 11.121 Texas Water Code

<sup>7</sup> § 382.051 Texas Health & Safety Code

<sup>8</sup> Other forms of authorizations exist, including registrations and licensing.

source, will often dictate whether, and to what extent, a permit is contested. While permit renewals or amendments for existing facilities can and often do draw protests, the focus of this section is on permitting of greenfield sites. Obviously, in investigating a location for a new facility which will require environmental permits, regulatory due diligence is essential. For example, selection of a site for a proposed MSW landfill will first entail a review of the location restrictions set forth in 30 T.A.C. §§ 330.300-305. Initially, site selection involves a determination whether a proposed site possesses fatal flaws with respect to airport safety, flood plains, wetlands, fault areas, seismic impact zones, or unstable areas. For siting of a hazardous waste storage, processing or disposal facility, the location standards are more substantive and comprehensive. See 30 T.A.C. §§ 335.201 - 335.206. These regulations, in addition to listing unsuitable site characteristics, also set forth specific distance limitations from established residences, churches, schools, daycare centers, and surface water bodies used for public drinking water supply or dedicated public parks. Location standards have also been adopted for domestic wastewater treatment facilities, 30 T.A.C. §§ 309.10 – 309.14, and lead smelting plants, 30 T.A.C. § 116.112. In order to qualify for an air quality permit-by-rule, and thus avoid permitting, depending on the emission source, there are mandatory distance limitations from receptors.<sup>9</sup>

## 2. County Landfill Siting Ordinances

With respect to siting of municipal solid or industrial solid waste landfills, the site selection process must necessarily entail determining whether the county in which the landfill is proposed to be located has adopted an ordinance prohibiting such disposal in certain locations within the county pursuant to § 364.012 of the Texas Health & Safety Code. A county's powers in this regard are only applicable to commercial facilities. Moreover, a county commissioners court may not prohibit the processing or disposal of municipal or industrial waste in an area of that county for which an application for a permit has been filed and is pending with the TNRCC. § 364.012(e) Texas Health & Safety Code. The writer is aware of local ordinances in Chambers, Fort Bend, McMullen, Kinney, Reeves, and Grimes Counties that have been adopted pursuant to these authorities.

## 3. Land Use Compatibility

Aside from the regulatory siting criteria or county ordinances, one should exercise common sense in site selection. For instance, permits issued under Chapter 361 of the Texas Health & Safety Code, relating to municipal and industrial waste, are subject to a separate (and initial) adjudicatory determination on the question of land use compatibility as opposed to technical matters. § 361.069 Texas Health & Safety Code. TNRCC regulations specifically state that a primary concern is that the use of any

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<sup>9</sup> 30 T.A.C. Chapter 106.

land for a MSW site not adversely impact human health or the environment. The impact of the site upon a city, community, group of property owners, or individuals shall be considered in terms of compatibility of land use, zoning in the vicinity, community growth patterns, and other factors associated with the public interest. 30 T.A.C. § 330.53(b)(A). In view of this provision, good judgment dictates not locating a landfill in close proximity to a suburban residential subdivision. The Spring Cypress Type IV landfill permit application was denied by the Commission on this basis.

#### 4. Good Sense Siting

An applicant is inviting a contested case hearing by, for instance, seeking to locate a wastewater facility that would directly discharge into relatively pristine water bodies such as the Comal, San Marcos, or Upper Guadalupe Rivers. Moreover, prudence dictates against applying for a sludge application permit<sup>10</sup> in the direct vicinity of residential housing, despite the fact that the regulations only require a 750 foot buffer from occupied residential structures. 30 T.A.C. § 312.44(d).

With respect to location of facilities that will result in air emissions, one should consider the nuisance potential vis-à-vis receptors in close proximity to the proposed location. Remember, compliance history will be an issue for permit renewals and amendments and numerous air nuisance enforcement actions will effect future permitting.<sup>11</sup> In addition, one should take into account production restrictions on the facility after air modeling is conducted where receptors are in close proximity.

Requesting a surface water diversion point in the vicinity of established river recreational use is, again, an invitation to a contested case hearing. There have recently been a number of contested hearing requests on diversions from the Upper Guadalupe River based on potential impacts to recreation.

#### 5. Know Your Neighbors

It is suggested that once the site is preliminarily located, that one conduct due diligence regarding surrounding landowners who either would receive mailed notice of the application or would potentially be affected parties for purposes of a contested case hearing. If you discover that Michael Dell, T. Boone Pickens, or H. Ross Perot is an immediate downstream landowner from your proposed discharge point, you may want to consider relocation prior to closing on the land. Moreover, one should think twice before locating a landfill next to residences of elected state officials or hostile in-laws.

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<sup>10</sup> New § 361.121 Texas Health & Safety Code requires permits for Class B sludge land application after September 1, 2003.

<sup>11</sup> Section 382.0518(c), 382.055(d), 382.056(o) Texas Health & Safety Code.

Obviously, no matter where some facilities are proposed to be located, one can expect a contested case hearing. For instance, with the exception of the Waste Control Specialist facility near Andrews, Texas, there has not been an uncontested hazardous waste landfill permit application in the State of Texas in the last 20 years. MSW landfills are, more often than not, opposed. For these and other activities, a contested case proceeding is almost a certainty. However, an applicant can potentially avoid a hotly contested hearing and/or significantly funded opposition, by utilizing due diligence in the site selection process.

#### B. Don't Forget Your Politics

One of the surest ways to have a permit application protested is to ignore local politics. From my experience in representing municipalities and county governments, the worst thing that can happen with an environmental project is for the mayor or county judge to first discover a proposed permit either through the TNRCC formal mailed notice or from irate constituents. In most instances, local officials believe they are owed the courtesy of advanced knowledge of a new project within or close to their jurisdiction.

