

ENVIRONMENTAL LAW AT MARYLAND

University of Maryland School of Law

Summer-Fall 1997 - No. 6

In this issue:

Clinic Focuses on Pfiesteria Problem; Files Suit Over Munition Rule.	1
Law School Establishes Environmental Concentration.	4
"Science for Lawyers" Featured in New Law School Curriculum.	5
1997 Symposium -- <i>A Civil Action</i>	8
Achieving Clean Water Through Water Quality-Based Limits -- Establishing and Implementing TMDLs.	10
Environmental Law Takes Center Stage in Chile.	12
Economy and Ecology in Trust in Eastern Germany.	14
Program Hosts Zambian Environmental Law Professor.	17
Comparative Environmental Law.	18
An Extern's Perspective: The Chesapeake Bay Foundation.	19
Community Activism: A SACReD Trust.	20
Cleaning up Federal Facilities: A View from the Hill.	22
MELS Retires 13 Ton of SO ₂	24

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*Robert V. Percival, Director
Environmental Law Program*

*Rena I. Steinzor, Director
Environmental Law Clinic*

Laura Mrozek, Editor

*Contributors to this Newsletter include
faculty, alumni, students, and friends of the
Environmental Law Program*

University of Maryland School of Law
500 W. Baltimore St.
Baltimore, MD 21201
(410) 706-8157

Environmental Law 1

Clinic Focuses on Pfiesteria Problem; Files Suit Over Munitions Rule

by Rena I. Steinzor*



Seated from left to right, Rena Steinzor, Director, Environmental Law Clinic, Senator Brian Frosh, Chairman, Maryland Senate's Environmental Subcommittee, and David Brewster, Legislative Assistant. Back row (clinic students from left to right) Tanya Greeley, Alison Rosso, Ann Ward, Yvette Pena, Erik Rosanes, Stu Barr, Lori Schectel, Charles Dodge, John Sheer, Eric Manas.

Beginning the school year with an unprecedented complement of 14 students, the Environmental Law Clinic has a caseload that spans a full range of environmental issues under consideration in the legislature, the courts, and before regulatory agencies.

Cont'd on page 2

Mark Your Calendar

The 1998 Ward, Kershaw and Minton
Environmental Symposium
**UP IN SMOKE: COMING TO TERMS WITH
THE LEGACY OF TOBACCO**

Friday, April 17, 1998
More information to follow

Recyclable Paper

The Clinic is providing staff support to Senator Brian Frosh, chairman of the Maryland Senate's Environment Subcommittee and a member of the blue ribbon taskforce appointed by Governor Glendening to respond to the outbreak of pfiesteria in the region's waterways. On behalf of the Military Toxics Project, a national network of citizens' groups organized around environmental issues at military bases across the country, we have also filed a lawsuit before the D.C. Circuit Court of Appeals challenging EPA's final rule on the management of military munitions under the Resource Conservation and Recovery Act. The Clinic continues its representation of the Fairfield/Wagner's Point Neighborhood Coalition, communities of some 270 residents stranded in two heavily industrialized areas of South Baltimore. Lastly, at the request of the Howard County Office of Law, the Clinic is preparing legal advice concerning the potential liability incurred by local governments when they operate such facilities as landfills, compost recycling facilities, and sewage treatment plants.

Pfiesteria Taskforce

Struggling to cope with widespread public anxiety about fish kills caused by the toxic organism pfiesteria piscidia, Maryland Governor Parris Glendening has appointed a blue ribbon taskforce to make recommendations for executive and legislative actions no later than November 1, 1997. Continuing four years of work for Senator Brian Frosh, the Clinic is researching the issues at stake in the crisis in an effort to identify legislative options for the Senate Environment Subcommittee he chairs. The Clinic will also provide staff support to the Senator as the Subcommittee considers other pressing issues, including the use of pesticides in public schools, efforts to improve environmental enforcement, and new toxic use reduction and disclosure proposals, although the pfiesteria crisis is likely to dominate the upcoming legislative session.

Pfiesteria typically makes its living as a nontoxic predatory animal, becoming toxic when it detects enough of an ephemeral substance that live fish excrete or secrete into the surrounding water. In a scenario straight out of a science fiction movie, when fish (for example, a large school of oily fish such as Atlantic menhaden) swim into an area and linger to feed, their excreta triggers Pfiesteria to emerge and become toxic. The small cells swim toward the fish prey and, in turn, excrete two potent toxins into the water. The first toxin stuns the fish, making them lethargic so that they tend to remain in the area. The second toxin breaks down the mucosal layer of the fish skin so that they lose their ability to maintain their internal salt balance. As the skin is destroyed, open bleeding sores and hemorrhaging often occurs. Once fish are incapacitated, Pfiesteria feeds on the sloughed epidermal tissue, blood, and other substances that leak from the sores.

Although pfiesteria existed as a nontoxic predator for thousands of years, many experiments in lab and field indicate that excessive nutrient enrichment to the ecosystem caused by nonpoint run-off from farms and point discharges from sewage treatment plants and manufacturing facilities have slowly changed environmental conditions in a manner that has significantly increased pfiesteria's fish-killing activity. Nutrient enrichment of the Chesapeake Bay waterways, from a variety of land-derived sources, is a principal cause of algal blooms, which in turn causes Pfiesteria proliferation and activity.

While urban runoff and wastewater from sewage treatment plants are sources of nutrient enrichment to the Chesapeake Bay, the far more significant cause on the rural lower shore is manure from chicken production facilities. More than 600 million chickens are raised annually on the Delmarva Peninsula. Chicken manure is also the main fertilizer for the 170,000 acres of cropland in the Pocomoke watershed.

Governor Glendening has indicated that he will consider posing mandatory controls on nonpoint run-off from these sources, although environmental advocates like Senator Forsh have tried for years to enact such legislation, only to be thwarted by the power of the farming lobby. Senator Frosh is optimistic, however, that in the wake of this devastating short-term catastrophe, significant legislative progress can be made.

Munitions Rule

When Congress enacted the Federal Facilities Compliance Act in 1992, waste military munitions on firing ranges and in storage were virtually unregulated under federal environmental laws. Responding to pressure by state attorneys general and the military itself, Congress directed EPA to issue a rule defining when military munitions become a hazardous waste under the Resource Conservation and Recovery Act over a 30-month time period. When the Agency fell behind on meeting these deadlines, the Clinic filed a lawsuit on behalf of the Military Toxics Project, ultimately negotiating a consent agreement that required promulgation of a rule in the early winter of 1996.

That rule was a profound disappointment to members of the Military Toxic Project because it defined munitions fired from weapons on military firing ranges to be "products" that are "used in the manner they are intended to be used" and therefore are exempt from federal regulation. Further, the EPA rule allows the military to follow its own internal guidelines for the storage and transportation of military munitions that are admittedly wastes, triggering intervention by federal and state environmental regulators only when the military self-reports its violations of its own rules. Disturbed by EPA's resolution of these issues, the Military Toxics Project authorized the Clinic to file suit in May 1997. Although a schedule for the case has not yet been set, the Clinic expects to file briefs and present oral argument within the next year.



Environmental clinic student, Todd Hooker, meets with Jane Nishida, Maryland Secretary of the Environment, at the Pfiesteria Taskforce meeting.

The Clinic will argue that the EPA rule is contrary to the statutory mandates conferred in the Federal Facilities Compliance Act, is an arbitrary and capricious abuse of the Agency's administrative discretion, and constitutes an illegal delegation of EPA's regulatory authority to the Department of Defense. The case could have implications far beyond the management of waste military munitions for two reasons.

The first is that EPA justifies its conclusion that spent munitions on firing ranges are "products" by noting that it has not developed significant evidence that such munitions pose a threat to the environment. Given the billions of dollars at stake in the cleanup of such facilities, EPA's finding is not only astounding, but suggests that the Agency may be tempted to abandon efforts to prevent environmental contamination in other areas, counting on cleanup laws to forge solutions after-the-fact. But because cleanup laws are often based on the condition that materials have been "disposed," the legal fiction that munitions -- and perhaps other dangerous contaminants -- are "products" could also undercut those authorities.

Second, EPA has justified its decision to grant the military a "conditional exemption" from RCRA storage and transportation requirements on the basis that there is not a "plausible scenario" of future mismanagement by the military, as opposed to the "intrinsic hazards" of the waste munitions themselves. The possibility that this sharp departure from 15 years of RCRA precedent could be extended to private industry

practices has spurred motions by the Chemical Manufacturers' Association and the Edison Electric Institute to participate in the case.

Fairfield and Wagner's Point

The Fairfield and Wagner's Point areas of South Baltimore, encompassing the port and an industrial park that is home to several large chemical and petroleum bulk storage facilities, presents a stark landscape, divided by high, locked fences with a skyline dominated by huge tanks, large warehouse-like buildings, and tall smokestacks. This barren but efficient factory complex is also home to some 270 people, including 70 children. Recently organized into an incorporated community association, they have retained the University of Maryland Economic, Housing, and Community Development Clinic and the Environmental Law Clinic to help them

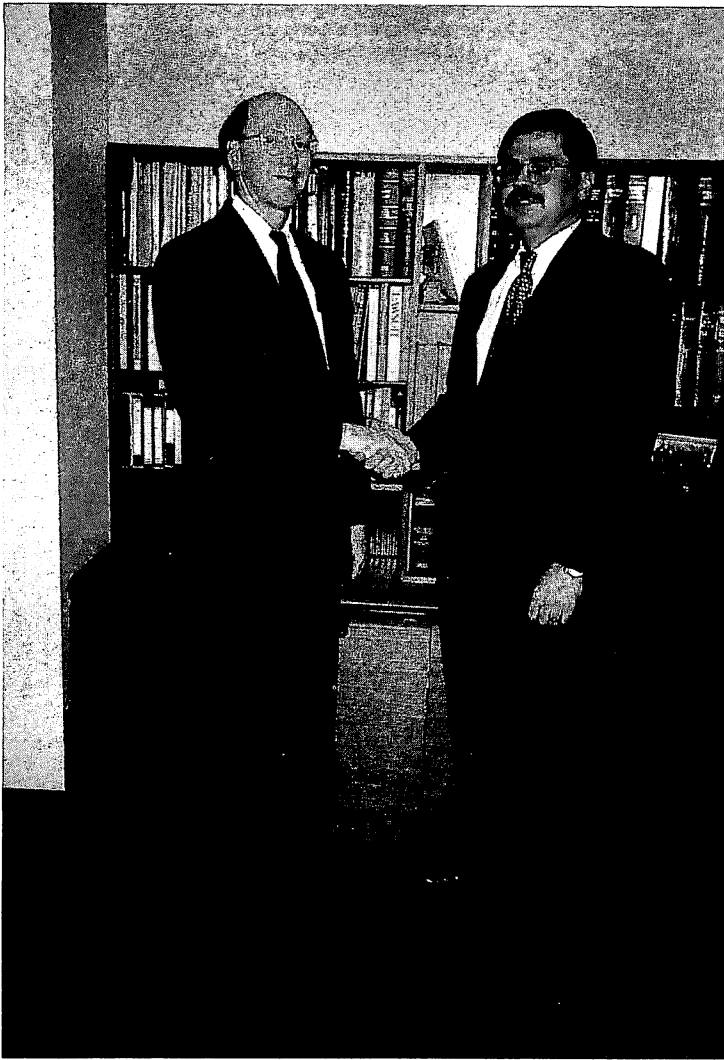
achieve two overall goals: first, to ensure that their current exposure to environmental hazards is as limited as possible and, second, to secure a buy-out that will give them the option of leaving the community.

The Environmental Clinic's work has focused on reviewing and then protesting Baltimore City's compliance with federal emergency plans, evaluating the compliance of major facilities with existing environmental permits, and analyzing the Toxics Release Inventory and other sources of emissions data. The Clinic has advocated its clients' concerns about the status of environmental compliance before the EPA Region III, the Maryland Department of the Environment, and the Baltimore City Local Emergency Planning Committee. The Clinic is currently evaluating other options, including litigation, to advance the communities' interests.

