The Ward, Kershaw & Minton
Environmental Symposium:
"The Future of Environmental Liability"

by Karin M. Krchnak*

Luncheon speaker, Jane Nishida, Secretary,
Maryland Department of the Environment

New sparks were added to the current debate over the future of environmental protection at the ninth annual Ward, Kershaw and Minton Environmental Symposium. Hosted by the University of Maryland Environmental Law Program and the Maryland Journal of Contemporary Legal Issues, the Symposium drew a large audience on April 12th to hear prominent legal practitioners, academics, and policymakers discuss competing visions concerning the future of environmental liability.

Bruce Diamond of Swidler & Berlin started off the first panel on "Superfund Liability: What Went Wrong, What Went Right" by asking: "Is the liability scheme “un-American” or is the polluter-pays principles the epitome of fairness?” He aptly pointed out that there is no historical underpinning in most discussions of environmental
Clinic Litigates, Comments, Counsels, and (Almost) Legislates

by Professor Rena Steinzor, Director, Environmental Law Clinic

Maryland's premier, public interest, environmental law firm has expanded its activities into virtually every arena for legal advocacy: from Maryland courts hearing lead paint cases and federal courts considering EPA's national rulemaking policies, to the offices of county governments worried about the implications of environmental liability, to the halls of the Maryland General Assembly, where sweeping changes in existing environmental laws are debated. The diversity of the Clinic's work load is perhaps best illustrated by brief profiles of its clients, who include:

Mark and Tama Smith, the parents of Tamaira, 9, Tanara, 3, and Marquise, 8 months. The Smiths have brought suit to compel their landlord to clean up hazardous lead paint conditions in their East Baltimore row house and have courageously overcome a series of extremely unusual and disturbing incidents, including the decision of the trial judge to report them to the Department of Social Services for child neglect because they cannot afford to move from their home and are therefore "endangering" their children. (Within 24 hours of making this report, the judge was compelled by a Clinic motion to recuse himself from the case.) This piece of contentious litigation, which the Clinic is handling in conjunction with the Public Justice Center's Tenant Advocacy Project, may require appeals through the Maryland courts because it involves the establishment of extremely important precedents for the future remediation of hazardous lead paint conditions throughout the state.

Barbara Cook, Solicitor for Howard County, and her fellow officials, who are grappling with a proposal that the County lease the Tipton Army Airfield for use as a commercial airport for small planes, potentially accepting responsibility for environmental conditions at this federally-owned facility. The Clinic has helped Cook and the County Executive, Charles Ecker, to understand the many facets of this complex transaction, one of the first of its kind in the country.

Cathy Hinds, executive director for the Military Toxics Project, a nationwide network of citizens who live and work around military bases and are concerned about the effects of munitions and other pollution on their health and environment. The Clinic is gearing up to challenge an EPA rule governing the disposal of military munitions that will be promulgated in December 1996, under a court-ordered schedule obtained by the Clinic in previous litigation.

Bonnie Bick and Alex Winter, two residents of Bryan's Road, Maryland, who are concerned about the effect of the nearby proposed Chapman's Landing development on some of the state's most beautiful and fragile wetlands and associated ecosystems. The Clinic helped these clients understand the operation of Maryland law governing the issuance of state permits to undertake development in a non-tidal wetland.

Brian Frosh, chairman of the Environmental Subcommittee of the Senate Economic and Environmental Affairs Committee. Frosh represents District 16 in Montgomery County. In his capacity as Subcommittee Chair, he is responsible for the consi-
Trade and the Environment: A New Approach to Policymaking

by D. J. Caldwell*

"Man Controlling Trade" by Michael Lantz, located outside the Federal Trade Commission headquarters in Washington, DC

The scope and breadth of the linkages between trade and the environment continue to expand. Most readers of Environmental Law at Maryland will recall a rather rancorous public debate on the relationship between trade and the environment during the negotiations of the North American Free Trade Agreement (NAFTA) and the 1994 Uruguay Round Agreements establishing the World Trade Organization (WTO) as the successor to the General Agreement on Tariffs and Trade (GATT). In the wake of NAFTA and the creation of the WTO, attention has shifted from the domestic approval of these trade agreements to the effects of their implementation on international business growth and environmental protection.

In this new era of proliferating liberalized trading regimes, recent field reports from their respective dispute settlement battlegrounds suggest that the trade and environment nexus is as pervasive and as entwined as ever in international and domestic affairs. For example, in the very first dispute convened under the auspices of the new WTO Dispute Settlement Understanding (DSU), an Appellate Body Report has recently upheld an adverse ruling to the United States that concluded the reformulated gasoline provisions of the Clean Air Act discriminate against foreign refiners in contravention of WTO rules. The Executive Branch is currently soliciting public comment on measures it may implement to bring United States law into compliance with the dispute settlement panel's report. Additionally, the WTO has recently announced that a dispute settlement panel has been established to hear the United States challenge to the European Union's (EU) import ban on meat produced from animals treated with growth hormones. Similarly, the United States has slowed its implementation of NAFTA commitments regarding the Mexican trucking industry in part because of concerns raised about road safety and potentially excessive exhaust emissions.

In recognition of the "real-world" effects these and other controversies have on efforts to simultaneously liberalize trade and increase environmental protection, the Community Nutrition Institute's (CNI) Joint Policy Dialogue on Trade and the Environment represents a unique experiment in private sector consensus-building between the representatives of the business community and environmental organizations. The Dialogue project owes its existence to the vision...
levels of protection for the environment, including are broadly concerned with achieving the highest access to trade measures as enforcement mechanisms are maintained. Environmental organizations understandably interested in ensuring those commit to resolve these issues. The business community col on;Substances that JDeplete the Ozone Layer are participants, consisting primarily of United States-based multinational corporations, are interested in certainty of international rules to protect their strategic investments. For example, former manufacturers of ozone depleting chemicals that have subsequently invested heavily in substitutes because of United States phase-out commitments in the Montreal Protocol on Substances that Deplete the Ozone Layer are understandably interested in ensuring those commitments are maintained. Environmental organizations are broadly concerned with achieving the highest levels of protection for the environment, including access to trade measures as enforcement mecha-
ISO-TONING: RESHAPING ENVIRONMENTAL MANAGEMENT PRACTICES IN CORPORATE AMERICA
by She'kJain*

About three years ago, in response to a call by industry, government, and public interest groups to adopt a uniform international standard for corporate environmental management practices, representatives from the United States and approximately 30 other members of the International Standards Organization (ISO) began negotiations on a globally applicable, voluntary Environmental Management System (EMS) standard. The product of those negotiations, known as “ISO 14001,” now has been officially adopted by the American National Standards Institute (ANSI) as the United States’ national environmental management standard and is expected to be adopted by all other ISO member nations by September, 1996.

In contrast to traditional American “command and control” environmental regulations, ISO 14001 establishes voluntary management principles rather than end-of-pipe pollution levels or specific standards for environmental performance. The premise of ISO 14001 is that if a company conducts its operations in an environmentally responsible manner, those operations need not be regulated as closely to achieve acceptable results.

Moreover, companies are given a great deal of flexibility in designing an ISO 14001 management system which best suits the characteristics of their business. When its environmental management system is in place, a company may seek “certification” by an approved auditor. Alternatively, companies have the option of self-certifying their compliance with ISO 14001, though self-certification may not have the same credibility as third-party certification and may not be recognized in all European nations.

