

MDE Environment

Maryland Department of the Environment

Annual Report Issue

October 1998



The Faces of Maryland's Environment

Air Quality Improvements



For the young and old, active or ailing ground-level ozone is a summer time hazard.

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Oil Cleanup in Your Hometown



Cleaning up hazardous materials, preventing spills and taking care of our children.

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Western Maryland finds environmental programs answer to emergency flooding.

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Helping the environment one project at a time.

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Revitalization is the Key



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Programs success.

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Taking Care of Business



Fast-track permits are a sweetheart of a deal.

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Parris N. Glendening, Governor

Kathleen Kennedy Townsend,

Lieutenant Governor

Jane T. Nishida,

Secretary of Environment

Bob Hoyt, Assistant Secretary

Susan E. Woods,

Director of Communications

Christine F. Plummer, Managing Editor

Editorial Board Members

John Mitchell, Program Manager

Environmental Permits Service Center

Dorothy Guy, Asst. to the Director,

Air and Radiation Management Admin.

Jim George, Section Head, Technical &

Regulatory Services Administration

Martha McCulley, Administrative Aide,

Water Management Administration

Joe Herb, Graphic Artist, Technical &

Regulatory Services Administration

Don Mauldin, Administrative Specialist,

Waste Management Administration

Barbara Rodgers, Division Chief,

Administrative & Employee Services

Pat Coll, Management Associate,

Administrative & Employee Services

Contributing Writers:

Bonnie Berardelli, WAS	Shirley Garner, OC
Carolyn Kuciara, TARSA	Fran Stierstorfer, OC
Pat Coll, AESA	John Mitchell, EPSC
Georgia Allen, AESA	Stephen Krause, WMA
Susan Woods, OC	Alan Williams, TARSA
Laura Armstrong, EPSC	Ron Lipinski, ARMA
Lorrie Del Pizzo, EPSC	Bob Summers, TARSA
Gary Setzer, WMA	Steve Dawson, WMA
Tom French, AESA	Alice Scanlon, WMA
Denise Brown, AESA	Shari Wilson, WAS
Herb Meade, WAS	Gerry Gietka, WAS
David Mrgich, WAS	Alan Kampmeyer, WMA

For the Record Section

Meetings and Hearings Calendar

Joane Mueller, Production Coord.

Contributors:

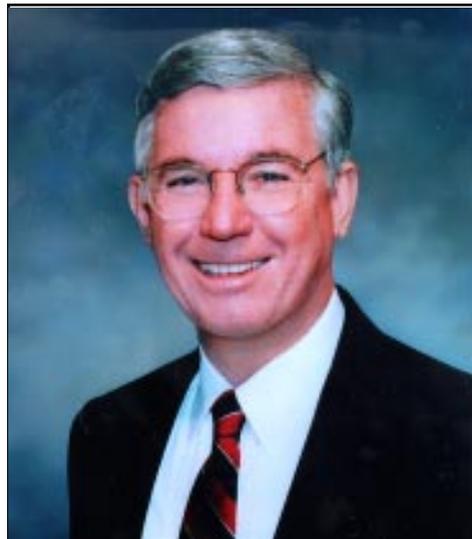
Dorothy Guy, ARMA	Ty Stinson, WMA
Gail Castleman, WAS	Ta-shon Yu, WMA
Lorrie Del Pizzo, EPSC	Bob Harris, WMA
Sheila Franklin, WMA	Rick Trickett, WMA
Edwina Goines, ARMA	Nadine Hailey, WAS
Jeanette Wolfe, ARMA	
Melody Thrower, WMA	
Lois McNamara, WMA	

Enforcement & Compliance Notes

Bernie Penner, Office of the Secretary

Contributors:

Angelo Bianca, ARMA
 Frank Courtright, ARMA
 Frank Whitehead, ARMA
 Regina Rochez, WAS
 Jack Bowen, WMA



Message from the Governor

As Governor of Maryland, my goal is to make Maryland the best place to live, work and raise a family. As a parent, my goal is to protect Maryland's environment not only for my son, but for my grandchildren and their children. By safeguarding our air, land and water resources, we ensure that future generations will have a healthy State to live, work, play and raise families. That's why I am proud of our recent accomplishments for the environment.