Municipal Liability for Environmental Facilities

Local governments across the country are increasingly defending lawsuits by citizens located near such environmentally necessary facilities as compost piles, recycling stations, solid waste landfills, and sewage treatment plants. Are there steps they can take to protect themselves against the imposition of liability for property damage and possibly adverse health effects caused by such facilities? This is the question the Clinic has been asked to research this semester for Howard County, a client for the past several years. Student attorneys will present their findings at a statewide meeting of county attorneys to be organized this winter.

**Associate Professor Rena Steinzor directs the University of Maryland Environmental Law Clinic.*



Dean Gifford awards Scott Garrison the Charles Taylor Fellow for Outstanding Adjunct Professor.

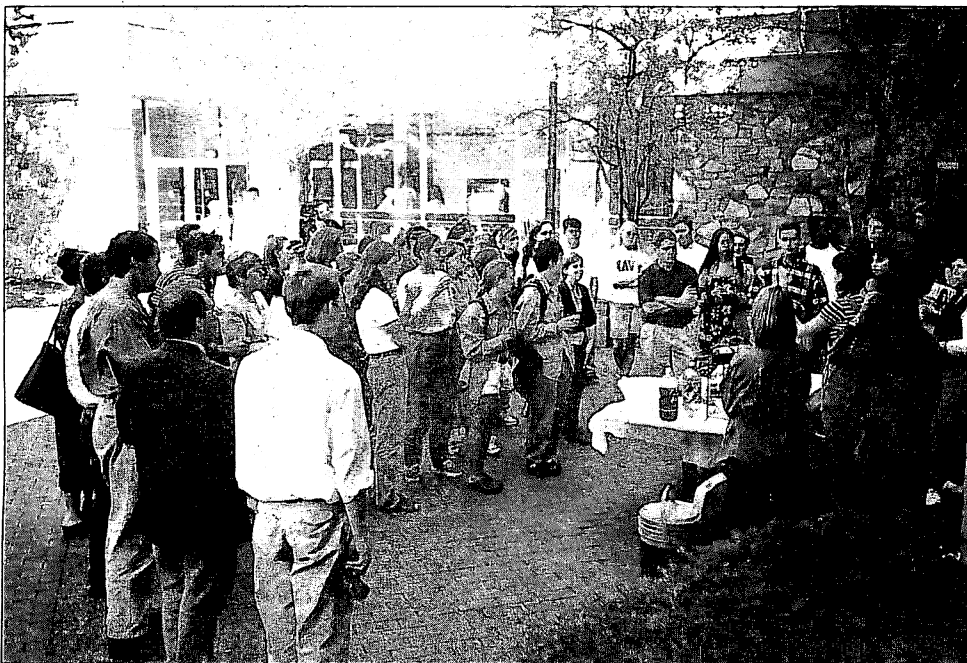
LAW SCHOOL ESTABLISHES ENVIRONMENTAL CONCENTRATION

Maryland law students will now be offered the option of "majoring" in environmental law as a result of the school's new environmental concentration program. The program will recognize law students who pursue a successful course of study specializing in environmental law. The law school's Faculty Council unanimously approved the environmental concentration program last spring to commence with the class graduating in spring 1998.

By establishing the concentration program, the school is recognizing that its Environmental Law Program and extensive environmental curriculum allow students to become experts in what has become a highly specialized field. The concentration program will help students interested in pursuing careers in environmental law to plan a course of study more closely tailored to their careers goals. It explicitly recognizes what has become a reality at Maryland in recent years -- that the school's environmental program allows students to acquire concentrated expertise in this field prior to graduation from law school.

In order to qualify for the new Concentration in Environmental Law, students will be required to complete at least 17 credits of courses related to environmental law. This coursework must include the basic Environmental Law survey course and elective environmental law seminars. Students also will be required to acquire clinical experience in environmental law by working with the Environmental Law Clinic or through the school's Environmental Externship program. In addition to the coursework, students seeking to qualify for the concentration must complete a successful research paper on a topic related to environmental law.

Student reaction to the new concentration program has been enthusiastic and it is anticipated that many students will opt to participate in the program.



The Maryland Environmental Law Society (MELS) holds its first get-together for the new school year.

"Science for Lawyers" Featured in New Law School Curriculum

by Michael Woodruff*

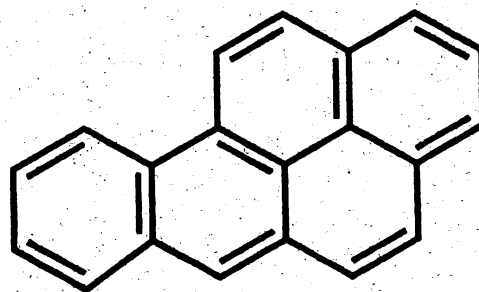
The University of Maryland School of Law has completed work on a unique curriculum designed to teach relevant scientific principles to lay professionals involved in the full range of environmental decision-making from drafting statutes and regulations, to writing permits to designing compliance programs, to negotiating consensus resolutions of environmental disputes at all levels of government. The course is organized around the four stages of a comprehensive risk assessment:

1. release assessment;
2. environmental fate and transport;
3. exposure assessment; and
4. consequence assessment.

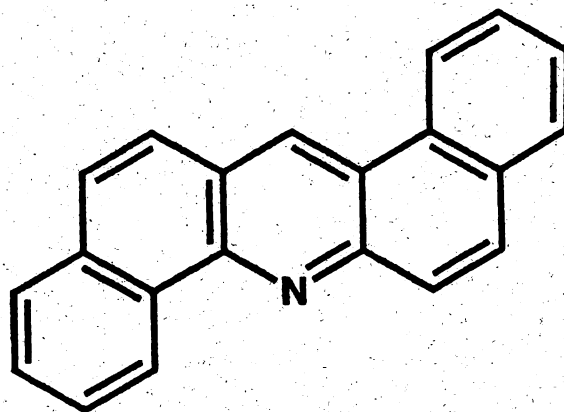
The need for the integration of science and law is especially acute as we begin an era when risk assessment and risk management are the touchstones of environmental decision making. The goal of this course is not to make lay professionals into rough approximations of scientists, but rather to teach them how to listen and to understand what the scientists are telling them. The curriculum emphasizes issues that arise in the remediation of brownfields sites, but is broadly applicable to other regulatory arenas.

Funded by a three-year grant from the United States Environmental Protection Agency, the course was developed in consultation with Dr. Linda Greer, one of the nation's foremost experts in environmental toxicology. Rena Steinzor, Associate Professor of Law, is project manager for the grant and worked with Dr. Greer to write the curriculum. Professor Steinzor, who also directs the University of Maryland Environmental Law Clinic, plans to teach this integrated course at the law school in 1998.

The course is organized into nine lectures designed to be taught over a period of thirty hours. Each of the lectures covers a discrete phase in the assessment and management of environmental hazards posed by environmental pollution. For example, Lecture 1 focuses on principles of naming and distinguishing the characteristics of different categories of chemicals that may be found in or introduced into the environment. Even if you flunked out of high school chemistry, do not despair. The concepts are introduced at a pace suitable for even the staunchest "right-brainer."



Benzo(a)pyrene



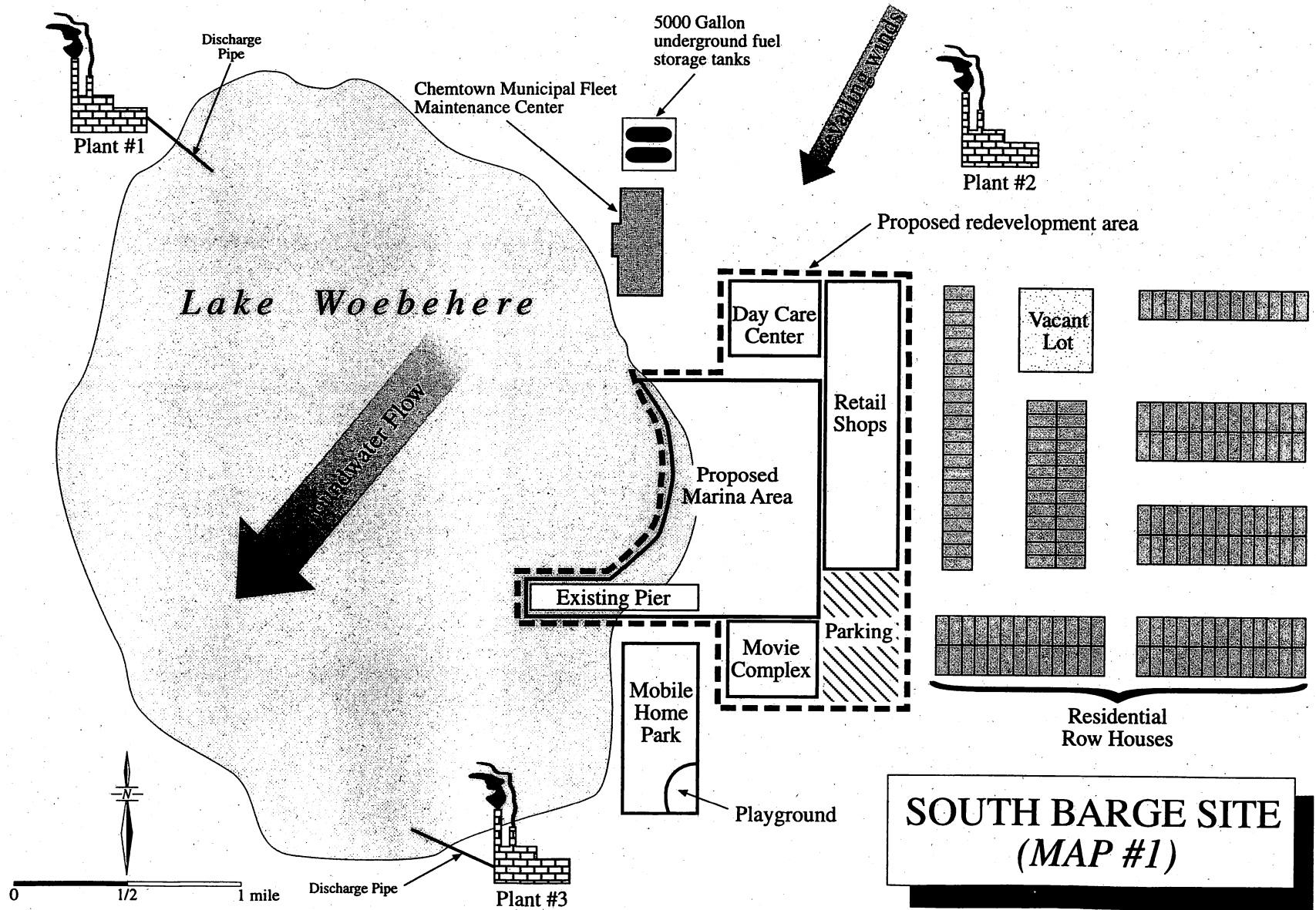
Dibenzo(a,h)acridine

Carcinogenic Polynuclear Aromatic Hydrocarbons

After the groundwork is laid for a basic understanding of chemical characteristics and reactivity, Lectures 2, 3, and 4 focus on the environmental fate and transport of chemicals, covering key environmental processes such as sorption, solubility, biodegradation and bioaccumulation, among others. The advantages and disadvantages of monitoring and modeling are introduced in the context of determining how much of a chemical is released into the environment from accidental releases as well as from industrial processes.