An applicant should seriously consider, when a proposed facility location is identified, discussing the project with local officials, including the county judge and mayor (if within or near an incorporated area). It is also advisable to consider bringing the proposed project to the attention of elected state and federal officials. Of course, these discussions should emphasize the advantages of the facility vis-à-vis the community and the environmental safeguards included in the project. While this early notification will not necessarily ensure that the county or municipality will not oppose a permit, it may instill some good will. Moreover, if proper lines of communications are established and elected officials are satisfied with the environmental safeguards, the county or city might elect not to earmark public funds to contest the project. In other words, while a county or city might pass a resolution in opposition of the project, it might not actively oppose the project.

With respect to elected officials, particularly concerning a controversial project which has elicited a public outcry, the applicant should be mindful of the potential for single-shot legislation to defeat a proposed facility. For instance, House Bill 2912, the TNRCC Sunset Legislation, included a provision, codified at § 361.122 of the Texas Health & Safety Code as follows:

The commission may not issue a permit for a Type IV landfill if:

1. The proposed site is located within 100 feet of a canal that is used as a public drinking water source or for

irrigation of crops used for human or animal consumption;

2. The proposed site is located in a county with a population of more than 225,000 that is located adjacent to the Gulf of Mexico; and
3. Prior to final consideration of the application by the commission, the commissioners of the county in which the facility is located have adopted a resolution recommending denial of the application.

This law, introduced by a Brazoria County elected official, was specifically earmarked to essentially outlaw the application of a proposed Type IV landfill in the vicinity of Arcola in Brazoria County. Suffice it to say, the applicant failed in its politics on this project. While the legality of such single shot legislation is questionable, no applicant wants to bear the time and expense to engage in court proceedings on the constitutionality of such a bill. Therefore, if an applicant is concerned over adverse bills during the Texas legislative session that might impact its application, the applicant should consider engaging a lobbyist to monitor the situation and take appropriate action.

In an application for a proposed MSW landfill, the applicant should coordinate with the local council of government ("COG"). It is advisable to review the COG's solid waste plan prior to site selection in order to make a determination of what the COG's recommendation on the project will be vis-à-vis consistency with its solid waste plan. Finally, an applicant should consider opening up lines of communication with potentially affected landowners prior to the filing of the application. In some instances, the landowners' concern can be addressed upfront, either through minor revisions to the proposed project or simply an explanation of the facility's operations. Once again, an adjacent landowner who discovers the project for the first time through mailed notice will often times retaliate by requesting a contested case hearing and/or attempting to gain the support of local officials in fighting the proposed facility.

#### C. Bulletproof the Application

The initial application (including all technical attachments) establishes the TNRCC's first impression of the project. First impressions are important. Moreover, if the draft permit is protested, the applicant will have to live or die with the contents of the application. Therefore, the original application submission is crucial. At all costs, one should avoid submitting a barebones application with the thought of later supplementation if protests arise.

It is advisable to avail oneself of any opportunity to meet with TNRCC staff prior to submission of an application. This is a common practice in MSW, air quality and water rights permitting. While the staff involved in any pre-application meetings may not necessarily be the personnel ultimately assigned to the application, the initial engagement with the TNRCC often gives the applicant an idea of what concerns exist from the agency's perspective regarding a proposed project or facility. With regard to air permitting, such meetings can be useful for an initial determination of whether the staff will require modeling. It is suggested that an applicant obtain, either at or prior to a pre-application conference, the TNRCC's permit application checklist used by the staff in reviewing the application.

In preparing an application, particularly with respect to a project that will likely attract opposition, an applicant should engage a highly qualified team of consultants upfront, including legal counsel.<sup>12</sup> It is advisable to retain consultants experienced with the TNRCC permitting process who have participated as witnesses in contested case hearings. From an evidentiary standpoint, it is wise to utilize consultants in the application preparation process that have expertise and are comfortable testifying in an adjudicatory proceeding. Inasmuch as TNRCC staff will be prohibited from assisting applicants in meeting their burden of proof, or rehabilitating applicant's witnesses, it is imperative to put together a competent permit team.<sup>13</sup> Experienced consultants should know the subtle nuances of the TNRCC's construction of certain technical requirements which can avoid notice of deficiencies ("NODs") after staff review. If the TNRCC staff is compelled to issue numerous NODs with respect to the technical components of the application, this can negatively impact the agency's perception of a project. Moreover, numerous NODs tend to, in some instances, highlight deficiencies in the project which can be fertile ground for protestants to the application.

While every application will be different, based on facility location, geology, hydrology, quality of receiving water, etc., set forth below are some observations relating to potential problem areas in applications:

1. Prepare a comprehensive operating plan for solid waste permit applications. A site operating plan must include sufficient detail to enable a permittee to conduct day-to-day operations. It is not enough to merely copy a portion of a TNRCC regulation, say for fire protection, and include this in the application. Non-believers are referred to the March 22, 2002 Travis County District Court final judgment reversing and remanding issuance of a permit amendment to BFI. *Martinez Environmental Group, et al. v. TNRCC*, Cause No. GNO-03403, 98<sup>th</sup> Judicial District Court of Travis County, Texas.

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<sup>12</sup> You knew that was coming!!

<sup>13</sup> See § II.C. of this paper.