Industry is already gearing up for certification under ISO 14001 as soon as the standard become final, with an eye towards use of third-party certifiers. International companies such as Toyota, Phillips Electronics, BF Goodrich, Canon, and Samsung have all announced their intentions to establish certifiable ISO 14001 environmental management systems. The reasons cited by these and other companies, both domestic and international, in opting to seek certification under ISO 14001 are as diverse as the companies themselves, although most ultimately relate to bottom-line profitability and efficiency.

Some of the regularly cited benefits of ISO 14001 certification include:

**Enhanced Product Marketability**

Many consumers, governmental and private, prefer to purchase products produced by "environmentally responsible" companies.

**Reduced Regulatory Oversight**

Companies with certified ISO 14001 management programs may be rewarded with relaxed compliance obligations.

**Operational Cost Savings**

Pollution prevention programs established in an ISO 14001 program can reduce overall production costs. Also, some insurers and banks are considering offering reduced premiums and lower interest rates for companies with strong environmental programs.

**Mitigation of Future Fines and Penalties**

If non-compliance occurs in the future, many state and federal penalty policies include reductions for violators with good internal environmental management programs.

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The basic components of an environmental management system under ISO 14001 include:

- A written environmental policy statement;
- Identification of the significant environmental aspects of corporate operation;
- Setting targets and objectives for self-improvement;
- Establishing procedures and plans to meet the targets and objectives;
- Adopting training programs and procedures for documentation;
- Conducting periodic management audits and reviews; and
- Establishing methods for internal and external communication of environmental information.
No company should decide to implement ISO 14001 without first carefully considering all of the implications for the company. The actual benefits and costs of ISO 14001 will vary depending on the products manufactured by the company, the specific markets for those products, the current status of environmental management programs at the company, the company's current level of environmental compliance, and the size of the company, among other things.

The major disadvantages associated with implementing ISO 14001 are the financial costs (at least for those companies that do not have existing environmental management programs or are not ISO 9001 certified), the risk of being held to a higher standard of care in future negligence suits, and the potential that an EMS will create a record of sensitive material that may be used against the company by government regulators or private plaintiffs.

Organizations contemplating implementation of ISO 14001 should be especially sensitive to the potential for becoming exposed to new governmental enforcement actions or third party plaintiff suits due to sensitive information being disclosed during the relatively open ISO 14001 implementation process. Prudent organizations will conduct a preliminary legal compliance audit for the purpose of determining potential legal exposures caused by any future implementation of ISO 14001 prior to making any implementation decisions, since such an audit may be covered by the attorney-client privilege or the attorney work product doctrine. If such a legal analysis reveals multiple instances of non-compliance, the company might decide that ISO 14001 certification should be deferred, while maximizing its legal protections. Alternatively, a preliminary legal audit might suggest the most appropriate ways to conduct all or a portion of the implementation process.

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** Trade and the Environment: A New Approach to Policymaking **

representatives interact face to face on a relatively level playing field. The continuous nature of the discussions provides an opportunity to identify areas of agreement and disagreement, clarify and define the relationship between the two disciplines, and potentially produce a firm consensus position reflecting practical solutions that ensure avoidance of further conflict. The end result may reflect impressive progress in both the substantive and the procedural areas of public policy development to the long-term benefit of all concerned parties.

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The Future of Environmental Liability

law, resulting in policymakers making decisions about the Superfund statute that are not informed by the lessons of history. In giving the audience a sense of where Superfund came from, Mr. Diamond highlighted just how powerful a tool it is in generating money for cleanup. He described how the late 1980s saw the emergence of the enforcement first strategy, resulting in a "liability tsunami." In answering his opening question, Mr. Diamond pointed out that focusing on the sound-bite wars over liability versus polluter-pays will accomplish little; instead, Mr. Diamond argued for taking di minimis parties out of the system, thereby going after the real problem—transaction costs.

Katherine Probst, Senior Fellow at Resources for the Future, continued the close inspection of the Superfund liability scheme by turning the debate to the issues of: "Who pays and for what?" In commenting on the benefits of the Superfund scheme in terms of incentives and deterrence, Ms. Probst agreed with Mr. Diamond's emphasis on cleanup. The money must come from somewhere and a government-led cleanup will not be faster, better, or cheaper according to Ms. Probst. Ms. Probst presented her organization's estimates of the costs to the superfund trust fund of different liability schemes. The conclusion from these figures is that the funding gap is the major obstacle to reauthorization, which brings one back to the issue of who ultimately pays. Ms. Probst also concluded that it is a mistake not to consider the $9 billion from general revenues being spent by the government, and not the private sector, on environmental management for federal facilities when discussing the future of liability.

In continuing the debate on the fairness of the Superfund scheme, Eugene Martin-Leff, N.Y. State Assistant Attorney General, argued that high transaction costs do not justify radical changes in the liability scheme. Although the origin of CERCLA's principle of joint and several liability is rooted in the common law, Mr. Martin-Leff observed that CERCLA cases differ from traditional common law cases, thereby leading him to conclude that the Symposium should address "What Went Right and What Went Wrong in the American System of Tort Liability and its Statutory Analogs." In seeking equitable allocation of costs, however, Mr. Martin-Leff argued that the plaintiffs should not be the ones to suffer. Repeal of retroactive liability, a subject of debate in Congress, would have an enormously disruptive effect on States. Instead, Mr. Martin-Leff recommended possible solutions to achieve a balance between fairness and cost, including: (1) streamlining allocation proceedings by creating a simplified scheme for rating toxicity of waste; (2) limiting municipalities' shares to a maximum of 10 percent of site costs; and (3) clarifying the allocation of orphan shares.

Rena Steinzor, Associate Professor at the University of Maryland School of Law, addressed the audience next in a joint presentation with Dr. Linda Greer, Senior Scientist at the Natural Resources Defense Council. Describing the Superfund program as the ultimate market-based incentive, Professor Steinzor emphasized that retaining the current liability scheme is critical to the program's success. According to Professor Steinzor, the current crisis is the product of five mistakes made by everyone involved in Superfund: (1) setting unrealistic expectations in terms of the time frame to clean up the toxic waste problem; (2) developing too broad a program with no mechanism to protect small entities; (3) letting the private sector develop the allocation process; (4) not insulating the program from destabilizing forces; and, (5) failing to accurately take into account the situation insurance companies faced 10 years ago. Despite these mistakes, Professor Steinzor observed that changing course would have a destabilizing effect, potentially resulting in the repeal of future liability. Instead, a blueprint for effective reform should include, among other features, an allocation scheme run by neutral third parties and a pay-as-you-go-system.