The effects of poisons on humans and the environment are covered in Lectures 5, 6, and 7: toxicology, epidemiology, and ecotoxicology. These lectures focus on how the human body and the environment deal with exposure to chemical releases and what impact those releases have. Risk assessment, the method EPA applies in order to develop quantitative estimates of human health risks, is also explored in detail. The background readings for this topic provide insight into the

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SOUTH BARGE SITE
(MAP #1)

"Science for Lawyers"

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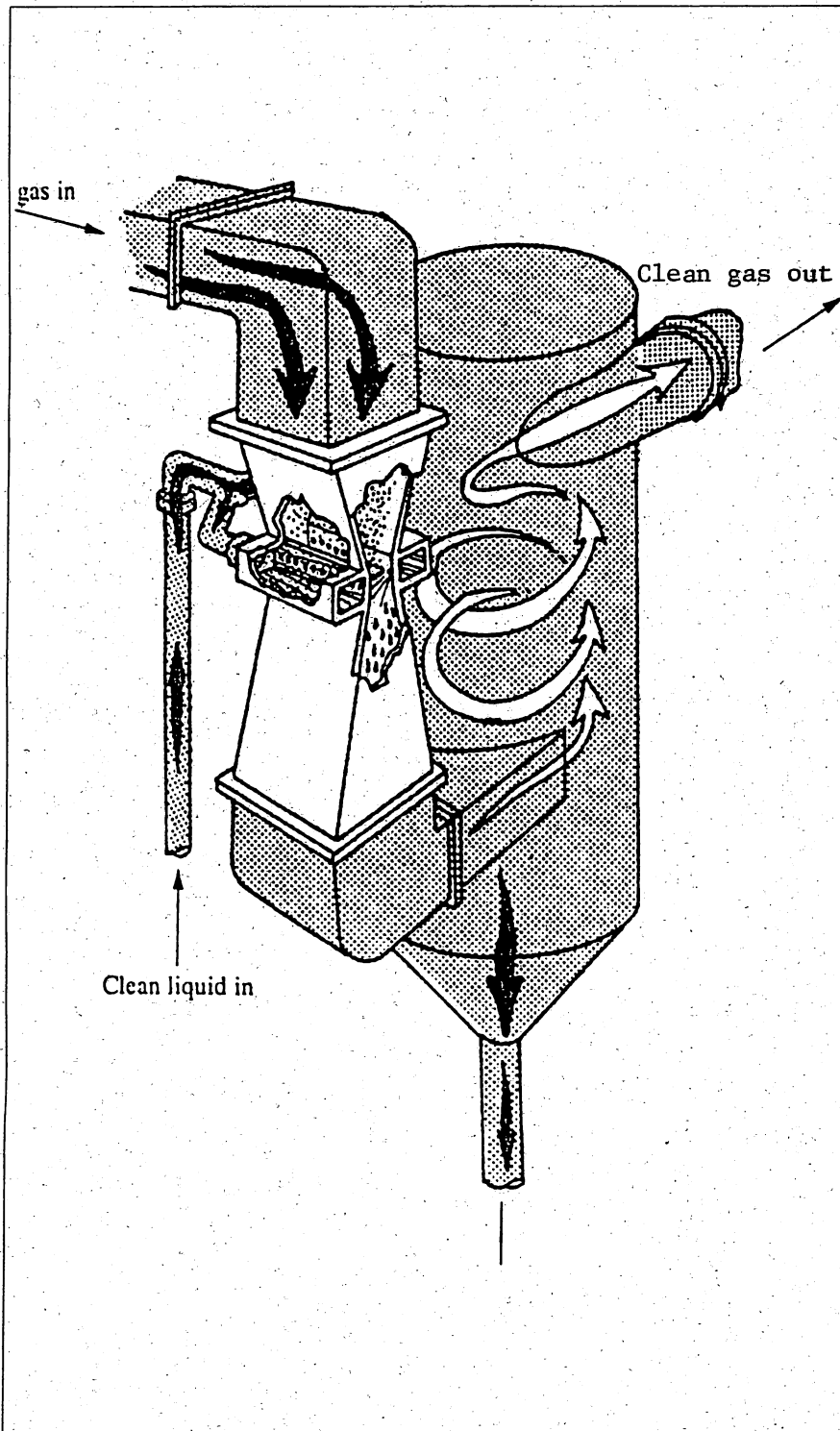
myriad of competing interests at play when a risk assessment is prepared.

The course culminates with a discussion of sources of pollution and a scientific explanation of the various pollution control techniques available. Methods to control volatile organic compounds (VOCs), sulfur oxides (SO_x), nitrogen oxides (NO_x), and particulate emissions are all examined.

The principles learned in the course are assimilated in a series of class exercises based upon a hypothetical scenario involving "Chemtown," a mid-western city which desires to remediate and develop a brownfield or abandoned industrial site. The class confronts the difficult decisions that must be made before any development plan can be adopted. For instance, the class assumes the role of a state EPA toxicologist attempting to facilitate a meeting between the local chapter of Sierra Club and the "Chemtown" Town Council, which has employed research methods that are unacceptable in the eyes of the Sierra Club members. The class exercise also provides an opportunity to explore the pros and cons of techniques employed by EPA, such as modeling versus monitoring.

For more information, please call Laura Mrozek at (410) 706-8157 or e-mail Professor Steinzor at rstein@law.umaryland.edu.

**Michael Woodruff serves as the research assistant for this project. He is a second year law student at the University of Maryland School of Law, where he is also a member of the law review. He received a B.S. in chemistry from Ursinus College in 1996.*

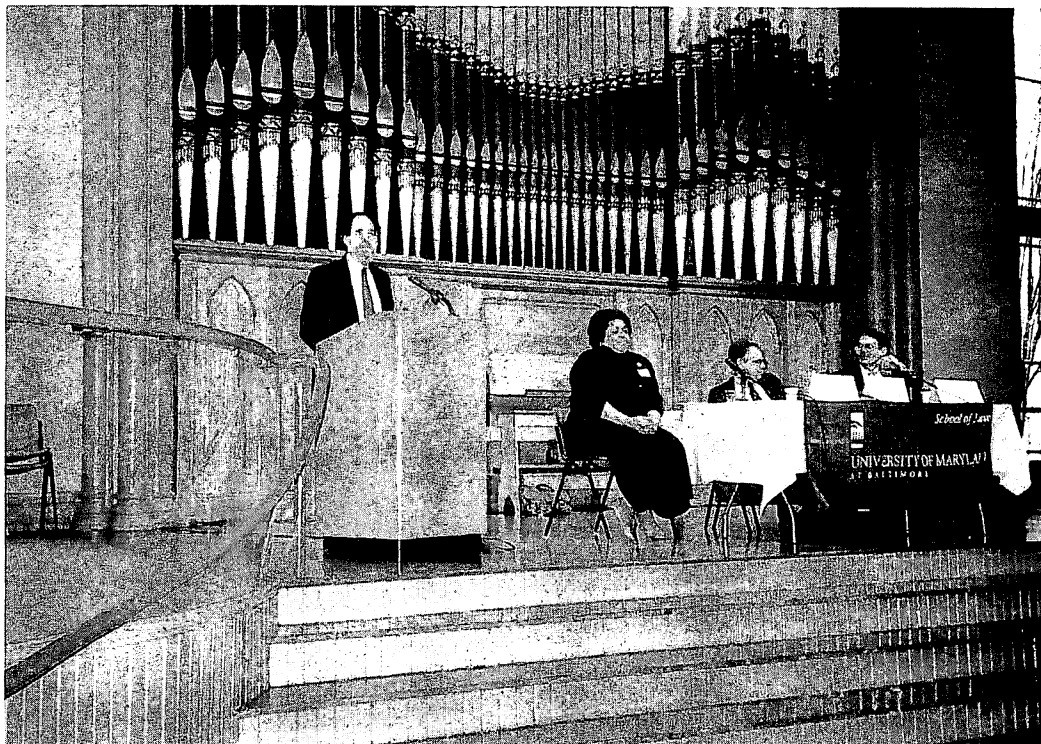


Venturi Scrubber

1997 SYMPOSIUM --LESSONS FROM A CIVIL ACTION: ENVIRONMENTAL TORTS AND THE WOBURN LITIGATION

by Maureen O'Doherty*

The University of Maryland Environmental Law Program presented the annual Ward, Kershaw and Minton Environmental Symposium on April 11, 1997. This year's topic, *Lessons From A Civil Action: Environmental Torts & The Woburn Litigation*, was based on the Jonathan Harr documentary of one of the seminal toxic tort cases. The incidents giving rise to this historic case were based in Woburn, Massachusetts where, almost single-handedly, a young mother investigated and forced to public attention, the sources of contamination which may have contributed to the death of many children, including her son, Jimmy.



From left to right, Anthony Roisman, Professor Katherine Vaughns, Ron Simon, and Bert Black

The book, *A Civil Action*, has been highly acclaimed as a thrilling insight into the difficulties of proving culpability in a toxic torts action. The symposium, however, raised more important issues regarding clients involvement, legal ethics and scientific vs. legal certainty. Perhaps the most compelling aspect of the program was the inclusion of Ann Anderson, the mother of one of the victims. Starting with an airing of a 60 Minutes interview at the early stages of the litigation, put faces to the tragedy and set the tone of the symposium. In his introductory remarks, Environmental Program Director Professor Robert Percival stated that the purpose of the day was to demonstrate "how law effects real people in the real world."

Professor David Luban, an ethicist, introduced the first panel: Ann Anderson and Reverend Bruce Young. Reverend Young indicated that Ms. Anderson was seen as an hysterical housewife when she started her campaign in the late 1970s following the death of her son, Jimmy from a rare form of leukemia. Early on, she discovered twelve other cases of childhood leukemia throughout her neighborhood. Ms. Anderson suspected the well water, as it was notorious for its strong odor and unpalatable taste. Further investigation led to the discovery of buried barrels and haphazard disposal of trichloroethylene (TCE) at two industrial sites in the area: W.R. Grace and Beatrice.

Admitting to early skepticism, Reverend Young later saw himself as a catalyst and used his collar as entree into state and federal agencies which would routinely dismiss an Ann Anderson. He clearly was an advocate for the victims and assumed that role even with the attorney handling the case, Jan Schlichtmann. Reverend Young's obvious distaste for the legal wranglings and the management of the case by Schlichtmann underscored the moral and ethical dilemmas which face attorneys in these types of tort actions.

Ms. Anderson reiterated the dissatisfaction of Reverend Young by indicating that the litigation process was very frustrating because Schlichtmann was reluctant to tell clients more than he believed they needed to know. She indicated that her motivation was to see justice done . . . vindication. She had not read the book nor did she intend to.

Professor Luban raised the question, which arose later among the panel of attorneys: Whose case is it? He indicated that he believed that it was wrong for lawyers to believe that it was their case. This question was revisited in the second panel which was introduced by Professor Katharine Vaughns of the University of Maryland Law School. The panel consisted of Anthony Roisman, formerly of the Trial Lawyers for Public Justice, Ross Simon, who represents Citizens

Clearinghouse and Bert Black, a defense attorney.

Roisman helped with the representation early in the litigation. Because of a difference in approach, he made the decision with Jan Schlichtmann to withdraw from the action. Roisman indicated that the major stumbling block was when Charles Nesson advised Schlichtmann that the case was worth in excess of \$100 million. He stated that the only stock and trade that lawyers have is judgment. He further indicated that the Woburn case was a test case in toxic torts and that attorneys have learned by mistakes of this case in how to prepare for other similar cases.

Simon addressed the issues of ethics, politics and science. He disagreed with Professor Luban regarding the issue of whose case is it? He indicated that it is always the lawyer's case but the real goal is empowerment of the clients. He stated that the tragedy of the Woburn case is that the lead plaintiff has the feelings that she has. He advised the audience that lawyers need to help clients through procedure and need a dignity as a lawyer in respect of the client.

Black said that the personal and scientific story got distorted into a legal story in the book. He stated that lawyers make the mistake of trying to learn the science of the case by reading other judicial decisions which can distort scientific proof. He believed that had Schlichtmann been economically wiser, he would have effected more justice. He indicated that he thought the case would have been lost on the causation issue had it gone to full trial.