2. Subsurface characterization is typically a key contested issue in landfill hearings. Cutting corners on aquiclude delineation and subsurface stratigraphy through inadequate soil borings is a recipe for NODs and protestant challenges.
3. In view of the Commission decision denying the MSW permit of Blue Flats Disposal, LLC,<sup>14</sup> an applicant should focus particular attention on off-site drainage issues in MSW applications. An application must include calculations or analyses of (a) existing and post-development run-off volumes; (b) existing and post-development run-off velocities; and (c) documentation that the proposed landfill will not significantly alter natural drainage patterns. (See TNRCC April 29, 2002 Memorandum on MSW Hydrology Issues attached).
4. If opposition to a domestic wastewater discharge plant is expected, consider using tertiary treatment. It is very difficult for a protestant to successfully contest a 5/5/2/1 discharge permit. Inasmuch as the TMDL program may necessitate retrofits in the future, it makes sense to consider installing advanced wastewater treatment upfront. The same thought applies to domestic wastewater irrigation permits. If opposition is anticipated, propose a more stringent treatment level than is minimally required.
5. In water rights applications, an applicant should consider having its consultants perform water availability studies and environmental assessments on the effects of water quality, groundwater, habitat, and bays and estuaries. Although the TNRCC staff independently conducts these analyses, a recent SOAH proposal for decision implied concern over the lack of detail in the State's analysis of environmental impacts.<sup>15</sup>
6. The TNRCC's technical regulations and statutes are the controlling authority and thus establish the applicant's burden of proof. An applicant must ensure its application meets all regulatory standards and not just those items found in TNRCC application form documents.

## II. RECENT REGULATORY AND STATUTORY DEVELOPMENTS

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<sup>14</sup> TNRCC Docket No. 1998-0415-MSW; SOAH Docket No. 582-98-1390 (January 2, 2001).

<sup>15</sup> See Southerland Properties, Inc.; SOAH Docket No. 582-01-1272; TNRCC Docket No. 2000-1230-WR.

## IN PERMITTING

### A. House Bill 801 or Direct Referral – You Decide

At the 13<sup>th</sup> Annual Texas Environmental Superconference, Molly Cagle<sup>16</sup> and Jim Blackburn and Mary Carter<sup>17</sup> presented excellent papers opining on the early impacts of House Bill 801.<sup>18</sup> Generally speaking, House Bill 801, and its implementing rules,<sup>19</sup> established two major revisions to the contested case process. First, House Bill 801 provided for (1) early notice of permit applications as applied to permits under Chapters 26 and 27 Texas Water Code and Chapter 361 Texas Health & Safety Code; (2) enhanced public participation included the opportunity for public meetings (prior to any contested case hearing); and (3) the requirement that the Executive Director respond to comments on a draft permit and preliminary decision on the application. Second, House Bill 801 requires the Commissioners to (1) limit the issues referred to SOAH based on relevant and material disputed questions of fact raised in the public comment period; and (2) to instruct SOAH regarding permit hearing timeframes. Suffice it to say that neither Ms. Cagle nor Mr. Blackburn and Ms. Carter were satisfied with the initial stages of the House Bill 801 process.

In the 2001 legislative session, the Legislature enacted Senate Bill 688 which added new § 5.557 to the Texas Water Code. This law was a response to disenchantment with House Bill 801. Now, an applicant may request direct referral to SOAH immediately after the Executive Director issues a preliminary decision on an application.<sup>20</sup> Under current law, therefore, an applicant has a choice whether to subject itself to the House Bill 801 process or proceed directly to a SOAH contested case hearing. What should one do?

It is indisputable that House Bill 801 lengthens the permit process. Interested persons are accorded 30 days to submit comments on the notice of application and preliminary decision, but this period is automatically extended to the close of any public meeting. 30 T.A.C. § 55.152(b). While in some cases a public meeting is at the discretion of the Executive Director, a public meeting is mandatory if (1) requested by a member of the Legislature representing the general area where the facility is located (or proposed to be located); (2) required by law, i.e., a solid waste management facility; or (3) if the Executive Director determines there is a substantial or significant degree of public interest in the application. 30 T.A.C. § 55.154. In practice, if a public meeting is held, the comment period can last much longer than 30 days due to the logistics of setting up the meeting location. After the close of the comment period, the Executive Director

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<sup>16</sup> Wearing red and in the corner of applicants.

<sup>17</sup> Wearing green and in the protestants' corner.

<sup>18</sup> House Bill 801, 76<sup>th</sup> Leg.:RS (1999). Adding §§ 5.551 – 5.556 to the Texas Water Code.

<sup>19</sup> 30 T.A.C. Chapters 39, 50, 55, and 80.

<sup>20</sup> The Executive Director may also request direct referral. See 30 T.A.C. § 55.210 and 30 T.A.C. § 80.126.

has 60 days to respond to comments. It is only after the response to comments that a new round of filings begin . . . requests for contested case hearings, replies to requests for contested case hearings, and the responses to replies . . . and then the Commission agenda for determination of affected parties and relevant and material disputed issues. At best, this entails a 155 day period from the initiation of the public comment period.

One of the provisions of the House Bill 801 process was the requirement that the Executive Director file with the Chief Clerk a response to each relevant and material public comment. The Executive Director is accorded 60 days to respond to comments on a notice of application and preliminary decision. 30 T.A.C. § 55.156(b)(3).<sup>21</sup> Although it was the intention of the work group drafting House Bill 801 that the responses to comments would lead to either the Executive Director or the applicant's (voluntary) revision of the draft permit to address protestants' concerns, these expectations have not borne fruit. Typically, the agency's response to comments on the application, draft permit, and preliminary decision has been an endorsement of the draft permit. The Executive Director's comments often state that the permit conditions, if complied with, will address the issues raised by commentors. This, of course, is consistent with the agency staff supporting its preliminary decision on the draft permit.