In bringing to the panel discussion a scientist's point of view, Linda Greer pinpointed an often overlooked reason for the Superfund program's problems—technical challenges, including the fact that remedial investigations take substantial time and money. Poor records on contaminated sites only serve to compound the problem for scientists. In addition, serious delays in remedial investigations occur for a range of reasons, some man-made (e.g., changes in the fund lead status) and others that are natural (e.g., floods). By standardizing cleanup decision-making and constructively engaging community involvement early in the process, Dr. Greer believes some problems could be alleviated. Dr. Greer concluded her presentation by explaining how liability stimulates technological advance and thus cost-effective cleanup solutions.
The second panel involved a heated debate over "Liability for Environmental Crimes" between government attorneys, private practitioners, and academics. Kevin Gaynor, formerly assistant section chief of the Department of Justice's Environmental Enforcement Section and currently in private practice with Vinson & Elkins, began by pointing out that the sheer complexity of the regulatory framework for environmental protection results in no one being able to be in compliance 100% of the time. Although EPA began to focus in the late 1980s and early 1990s on mechanisms other than enforcement, such as audits and supplemental environmental projects (SEPS), Mr. Gaynor argued that the opposite has been the case with respect to criminal enforcement, as reflected in the four-fold increase since 1990 in criminal referrals from EPA to the Department of Justice. In examining the application of a general intent versus specific intent standard to criminal cases, Mr. Gaynor questioned whether we want to put a person in prison if we have not even proven that the individual knew his or her conduct violated the law. Arguing against the "lynch mob" mentality, Mr. Gaynor suggested a tiered approach of first determining whether there was culpable conduct. Only if the answer is yes, should the prosecutor determine whether, based on the harm to the environment, the case should be prosecuted criminally. Raising the standard for criminal liability will mean reduce uncertainty in the regulated community.

Jane Barrett, Assistant U.S. Attorney, countered Mr. Gaynor's points by raising the question: "What is so special about companies and people who violate environmental laws that they should be treated differently from those who commit any other type of business crime or violation?" According to Ms. Barrett, a corporate representative responsible for an environmental crime is no different than the bank president who embezzles funds or the securities broker who does insider trading deals. Arguing against a third category of crimes -- Green Collar crimes -- Ms. Barrett maintained that criminal prosecution is the biggest deterrent and biggest stick to prevent conduct that can cause significant harm to all of us. In contrast to Mr. Gaynor's comments, Ms. Barrett emphasized the increase in administrative enforcement, with criminal cases playing a minimal role in enforcement. In addition, her review of case law and statutory language showed that the standard for most environmental crimes is proof of knowing conduct. Since the average citizen knows not to dump pollutants or raw sewage into a stream, this should not come as a surprise to corporations.

Paul Kamenar, Executive Legal Director of the Washington Legal Foundation, agreed with Mr. Gaynor's comments, pointing out "a dangerous trend over the years to over-criminalize conduct" that would be better handled with civil or administrative enforcement. Mr. Kamenar described the case of John Poszgai, a wetland violator who received 27 months in prison for putting topsoil and clean fill in an old dump site that he had cleaned up. In describing Bill Ellen as an environmentalist, Mr. Kamenar questioned the criminal prosecution of Mr. Ellen for attempting to build a duck pond on some wetlands. Listing these and other cases, some that were handled criminally and others that were handled civilly, Mr. Kamenar concluded there is no rhyme or reason for the distinctions being drawn by the government. Maintaining that cases are being prosecuted under one-size-fits-all type guidelines that send people to prison who do not belong there, Mr. Kamenar encouraged reform of the federal sentencing guidelines.

The remainder of the session consisted of rebuttal time for each of the panelists. Mr. Gaynor started off...
Panelist, Evans Paull

by challenging Ms. Barrett's assertion that regulatory crimes are governed by the general intent standard. Ms. Barrett responded that legislative history shows that Congress did address this issue and chose to insert a knowing standard in the environmental laws. Moreover, the "beyond a reasonable doubt" standard offers a safety net for prosecuting cases in gray areas. Calling Mr. Kamenar "one of the worst offenders" of sound-bite arguments, Ms. Barrett pointed out that criminal charges were brought against Mr. Poszgai only after he violated a court order and was caught on videotape doing so. Ms. Barrett also observed that Mr. Ellen ignored three cease and desist orders and refused government requests to stop excavating wetlands before criminal prosecution was brought. Mr. Gaynor jumped in, calling into question the facts of the Ellen case, noting that one government regulator told Mr. Ellen he could fill while another said that he could not. Ms. Barrett and Mr. Gaynor concluded the panel session by questioning each other's interpretation of the facts.

The third panel, "Brownfields: Clarifying Liability to Encourage Redevelopment," commenced in the afternoon with a presentation by Thomas Voltaggio, Director of the Hazardous Waste Management Division of EPA. Brownfields, one of the Agency's top priorities, are abandoned, idled or under-used industrial or commercial sites where expansion or redevelopment is complicated by real or perceived environmental contamination. Mr. Voltaggio described EPA's 1995 four-prong Action Agenda for Brownfields designed to empower states, communities and other stakeholders in economic redevelopment to work together to prevent, assess, safely cleanup, and sustainably reuse brownfields. First, EPA gives states and local communities grants to establish innovative pilot programs to deal with brownfields. In addition, EPA has archived sites that require no further action under CERCLA. EPA has addressed liability issues, the second action item, by preparing guidance documents, the first of which focused on prospective purchaser liability, to simplify the redevelopment of brownfields. Public-private partnerships and outreach are the third prong, while work force development, including training on how to do assessments, is the fourth and final prong. In closing, Mr. Voltaggio predicted that Brownfields is going to be the savior of the Superfund program.

Evans Paull, Project Director of the Brownfields Initiative for Baltimore City, observed that the redevelopment of urban brownfields not only will revitalize the inner city but will prevent suburban sprawl. Approximately 50% of land in Baltimore City is environmentally impaired and subject to the Brownfields obstacles. However, only 4% of the industrial sites lack some kind of infrastructure, a problem which plagues the suburbs. Further, only 5% of the industrial parcels have been rated as being in unmarketable locations. Mr. Paull pointed out that 300 acres of impaired industrial properties in the empowerment zone, a category under which Baltimore City falls making it eligible for federal benefits in exchange for cleanup of industrial areas, have an upside potential of employing about 1900 new people and generating about $2.3 million in city real estate taxes. In order for this to be realized, however, Mr. Paull urged that cleanup must be voluntary and that there must be clear and predictable cleanup standards.

The scope of the Brownfields problem is evident from the General Accounting Office's estimate of 450,000 contaminated sites in the U.S. requiring $650 billion to cleanup, according to Michael Powell of Gordon, Feinblatt, Rothman, Hoffberger & Hollander. Brownfields is the "carrot" and liability is the "stick" in coping with this enormous problem. Mr. Powell presented some of the issues that the Maryland State Legislature will face next year, as it did this year when it considered
Brownfields legislation. The first issue is certainty in terms of "re-openers." For example, what if something was missed that is an eminent threat to health? What if there is more pollution there than anyone thought? To maintain the carrot effect of brownfields, Mr. Powell argued for extremely broad relief. To cope with the issues of speed and cost, Mr. Powell argued for deadlines and caps on the recoupment of oversight costs. The third element of the Brownfields program is the need for clear standards. Admitting his self-interest in having represented the Maryland Banker's Association, Mr. Powell nevertheless argued that in the real world banks should get special treatment because they will not give much-needed loans without lender liability relief. Success of the brownfields program, which has the potential for large payoffs, also depends on financial incentives and community involvement.