Working with the Legislature, we created a nationally recognized plan to fight a repeat outbreak of toxic pfiesteria, manage the nutrients that feed that bacteria, curb agricultural runoff into the Chesapeake Bay and its tributaries and provide money to upgrade sewage treatment plants. Maryland will modernize 15 sewage treatment plants on the Eastern Shore within three years and all sewage plants within five years.

We are already seeing results in our efforts to curb sprawl and revitalize neighborhoods through Smart Growth policies. The Voluntary Cleanup Program designed to cleanup and re-use contaminated industrial sites gains more participants every day with an eye to following in the successful steps of the American Can site in Canton, where sparkling new office and retail space has replaced a decaying eyesore. Our efforts to preserve green spaces and rural legacy, restore wetlands and direct state resources to established neighborhoods has brought new hope and optimism to our communities.

We also are working to achieve the State's environmental goals through enhanced customer services, more flexible regulations, easier permitting and public awareness. It is important that we work together to achieve Maryland's environmental protection and economic development goals to improve the quality of life for all Marylanders, present and future.

My administration remains committed to protecting Maryland's valuable natural resources, probably the most valuable legacy we can leave our children. It is my hope that our children, and their children, will be able to look at what we did and say, "Well done."

Infrastructure Funding Improvements

by Stephen Kraus

Over the past eighteen months the Maryland Department of the Environment (MDE) has made significant enhancements to the Water Quality and Drinking Water Revolving Loan Funds. MDE is able to provide below market financing terms for water quality and drinking water projects to qualified borrowers primarily through capitalization grants from the U.S. Environmental Protection Agency, matching funds from the State of Maryland, and revenue bonds issued by MDE. These funding sources are pooled together with loan repayments and other income to provide the citizens of Maryland with a low cost innovative funding mechanism. As of June 30, 1998, MDE had entered into loan agreements with 45 jurisdictions (certain jurisdictions have more than one loan) throughout our state totaling \$338 million.

Effective July 1, 1998, MDE reduced the cost of borrowing from the Water Quality Revolving Loan Fund (WQRLF) from 60 percent of the Bond Buyer Revenue Bond Index to 45 percent. For loans closing in September 1998, the interest rate was just 2.40 percent for a term not to exceed 20 years. This interest rate

reduction can save a local jurisdiction approximately \$2.5 million in interest costs on a \$10 million loan verses what the jurisdiction would otherwise receive in the open market. The Drinking Water Revolving Loan Fund (DWRLF) is being offered at 60 percent of the same index.

MDE has eliminated the borrower costs of issuance and replaced it with a simple \$3,000 out of pocket origination fee. Removing this requirement reduces the cost of borrowing.

Davis Bacon Federal Wage Rates no longer apply. This requirement often increased construction labor costs 10 to 15 percent depending on the jurisdiction. Eliminating this federal requirement reduces project costs and results in lower user fees.

Project performance certification is no longer required, as this was redundant and mirrored the requirements under the discharge permits.

Payment reimbursement procedures have been streamlined so that borrowers are able to receive loan proceeds much sooner than in the past.

Construction Change Orders no longer require departmental approval for qualified borrowers.

The revolving loan funding application has been reduced by 50 percent and now includes only the most

pertanante information relating to project eligibility and construction costs.

The WQRLF is now available for what is termed "Expanded Uses." In the past, the focus of the WQRLF has been wastewater collection and treatment systems. Now the loan fund can be used for other water quality purposes such as farmer's Nutrient Management Practices, Soil Conservation Plans, storm water management facilities and brownfields.

Financial Advisory Assistance

In July 1997, MDE developed a financial model that assists water and sewer system operators in developing a user rate structure that provides financial security to their respective water and/or sewer utility funds. Recently, a small Western Maryland jurisdiction requested loan funds to upgrade and improve their wastewater and drinking water facilities. However, the jurisdiction was unsure of the effect the additional borrowing would have on their user rates and asked MDE for assistance. MDE modeled the jurisdiction's financial

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Funding Improvements

data to include operating revenues, expenses, and the new MDE debt service requirements to determine if the current rate structure provided adequate revenue to support the expenses of water and sewer enterprise funds. The results of the model indicated that user rates needed to be increased in order for the jurisdiction to maintain adequate service and pay principal and interest on MDE's loan. After several months of negotiation, we agreed on a combination of user rate and impact fee increases that will provide adequate revenue to ensure cash flow and financial stability to the jurisdiction's water and sewer funds well into the future. The jurisdiction was able to obtain council approval for the rate changes based on MDE's financial model, and at our request, implemented the new rates prior to closing both loans. By working together with borrowers in this manner, we not only protect the financial stability of both revolving loan funds, but also protect the financial integrity of the jurisdiction.