Another intent of the House Bill 801 public participation process, to limit the scope of contested issues referred to SOAH, has not been realized. As aptly noted by Blackburn & Carter, a sophisticated protestant will raise every potential fact issue in the comment period and subsequent request for contested case hearing to preserve these matters for SOAH referral. House Bill 801 specifically prevents the Commission from referring an issue to SOAH "unless the Commission determines that the issue is relevant and material to the decision on the application." § 5.556(d)(3) Texas Water Code. "Relevant" and "material" are not defined in the statute. Moreover, in the House Bill 801 implementing rules, "relevant" and "material" were again left undefined. In the preamble to these regulations, the Commission stated that the specific determination of what is "relevant and material" will vary from case to case to reflect the particular facts of a specific application and of the statutes and rules applicable to that permit. In practice, the TNRCC, in construing "relevant" and "material" for purposes of issue definition for referral to SOAH, has defaulted to dictionary definitions. In a recent House Bill 801 proceeding, the Executive Director referred to the Webster Third International Dictionary's definition of "relevant" as "bearing upon or properly applying to the matter at hand." The Executive Director relied on Webster's definition of "material" as "being of real importance or great consequence . . . substantial, . . . essential." The Executive Director's staff has taken the position that if the information concerning an issue raised by a commenter, if shown to be true, would have some effect upon the Commission's decision on the application, it is relevant. Similarly, if the same information, if shown to

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<sup>21</sup> There is no sanction for failing to meet this deadline.

be true, would have a significant, consequential, or substantial bearing upon the Commission's decision on the application, it is material.<sup>22</sup>

It is submitted that, in applying this threshold as to whether an issue is material or relevant, a sophisticated protestant will not be seriously constrained by issue limitations. It is simply not that difficult to tie a disputed fact issue to a statutory or regulatory requirement related to protection of human health, safety, or the environment.

From an applicant's perspective, the House Bill 801 process adds upfront procedural delays before submission of a contested case to SOAH. An experienced protestant can, under the current procedures, manage to have most, if not all, pertinent issues referred to SOAH under the standards for "material and relevant" issues. While the hearing time may be compressed by order of the Commission, this is not necessarily advantageous to either party. An abbreviated discovery and hearing schedule can lead to an impediment of orderly discovery in the contested case hearing. Moreover, if SOAH adheres to an extremely strict hearing schedule, this opens the process to appeal points on allegations of deprivation of due process by the litigants.

The option of direct referral to SOAH, after the Executive Director issues a preliminary decision on the application, avoids some of the procedural delays inherent in the House Bill 801 process.<sup>23</sup> While direct referral requires that SOAH conduct a contested case hearing on whether the application complies with all applicable statutory and regulatory requirements (a broader scoped hearing), in reality a sophisticated protestant will obtain referral of all of the pertinent issues to SOAH anyway – only with the additional time lags. Moreover, in the vast majority of cases, the applicant is cognizant of what the pertinent issues will be in any SOAH proceeding prior to the application being noticed to the public.

Although both the House Bill 801 process and direct referral are currently available to applicants, the current trend for experienced practitioners in TNRCC permitting matters is towards direct SOAH referral. In a typical case, an applicant is anxious to obtain a permit as soon as possible. This often lends itself to direct referrals to SOAH to avoid the procedural delays. Moreover, the House Bill 801 process has not, to date, achieved its goal of substantially narrowing the issues in contested permit proceedings.

#### B. Compliance History and Permitting

For years, an applicant's compliance history has been a factor for consideration in Commission deliberation on permits. Prior to the enactment of House

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<sup>22</sup> See Executive Director Response to Hearing Requests; Application of Hays County Development District No. 1; TNRCC Docket No. 2002-0444-MWD.

<sup>23</sup> i.e., public meetings, Commission decisions on party status and limitations of issues.

Bill 2912 in 2001, by statute the TNRCC was to consider compliance history in permit decisions on solid waste management facilities (§§ 361.084, 361.089 Texas Health & Safety Code), municipal wastewater discharges (§ 26.0281 Texas Water Code), and hazardous injection wells (§ 27.051(a) Texas Water Code). In certain permitting matters, TNRCC staff compiled compliance summaries as a component of application processing. See 30 T.A.C. § 281.21(d); 30 T.A.C. § 116.121. Under the current consolidated permit regulations, the Commission may deny a permit renewal (30 T.A.C. § 305.65(5)), involuntarily transfer a permit (30 T.A.C. § 64(i)), or deny, suspend or revoke a permit (30 T.A.C. § 305.66) for poor environmental compliance.

Despite this existing authority, as of May 2000, a permit had never been denied by the TNRCC based on an applicant's compliance history.<sup>24</sup> Subsequent to the enactment of House Bill 2912, the Commission, on March 22, 2002 did deny renewal of a confined animal feeding operation permit. See Application of Gerald Oosten for TPDES Permit No. 03142; SOAH Docket No. 582-01-033; TNRCC Docket No. 2000-0620-AGR. In this case, the Commission denied the renewal, after a contested case hearing, based on findings of a record of significant environmental violations in the preceding 5 years and a failure to make a substantial attempt to correct the violations. See 30 T.A.C. §§ 305.66(f) and (g).<sup>25</sup>

Based on findings by the Sunset Advisory Commission that compliance history is inconsistently defined and applied by the TNRCC, thus limiting its use as a permitting and enforcement tool, the 77<sup>th</sup> Legislature, in enacting House Bill 2912, included numerous provisions related to compliance history.<sup>26</sup> This legislation established a two-step process in the implementation of compliance history evaluation. First, § 5.753 of the Texas Water Code requires the TNRCC to develop, by rule, a uniform standard for evaluating compliance history. This essentially entails a regulatory determination of the components of compliance history. Second, § 5.754 of the Texas Water Code mandates that the TNRCC establish a set of standards for classification of person's compliance history and rules for use of compliance history classification in Commission decisions.