Brian Frosh, Chairman of the Environment Subcommittee of the Maryland Senate Economic and Environmental Affairs Committee, concluded the panel session by discussing this year's failure of the Brownfields bill in the Maryland State Legislature. Despite the substantial common ground in the legislation's House and Senate versions, specifically on the issues of certainty and speed, two major differences centered on cleanup standards and liability relief. Particularly troubling for Senator Frosh was the House version's requirement that the Maryland Department of the Environment (MDE) consider the cost-effectiveness and technical practicability of the cleanup standard. In addition, Senator Frosh questioned the House bill's provision for a series of letters to be sent to program participants. The requirement that MDE absolve parties of environmental liability before cleanup is complete could mean that work at the site would never get finished. Senator Frosh was optimistic that some form of a Brownfields bill will be signed into law in the next legislative session or soon thereafter.

The Honorable Jane Nishida, Secretary of the Maryland Department of the Environment, gave a luncheon address between the second and third panels. The Secretary discussed two issues: (1) how the national debate over environmental protection versus development affects the states; and (2) how Maryland has addressed liability issues. In particular, Secretary Nishida stressed the importance of Maryland, and states in general, being able to determine whether certain issues require stricter regulation than federal standards, pointing out that one size does not fit all in regulation. Examples of areas in which Maryland has attempted to address liability issues in this past legislative session include lead paint, brownfields, and environmental audits. In terms of liability, Ms. Nishida concluded by pointing out that the challenge will be to strike a balance between the encouragement of economic development and protection of the environment.

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TRADE AND ENVIRONMENT - GROWING UP TOGETHER

by Jane Earley*

In the early nineties, a new constellation of issues created by the potential conflict of international trade and environmental disciplines burst onto the international legal scene. Americans discovered, on the heels of learning that thousands of dolphins were dying in the tuna fishery, that the way their Congress had resolved to end this problem was inconsistent with multilateral trade rules. They also learned that, under the rationale of this dispute settlement panel report (United States - Restrictions on Imports of Tuna, Report of the Panel, 3 September 1991), many of the trade provisions of international environmental agreements could conflict with multilateral and binding - trade disciplines.

Since then, much work has been done to resolve some of the most pressing issues. A forum has been created within the World Trade Organization - the WTO's Committee on Trade and Environment (CTE) - for multilateral discussion of these international legal conflicts. However, many potential conflicts persist. For instance, are the trade provisions of existing international environmental agreements, such as the Montreal Protocol and the Basel Convention, consistent with the provisions of WTO Agreements? Can new treaties be negotiated that use trade sanctions to enforce environmental objectives? Can ecolabels be said to constitute non-tariff barriers to trade? Under what rationales can national health, safety and environmental regulations be determined by WTO dispute settlement panels to be inconsistent with the provisions of WTO agreements? What effects will the Uruguay Round Agreements, the most extensive multilateral trade agreements to date, have on the procedural and substantive elements of environmental regulation?

These issues are important components of the ongoing debate about globalization and its effects on economic, and environmental, activity. Stakeholders include international institutions, environmental groups, multinational corporations, and standardizing bodies. They also include every municipal government that operates a recycling program, and every citizen concerned about the effects of the international trading system on national regulations and the world’s environment.

It is too soon to comprehensively evaluate the work of the CTE to date, but some trends are emerging in the international legal disciplines governing potential conflicts between the trade world and the environmental one. The CTE seems to be functioning well, and its existence beyond 1996 seems assured. Its report to the Singapore Ministerial of the WTO in December of 1996 may suggest the direction of new disciplines to govern potential clashes between trade provisions of multilateral environmental agreements and rules of the trading system, and may also address new disciplines for ecolabeling programs. Developing countries have also suggested that it tackle new disciplines that would allow countries to ban imports of products whose sale is prohibited in developed countries.

In the meantime, the WTO's new Appellate Body has reached a decision that could change the way the WTO system and the GATT have looked at GATT Article XX, an exception to GATT Articles that covers measures necessary to protect human, animal or plant life or health, and those relating to the conservation of exhaustible natural resources. The new ruling (United States - Standards for Reformulated and Conventional Gasoline - Report of the Appellate Body, WT/DS2/AB/R) sets on a solid foundation the application of the exception to GATT's national treatment requirement by departing from previous rulings based on the rationale that countries must choose, among the legislative alternatives available at the time, the one that is the least inconsistent with WTO rules. What this means to domestic envi-

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ronmental regulators is that they must still continue to avoid prima facie discrimination in the way that foreign producers are treated relative to domestic ones - but they can have confidence that the trading system will acknowledge legitimate environmental regulatory bases for discrimination when they are justifiable and not arbitrary.

However, new situations have been created that could pose challenges to U.S. environmental legislation in the WTO. A 1996 court order imposed a ban on shrimp from nations that could not certify that they were requiring use of turtle excluder devices on their shrimp trawl vessels. These embargoes have gone into effect, and it is possible that one of the many countries affected may choose to challenge these restrictions - based not on product characteristics but instead on the way the shrimp are harvested - in the WTO. Similarly, in 1997, the E.U. may ban all fur imports from countries that cannot certify that they have prohibited use of the leghold trap - or have enacted E.U.-recognized humane trapping regulations.

We will discuss these issues - multilaterally-agreed trade disciplines - and the environmental regulations that they affect, in a seminar to be offered during the Spring semester of 1997. The seminar is entitled, "International Trade and the Environment." If you are interested in the issues discussed above, I encourage you to register for this seminar.

*Jane Earley currently serves as Director of OECD Affairs in the Office of the United States Trade Representative in Washington, DC.
Defying the pessimists who predicted the 104th Congress would remain gridlocked on environmental issues, President Clinton recently signed a comprehensive reauthorization of the Safe Drinking Water Act. The new law, which attracted broad bipartisan support, will make several fundamental changes in how this important program is implemented.

The new law addresses a number of deficiencies in the current SDWA. For example, EPA will no longer be required to regulate 25 contaminants every three years. Instead, EPA will have the authority to decide which contaminants to regulate based on several criteria, including whether the contaminants present the greatest public health concern. Furthermore, EPA will have the discretion to set a maximum contaminant level at a level less stringent than the currently mandated feasible level if achieving the feasible level would increase health risks by inadvertently elevating the concentrations of other contaminants.

The cost-benefit provisions of the new law address another deficiency of the SDWA - the widely recognized view that large costs can be imposed on public water systems without commensurate public health benefits. EPA will have the discretion to utilize cost-benefit analysis in establishing a maximum contaminant level that maximizes health risk reduction benefits at a cost that is justified by the benefits. Surprisingly, the original Act prohibited EPA from utilizing cost-benefit analysis in regulating disinfection byproducts (DBP), produced when disinfectants, including chlorinated compounds, are used to disinfect drinking water.

On July 29, 1994, EPA proposed Stages I and II of the Disinfectants/Disinfection byproducts (D/DBP) rule and the interim Enhanced Surface Water Treatment Rule, based on a consensus reached by a negotiated rulemaking committee. Under the D/DBP rule, water utilities will be required to alter their treatment and disinfection practices to control the level of DBPs. EPA's regulatory impact analysis (RIA) of the D/DBP rule indicates that Stage I alone will cost $4.4 billion in capital and nearly $500 million per year in increased operations and maintenance. Stage II would add billions more to these costs. In fact, total compliance costs for Stages I and II are anticipated to be greater than EPA's estimated costs of compliance for all its previous drinking water regulations combined. Yet, EPA's current range of estimated net benefits of the D/DBP rule, measured as cancer cases avoided, are far too imprecise to provide useful information for regulatory decision making. Indeed, the cost per cancer case avoided ranges from hundreds of thousands of dollars to tens of billions of dollars! In addition, reducing the use of chlorine to reduce byproduct formation could undermine pathogen control and increase waterborne illness. Although EPA attempted to balance the countervailing risks of both pathogens and DBPs when it concurrently proposed both the DBP rule and the interim ESWTR, it remains to be seen whether the appropriate balance is achieved.