Linked Deposit

Maryland is one of only two states in the nation that has incorporated a "Linked Deposit" mechanism with the DWRLF and WQRLF. Under this program, a private land owner or water system operator may apply for below market rate of interest financing through a network of private lending institutions. The below market rate of interest loan the borrower receives from the lender is "Linked" to a below market rate of interest investment MDE will place with the lender. Applicants currently have 39 lending institutions in MDE's Linked Deposit network to choose from.

This innovative mechanism was designed for private water system operators, landowners with failing septic systems, and farmers with an approved Soil Conservation or Nutrient Management plan(s), whom prefer to apply for below market rate financing through a lender in their city or town instead of applying directly to MDE. This new program is expected to be available by November 1, 1998.

Please contact Stephen Krause at (410) 631-3119 if you have additional questions about MDE's revolving loan funds.

Strengthening Communities

" In the early 1990s, MDE issued Greensboro a consent order because our old wastewater treatment plant wasn't meeting standards for Biological Oxygen Demand (BOD). The town worked with MDE to come up with a plan, we applied for grants and now we have a treatment facility that more than adequately serves our 1,500 residents. BOD is down from 45ppm/month to 7, and now we use fewer chemicals to treat the sludge. That has to be better for the environment and our future. Planning for a positive future for Greensboro has definitely

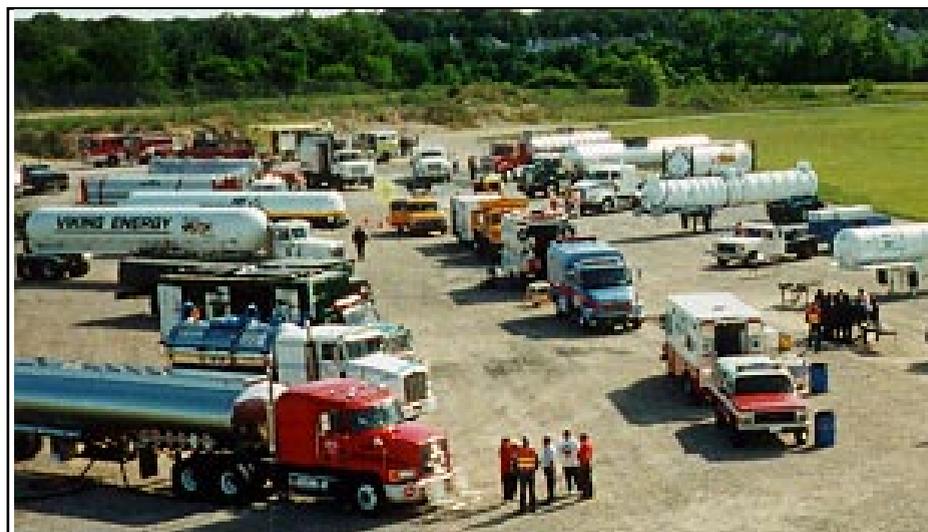


Photo by Alan Kampmeyer

been a team effort. The town has a new wastewater treatment plant, new water lines and pumping station.... So much of what happens in our town is due to the contributions of agencies such as Maryland Department of the Environment, Department of Economic Development, Community Development Block Grants, U.S. Department of Agriculture and many others. They will help you get the project completed. All you need is a well thought out plan, and the vision to make it happen. Greensboro's citizens know that we are working hard for them."

Diane Ewing
Town Manager
Town of Greensboro

Preparing for Environmental Emergencies



MDE's Emergency Response Division at a recent training exercise

by Alan Williams

Every day in Maryland thousands of individuals work with substances which are potentially harmful to our environment. When proper care fails and accidents happen, the Maryland Department of the Environment's Emergency (MDE) Response Team is called into action. As Maryland's front-line experts in hazardous materials spills, chemical fires and other environmental disasters, MDE responded to 663 environmental emergencies in fiscal year 1998.

Emergencies range from the near common gasoline tanker collision to the September 1997 Stealth Fighter crash at the air show at Martin's State Airport—both involving fuel spill and cleanup expertise. Many of the emergencies that MDE is called to assist with involve danger not only to the environment but to human health as well. A recent leaking underground gas tank resulted in the closure of three shopping centers and the evacuation of an apartment complex.