The Commission has adopted rules, effective January 9, 2002, implementing § 5.753 of the Texas Water Code. These rules are codified at 30 T.A.C. § 60.1. See 27 Tex.Reg. 191-263 (January 4, 2002). The Chapter 60 regulations apply to persons subject to requirements of the Texas Water Code, Chapters 26 (Wastewater

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<sup>24</sup> Sunset Advisory Commission Staff Report; Texas Natural Resource Conservation Commission at p. 24 (May 2000). The TNRCC did, however, revoke permits of Malone Service Company for non-compliance; TNRCC Docket No. 95-1270-IHW-E; SOAH Docket No. 582-95-1654 (April 30, 1977).

<sup>25</sup> The Commission order is currently under appeal and the Travis County District Court recently issued an injunction allowing continued operation at this facility.

<sup>26</sup> The primary provisions were included in § 4.01 of House Bill 2912, which added subchapter Q, performance based regulations, to Chapter 5 of the Texas Water Code, including §§ 5.753 and 5.754.

Discharge) and 27 (Injection Wells) and Texas Health & Safety Code Chapters 361 (Solid Waste), 382 (Air), and 401 (Radiation Control).

Pursuant to the statute and § 60.1, the agency will utilize compliance history when making decisions regarding:

1. The issuance, renewal, amendment, modification, denial, suspension or revocation of a permit;<sup>27</sup>
2. Enforcement;
3. The use of announced investigations; and
4. Participation in innovative programs.

Compliance histories are not applicable to: voluntary permit revocations; minor amendments, and non-substantive corrections to permits; TPDES and UIC minor permit modifications; Class I solid waste modifications (except for change in ownership); MSW Class I modifications (except for temporary authorizations and MSW Class I modifications requiring public notice); permit alterations, administrative revisions, and air quality new source review permit amendments which meet the criteria of §§ 39.402(a)(1)-(3) in minor permit revisions under Chapter 122 relating to federal operating permits.

As of September 1, 2002, the agency shall apply the use of compliance histories in decisions relating to:

1. Applications submitted on or after September 1, 2002 for the issuance, amendment, modification, or renewal of permits;
2. Inspections and flexible permitting;
3. A proceeding that is initiated or an action that is brought on or after September 1, 2002 for the suspension or revocation of a permit or the imposition of a penalty in matters under the jurisdiction of the Commission; and
4. Application submitted on or after September 1, 2002 for other forms of authorization, or participation in an innovative program, except for flexible permitting.

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<sup>27</sup> The term "permit" means licenses, certificates, registrations, approvals, permit-by-rule, standard permits, or other forms of authorization.

A key point of contention in the § 60.1 rulemaking was the compliance history period to be utilized by the TNRCC in its decisions. With respect to permitting matters, § 60.1(b) provides that the compliance history period includes the 5 years prior to the date the permit application is received by the Executive Director. Thus, a permit application submitted on September 1, 2002 would have a compliance history dating back to September 1, 1997.

Numerous commenters to the § 60.1 regulations complained that it was unconstitutional for the Commission to retroactively consider compliance history for purposes of permit decisions. On December 18, 2001, State Representative Warren Chisum, Chair of the House Committee on Environmental Regulations, submitted a request for an Attorney General's opinion inquiring whether the provisions of House Bill 2912 on regulated entity's compliance history authorize the TNRCC to consider compliance history that occurred prior to February 1, 2002. On January 24, 2002, the Attorney General issued its opinion concluding that the provisions of House Bill 2912 authorizing the Commission to define compliance history to encompass facts dating from before February 1, 2002 was not unconstitutional as the provisions were protective of the public health, safety and welfare and not facially violative of Article 1, § 16 of the Texas Constitution.<sup>28</sup> Thus, the provisions of House Bill 2912 and the TNRCC compliance regulations requiring a 5 year look back from the date a permit application is submitted, will remain in effect unless successfully challenged in court.<sup>29</sup>

In response to the mandates of § 5.573 of the Texas Water Code, the Commission timely established in 30 T.A.C. § 60.1(c), components of compliance history. These components are:

1. Any final enforcement orders, court judgments, consent decrees, and criminal convictions of this State and the federal government relating to compliance with application legal requirements under the jurisdiction of the Commission or the EPA;
2. Notwithstanding any other provisions of the Texas Water Code, orders developed under Texas Water Code § 7.070 and approved by the Commission on or after February 1, 2002;<sup>30</sup>

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<sup>28</sup> Opinion No. JC-0515 (June 24, 2002).

<sup>29</sup> The particular provision at issue in the Attorney General's Opinion was § 18.05(i) of House Bill 2912 which provides "the changes made by this Act in the definition of compliance history apply to an action taken by the Texas Natural Resource Conservation Commission on or after February 1, 2002. An action taken by the Texas Natural Resource Conservation Commission before February 1, 2002 is governed by the law in effect on the date the action is taken, and the former law is continued in effect for that purpose.

<sup>30</sup> The Halcyon days of "no findings orders" being exempt from inclusion in an entity's compliance history are gone.

3. To the extent readily available to the Executive Director, final enforcement orders, court judgment, and criminal convictions relating to violations of environmental laws of other states;
4. Chronic excessive emission events;
5. Any information required by law or any compliance related requirements necessary to maintain federal program authorizations;
6. Dates of investigations;
7. All written notices of violations, including written notice of violation from a regulated person, issued on or after September 1, 1999, except for those administratively determined to be without merit and specifying each violation of a state environmental law, regulation, permit, order, consent decree, or other requirement;<sup>31</sup>
8. The date of letters notifying the Executive Director of an intended audit conducted and any violations disclosed under the Texas Environmental, Health, and Safety Audit Privilege Act;
9. The type of environmental management system, if any, used for environmental compliance;
10. Any voluntary on-site compliance assessments conducted by the Executive Director under a special assistance program;
11. Participation in a voluntary pollution reduction program;
12. A description of early compliance with or offer of a product that meets future state or federal government environmental requirements; and
13. The name and telephone number of an agency staff person to contact for additional information regarding compliance history.