According to the House Commerce Committee Report which accompanied H.R. 3604, utilizing cost-benefit analysis in D/DBP rulemaking would substantially disrupt, if not destroy, the next round of negotiations for Stage II and lead to unnecessary delays in protecting public health. But this apprehension is misplaced, particularly with respect to Stage II, which is not expected to be promulgated until the year 2003, at the earliest. EPA has committed to reevaluate and repropose Stage II based on new data regarding DBP occurrence, parameters that influence DBP formation, as well as toxicological and epidemiological research. Surely, EPA could also incorporate cost-benefit analysis data. After all, cost-benefit analysis is an important and useful tool for improving the efficiency and effectiveness of drinking water regulations.

In light of the staggering costs associated with D/DBP rulemaking and its uncertain benefits, EPA should have the discretion to use cost-benefit analysis in D/DBP rulemaking to ensure that sensible regulatory decisions are made.

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Nuclear Regulation Seminar
Added to Environmental Curriculum

During Spring 1997, the University of Maryland School of Law will be offering a new Environmental Law Seminar on Nuclear Regulation. The seminar will examine the response of public law to the environmental legacy of the atom. It will consider how a variety of environmental statutes and government agencies are responding to the scientific complexity and unprecedented environmental challenges caused by the use of radioactive materials in civil and defense activities during the last five decades. The seminar will be taught by Wib Chesser and She'k Jain, two practicing attorneys with extensive experience in the nuclear regulation field.

Course Overview

The seminar will examine the range of options available to enforcers and members of the regulated community in the context of radioactive, as well as mixed hazardous and radioactive, wastes produced during mining, processing, and manufacturing. In addition, the course will examine legal issues raised by the production and testing of nuclear weapons. Overarching themes will include the importance of science in the development of regulatory policy and the role of states and others in regulatory oversight.

Following a brief review of the science of radioactive materials, the course will provide an overview of the legal structure that regulates the use of radioactive materials, beginning with the Atomic Energy Act of 1954. Subsequent classes will examine federal government participation in the generation of radioactive materials, state roles in regulating these materials, the continuing uncertainty with regard to the legal status of much of this material, the importance of the Resource Conservation and Recovery Act (RCRA) to regulation of these materials, and the importance of other federal acts, including Superfund, the Safe Drinking Water Act, the Clean Water Act, and the Clean Air Act. The course will also examine long-term disposal issues, issues relating to mining and mill tailings, and international issues, concluding with an examination of the future regulation and control of radioactive materials.

She'k Jain and Wib Chesser

Mr. Chesser is an associate attorney practicing environmental law in the Washington, D.C., office of the law firm Kilpatrick & Cody. Prior to joining Kilpatrick & Cody, Mr. Chesser was an environment counsel at the National Association of Attorneys General, where his work focused primarily on counseling states on regulatory and enforcement issues related to radioactive materials at United States Department of Energy facilities. He has authored or edited a number of publications relating to radioactive materials. Mr. Chesser is a graduate of the University of Maryland School of Law, where he served as Managing Editor of the Maryland Journal of Contemporary Legal Issues. Prior to law school, Mr. Chesser was employed as an environmental consultant.

Mr. Jain is an associate attorney practicing environmental law in the Washington, D.C., office of the law firm Jones, Day, Reavis & Pogue. Prior to joining Jones, Day, Mr. Jain was an attorney/advisor to the United States Environmental Protection Agency, where he assisted in developing regulations for defense-generated nuclear wastes, for which he received a Bronze Medal of Commendation. Additionally, Mr. Jain advised the Agency on various other environmental matters, especially Acid Rain issues. Mr. Jain is the author of numerous articles related to environmental law, privatization, and international trade. Mr. Jain is a graduate of the University of Maryland School of Law.
Every year thousands of tons of crude oil and petroleum products are spilled in U.S. waters as a result of vessel collisions, groundings and other operational accidents. While the amount of oil discharged into U.S. waters is only a fraction of a percent of the total amount of oil being transported through U.S. waters, discharges can have devastating environmental effects, as evidenced by the Exxon Valdez spill in 1989. Thus, reducing the risk of spills, increasing preparedness to respond to spills when they occur, and ensuring that vessel owners have the financial resources to cover the costs of response and compensation are critical, particularly in light of the United States growing dependency on imported oil.

That was exactly what the U.S. Congress had in mind when, in direct response to several catastrophic petroleum oil spills, including the Exxon Valdez spill, it enacted the Oil Pollution Act of 1990 (OPA 90). OPA 90 created a new legal regime that purported to increase pollution prevention (through measures designed to reduce human error in addition to those mandating certain structural requirements on tank vessels), ensure better spill response capability, increase liability for spills and facilitate prompt compensation for cleanup and pollution damage. While many of OPA 90’s requirements are still in the early stages of implementation and have not yet been fully tested, it is clear that response preparedness has improved since its enactment, partly because tank vessel owners now must have federally approved vessel response plans (VRPs) for responding, to the maximum extent practicable, to a worst case discharge of oil and to a substantial threat of such discharge prior to operating in U.S. waters. Most significantly, the regulations require planholders to have under contract private response organizations that have the capability to respond to possible spills from the planholders’ vessel. The response plan regulations also require (1) identification of a qualified individual who has full authority to initiate a response (i.e., call out and provide initial funding for response contractors) and (2) detailed descriptions of training, equipment testing and periodic unannounced drills to exercise response capabilities. Accordingly, tank vessel owners have been forced to think about and plan for oil spills. While the planning process and its implementation
are far from perfect, most agree that response actions have been more effective due to the increased attention given to preparing for oil spills.

However, because OPA 90 was the product of a turbulent, highly polarized and painfully disorganized legislative process, the implementation of OPA 90 has produced some unintended results. Two examples are the regulation of vegetable oils in the same manner as petroleum oils (due to OPA 90's broad definition of oil) and the now meaningless, yet costly, requirement for Certificates of Financial Responsibility (COFRs) (meaningless because the COFR evidences only a fraction of the potential liability of the shipowner and costly because, as discussed below, the methods for obtaining a COFR are expensive and provide no additional layer of protection for the public).

The vegetable oil issue has been addressed somewhat (but only at the expense of hundreds of thousands of dollars on the part of the vegetable oil industry) through enactment of the Edible Oil Regulatory Reform Act in the fall of 1995. The COFR issue currently is being debated in Congress. Relief on the COFR issue, however, is not likely to occur in this Congress because it is an election year and any attempts to amend OPA 90 are apt to be viewed as anti-environmental irrespective of the actual intent. Both the COFR and vegetable oil issues are discussed in more detail below as two examples of OPA 90's unintended consequences.

Under OPA 90, the owner of a vessel (cargo, passenger and tank vessel) over 300 gross tons must establish and maintain evidence of financial responsibility sufficient to meet its potential liability prior to operating a vessel in U.S. waters, i.e., trading to the United States. No one argues with the concept of a vessel owner evidencing financial responsibility for pollution damage; however, such a requirement should provide protection to the public and the environment rather than being a meaningless piece of paper.