MDE's Emergency Response Team regularly participates in pre-

paredness training and drills with local governments, volunteer fire departments and business groups including the Chemical Stockpile Emergency Preparedness Program (CSEPP), South Baltimore Industrial Mutual Aid Plan, Salisbury Mutual Aid Group and the Seaford Delaware Mutual Aid Group. This past year, MDE co-hosted the International Fire Chiefs Hazardous Materials Conference in Baltimore.

Community groups and local schools benefit also from the team's expertise in environmental issues. Emergency response team members regularly visit classrooms to educate students on hazardous material spills and cleanup activities and how they effect Maryland's environment.



Customer Service is the Bottom Line

by EPSC Staff

The Maryland Department of the Environment realizes that businesses need solid information and timely permitting services to be competitive in today's global economy. And, the department's commitment to customer service has produced effective results.

In 1997, for example, 83 percent of all MDE's permits were issued in 30 days or less. 1997 was also the first year in which standard permit turnaround times were in effect. MDE established these times, in consultation with businesses and other stakeholders, to help businesses know when to expect their permits, and to help the department measure its success at making timely permitting decisions. And the statistics are impressive: 93 percent of the permits issued by MDE in 1997 were issued within the established standard turnaround times.

Timely, service-oriented permitting is only one part of MDE's coordinated attack on the stereotype of inefficient, unfriendly bureaucracies. 1997 also saw several other customer-service initiatives underway.

Form Reform

Operating many different programs, MDE has many different forms that customers must complete to get the services that they need. Some of these forms are more usable and understandable. In 1997, MDE began an initiative to review, revise, and improve these forms to make them more efficient and customer friendly. Over 100 obsolete forms already have been eliminated, and many others are in the process of being improved.



Sweetheart Cup's EarthShell

Money-Back Guarantee

In 1997, the General Assembly passed a law, supported by MDE, requiring the department to establish a money-back guarantee for permit applicants. Applicants for most major permits are eligible to apply for refunds of their permit application fees if MDE fails to issue a permit decision by the date promised. This program highlights the department's commitment to providing predictable, common sense permitting services.

Pollution Prevention

The P2 Program received an EPA grant in September, 1997 to promote pollution prevention and best management practices at marinas. Under this grant, MDE participated in the Governor's Clean Marina Committee and worked with the Department of Natural Resources in developing a multimedia manual for marinas. The P2 Program also worked with the Chesapeake Bay Program on Businesses for the Bay, a new voluntary program encouraging and rewarding businesses that engage in various pollution prevention measures. Thirty-six facilities signed up in the first year of the program.

Taking Care of Business

met with us to discuss the best approach to the permitting process. Sweetheart described in detail the production process plans and MDE outlined all of the requirements for permitting to occur. We left the meeting armed with information and their support to help "fast track" our request. Fast tracking did not mean cutting corners. All permitting requirements had to be met and with the help and guidance of MDE we were able to receive a permit to construct within 10 weeks of application. The key for a fast track approach is developing good communication, being prepared, submitting all applications and paperwork efficiently and responding to issues quickly. We are planning to begin production at the end of this calendar year."

"This past spring Sweetheart Cup Company Inc. finalized plans for a new environmentally friendly food service disposable product. The new product required an existing warehouse to be converted into a production facility which meant Sweetheart needed a permit to construct from MDE. We needed it fast. We had customers ready to buy. We turned to MDE for their guidance. MDE staff

Barry Ebling
Plant Manager
Sweetheart Cup Company Inc.

Online Permit Service

MDE is now accepting permit applications online. Currently, the service is available for two State discharge permits:

- Notice of Intent for the Discharge of Treated Ground Water from Oil Contaminated Ground Water Sources to Surface or Ground Waters
- Notice of Intent for the Discharge of Storm Water and Hydrostatic Test Water from Oil Terminals to Surface or Ground Waters

Online permitting is part of MDE's efforts to develop one-stop business permitting under its Integrated Environmental Permitting and Compliance Information System. MDE is currently identifying additional general permits to increase our online, interactive presence. Most applications and instructions are downloadable on the web at www.mde.state.md.us/permit/download.html. The 1998 Permit Guide also is online. Real-time, queryable data on current permitting activity will be added in November 1998.

FREE
Pollution Prevention Internet Training for the First 40 Maryland Businesses that Sign Up!

Learn how to navigate the web to access valuable pollution prevention information relevant to your business.