The final panel addressed the difficulties of establishing scientific probability that a substance caused a specific injury. Dr. David Ozonoff of Boston University's Department of Environmental Health and one of the plaintiffs' experts in the Woburn case, explained the problem with presenting scientific evidence in court. He stated that [most] of the literature on the nature of causation in law and medicine has been written by lawyers rather than scientists. For lawyers, the concept of cause is a fact; but for scientists cause falls into the realm of interpretation. Ozonoff bases his expert opinion on case reports and first hand observations, toxicology and epidemiology. Using these data, the scientist is then able to make a judgment by weighing the evidence and then assembling a picture from how the evidence is weighted. What can be confusing for the trier of fact is that experts differ in the weighing of the evidence.

Dr. Marvin Zelen of Harvard University's School of Public Health was one of the principal scientists who conducted the Harvard Study related to the Woburn case. Zellen believes

that there are very few courts in the country which are equipped to allow a judge and jury to come to reasonable conclusions about the evidence that is being presented. Following a sophisticated study of the available facts from Woburn, the study concluded that the water was the probable cause of the injuries to the victims. Zelen further stated that, following the release of the study, several top level EPA officials discussed means of discrediting the study for fear of its bolstering a floundering amendment to the Superfund law for victims compensation.

The final speaker, Bert Black, offered a defense attorney's view of the difficulty of presenting scientific evidence in toxic tort cases. Black stated that, had the Woburn case entered phase two and addressed the scientific evidence, the plaintiffs would have failed in their burden of proof. Black said that the role of an expert is to explain how his or her conclusions were reached.

The symposium concluded with a robust discussion in a round table format and panelists fielded questions ranging from pure legal and scientific burdens of proof to issues concerning ethics and justice. The day was lauded by many to be one of the best programs because it dealt with the consequences of human activity on very specific individuals. Further, the emphasis on ethical issues provoked the audience to think beyond the ways and means of merely winning a case.

**Maureen O'Doherty is a 1993 graduate of the University of Maryland School of Law and has an environmental practice in Connecticut.*

Do you have an opinion or commentary on any of the articles in this Newsletter? We would love to hear from you! Send your response to:

**Laura Mrozek
University of Maryland School of Law
500 W. Baltimore Street
Baltimore, MD 21201**

Next issue to be published in Winter/Spring 1998.

Achieving Clean Water Through Water Quality-Based Limits --Establishing and Implementing TMDLs

by Gina M. Zawitoski*

The Clean Water Act established a goal of attaining swimmable, fishable waters everywhere. Great progress has been made in attaining cleaner water through the imposition of technology-based effluent limitations imposed on waste water dischargers, but many water bodies have not been able to attain and maintain water quality standards through the technology-based limits. Section 303(d) of the Clean Water Act requires states to identify water segments that are unable or are not expected to achieve water quality standards through the use of technology-based limits and to rank those water quality limited segments ("WQLS") according to the severity of the pollution and the use designation of the water. EPA requires these Section 303(d) lists to be updated regularly. Once WQLSs are identified, states are then required to develop total maximum daily loads ("TMDLs") for the pollutants impairing the listed water segments. 33 U.S.C. 1313(d). If States fail to meet these requirements, EPA is required to step in.

In broad terms, TMDLs are written, quantitative assessments of water quality problems and contributing pollution sources. They specify the amounts of pollutants or other stressors that need to be reduced in order to meet water quality standards, they allocate pollution control responsibilities for those pollutants and they provide the basis for restoring the water quality limited segment.

TMDLs are pollutant specific and specific to the particular segment of an impaired water body. TMDLs specify the maximum amount of a particular pollutant that a WQLS can assimilate and achieve the water quality standard. To calculate TMDLs, states must factor in the background levels of pollutants in the water body and must consider both point source and non-point source discharges. In addition, TMDLs must provide for a margin of safety and provide for future growth.

Because the total amount of a pollutant discharged to a water body from all sources may cause the water body to exceed water quality standards, states are faced with the

daunting prospect of reducing the amount of pollutants discharged beyond the reductions achieved through the NPDES permitting program. While states may be able to attain some additional reductions in pollutant loadings by ratcheting down the discharge limits in permits and forcing tighter controls and more sophisticated (and expensive) treatment systems on permitted dischargers, these restrictions may not be enough, particularly for water bodies impacted primarily or solely by non point source discharges like agricultural runoff.

Establishing effective controls for non-point sources is complicated. Regulatory controls have generally not been implemented or have

only begun to be implemented. The agricultural community in particular has been asked to control polluted runoff through voluntary programs in the last several years and is resistant to the imposition of regulatory controls before the voluntary programs have been given a full chance to work. In Maryland, farmers have been asked to participate voluntarily in the Maryland Tributary Strategies which call for the implementation of Best Management Practices to minimize polluted runoff. While these voluntary efforts have been widely applied, they have not been universally embraced. The jury is still out on whether voluntary efforts are sufficient to achieve water quality standards. To the extent non-point source controls are ineffective or unenforceable, point source dischargers will be faced with increasingly stringent regulation and new discharges may be limited or barred.

Environmental organizations that believe that EPA and the states have failed in their responsibilities under Section 303(d) have taken legal steps to hold the states and EPA accountable. There are reportedly 26 legal actions related to TMDLs pending against EPA in 23 states, ranging from notices of intent to sue to active lawsuits and pending court orders and consent decrees. EPA reports that court orders are pending in Oregon, Alaska, Georgia, California (north coast), Pennsylvania, Arizona, New Mexico, and West Virginia. Law suits have been filed with respect to the 303(d) lists or TMDL programs in New York, New Jersey, Delaware, North Carolina, Alabama, Louisiana, Kansas, Montana, Wyoming, California (Newport Bay),

The development of TMDLs for Maryland waters is expected to have significant ramifications for Maryland's industries and municipalities, with TMDLs affecting discharge limits, treatment technologies and growth potential.

Washington, Oregon and Idaho. The Newport Bay case has been voluntarily dismissed pending settlement discussions and a consent decree was recently filed in the Delaware case. Notices of intent to sue have been filed with respect to Alabama, Florida, Mississippi, Colorado, Maryland and Oklahoma.

The Sierra Club, the Chesapeake Bay Foundation and the American Littoral Society filed a 60-day notice of intent to sue EPA over Maryland's water program in June. The notice letter complains that EPA should not have approved Maryland's list of threatened or impaired waters (the 303(d) list) in December 1996 because, among other things, the list allegedly does not identify waters known to be impaired, does not identify all of the pollutants known to be causing pollution, and is based on inadequate monitoring. The notice letter also alleges that Maryland has not submitted any TMDLs to EPA for any of its WQLSs and that EPA has failed to approve or disapprove Maryland's continuous planning process ("CPP") which is supposed to provide for development of TMDLs. Finally, the notice letter alleges that EPA has violated the Endangered Species Act by failing to consult with the Interior Secretary before approving Maryland's 303(d) list and Maryland's water quality standards.

Maryland has achieved significant reductions in toxic discharges through the NPDES program, and the goal of the Tributary Strategies is to achieve a 40 percent reduction in nutrient loading to the Bay and its tributaries. MDE has been negotiating with EPA and the environmental organizations and expects to prepare a reasonable plan of action that will be agreeable to both. Details of the proposals being developed or discussed among the parties are not publicly available.

Pennsylvania and Delaware have each recently signed agreements with EPA to resolve similar complaints about their programs. The Pennsylvania agreement reportedly calls for the Commonwealth to monitor all of its unassessed rivers, lakes and streams and to develop TMDLs. The Delaware agreement reportedly calls for the development of TMDLs for Delaware's inland bays by the end of 1998.

In August, EPA issued a policy statement that would give states 8 to 13 years to set TMDLs for their impaired or threatened waters. By April 1, 1998, states are expected to establish a comprehensive schedule for setting TMDLs for all waters on 303(d) lists. EPA acknowledges that state-specific factors will influence the timeframe for TMDL development. These factors include the number of impaired waters; the length of rivers and the area of other water bodies for which TMDLs are needed; the physical proximity of the listed

waters in the watershed; the number and relative complexity of required TMDLs; the number of and similarities and differences among the sources to which the pollutant loadings will be allocated; the availability of monitoring data or models; and the relative severity of the environmental harm or threat to be addressed.

The EPA policy also directs states to work with EPA regional offices to address pollutant load allocations for non point sources, particularly where polluted runoff is the sole or primary cause of impairment. States are to develop load allocation plans for non point sources that include reasonable assurance that TMDLs will be achieved. The assurances can be regulatory, non regulatory or incentive based. The non point source load allocation plans are required to include a public participation process and are to recognize other pertinent watershed management programs.

The development of TMDLs for Maryland waters is expected to have significant ramifications for Maryland's industries and municipalities, with TMDLs affecting discharge limits, treatment technologies and growth potential. It will be important to participate in the TMDL development process to ensure that sufficient data are used in the development of TMDLs and that equitable allocations are made among point and non point sources. Moreover, margins of safety and growth allocation are factors that can dramatically influence the amount of pollutants that can be discharged under the TMDL, and these factors have no finite parameters.

Dischargers who wait until their permits are up for renewal may find that it is too late to effectively influence the outcome. Interested parties would be well-advised to be mindful of the priorities MDE sets for developing TMDLs for Maryland's waters and to be involved in the process at the start.

**Gina M. Zawitoski is a partner in the environmental practice group in Piper & Marbury L.L.P.'s Baltimore office. Her practice covers a variety of environmental matters including counseling, negotiation and dispute resolution pertaining to water pollution, wetlands, brownfields, environmental site assessment, cleanup cost recovery, and the range of environmental issues encountered in commercial and real property transactions. Ms. Zawitoski graduated from the University of Maryland School of Law with honors in 1985, where she was a member of the Maryland Law Review and the Order of the Coif. She received a B.A. in psychology, magna cum laude, in 1982 from the University of Maryland.*

ENVIRONMENTAL LAW TAKES CENTER STAGE IN CHILE



Copies of New Laws sold on the streets of Santiago

Environmental law is assuming increasing importance in South America, as Professor Robert Percival discovered this summer when he participated in an international environmental law conference in Chile. Professor Percival, the director of Maryland's Environmental Law Program, presented a paper at the Congreso Internacional de Derecho Del Medio Ambiente, which was held in Santiago, Chile in July. The conference, which was organized by the University of Chile, brought together legal and scientific experts from around the world to explore the wide array of environmental issues that have risen to the forefront of public concern in South America.

Percival's paper on "Water Pollution Control: Lessons from Transnational Experience" explores what countries that are developing comprehensive water pollution control laws can learn from the regula-

tory experience of other countries. He found that water pollution control law has evolved in remarkably similar patterns around the world, despite significant differences in local and regional conditions. Percival argues that countries whose environmental laws are in the early stages of this evolution can make significant strides by examining pollution control efforts in other countries. His paper will be included in a book to be published by the University of Chile.

Environmental issues have become a major public concern in Chile in recent years. Air pollution in Santiago repeatedly has reached health-threatening levels requiring the authorities to issue environmental alerts curtailing vehicle traffic and closing schools. Water pollution problems generated by mining activity and the absence of sewage treatment capacity also have become important concerns. Plans by Chilean utilities to build numerous dams to generate electricity have generated controversy with environmentalists and indigenous people whose communities would be displaced by the projects.

Chile's framework environmental law now requires environmental impact assessments before development projects can be approved. A decision earlier this year by Chile's Supreme Court reversing the national environmental commission's approval of a major logging project has established an important precedent for the development of Chilean

cont.on page 13



Air pollution obscures view of Andes in Santiago

Center Stage in Chile

cont'd from page 12

environmental law. The country has an extensive system of national parks and the Chilean government recently reached agreement with Douglas Tompkins, a U.S. citizen, to create an enormous private ecological reserve in southern Chile called Pumalin Park, which will be managed by an independent foundation.