OPA 90 increased a cargo and passenger vessel owner's liability for oil pollution costs and damages to $600 per gross ton (to cover bunker oil spills) and a tank vessel owner's liability to $1200 per gross ton (covering both cargo spills and bunker spills). These limits, however, may easily be broken through violation of an applicable federal safety, construction or operating regulation. Further, the higher tank vessel liability limits apply to tank vessels irrespective of the cargo they are carrying, e.g., the higher limits apply to petroleum oil, vegetable oil and even grain in bulk (unless the vessel owner certifies that the vessel has been modified or certificated by the appropriate authority so that it is incapable of carrying oil). A vessel owner also must demonstrate financial responsibility sufficient to meet its liability under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) for discharges or threatened discharges of hazardous substances. CERCLA financial responsibility must be
evidenced at $300 per gross ton, whether or not the vessel carries hazardous substances as cargo. In implementing the COFR requirement the Coast Guard has taken a just in case approach, i.e., the Coast Guard requires the vessel owner to evidence financial responsibility for both OPA and CERCLA in the amounts stipulated irrespective of the cargoes carried just in case the vessel ever happens to carry those cargoes. This imposes unnecessary costs on the vessel owner merely because the Coast Guard wants to play it safe rather than regulate the industry in a proper manner for cargoes actually carried.

A COFR applicant may establish evidence of financial responsibility by several methods, including insurance, a surety bond, self-insurance (usually only available to U.S. shippers) or a financial guaranty. The P&I clubs, the traditional providers of marine insurance (and those who have been providing COFR cover for two decades under the Federal Water Pollution Control Act, albeit in lower amounts), have refused to provide the required guaranty based on their determination that OPA 90's liability risks are unacceptable because of the potential for unlimited liability and other uncertainties in the law and regulations. (Please note: P&I clubs continue to provide insurance cover but refuse to sign a guaranty with the Coast Guard for COFRs.)

Thus vessel owners have had to seek other, and ultimately more costly, alternatives to meet the COFR requirement. When the P&I clubs refused to provide the required guaranty, new insurance companies stepped in to provide the required cover. A condition to coverage by these new entities, however, is membership in a P&I club. These new entities are therefore counting on the P&I clubs' excellent payment history as a sort of insurance against the possibility that they will actually have to pay any claims as a result of their OPA 90 guaranty. Since these new entities levy heavy fees for COFR coverage, often imposing egregious per voyage fees on tank vessels operating in U.S. waters, the shipowner is forced to pay twice for the same cover -- once to the P&I club for the real cover and once to one of the new entities for the right to list them as the shipowner's COFR guarantor. Having a COFR, therefore, has no practical effect. Having P&I cover or other true pollution insurance cover is critical -- the amount of cover provided by these organizations is commonly $700 million for tank vessels -- an amount that far exceeds that required to be evidenced by the COFR requirement. Premiums that vessel owners must pay to these new entities for a COFR guaranty, which are over and above P&I premiums, vary by type and size of vessel and the number of voyages to the United States, but the annual cost to the shipping industry is estimated to be in excess of $70 million.

In summary, the COFR requirement imposes significant costs on the shipping industry and provides no additional funds for cleanup or damages. Further, a COFR only provides a guaranty for a fraction of P&I club coverage in the unprecedented event the P&I club should refuse to honor its cover. And because of the P&I clubs impeccable record for paying claims, it is unlikely that a COFR guarantor will ever be called on to pay compensation and damages. Thus buying a COFR to meet OPA 90's requirements is akin to buying a ticket to trade to the U.S. without the benefit of any additional pollution cover. The greater irony is that the vast majority of foreign-flag vessels that trade to the U.S. already carry evidence of financial responsibility to cover oil spill liability under the International Convention on Civil Liability for Oil Pollution Damage (CLC), an international convention to which 95 countries are party, but that the U.S. rejected in unilaterally enacting OPA 90. Thus most foreign-flag vessel owners that wish to trade to the United States must have P&I cover, a certificate of insurance under the CLC and a COFR. The $70
million in annual COFR premiums paid by vessel owners could be more effectively spent on preventing pollution through crew training, undertaking inspections and audits of operations, new equipment, upgrading existing fleets, etc. rather than on buying a guaranty that in all likelihood will never be called on to pay claims.

Another example of regulating in a nonsensical manner involves the regulation of vegetable oils under OPA 90. Clearly, from its legislative history, OPA 90 was primarily designed to address the risks of petroleum oil spills. By adopting a broad definition of oil (i.e., oil of any kind or in any form) found in existing statutes without distinguishing one type of oil from another, however, Congress imposed far-reaching and stringent requirements on all oils, not just petroleum oils. Congress simply did not anticipate the impact the new provisions would have on agricultural products such as vegetable oils, which, like petroleum oils, are carried in tank vessels. As a result of OPA 90’s broad definition of oil and the lack of clear congressional direction on differentiation, regulatory agencies, including the EPA and the Coast Guard, generally proposed or issued rules that would regulate vegetable oils to the same degree and in the same manner as petroleum oils, without regard for the significant scientific data justifying differentiation, e.g., vegetable oils, unlike petroleum oils, are nontoxic, biodegradable and non-persistent and thus requirements imposed on the transport of petroleum oils are not in and of themselves appropriate or effective for vegetable oils. The need to differentiate vegetable oils from petroleum oils is evident in both the response planning requirement and the COFR requirement -- not because vegetable oils should not be regulated, but because they should not be regulated in the same manner as petroleum oils based on the differences in characteristics of the products and their attendant risks.

From the outset, the vegetable oil industry participated in the rulemaking process, carefully explaining that it was not seeking an exemption from regulation, but rather appropriate regulation. Inherent in OPA 90’s broad grant of authority to federal regulatory agencies was discretion for agencies to exercise common sense in issuing regulations, as exhibited by the Department of Transportation’s Research and Special Projects Administration in its regulation of tank trucks whereby it determined that vegetable oils carried in tank trucks did not have to be labeled as hazardous materials (imagine the consumer uproar resulting from a common household cooking item being dubbed a hazardous material!).

After hundreds of thousands of dollars expended by the vegetable oil industry lobbying for differentiation (first to the administrative agencies to no avail and then to Congress), Congress enacted the Edible Oil Regulatory Reform Act during the fall of 1995. The measure amended OPA 90 by requiring federal agencies charged with regulation of oil under federal environmental laws to differentiate between vegetable oils and other toxic oils, such as petroleum -- something the agencies arguably could have done absent the new legislation by exercising discretion in implementing the OPA 90 requirements. Although the law was enacted, recent regulatory activity suggests that the agencies still don’t get it. Final rules for response plans were issued by the Coast Guard that establish a separate category for vegetable oils but essentially impose the same costly response requirements. While the agency may have implemented the letter of the law, it certainly did not implement the spirit. In fact, the agency appears to have ignored the law itself because it failed to even recognize the enactment of the legislation when it published its regulations.