On April 12, 2002, the TNRCC published its draft regulations related to classification and use of compliance history. 27 Tex.Reg. 2922 *et seq.* (April 12, 2002). These proposed regulations, the subject of 561 separate written comments, are scheduled for Commission consideration on August 7, 2002. Unfortunately, Commission action on the proposed rules postdates this paper. However, communications with TNRCC staff

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<sup>31</sup> The TNRCC limited its look-back for NOVs due to computerized data base issues.



indicate that there will be substantial revisions from the published draft regulations. Although this paper focuses primarily on the statutory provisions of House Bill 2912 as they related to compliance history, practitioners would be well served to track the TNRCC's rulemakings and implementation of this important program.

Section 5.754(b) of the Texas Water Code requires that the Commission, by rule, provide for 3 distinct classifications of a person's compliance history – poor performers, average performers, and high performers. The classification of a person's compliance history must include a determination of whether violations of the applicable legal requirements are of major, moderate, or minor significance and whether the person is a repeat violator taking into account the number and complexities of facilities owned or operated. The proposed compliance history classification system, based on a complex point system with various multipliers, is the subject of the current 30 T.A.C. § 60.2 rulemaking.

Under § 5.754(g) of the Texas Water Code, the TNRCC must adopt rules for use of compliance history to provide for additional oversight of and review of applications regarding facilities owned or operated by persons in the lowest classification of compliance history. Conditions which the Commission could incorporate into a new, amended, modified, or renewed draft permit for a poor performer include reduced renewal periods, additional notices of deficiencies to require more specificity in the permit application, prescriptive rather than performance based permit provisions to address recurring problems, requiring more frequent monitoring than in a typical permit, requiring a person to obtain a co-permittee and/or an independent operator, requiring a citizen advisory panel on the permit, and a host of other provisions. See Draft 30 T.A.C. §§ 60.2 and 60.3. It is suggested herein that the TNRCC will typically avail itself of more stringent permit conditions, as opposed to permit denials, in adjudicating poor performers.

Pursuant to House Bill 2912, if a person's site is classified as a poor performer, the agency shall deny or suspend authority to discharge under a general permit for wastewater discharges and shall deny a permit or renewal of a flexible permit under Chapter 116 related to air emissions. See §§ 26.040(h) and 5.754(h)(2) Texas Water Code.

The Commission shall consider the compliance history of a regulated entity when determining whether to grant an application for a permit or permit amendment under Chapters 26 and 27 Texas Water Code and Chapters 361, 382, and 401 of the Texas Health & Safety Code. See § 5.754(i) Texas Water Code. In order to deny a solid waste permit, the Commission must find the applicant or permit holder has a compliance history in the lowest classification. See § 361.089(f) Texas Health & Safety Code. Notwithstanding any other provisions of the Texas Water Code or the Texas Health & Safety Code relating to granting of permits, the Commission after an opportunity for a

hearing shall deny a regulated entity's application for a permit or permit amendment if the regulated entity's compliance history is unacceptable based on violations constituting a recurring pattern of conduct that demonstrates a consistent disregard for the regulatory process, including a failure to make a timely and substantial attempt to correct the violations.

The new compliance provisions of § 5.754(e)(1) of the Texas Water Code require the Commission to consider compliance history in permitting actions concerning wastewater discharges, injection wells, solid waste, air emissions, and radiation control. A regulated entity classified as a poor performer will not necessarily be denied a permit or permit amendment,<sup>32</sup> but certainly that permitting decision will be highly scrutinized. For instance, it is inconceivable that the TNRCC would deny a municipality's discharge permit renewal, but the agency would likely require more prescriptive permit provisions. Under the statute, the only occasion where the Commission must deny a permit is reoccurring egregious conduct including a failure to make timely and substantial attempts to correct violations. It is suggested this will be a very rare event.

As of the submission of this paper, it is still unclear how the agency will classify a person's compliance history. Early indications from TNRCC staff are that the vast majority of permittees will be average performers – not subject to compliance-based special provisions in draft permits or permit denial. Despite the current uncertainty, it is more likely that permittees will be inclined to contest notice of violations and enforcement actions, regardless of the attendant costs, to avoid a poor performer classification. It is also likely that regulated entities will contest, in hearings, staff recommended draft permit provisions based on compliance history. This will, in turn, tax the resources of the TNRCC's permit, enforcement and litigation support divisions. Moreover, a person's compliance history, particularly that of a poor performer, will surely be an issue raised by protestants, and in some cases TNRCC staff, in contested permit proceedings. A person contesting compliance history classification will bear the burden of proof.

### C. Executive Director Participation in Contested Case Hearings

In response to public testimony before the Sunset Advisory Commission that the Executive Director's role in permit cases makes the staff an advocate for permit applicants, the 77<sup>th</sup> Legislature in House Bill 2912, amended § 5.228 of the Texas Water Code significantly restricting the Executive Director's role in contested case hearings.<sup>33</sup> While prior to the 2001 Sunset Legislation, the Executive Director was a statutory party in all permit proceedings, now the Executive Director is a mandatory party only in

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<sup>32</sup> Except for water quality general permits and Chapter 116 flexible permits referenced earlier.