International trade is proving to be another major impetus for Chile's development of comprehensive environmental controls. In late June Canada and Chile approved a free trade agreement that includes provisions for upgrading Chile's environmental standards. The Chilean government is currently developing national pollution control laws that should substantially improve environmental conditions in the country.

Professor Percival's trip to Chile for the Congreso Internacional was his fourth visit to a country to which he has an emotional bond. He and his wife Barbara spent their honeymoon exploring Chile's spectacular national parks. Eight years ago they returned to the country to adopt their daughter Marita, who was born in Puente Alto. On this return visit, Percival had a reunion with several Chilean friends who had assisted with the adoption.

Attention

Alumni of the Environmental Program are invited to celebrate our Program's 10th Anniversary at the annual winetasting party to be held on Wednesday, December 3, in the Brune Room. We would love to see as many alumni as possible. For more information, please call Laura Mrozek at (410) 706-8157.

LAW AND THE ENVIRONMENT: A MULTIDISCIPLINARY READER

A major new environmental anthology co-edited by Professor Robert Percival, Director of the Environmental Law Program, has just published by Temple University Press. Called Law and the Environment: A Multidisciplinary Reader, the book includes some of the most important original work on environmental policy by scientists, philosophers, historians, economists, and legal scholars. The readings contained in the anthology explore the nature and sources of environmental problems, the history of environmental law, how law is translated into regulatory policy, and the globalization of environmental concerns. Among the authors whose work is included in the reader are: George Perkins Marsh, Aldo Leopold, E.O. Wilson, Mark Sagoff, Carole Rose, Dan Farber, Tom Regan, J. Baird Callicott, Robert Bullard, Vicki Been, Roderick Nash, Samuel Hays, William Rodgers, Jr., Edward Abbey, Joseph Sax, Lynton Caldwell, Gregg Easterbrook, Christopher Stone, Robert Hahn, and Howard Latin. Copies of the book can be ordered by calling: 1-800-447-1656.



Professor Percival visits faculty of the Baltic University of Ecology, Politics & Law in St. Petersburg, Russia.

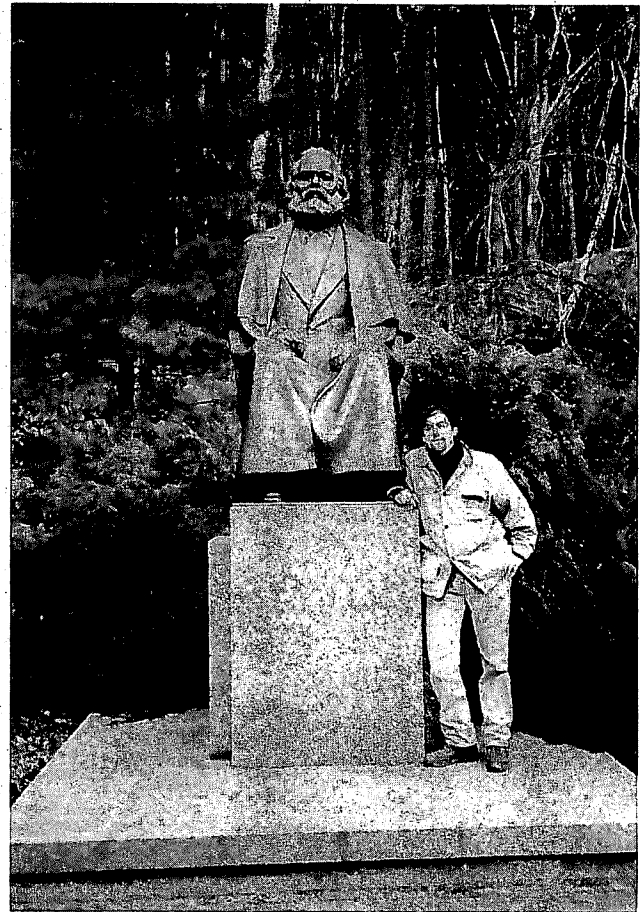
Economy and Ecology in Trust in Eastern Germany

by Steve Groseclose*

The German Treuhandgesetz (Trust Law) of June 17, 1990 is a unique instrument in the evolution of economic and social structures in the Twentieth Century. During the hectic period between the October 1989 revolution in the German Democratic Republic (GDR), which led to the end of the socialist regime in East Germany, and German Reunification of October 3, 1990, the interim democratically elected Volkskammer (Congress) of the German Democratic Republic passed the law designed to devolve the ubiquitous holdings of the government into the hands of private investors to be the key part of the transformation from a socialist central-planned economy to a market-driven capitalist economy. The Treuhand (Trust) institution was founded March 1, 1990 as the "carrier of hopes for a better order of the economy, greater success for scientists and engineers to transform ideas into sustainable jobs, and a healthy development, free of the constraints of bureaucratic central state planning." The Treuhand was holder in trust of the assets of the former GDR and responsible for the operations of its commerce and industry, their employees (roughly 4 million), their debts and other liabilities, including as yet incalculable environmental liabilities. In all sectors, the Treuhand was responsible for 44 billion German Marks (DM) worth of ecological redevelopment investments in risk containment, contaminated site cleanups, mining industry-specific contaminated site cleanups, and nuclear power plant rehabilitation.

At the beginning of 1995, the remaining duties of the Treuhand -- contract management, liquidation of unsustainable companies, and the remaining privatizations -- were transferred to several successor organizations, including the Bundesanstalt für vereinigungsbedingte Sonderaufgaben (BvS), which was made responsible for the key industrial sectors, excluding mining. BvS administers some of the most contaminated commercial and industrial sites in eastern Germany. Its policies regarding environmental contamination are integral to the redevelopment not only of the unified German economy but also of the ecology of the new states of eastern Germany.

The projected cumulative BvS budget expenditures from 1995 to 2000 total 37.6 billion DM, and 7% is directed towards costs associated with the environmental liabilities of the GDR, primarily the cleanup of contaminated sites. The Treuhand/BvS has accepted financial risks associated with partial, and in some cases total, liability for contaminated sites in over 13,000 privatization contracts.



Steve Groseclose visits statue of Marx

State of the East German Environment at Reunification

Five years after German Reunification, the Federal Environmental Ministry published a report on the ecological rehabilitation and development in the new states. The GDR's state of the environment was characterized by dramatic pollution in industrial sectors and significant structural deficiencies after decades of mismanagement exacerbated by the narrow focus of the social planned economy in its years of final decline. Forty-two percent of the waterways and 24 percent of the standing waters were unsuitable for drinking water even after secondary treatment. Over 800,000 sites discharged industrial wastewater of approximately 4 billion cubic meters per year. Ninety-five percent of those discharges flowed into waterways after inadequate or no treatment. Only 36 percent of the population was tied into a biological treatment facility compared with 90 percent in the old states. Sixty to 70 percent of the 36,000 kilometers of wastewater sewers had structural damage and 800 kilometers were in serious need of repair.

Five to six million tons of sulfur dioxide were emitted yearly making the GDR the world leader in per capita sulfur dioxide pollution. 2.2 million tons of particulates were emitted annually. The 1989 per capita CO₂ emission of 20 tons was also the highest in the world, compared to 7 tons in France and 11 tons in the old German states. Because of outdated technology in the energy sector, the GDR used significantly more primary energy than necessary with average efficiency of GDR power plants at 28 percent compared to 35 percent in the old states of the Federal Republic of Germany.

In the field of solid waste disposal there were roughly 11,000 disposal sites for municipal waste in use in 1989, although only 120 were licensed landfills. Many surface mining pits were routinely used as mixed waste receptacles without any containment measures even though they were clearly not geologically suited.

One hundred twenty thousand hectares of land had been consumed by brown coal surface mining over 40 years. The Federal Environmental Ministry estimates that only 50 percent of that area will be capable of reuse even after significant land use restrictions are attached. Hard rock mining in Saxony, Thuringia, and Saxony-Anhalt since the Middle Ages has resulted in a concentration of radionuclides and heavy metals in the biosphere. This contamination has been accelerated since 1946 by the intense uranium mining of the Wismut Project, which fed the Soviet Union's weapons programs. The suspected radionuclide-contaminated sites include thousands of spoil mounds totaling approximately 1,500 square kilometers, dispersed over an area of 10,000 square kilometers.

Ecological damage resulting from mismanagement of military and conventional armament industry sites presents another significant dimension of the environmental burden. Suspected contaminated sites include approximately 240,000 hectares at 3,300 properties used by the armed forces of the German Democratic Republic. The legacy of the western contingent of the Soviet Armed Forces leaves another 231,000 hectares of suspected contaminated sites at 1,026 properties.

The Environmental Role of the BvS: Fostering Contaminated Site Cleanup and Reuse

As financial trustee responsible directly to the Federal Finance Ministry rather than the Federal Environmental Ministry, BvS is concerned principally with the secondary effects of the environmental hazards associated with contaminated sites: financial liability for cleanups; the resulting restrictions on qualified uses of the sites (structural limitations that retard investment); and the reduced property value

of the site and surrounding properties. Certainly primary health effects strongly influence the economic consequences for any given site, but as a general rule, BvS's environmental activities are first and foremost concentrated on economic redevelopment.

The situation presented by the privatization of the GDR economy after decades of environmental negligence and abuse, presented just such an incalculable risk when viewed simply from the perspective of potential environmental liabilities for investors. Land reuse was a necessary part of economic and social revitalization. Without dealing with the contaminated site issue, the new east German economy would have to be built at a higher cost on scarce virgin land, further endangering the fragile environment and dislocating the social and cultural patterns that had existed for generations in connection with geographic relationships between industrial and residential development.

In the Leipzig/Halle region, the focal point of the East German petro-chemical industry, there were 5,048 suspected contaminated industrial sites. The continuing comprehensive evaluation has revealed approximately 70,000 suspected sites in this one industrial area. The estimates of the actual number of contaminated sites is wildly divergent because the states utilize divergent criteria to ascertain risk and to divide up large industrial facilities into individual contaminated site sites. Working from the conservative Federal Environmental Ministry estimate, as of December 31, 1993, there were approximately 140,000 registered contaminated sites and verified suspected contaminated sites in all of Germany. (A reasonable, accepted upper limit is approximately 250,000.) Approximately half of these verified sites are located in the new states. Interestingly, the Federal Environmental Ministry's estimate of total sites includes 161,678 in the old and 83,248 in the new states: a skewed, although more population-proportional distribution, which perhaps underscores the fact that investigations have focused on the new states as a direct result of unification and privatization efforts and thus are much ahead of the old states in site assessments. A 1989 cleanup cost estimate for all existing German contaminated sites came in at 20 billion DM, while another estimate from 1991 estimated 30 billion DM over 10 years would be required. Credible estimates reach as high as 70 billion DM.

Liability for cleanup costs follows the German Responsible Party Principle, which extends liabilities to subsequent purchasers. The subset of the contaminated sites that falls within the responsibility of the Treuhand/BvS in the new states is significant in the number of sites affected, their economic significance, and the potential financial liability. As a prelude to establishing sufficient information to warrant

the investment of billions of DM in these properties, due diligence evaluations would have extended well into the 21st Century -- a time frame that was economically and politically infeasible in the early 1990s. Rapid equalization of social and economic conditions was promised by politicians and eagerly anticipated by the citizens.

To expedite investment a complex scheme of environmental liability releases has evolved to transfer liability from the investor/purchaser to the state and federal governments -- to the German people through a ponderous model that requires prolonged negotiations between the BvS (representing the federal government) and state governments. The Environmental Framework Law of June 29, 1990 provided the states with the opportunity in certain cases to provide releases from liability for contaminated sites arising from activities before July 1, 1990. This preliminary Release Clause was modified by the Unification Agreement of August 31, 1990 between the FRG and the GDR and later through the Law for the Removal of Obstacles to the Privatization of Enterprises and to the Promotion of Investments of March 22, 1991. That law states that "[o]wners, occupiers, and proprietors of facilities and properties that serve commercial purposes or are utilized in the scope of economic enterprises are not responsible for damages caused by the operation of the facilities or the use of the property before July 1, 1990 in so far as the relevant local authority, in agreement with the highest state authority has released them from liability." Under this original scheme, liability fell exclusively to the state governments.