Almost five years after its enactment the shipping industry and Congress are trying to work out some of OPA 90’s kinks. It still remains to be seen whether history will view OPA 90 as a success. Clearly an inordinate amount of money is being expended unnecessarily to fix problems that should have or could have been resolved through clearer Congressional direction or an agency’s exercise of discretion in implementing regulatory requirements in a manner that achieves OPA 90’s intended results -- prevention of oil pollution -- rather than imposing costs with little or no environmental benefit.

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Brian Perlberg, outgoing president of the Maryland Environmental Law Society (MELS), reflects on the society's accomplishments during his tenure.

MELS members competed in the National Environmental Law and Policy Competition at the University of Maryland, College Park, and the National Environmental Negotiation Competition at the University of Richmond. MELS also participated in the National Environmental Law Society (NALS) conference in Las Vegas. The NALS conference provided MELS members with networking opportunities and a chance to showcase their environmental law knowledge.

MELS also hosted the Maryland Environmental Law Society (MELS) annual dinner and the MELS Environmental Law Scholarship Dinner. These events provided an opportunity for members to network and engage in environmental law discussions.

In addition to these activities, MELS members volunteered at local environmental organizations and participated in community service projects. These efforts helped to raise awareness about environmental issues and promote sustainable practices.

Looking back on his year as president, Perlberg expresses gratitude to the environmental law program, fellow officers, and members. He highlights the success of MELS in putting on quality events and improving the organization.

The Maryland Environmental Law Society (MELS) continues to be a vibrant and active organization, providing members with opportunities to engage in environmental law and make a positive impact on the community.

By Brian Perlberg, outgoing president, MELS
Touring the World of Environmental Prosecution

by Paul A. Fioravanti, Jr.*

The Environmental Clinic added a practical dimension to my legal education last year through my placement at the United States Attorney's Office in Baltimore. My nine month experience as a court certified student attorney offered more than just a chance to observe; it provided me with the opportunity to participate in many aspects of environmental trial practice.

Throughout the year I was assigned to the Environmental Litigation Group, headed by Assistant United States Attorney, Jane F. Barrett. She and five other attorneys in her group, Ethan Bauman, Warren Hamel, James Howard, Patricia Smith, and Bob Thomas, offered remarkable insights into trial practice and helped to sharpen my advocacy skills. It was also exciting to apply the lessons that I was simultaneously learning in my evidence, environmental law, and clinic classes.

Day one provided an inside view of witness preparation for an upcoming criminal case involving fish poaching on the Potomac River. What followed seemed like a whirlwind tour of environmental practice from the Rivers and Harbors Act of 1899 to the Clean Air Act Amendments of 1990. Along the way I developed a familiarity with the world of environmental law, and I chronicled each of these experiences in the form of legal memoranda.

At every turn the prosecutors to whom I was assigned provided constant feedback and gladly offered context to my assignments. This was especially true in the case of United States v. Interstate General Company, L.P. (IGC), a criminal prosecution involving wetlands violations in Charles County, Maryland.

In October I was invited to a strategy session to discuss the status of the litigation. The next day I was enlisted to research the first of several anticipated trial issues. As the January trial date approached, the pace quickened and last minute trial issues began to swirl; all points headed to the law library. After combing case law I watched the trial unfold. Observing jury selection, opening statements, direct and cross-examination was valuable, but it was what happened outside of the courtroom that I found most enriching. During breaks I participated in strategy sessions as the trial team reviewed the most recent testimony. It was there that I developed an understanding for where Jane Barrett and Jim Howard were headed, further enhancing my appreciation for their in-court presentation. After ten weeks of trial, the jury returned a guilty verdict. The case is being appealed to the Fourth Circuit.

The lessons I learned from the IGC trial were extremely valuable later in the year when I prosecuted two cases involving violations of the Migratory Bird Treaty Act (MBTA) before Judge Daniel Klein. I argued points of law, made opening and closing statements, and conducted direct and cross examination. Winning both cases was the highlight of my clinical experience.

My MBTA prosecutions and the IGC trial are treasured snapshots of my clinical journey. Each project and each attorney who supervised my work provided insights into environmental trial practice and contributed to a truly memorable year.

*Paul Fioravanti is a 3rd year law student and Editor-in-Chief of the Maryland Law Review.
"Summertime and the livin' is easy" -- but, not necessarily the breathing. With the hazy, hot, and humid weather typical of Baltimore summers comes high levels of ground-level ozone. In the summer of 1996 the health-based National Ambient Air Quality Standard (NAAQS) for ozone was violated fourteen times in central Maryland. Only Los Angeles had poorer air quality. While ozone violations have fallen from about forty per summer back in the late 1970s, this failure to attain the ozone NAAQS means the Baltimore - Washington area, like many other urban centers in the U.S., must implement most of the mandatory provisions of Title I of the 1990 Clean Air Act Amendments (the Act). The ozone nonattainment provisions of the Act authorized EPA to develop regulatory programs that employ traditional mandatory requirements, so-called command and control rules, as well as market-based programs such as nitrogen oxides (NOx) emissions reduction credits banking and trading. The Act also requires certain programs that directly affect the public such as the Vehicle Emissions Inspections Program (VEIP), the Employee Commute Options program (changed in 1995 from a required to optional program), the use of reformulated gasoline, and the reduction of volatile organic compound (VOC) emissions from consumer products like charcoal lighter fluid and aerosol sprays.

Some nonattainment areas have augmented these mandatory programs with voluntary ozone control programs. San Francisco, Chicago, Denver, Detroit, Dallas/Ft. Worth, Kansas City, Phoenix, Philadelphia, Pittsburgh, Tulsa, and other cities faced with ground-level ozone problems have started voluntary initiatives. Generally, these programs are cooperative efforts between the state air regulatory agencies, local governments, regional planning councils, private companies, non-profits, and environmental and health advocacy organizations. Outreach programs aim at educating the public about air pollution and at promoting voluntary steps to reduce emissions that contribute to ozone formation. "Endzone - Partners to End Ground Level Ozone" is the Baltimore - Washington voluntary ozone control initiative. But first, a lesson in Air Quality 101.

**TOP 10 TIPS**

On Ozone Action Days, use this list and help reduce ozone (smog) formation.

1. Defer lawn and gardening chores that use gasoline-powered equipment.

2. Limit driving. Rideshare, carpool, walk or bike. Combine errands.

3. Take public transportation.

4. Postpone using oil-based paints and solvents.

5. Do not refuel on an Ozone Action Day. If you must refuel, do so after dusk.

6. Avoid excessive idling.

7. Keep your car well-tuned.

8. Defer use of household consumer products that release fumes or evaporate easily.

9. Start charcoal with an electric or chimney-type fire starter instead of lighter fluid.

10. Conserve energy and recycle.
Ozone and Atmospheric Chemistry

There are two types of ozone. Stratospheric ozone exists some 10-15 miles above the earth. This ozone shields the earth's surface from the damaging effects of ultra-violet radiation. Chlorofluorocarbons (CFCs) released from air conditioners and refrigeration equipment deplete stratospheric ozone. Use of CFCs is now subject to mandatory controls under Title VI of the Act.