<sup>33</sup> Sunset Advisory Commission Staff Report, Texas Natural Resource Conservation Commission at p. 73 (May 2000).

hearings where the Executive Director bears the burden of proof.<sup>34</sup> See § 5.228(b) Texas Water Code. House Bill 2912 provides that the Executive Director may participate as a party in a contested case hearing for the sole purpose of providing information to complete the administrative record. The agency was required, by rule, to specify the factors the Executive Director would consider in determining, on a case-by-case basis, whether to participate as a party in a contested case hearing. Moreover, the legislation specifically prohibits the Executive Director from rehabilitating the testimony of a witness unless the witness is a Commission employee testifying for the sole purpose of providing information to complete the administrative record.

The TNRCC adopted rules, effective November 29, 2001, relating to the Executive Director's participation in contested case hearings. 26 Tex.Reg. 9105-9123 (November 9, 2001). Under 30 T.A.C. § 80.108(a), the Executive Director is prohibited from participating as a party in the following contested case hearings:

1. An application concerning municipal solid waste where land use is the sole issue at the hearing;
2. An application for an air quality standard permit to authorize a concrete batch plan under Texas Health & Safety Code § 382.05195;
3. An application for an air quality permit to authorize emissions from facilities which solely emit the types of emissions that do not require health and welfare effects review as specified on the Toxicological and Risk Assessment ("TARA") section emission screening list;
4. An application for a permit for a municipal solid waste transfer facility under § 330.4;
5. An application for a permit for processing of grit and grease trap waste under § 330.4;
6. An application for a permit for compost facilities under § 332.3; and
7. An application to authorize solely the irrigation of domestic or municipal waste water effluent meeting the requirements for secondary treatment in Chapter 309.

Under 30 T.A.C. § 80.108(b), mandatory Executive Director participation is provided for the following permitting matters:

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<sup>34</sup> Of course, the Executive Director is a mandatory party in all TNRCC-initiated enforcement proceedings before SOAH.

1. An application concerning water rights;
2. An application of which the Executive Director has recommended permit denial;
3. An involuntary amendment; and
4. An application for which a draft permit includes provisions opposed by the applicant.

For all other permitting matters, the Executive Director shall, on a case-by-case basis, consider certain criteria in determining whether to participate as a party. The Executive Director's discretionary party participation is based on a two-pronged analysis; first whether there is a significant issue meriting Commission participation in the contested hearing<sup>35</sup> and, if so, if there is significant disparity in the experience and resources of the parties.<sup>36</sup> In the second prong of the analysis, the agency may also consider limitations on the availability of agency staff or whether the draft permit contains any provisions that have been included by the Executive Director to address an applicant's compliance history. To date, the agency has not adopted procedures specifying how and when a party makes a showing of disparity of resources. It is suggested that a potential party bring this to the attention of the TNRCC in the public comment period and in requests for contested case hearings. Raising the disparity issue for the first time at the preliminary hearing may be too late to obtain Executive Director discretionary participation.

If the Executive Director participates as a party on a mandatory basis or discretionary basis, that participation (with an exception discussed later in this section of the paper) shall be for the sole purpose of providing information to complete the administrative record. 30 T.A.C. § 80.108(d). The administrative record in contested case hearings includes at a minimum the following certified copies of:

1. The final draft permit, including any special provisions or conditions;
2. The Executive Director's preliminary decision or the Executive Director's decision on the permit application if applicable;
3. The summary of the technical review of the permit application;

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<sup>35</sup> See 30 T.A.C. § 80.108(c)(1).

<sup>36</sup> See 30 T.A.C. § 80.108(c)(2).

4. The compliance summary of the applicant;
5. Copies of the public notices related to the permit application, as well as affidavits of public notices; and
6. Any agency documents determined by the Executive Director to be necessary to reflect the administrative and technical review of the application. 30 T.A.C. § 80.118(a).

The chief clerk's file, transmitted to SOAH, shall contain each component of the administrative record. 30 T.A.C. § 80.118(b).

When the Executive Director participates as a party in a SOAH contested case hearing, it may not assist an applicant in meeting its burden of proof. One would assume Executive Director counsel will typically refrain from extensive cross examination of applicant's witnesses. Of course, there is no prohibition from the Executive Director assisting a protestant's case.

The Executive Director may assist an applicant in meeting its burden of proof if:

1. The applicant is a qualifying local governmental entity;<sup>37</sup> or
2. The applicant is a non-profit entity; and
3. There is significant public need for the permitting action to avoid adverse impacts to human health or the environment.

In effect, the Executive Director may assist a publicly-owned treatment works owner in obtaining a wastewater discharge permit when significant environmental problems exist and where the local government demonstrates that it lacks the technical, legal, or financial resources to support its application in a contested case hearing process. While the rules also provide that the Executive Director may assist a non-profit entity applicant in meeting its burden of proof when there is significant public need for the permitting action to avoid adverse impact to human health and the environment, it is difficult to envision many scenarios that lend themselves to Executive Director participation under this regulation.

One interesting component of the new regulation related to Executive Director participation in contested case hearings is 30 T.A.C. § 80.108(g). This

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<sup>37</sup> Defined as a district, authority, county or municipality that demonstrates that it lacks the technical, legal or financial resources to support its application in a contested case hearing. 30 T.A.C. § 108(j)(1).

regulation accords the Executive Director a period of one week after the end of the preliminary hearing to make a determination of its intention to participate as a party. A decision by the Executive Director to participate as a party after the preliminary hearing obviously would impact the discovery schedule established either at the preliminary hearing, or in House Bill 801 cases, prior to the preliminary hearing.