A flood of release applications resulted as the Treuhand (holder in trust) and other property owners filed thousands of applications as soon as possible to satisfy the one year filing deadline of March 28, 1992. A total of approximately 70,000 release applications were filed. States were placed in an awkward position as resources were strained in the effort to process claims as quickly as possible to enable investments in local economies. At the same time there was an obvious tendency towards cautious hesitance in application processing since each release acted as a transfer of incalculable financial risks to the states. In response to this problem, in a further effort to expedite investment, an administrative agreement was brokered between the Federation and the states.

The goal of the Administrative Agreement Regarding the Regulation of the Financing of Ecological Contaminated Sites of December 1, 1992 was to mitigate the risk burden of the states through federal participation. As a general rule, the enterprise must carry 10 percent of the cleanup costs. The remaining costs are shared by the Federation and the state at a 60:40 ratio. For these "Rule Financing" cases, the Federation

and the states have committed to one billion DM per year for 10 years from 1992. In the case where a Treuhand enterprise has already been privatized, the contractual agreement regarding contaminated site financial risks must be honored; a release can only be granted contrary to the contractual conditions in rare cases.

The release is not a commentary on the equity of the liability scheme; rather it is exclusively an investment fostering mechanism. Thus a release is not possible for property used exclusively for private purposes. The amount of potential local investment and the preservation or creation of jobs are the essential considerations. Releases generally provide release from and apply to all damages incurred before July 1, 1990; however, in the discretion of the relevant authority, a release can be narrowly written to cover only certain media, kinds of contamination, or a maximum value of clean-up costs.

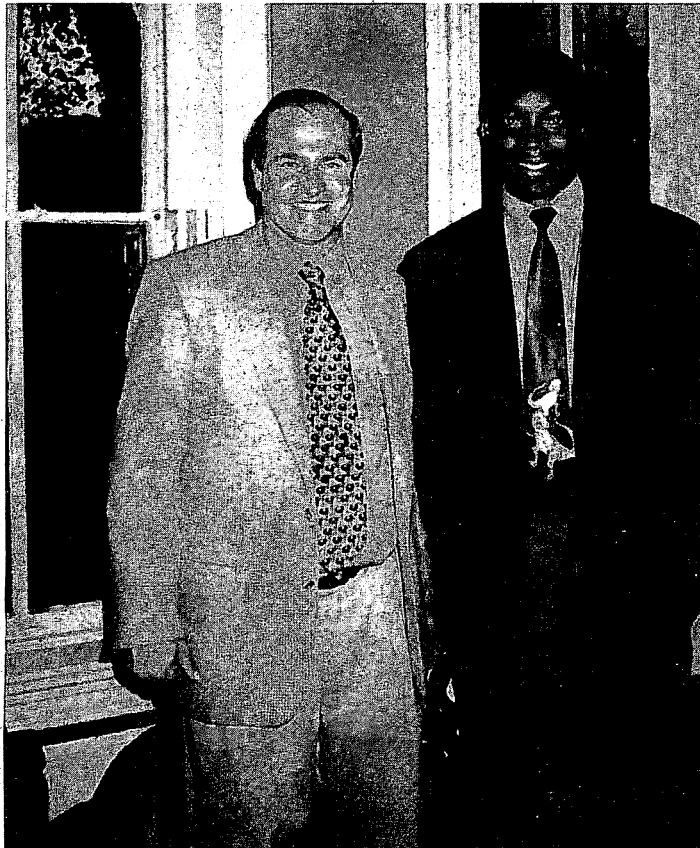
For "Major Project," special financing guidelines provide for a 75 percent contribution from the Federation through the Treuhand/BvS and 25 percent from the states. In addition to the brown coal regions, the chemical production regions were given priority. By the end of 1995, the cleanup concepts for the 23 Major Projects had been presented with a total projected cost of approximately 6.5 billion DM. For the separate brown coal project the Federation and states have set aside 7.5 billion DM to cover costs for the period from 1993 to 1997 alone. The Major Projects focus mainly on the industrial centers of the east German economy, including: the former chemical conglomerates Buna AG, Leuna AG, Filmfabrik Wolfen AG, Chemie AG Bitterfeld-Wolfen, and SOW in the chemical triangle of Saxony and Saxony-Anhalt; the shipyards of Mecklenburg Pommerania; the potash-oriented industry in Thuringia; and other industrial centers such as the Schwarzeheide complex in Brandenburg, privatized by BASF in 1992.

The 1990 Treuhand estimate of potential contaminated site liabilities was 144 billion DM. Further investigation has led to a current BvS estimate of 10 billion DM. BvS and the states have approved 230 priority measures representing a BvS contribution of approximately 600 million DM. Measures costing 340 million DM were already completed and paid out through September 1996. The rather insignificant amount of funds approved to date underscores the need for further streamlining of the bureaucratic approval procedures. BvS and the states are currently negotiating changes.

**Steve Groseclose, a 1994 graduate of Maryland Law School, has just completed a one year fellowship in Germany. During this two-stage fellowship, which was awarded by the Robert Bosch Foundation, Steve worked first in the Federal Ministry of the Environment in Bonn and then for BvS, the federal trust agency responsible for the privatization of the holdings of the former German Democratic Republic.*

Environmental Law Program Hosts Zambian Environmental Law Professor

by Rhonda Barton*



Environmental law is growing rapidly throughout the world and Maryland's Environmental Law Program is helping to assist in its development. During this past summer Maryland served as host to Enoch Mulembe, who teaches at the University of Zambia Law School. Professor Mulembe spent the summer at Maryland to learn about environmental law and to develop an environmental law curriculum to be taught at the University of Zambia. Zambia is located in Southern Africa and became an independent country from Britain in 1964. The University of Zambia is located in Lusaka, the country's capital and largest city where more than 5.6 million of the nation's 9.1 million people live.

Professor Mulembe's visit was sponsored by the American Bar Association's African Law Initiative. This project seeks to assist African countries in the development of law and legal institutions. A major focus of the ABA's efforts is to help law

professors to develop the capacity to teach about issues, such as environmental concerns, that are assuming increasing importance in Africa.

Enoch is 29 years old and this was his first visit to the United States. His goal was to gather information that would make it possible for the University of Zambia to implement a program similar to Maryland's Environmental Law Program. In addition to studying how Maryland's courses are organized, Enoch attended several seminars on contemporary environmental issues and prepared a detailed environmental syllabus for use at the University of Zambia.

Enoch learned his way around Baltimore very quickly. He enjoyed walking around the Inner Harbor in downtown Baltimore. During the evenings and on weekends he frequently joined me and my friends on outings. One evening we went to see the film "Batman and Robin." Unfortunately, I was unable to discuss the movie with him afterwards because I fell asleep at the beginning. He was kind enough not to talk about the film and spoil the plot for me. From this experience, I found out that Enoch was a very considerate individual.

Another outing with my friends took Enoch to Colonial Williamsburg and Busch Gardens. Although he had never been on an amusement park-type ride, much less an amusement park, he cheerfully agreed to make "Alpengeist" -- the new multiple-look roller coaster -- his first ride. Through the all-you-can-eat breakfast buffet, cotton candy, comdogs, popcorn, fruit drinks, and 18th century culinary expertise, Enoch braved his way through the weekend and proved himself to be a very hearty traveler. Enoch said that he has always enjoyed walking, listening to music, and going to the movies. To that list he now adds Maryland crabs, road trips, and roller coasters.

Before he left, he said that he was already feeling nostalgic about Baltimore. It was a pleasure having him with us this summer and we all hope to see him again soon.

In addition to its work in Zambia, the ABA's African Law Initiative is currently working with professors in Ethiopia, Eritrea, Gambia, Kenya, Malawi, Tanzania, and Uganda. Maryland hopes to continue its work with the ABA project by hosting a group of African professors for an environmental law workshop in spring 1998 and by participating in an environmental conference in Africa during the summer of 1998.

**Rhonda Barton is a third year law student at the University of Maryland School of Law.*

INTERDISCIPLINARY SEMINAR FOCUSES COMPARATIVE ENVIRONMENTAL LAW AND POLITICS

Maryland's Environmental Law Program is continuing its tradition of emphasizing interdisciplinary study through an innovative joint seminar with the University of Maryland's Department of Government and Politics. This fall law students are joining graduate students in an interdisciplinary seminar on Comparative Environmental Law and Politics. The seminar is taught jointly by Professor Robert Percival of the Law School and Professor Miranda Schreurs of the Department of Government and Politics. The seminar explores how political, economic and cultural influences shape the development of environmental law in different countries and the various approaches to environmental regulation that are being employed throughout the world.



Professors Percival and Schreurs, with students in their comparative environmental law class.

Each student in the seminar has selected two countries for which they are responsible for conducting research into political and legal developments pertaining to environmental law. After the students present initial reports on each of their countries, the seminar sessions explore cross-cutting issues in comparative law and politics with examples drawn from current developments in various nations. Students in the seminar also are participating in a simulation exercise in which they represent one of the countries they have selected in an international environmental negotiation to establish limits on greenhouse gas emissions, which is modeled on the upcoming Kyoto conference.

The seminar is designed to help students gain an understanding of the principal approaches to environmental law and regulation employed by the major countries of the world and to acquire insights into how differences in legal systems and political processes affect the development of environmental policy.

If you are interested in writing an article for our next issue of the Newsletter, Winter/Spring, please call or write to:

Laura Mrozek
Editor, The Newsletter
University of Maryland School of Law
500 W. Baltimore Street
Baltimore, MD 21201
(410) 7065-8157

An Extern's Perspective

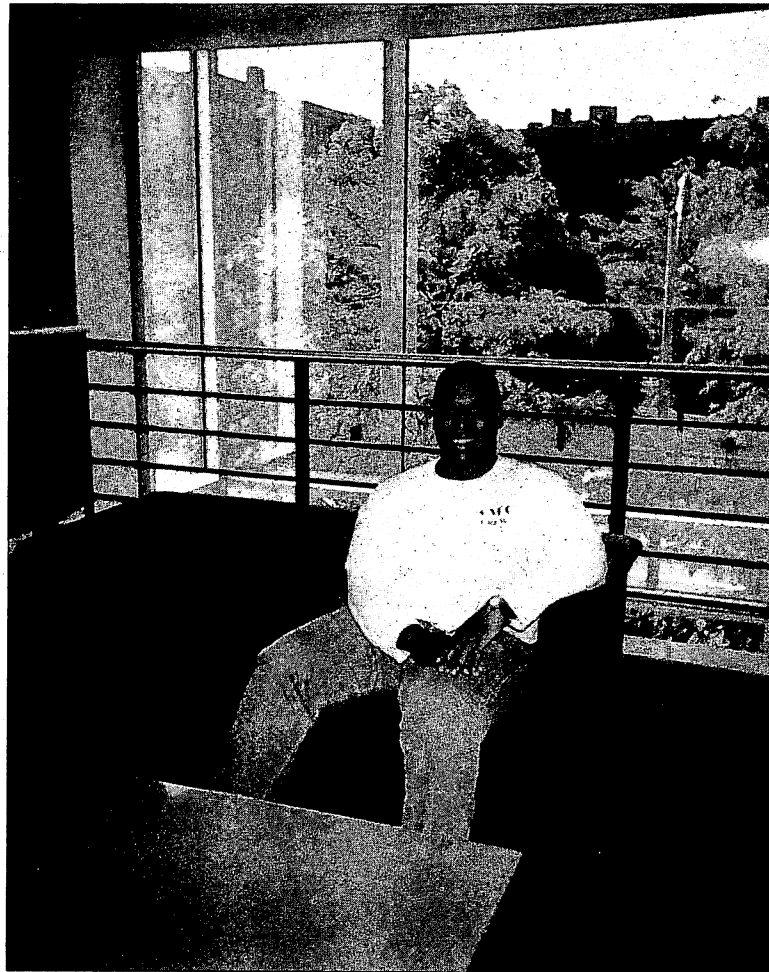
The Chesapeake Bay Foundation

by Kelsey Bush*

I just want you to know this article has been re-written about six times. It has been difficult to put my experiences as an intern at the Chesapeake Bay Foundation into words. I toyed with the idea of just recounting my time there. However, that version started to sound like a fourth grader talking about their cross country vacation with their mom, dad, two bratty younger siblings, and his Aunt Mable, who snores like a chainsaw whenever she is in the backseat. My experiences at the CBF are not easily translated into words. Trying to experience an externship vicariously is okay but it does not adequately translate the different adventures one encounters while gaining this invaluable experience.