Tropospheric or ground-level ozone is an air pollutant that can cause respiratory problems, particularly for sensitive populations such as children, older people, and those with breathing difficulties. It can also damage crops and vegetation. Ground-level ozone is not directly emitted, but is formed when NO\textsubscript{x} and VOCs, the precursors of ozone, react in the atmosphere on hot sunny days. Each day hundreds of tons of NO\textsubscript{x} and VOCs are emitted in the Baltimore - Washington area. During the daylight hours they form ozone, and when conditions are right, levels can exceed the NAAQS standard of 120 parts per billion. About half the NO\textsubscript{x} comes from industrial smoke stacks. The other half of NO\textsubscript{x} emissions and around 95% of the VOCs come from mobile sources (including lawn mowers and boats), vehicle refueling, use of paints and solvents and use of consumer products such as charcoal lighter fluid and aerosol cans. It is on these sources that the Endzone Partnership is focused.

The Partnership

Endzone is a public-private partnership created in 1995 to implement a voluntary ozone control initiative in the Baltimore and Washington nonattainment areas. The goals of the program are: to educate the public about how individuals contribute to ozone air pollution, to inform them about the health affects of ground-level ozone, and to promote easy and effective voluntary actions individuals can take to reduce air pollution. The program is funded by Virginia, Maryland and the District of Columbia with in kind support from the private sector. Local governments from both regions are members of Endzone as well as the Baltimore Metropolitan Council (BMC) and the Metropolitan Washington Council of Governments (COG). Virginia, Maryland and DC transportation and environmental control agencies are members. Private sector partners include BGE, PEPCO, AAA Mid-Atlantic, AAA Potomac, the Maryland Chamber of Commerce, Giant Food, Bell Atlantic, Black & Decker, Washington Gas, and Northrop - Grumman. The American Lung Association and the Washington Regional Network, an umbrella environmental group represent environmental and health advocacy organizations. As part of its goal to promote voluntary actions, this summer Endzone introduced Ozone Action Days. Here is how it works.

Ozone Action Days

Each day of the summer, meteorologists from the University of Maryland at College Park (UMCP) analyze weather data and telemetered data from air quality monitors throughout the region. Working with the Maryland Department of the Environment (MDE) and the Virginia Department of Environmental Quality, a forecast of the peak ozone level is prepared. The level is compared to a forecast scale and, depending on the level, a code green, yellow, orange, or red is issued. The color codes corresponded to good, moderate, approaching unhealthy, and unhealthy air quality.

Endzone partners and affiliated businesses and organizations that have pledged to participate in Ozone Action Days receive notification of code orange and code red forecasts by fax, email, or by accessing MDE, COG or UMCP Interment websites. Press releases are issued to the media. TV viewers in Baltimore and Washington watching early evening weathercasters will see the animated Ozone map sponsored by the American Lung Association and funded by Endzone. The map shows ozone levels increasing as the atmosphere cooks during the heat of the day. All these means are used to alert the public of the need to take voluntary measures to help avoid high levels of ozone.

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OVERCOMING LEGISLATIVE GRIDLOCK:
CONGRESS ENACTS CONSENSUS SAFE DRINKING
WATER AND FOOD SAFETY LEGISLATION

Congress has just ended years of legislative gridlock by reauthorizing the Safe Drinking Water Act and by enacting legislation to protect against pesticide residues on foods. Approved overwhelmingly in both the House and the Senate at the end of July, both pieces of legislation were signed into law by President Clinton in early August. Each law is the product of a remarkable compromise that won support from the Clinton administration and broad coalitions of business interests and environmental groups. These laws are the only significant environmental initiatives adopted in the 104th Congress, but they may be harbingers of how future environmental legislation will be adopted through consensus-building processes that may now be necessary to overcome legislative inertia.

The Food Quality Protection Act of 1996 (FQPA) responds to a court decision that would have forced EPA to revoke the tolerances for dozens of pesticides whose residues appear regularly on processed foods. The FQPA bars application of the food additives Delaney Clause to pesticide residues on raw or processed foods. For establishing tolerances for such residues, the legislation replaces the Delaney clause's absolute prohibition on carcinogens with a new, health-based standard of "reasonable certainty of no harm" and it extends this standard to raw foods on which a much wider range of pesticides typically are used than the 80 to 100 chemicals used on processed foods. It is widely believed that this will provide greater overall protection of public health by subjecting pesticide residues on both raw and processed foods to a stringent health-based standard limiting individual cancer risks to the exposed population to no greater than a one-in-one-million additional lifetime risk.

The Safe Drinking Water Act Amendments of 1996 were approved unanimously in the Senate and by a 392-30 margin in the House and signed into law by President Clinton on August 6, 1996. The amendments seek to improve protection of drinking water while providing greater flexibility to EPA and localities to address contaminants that pose the greatest risks. The legislation authorizes increased federal financial aid to localities to upgrade their water supply systems and it requires water suppliers to provide more information to their customers about contaminants. It also seeks to ease the burden of regulation on small entities by authorizing variances from monitoring requirements and by providing alternate means for satisfying contaminant standards.

The legislation requires water suppliers to notify their customers within 24 hours if violations are discovered that have potentially serious health effects. For other violations, the supplier must notify its customers within one year of the violation. The water suppliers also are required to provide the public with an annual report on the levels of various contaminants found in their system and a toll-free hotline number for consumers to use to seek more information. This represents another effort to use informational regulation to mobilize public demand for environmental protection. (See David Fischer's article on Page 13.)

Clinic Litigates, Counsels, and (Almost) Legislates

The 1996-97 school year will be a very busy one for the Clinic, which will have a full complement of ten students working under the supervision of Professor Steinzor and our co-counsel. As always, we welcome any thoughts or suggestions from University of Maryland alumni or other readers about our work or potential new projects.
Ozone Action Days and the Endzone Partnership

The Call to Action

Once a code orange or code red is declared, Ozone Action Days participants implement their voluntary episodic programs. Industrial participants may shut down operations or modify their production lines to reduce emissions. Employers notify their employees to take public transportation or carpool to and from work. Some may subsidize fares, while others may raffle off passes or offer free soft drinks in the cafeteria as an incentive not to drive to a fast food restaurant for lunch. Some gas stations offer discounts to refuel after dusk when the photochemical reactions stop. Some Washington area counties offer free ride days on the Metro. MDE estimates that if one in five Marylanders take voluntary measures on Ozone Action Days, about 10 tons of VOC emissions will be eliminated. What can you do to improve air quality on Ozone Action Days? Check out the "Top Ten Tips" on the previous page to see how you can make a difference.

* Charles Wagner is a senior environmental engineer with Baltimore Gas and Electric Company and Co-chairman of the Endzone Steering Committee. He is also a second year evening student at the University of Maryland School of Law. Any opinions or views expressed above are those of the author and not Baltimore Gas and Electric Company, the Endzone Partnership or any of its members.

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New Edition of Environmental Regulation Casebook Published

Little, Brown & Company has just released the second edition of Professor Percival's best-selling casebook, Environmental Regulation: Law, Science, and Policy. The new edition represents a comprehensive revision and updating of the highly successful first edition that incorporates all the major developments in the field through spring 1996. It also features a new chapter on environmental enforcement that includes new materials on criminal enforcement and the enforcement consequences of self-auditing. The book, which runs 1465 pages, provides the most extensive and up-to-date coverage of the environmental law field of any casebook. Copies can be ordered from Little, Brown & Company by phoning (800) 759-0190 or by writing Little Brown's Order Department at 200 West Street, Waltham, Massachusetts 02154. A 470-page Teacher's Manual also is available to assist professors who adopt the book for classroom use.