As of the writing of this paper, the Executive Director has refrained from discretionarily participating in any contested case hearings for which jurisdiction was taken post September 1, 2001. These decisions have been made prior to the preliminary hearing and premised on a staff finding of no significant permitting issues compelling Executive Director participation. In these cases, the Executive Director staff witnesses, if called, will testify without their counsel's representation. It remains to be seen whether the Executive Director "sits out" of contested case hearings involving controversial landfill permit or air quality applications. It is suggested that, under the factors that the Executive Director may consider under 30 T.A.C. § 80.108(c), including whether any of the issues to be presented at the hearing are new, unique or complex, or whether it is likely that changes to proposed permit conditions could adversely affect human health and the environment, the agency has vast leeway in contested hearing participation. Moreover, the Executive Director's determination to participate as a party in contested case hearings is not subject to review by the Commission or SOAH.<sup>38</sup>

### III. CONCLUSION

Permitting can be a complicated and lengthy process, particularly when an application is contested. This paper has offered practical advise on minimizing delay and hopefully avoiding a contested case hearing through due diligence in site selection. It is suggested that the House Bill 801 public participation process, as implemented, has been unsatisfactory to both applicants and protestants.

With respect to the House Bill 2912 provisions relating to compliance histories and Executive Director participation, the jury is still out inasmuch as the rules either have not been adopted, or have not been applied. However, it is clear that compliance histories will be a controversial issue in permit hearings.

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<sup>38</sup> 30 T.A.C. § 80.108(h).



## **A&WMA Overview**

The Air & Waste Management Association (A&WMA) is a nonprofit, nonpartisan professional organization that provides training, information, and networking opportunities to 9,000 environmental professionals in 65 countries. The Association's goals are to strengthen the environmental profession, expand scientific and technological responses to environmental concerns, and assist professionals in critical environmental decision making to benefit society.

Founded in 1907 by Canadian and American smoke inspectors, A&WMA's members include scientists, engineers, policymakers, attorneys, and consultants who work for governments, corporations, universities, consulting organizations, and law firms. A&WMA is divided into 33 regional sections, 67 local chapters, and 40 student chapters worldwide. Maintaining a neutral forum is vital to the Association, whose bylaws mandate balance by employment sector for membership on the board of directors.

## **Central Texas Chapter of the Southwest Section**

The Central Texas Chapter, based in Austin, Texas, is the local chapter of A&WMA. The Chapter has over a hundred members in the Central Texas area, consisting of environmental attorneys, engineers, consultants, academia, agency staff (e.g. TNRCC, LCRA), and industry professionals (e.g. AMD, Motorola, Samsung, 3M). The Chapter publishes regular newsletters and holds monthly meetings with guest speakers that discuss air and waste topics of local relevance. These meetings provide members with the opportunity to meet their peers and exchange information. The Chapter also educates the public through volunteer activities and events such as Earth Day and the Central Texas Air Care Day.

## **Publications**

One of the primary ways the Association helps members meet their professional goals is by providing environmental knowledge through its two monthly publications.

- The Journal of the Air & Waste Management Association, A&WMA's flagship publication, is the oldest continuously published, peer reviewed, technical environmental journal in the world. In print since 1951, the Journal features the latest in cutting-edge research and technology.
- EM, the magazine for environmental managers, covers the environmental industry from a management, policy, and regulatory perspective, providing in-depth analysis of the issues affecting today's environmental professionals.

## **Professional Development**

The Association, with its international headquarters in Pittsburgh, Pennsylvania, offers a series of conferences, workshops, and courses to help keep members up to date on

new developments in the profession. The Annual Conference and Exhibition is the Association's largest yearly gathering and attracts more than 7,000 environmental professionals from around the world. Attendees gather to hear more than 800 technical papers on cutting-edge topics and view an exhibit in which more than 450 environmental businesses participate.

The Association also sponsors 12-15 specialty conferences annually on topics such as global climate change, emission inventories and measurements of toxic and related air pollutants; a dozen workshops on issues such as new source reviews, compliance assurance monitoring, and accident prevention and risk management; and more than 40 continuing education courses, including the Environmental Practices Review course which serves as a preparatory course for the QEP certification exam.

Other career advancement opportunities provided to A&WMA members include a job bank, an extensive Web site, and hundreds of publications on key air and waste issues.

## **International Scope**

Although most Association members reside in North America, A&WMA has spearheaded an effort to build an international network of environmental professionals by establishing sections and chapters worldwide. A&WMA has two sections in Mexico, as well as sections in Brazil, Europe, Hong Kong, the Philippines, Taiwan and Saudi Arabia, Thailand, and Singapore are chapters of the West Coast Section.

## **Public Education**

A&WMA has launched an active public education effort that revolves around its award-winning Teacher-Training Program. Through this program, the Central Texas Chapter has trained teachers to instruct students on the environment. The teachers use the Association's Environmental Resource Guides, which provide educators with explanations of environmental problems and classroom exercises designed to illustrate environmental issues to students.

The Teacher-Training Program has been honored with awards from Renew America, the National Environmental Development Association, American Society of Association Executives, and Keep America Beautiful.

## **For Further Information**

### Central Texas Chapter

Brett Davis, 2001-2002 Chair, 512-895-3953  
Julie Jumonville, Public Outreach, 512-266-9044  
<http://www.main.org/awmactc/>

### A&WMA International

412-232-3444  
<http://www.awma.org>

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To become a member of the Central Texas Chapter of the A&WMA, or to renew your existing membership, please complete this form and submit it with a \$25 check made payable to the "Central Texas Chapter of A&WMA" to the address provided below. Full-time students may join the Chapter for \$10 with a copy of their current schedule. Thank you for becoming a member, and we look forward to seeing you at our upcoming meetings.

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