For those of you who are not familiar with the Chesapeake Bay Foundation, it was founded about thirty years ago with one issue in mind, Save the Bay and all its treasures for the generations yet to come. The formation of the Foundation coincided with the birth of the environmental revolution and reports that the Bay was dead because of the pollution from industries along with its tributaries banks. The first unique thing I learned in my research on CBF, the watershed conservation model, used by CBF, focuses on every water body that contribute to health of the Bay, approach successfully developed and employed by the Foundation was the model for several other programs recently initiated across the country. This may not seem to be important, but the Foundation had successfully lobbied and influenced legislation in the two states, Maryland and Virginia, which directly benefit from the Bay's treasures. In addition to those states, the Foundation has spread its influence beyond beaches of the Bay to New York and Pennsylvania, the largest contributors of fresh water to the Bay.

I could continue to laude the accomplishments of CBF, but that could take several pages to develop, and probably



prove to be very boring. This next section is directed at the students who have or are contemplating doing an externship with CBF or any other organization. I can put it simply, Don't think about it, DO IT! Outside of the clinical program at the University of Maryland, an externship is probably the most important and beneficial experience you will have in law school. The first thing you will notice, if you decide to pursue an externship, is an externship is completely different then the internships you were exposed in undergraduate or in high school. An externship is called an externship for one important reason, much like clinic and from my experience, you

will be called upon to make legal interpretations and to give legal advice. That's a lot better then being pushed off in the corner filing or cataloging receipts for the past twenty years.

I knew from my initial interview that working for the Chesapeake Bay Foundation would be a rewarding experience. My interview was with the staff attorney for the Maryland Office, George Chmael. Like all other externships, the interview process is how you get the position. I had always been taught to show up to an interview early to give the interviewer the impression you are responsible and eager to be working. I was dressed in my finest interview suit, well to be honest I only own one suit, so it is my finest. Nervous but confident, I walked into the office and wondered what to expect. The first thing I learned from George is the

A SACReD Trust

by Martha E. Joseph*

Over two years ago, signs began to appear in my quiet home town of Shady Side, Maryland, declaring Protect Our Wetlands - Come to the Public Hearing.... My husband and I were wary. We both had become environmental lawyers because of our interest in resource management issues. But the resource issues we fought at work affected other areas of the country, and did not directly impact our haven along the Chesapeake Bay. We decided to attend the hearing, sensing that our refuge from the turmoil of work had become the front lines of battle.

Members from South Arundel Citizens for Responsible Development (SACReD) greeted us at the door of the school where the hearing was held. The hearing concerned Baldwin's Choice, a 154-home residential development proposed along the Bay on the Shady Side Peninsula. The land constitutes the last large piece of privately-owned, contiguous wetland habitat along the western shore of the Chesapeake Bay. Citizens in the community had organized SACReD in response to their concerns about the impacts that the development could have upon the health of the Bay's ecosystem and the future of our community. We signed our names to a volunteer list and indicated that we were attorneys.

A couple weeks after the hearing, someone from SACReD contacted us and asked whether we would attend a lawyer's meeting. Weems Duvall, a local attorney, had volunteered to head up SACReD's legal team. Weems enthusiastically greeted his new recruits, and SACReD's 6-member legal committee became known in the community as the county's largest law firm.

Every Wednesday night for the past two years, barring children's illnesses or late-night work commitments, Weems has held a legal committee meeting in his home to discuss the legal strategy for the organization. These meetings vary in intensity, from substantive social event to grueling work session. Committee members contribute their time and talents as much as their schedules permit, some joining the committee to work on short-term projects which make use of their specialized knowledge while others devote their time to more broad-based efforts.

Since the organization first formed three years ago, SACReD has grown to over 200 members and the legal committee membership sometimes swells to 10 to 12 attorneys. SACReD

has organized expert testimony at numerous public hearings, conducted petition drives and letter writing campaigns, discussed development issues on radio and television, and obtained and made available public information about development projects from county, State, and Federal agencies. Over fifty newspaper articles about SACReD and its efforts have appeared in local newspapers, including the Washington Post, the Baltimore Sun, and the Annapolis Capital.



SACReD is committed to building a sustainable and environmentally responsible community in South Anne Arundel County, and with the assistance provided by its legal committee, has taken on issues in addition to the community's opposition to the Baldwin's Choice subdivision. SACReD is currently involved in at least four lawsuits, encompassing a range of land use issues.

Early in the summer of 1996, the County Executive announced a policy to allow school enrollment up to 120% capacity before denying the approval of any new residential development in an area. Believing that the County Executive did not have the authority to establish school capacity limits, SACReD and two of its members filed suit to enjoin enforcement of the policy. The suit has survived a motion to dismiss challenge from the county and is proceeding to discovery. Another suit concerns a developer's request to build a house on an infill lot which is three-quarters covered by water and is located within the Chesapeake Bay critical area. The building permit was denied, and is currently under appeal. Other lawsuits have arisen from the scrutiny SACReD has placed on the Baldwin's Choice proposed development.

A SACReD Trust cont'd from page 20

Yet the value of the legal committee to SACReD extends beyond the ability to enforce SACReD's watchdog efforts in court. Most recently, the legal committee has assisted SACReD in its review of the proposed General Development Plan for Anne Arundel County. The General Development Plan (GDP) is a 25-year blueprint to guide development decision-making in the County. Certain policies in the proposed GDP generated strong opposition, especially in environmentally sensitive coastal communities targeted for concentrated growth, including the communities along the Shady Side Peninsula. The County Council now has in its possession a white paper that expresses a community-based vision and a package of specific amendments to the proposed GDP.

In its brief history, SACReD has confronted the difficult challenges of a community of citizens seeking to take responsibility for their own future. While the attorneys on the legal committee have been instrumental in the community's participation in the development planning and implementation processes, by attempting to represent the community's desire to ensure a legacy of environmental and social responsibility, we have assumed a sacred trust.

**Martha E. Joseph is a 1993 graduate of the University of Maryland School of Law. Martha currently works for the United States Department of Agriculture, Office of the General Counsel. The views expressed in this article are those of the author and do not purport to reflect the views of the United States Government or its agencies.*

Externship at CBF cont'd from page 19

importance of a phone voice. Whenever you are speaking with anyone in the course of business use a firm but relaxed tone, so the person on the other line envision a person who knows what's what and is not afraid to call people to the carpet with this knowledge. George is the mater of the phone voice. I had spoken with him several times in the process of setting up this interview, so I had created a picture of an older person with distinguishing gray highlights on his temples and maybe a tweed jacket, but definitely a no nonsense and humorless individual. How wrong can a person be when relying on only one sense? Well, in my case I should go deaf before going blind because my rudimentary assessment of George proved to be completely unfounded. As I sat waiting for my inquisitor, I saw this man dressed in jeans and a flannel shirt coming down the stairs. Inside, part of me wanted to begin laughing, but I decided that this would not make the proper impression. The interview lasted for over an hour, but it only seemed to take a few minutes.

Before I go on about the externship experience, I just want to take this opportunity to thank George and the other members of the Chesapeake Bay Foundation. I have to thank George especially because he put the practice of environmental law into context. For me at least, until someone who has experienced what it is like to do something, it is easy to discount what other say about a particular activity. In this case, George was not the typical environmental lawyer. Prior to coming to CBF, George worked for a private firm in Connecticut that did not have an environmental focus. Like a lot of us have learned or will learn, George created his own fortune by badgering the partners in the firm about the importance of expanding the firm's operations to include an environmental section. The firm gradual conceded their clients needed the services of an environmental aficionado. Luckily for George and CBF, the staff attorney's position became available in the Maryland office. However, the job with CBF was over seven years in the making. There are two things I gathered from George's experience: (1) even within the veil of the corporate structure,

a person with a passion for the environment can still use this to protect it without losing their drive; and (2) if you want to work in the public interest realm of environmental protection, if you have a public interest experience you will get hired over a person who is more experienced and from the private sector. In George's case, luck is a strange and wonderful thing.

The overall externship experience was the most beneficial experience I have had in my legal education. I do not know about other law students, but going into my fourth semester of law school I was burnt out. I was still happy about my choice to go law school, but I did not want to be in class any more. I wanted to be out applying what I have learned for the past three semesters. The externship revived my interest in the law school experience. In my stormy sea of discontent and boredom with law school, this externship was the beacon of light guiding me safely home.

I know I have been waxing poetic for a while here, but I do not know how to otherwise present such a fulfilling experience. There is so much more that could have been said, such as the two-day and two-night trip out to Port Isobel, a CBF education facility next to Tangier Island, Virginia, with the Baltimore Urban League. This was retreat to promote the relationship between the CBF and BUL. The relationship between BUL and CBF show the importance of the environment beyond the shores of the water and the end of the tree line. This partnership illuminated the environmental issues found in everyday life. Another perk of the CBF externship was being able to get out one of the Skipjacks. The first time I went out on one I was told to go, because the people in the office wanted me to enjoy the water at least once while I was there. Overall, CBF is a wonderful organization and I was blessed to be associated with them, if only for a little time. Remember, while you're still a student, do an externship, you will never regret it.

**Kelsey Bush is a third year law student.*

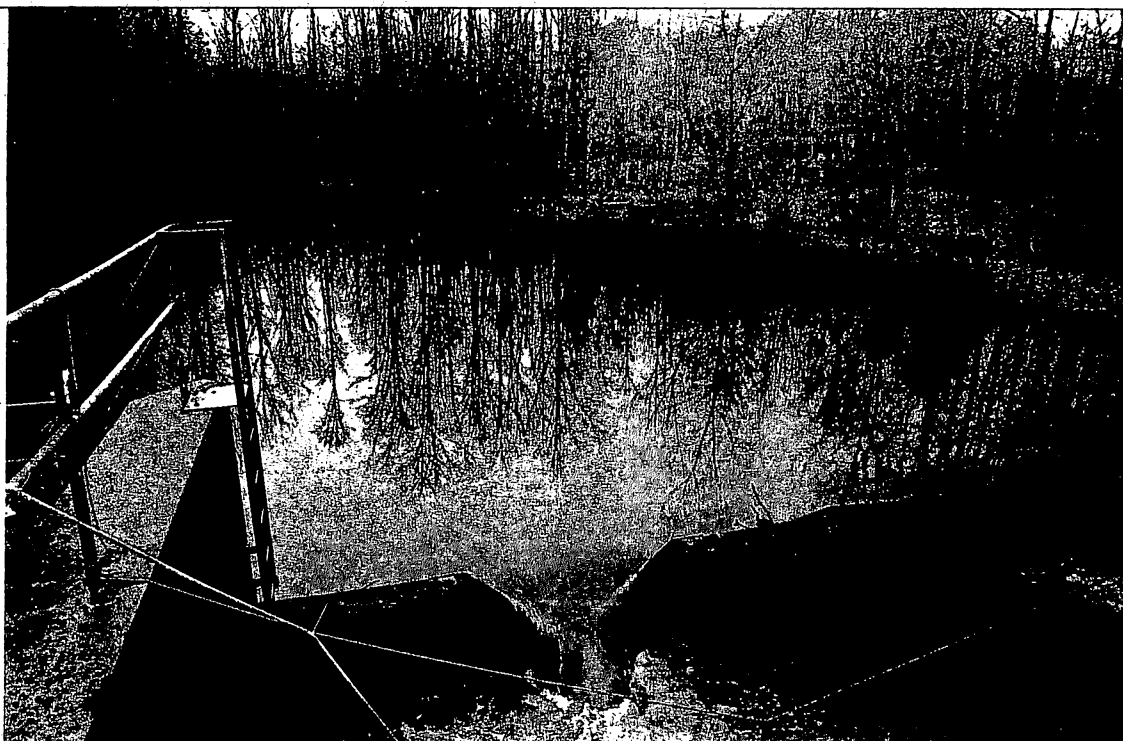
Cleaning Up Federal Facilities: A View from the Hill

by Chris Van de Verg*

Introduction

How thoroughly and how quickly and to clean up Federal facility sites contaminated with hazardous waste remain important concerns on Capitol Hill, a decade after the Superfund Amendments and Reauthorization Act of 1986 established a process to govern Federal facility cleanups. Spurred on by

Environmental Response, Compensation, and Liability Act (CERCLA). Not surprisingly, improving regulation of Federal facility sites is an important piece of Congress current efforts to reauthorize CERCLA.



Contaminated environmental media. From 1944 until 1957, untreated liquid low-level radioactive waste from the Oak Ridge National Laboratory was discharged into White Oak Creek, which then flowed directly into the Clinch River. Today, the waters of White Oak Creek carry sediments contaminated with strontium-90, tritium, cesium-137, cobalt-60, and PCBs. These contaminants come from past laboratory discharges and waste storage area seepages. To insure that most of the contaminated particles settle out of the creek water before it flows into the Clinch River, the Department of Energy has constructed a state-of-the-art embayment dam, and, above it, White Oak Lake (pictured here). *White Oak Lake, one mile from Oak Ridge National Laboratory, Oak Ridge, Tennessee. January 11, 1994.*

Hazardous Waste Site

legislators from states that host Federal facilities, Congress is currently considering a number of proposals that could profoundly effect the quality and pace of Federal facility cleanups. But budget-conscious appropriations committees, reinforced by this summer's budget deal between the Republicans and President Clinton, are just one barrier to effective reform.

Federal agencies control many of the most contaminated hazardous waste sites in the United States, including former nuclear weapons production facilities managed by the Department of Energy (DOE) and nuclear, chemical, and conventional weapons arsenals managed by the Department of Defense (DOD). Many of these sites are regulated by U.S.E.P.A. and state environmental agencies under the Comprehensive

But Congress is responsible not only for subjecting Federal facilities to CERCLA's requirements; it also authorizes the programs and appropriates the funds that DOE and DOD use to achieve compliance. This is a substantial responsibility, since the contamination at Federal facility sites is far more dangerous and complex than that found generally at private sites.

The Problems: Pit Nine

The saga of Pit Nine illustrates the unpredictable and expensive problems that plague DOE and DOD cleanups. Pit Nine is a one acre field set amidst DOE's sprawling Idaho National Engineering and Environmental Laboratory, where nuclear weapons research was once conducted, and which

today is a center for environmental technology development. To clean up Pit Nine, DOE expects its contractors will spend a total of \$400-600 million. Contractors have already erected a 200 by 90 foot moving shed that slides over Pit Nine along gigantic rails. Inside the shed are robotic devices that sift and remove radioactive wastes. The shed and the robotics are designed to keep remediators as far away from the site as possible.

Yet, neither DOE nor its contractor can guarantee that these efforts will remediate the transuranic and heavy metal contamination at Pit Nine to acceptable levels. In fact, the cost estimate could well follow the fate of the initial assessment of \$180 million. That assessment was scrapped after an innovative nitric acid leaching process proved inappropriate for the project because the acid was corroding metal treatment machinery.

For now, operations at Pit Nine are stymied as DOE and its contractor attempt to assign blame for the failure of the original design. Their contract, signed in 1994, was an early DOE foray into fixed-price contracting in which the parties agree on a price before construction begins. At a hearing before a House panel in late July, DOE argued its contractor should perform at the original price; but the contractor alleged that key facts that formed the basis of the agreement, such as the nature and extent of the contamination, had been disproven, invalidating the contract. Both parties insisted they would seek to vindicate their rights in court, if necessary.

DOE: Struggling to Fund Compliance

The Pit Nine dispute could not come at a worse time for DOE's Environmental Management program (EM), which is tasked with managing cleanups at DOE facilities. The Pit Nine contract was intended to showcase EM's Privatization Initiative, a suite of reforms designed to reduce bureaucracy and shift many of the risks inherent in using innovative remediation technologies to private contractors on a fixed-price basis. Needless to say, the results at Pit Nine did not impress the legislators who control EM's authorizations and appropriations. Many of them, including the House Commerce Committee's powerful chair, Tom Bliley (R-VA) said the experience signaled that DOE is not yet prepared to implement privatization reforms.

In addition, EM's technology development program which fosters development of remediation technologies such as the leaching process, moving shed, and robotic sifters employed at Pit Nine is beset with criticism. EM has defended technology development to past Congresses by holding out the possibility that new technologies will cost less and work better. Roughly a decade after the programs inception, few such technologies have attained commercial viability, mired

instead in continuing rounds of development and testing. Although ten years is not a long span of time in which to judge such a massive project, Congressional appropriators have become impatient in recent years. Replying to the pressure, EM launched an initiative to move technologies from labs to sites. But the initiative itself costs money, and could cause poor technology choices, as may have been the case with Pit Nine. Unfortunately for EM, House appropriators this year slashed EM's technology development budget for next year, increasing the pressure for EM to produce results now. It is still too early to tell whether support in the Senate, and a last-minute weigh-in by DOD Secretary William Cohen, can restore funding to the program.

Superfund Reform

Meanwhile, a separate set of legislators is considering reforms to CERCLA that would subject Federal facilities to a host of new state standards, as well as direct regulatory oversight by state agencies. In the Senate, a bill sponsored by John Chafee (R-RI) would allow states to apply to EPA for authority to enforce CERCLA at Federal facility sites, but only if the states use EPA's ARAR formula for selecting appropriate cleanup standards. Bills sponsored by Rep. Dan Schaefer (R-CO), and Sen. Wayne Allard (R-CO), who have expressed frustration with the pace of Federal facility cleanups in their state, go much further. These bills would grant states the right to enforce all state environmental standards at CERCLA sites. This is a grim prospect for Federal facilities that are struggling to comply with current standards, which are carefully selected by EPA based on site-specific factors.

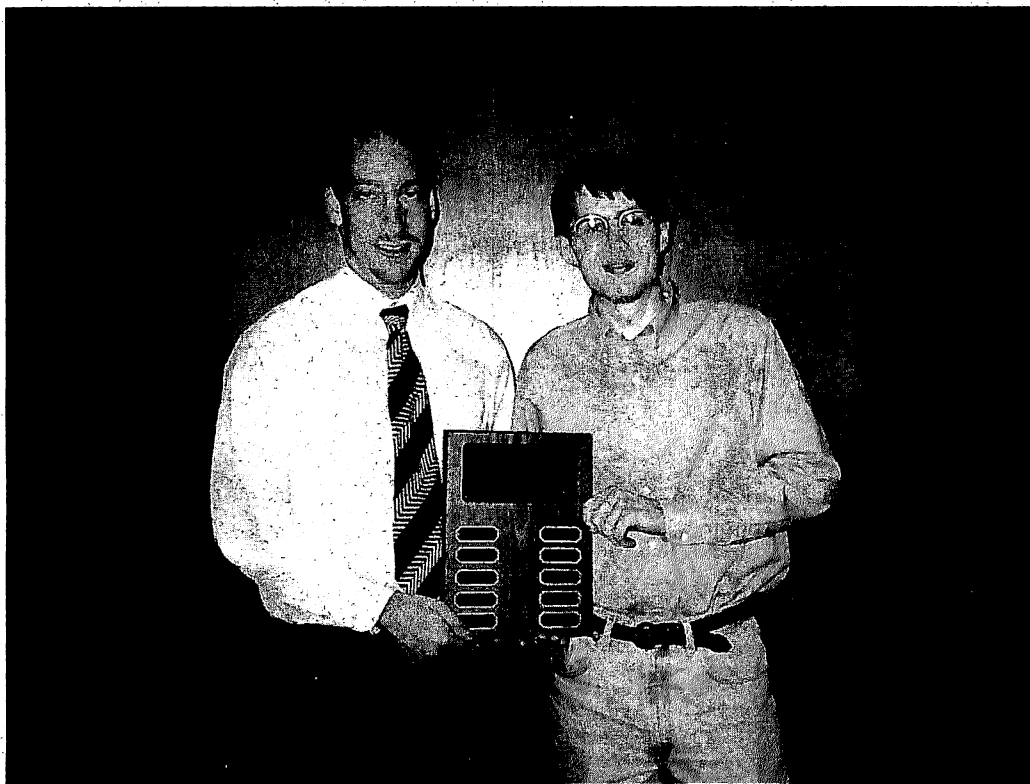
Conclusion: Uncertainty

The big question for the 105th Congress is whether the legislators who control CERCLA reauthorization can team with those who control DOE and DOD appropriations to produce a coherent vision for cleaning up Federal facilities. More likely, Federal agencies will continue to balance decreasing funds against an increasing tide of regulatory scrutiny for many decades to come. DOE has estimated that cleanup of its sites will continue into the middle of the next century.

**Chris Van de Verg is a regulatory and legislative analyst for the Waste Policy Institute in Arlington, Virginia, and a 1996 graduate of the University of Maryland Law School.*

MELS Retires 13 Tons of SO² at EPA Auction

by David Thomas*



MELS members, Brian Perlberg and David Thomas, present plaque designating SO² retirements for the past four years.

Breathe easier. Thirteen fewer tons of sulfur dioxide (SO²) will be emitted into the air over the next several years due to the Maryland Environmental Law Society's recent purchase of 13 tons of SO² emissions allowances through the U.S. Environmental Protection Agency. As it has done for the last three years, MELS purchased and retired the SO² allowances, which could otherwise have been purchased by industrial companies to increase their level of SO² emissions.

Thanks in large part to BAR/BRI, which donated a bar review course that was raffled off by MELS, and the SBA, which matched the funds raised by MELS over the last two semesters to buy the allowances, MELS bought more tons of SO² allowances than ever before. MELS was one of only three law school organizations across the country to successfully bid for allowances in this year's EPA auction, which took place on March 26, 1997.

The idea behind the SO² emissions allowance program is that market forces can be a more cost-effective means of reducing sulfur dioxide, a pollutant that causes acid rain, than the traditional command and control approach to regulation. By capping the total amount of SO² emissions nationwide and allowing industries (or any organization or individual for that matter) to sell or buy rights (i.e. allowances) to emit SO², the program seeks to reduce the overall level of SO² discharged into the air each year.

While the SO² emissions allowance program only began in 1992, data from the EPA Acid Rain Program, which oversees the emissions allowance program, indicates that national SO² emissions reported by the utility industry (a major source of SO² emissions) decreased between 1990 and 1994. Since 1993, the Chicago Board of Trade has administered the SO² auction, which occurs during March of each year.

There are three types of SO² emissions allowances: (1) spot SO² emissions allowances that can be used to emit SO² beginning in 1997; (2) 6-year advance SO² emissions allowances that can first be used in 2003; and (3) 7-year advance SO² emissions allowances that can first be used in 2004. This year, MELS purchased 7 tons of SO² in the spot market, and 3 tons each in the 6-year and 7-year advance markets. The average bidding prices for these three allowances were \$110 per ton for the spot allowances, \$105 per ton for the 6-year allowances, and \$104 per ton for the 7-year allowances.

**David Thomas is a third year law student at the University of Maryland School of Law.*