Training will take place at the Maryland Department of the Environment
2500 Broening Hwy
Baltimore, MD 21224.

Contact Laura Armstrong
at 410-631-4119 or
larmstrong@mde.state.md.us

Improving Air Quality



"Ever since I was three years old I would come down with bronchitis or pneumonia by the end of every summer. Mom finally realized that it was the air pollution that was making me get sick every summer and making my asthma worse. We found out about ground-level ozone and the Maryland Department of the Environment's Air Quality Hotline when I was ten. We have those little magnets all over the refrigerator now...the ones that have the hotline telephone number on them. I call the hotline every day during ozone season. I like to play field hockey, swim and even run. I just can't do it on bad air days. My asthma gets so bad, my chest tightens, I cough and wheeze and, because I'm not getting enough oxygen, I sometimes even get a headache. If I could say one thing to everyone in Maryland it would be to carpool and to only mow lawns on good air days. It really does make a difference. I can tell."

*Lilly Schestag
Howard County
15 years Old*

Vehicle Emissions Inspection Program

Maryland moved a dramatic step closer to cleaner and healthier air in 1997 when the state began mandatory dynamometer emissions testing for most vehicles in the Baltimore and Washington area. Twenty-one states, including Pennsylvania and Virginia, have implemented some form of an enhanced program including a dynamometer test, many of them following Maryland's lead. Six other jurisdictions, including Washington, D.C., will be starting a treadmill testing program in the near future.

Motorists who drive 1984 and newer model year vehicles are now having their cars tested on the dynamometer. Model years 1977-1983 and heavier vehicles continue to receive the idle test. Newer computer-controlled vehicles are designed for dynamometer testing. VEIP was made more customer-friendly by offering a renewable, two-year waiver to senior citizens who drive less than 5,000 miles per year; providing monitors in the waiting booths so that drivers can view the driving path that the inspectors use during the test; installing lift bars to ease vehicles on and off dynamometers; maintaining the \$150 maximum expenditure required for emissions-related repairs until January of 2000; maintaining the \$12 fee for both the tailpipe and treadmill test; improving directional signs, literature and employee training and certification.

Air quality improvements resulting from VEIP help to protect the health of all Marylanders exposed to poor air quality, especially the 600,000 citizens whose health is already compromised

by various respiratory diseases. It is estimated also that airborne emissions are responsible for 27 percent of the nitrogen reaching the Chesapeake Bay; a leading source of which is motor vehicles. A fully implemented vehicle emissions program will reduce ozone-forming emissions from motor vehicles by 71 tons per day. To date, more than a 800 thousand vehicles have been tested. In general, when the temperature exceeds 90 degrees, Maryland now has half the ozone exceedances of the one-hour ozone standard when compared to the 1980s.

Air Quality Plans Submitted

MDE has submitted several air quality plans to the U.S. Environmental Protection Agency that would result in a 27 percent reduction in volatile organic compounds (VOC) and nitrogen oxides (Nox) emissions in the Washington region and a 42 percent reduction of these pollutants in the Baltimore region and Cecil County. Control measures include the new VEIP, cleaner fuels, reformulated paints and consumer products, cleaner cars, controls on open burning and an increased use of available technology.

The latest plans also include attainment demonstrations for the Washington, Baltimore and Cecil County areas that analyze whether current pollution control efforts are likely to reduce ozone concentration to levels that do not exceed the health-based one-hour ozone standard. Both Baltimore and Cecil County are required by law to meet the one-hour standard by 2005. The Washington region must meet the standard by 1999. In general, when the temperature exceeds 90 degrees,

Maryland now faces half of the exceedances of the one-hour ozone standard when compared to the 1980s. The EPA will be acting on the plans by late 1998 or early 1999.

Cash For Clippers

To make Maryland's air cleaner, the Maryland Department of the Environment (MDE) offered rebates of \$50 on purchases of electric and rechargeable mulching mowers and \$15 on push mowers for each operating gasoline-powered mower turned in during "Cash-for-Clippers" events.

To ensure the success of the program, MDE created a partnership among Anne Arundel, Baltimore, Charles, Frederick, Harford, Howard, Montgomery and Prince George's counties as well as BGE, PEPCO, Black & Decker, the American Lung Association, the Baltimore Metropolitan Council, and the U.S. Environmental Protection Agency to implement the program.

Pollution from lawn mowers, particularly older equipment, contrib-

utes measurably to the problem of ground-level ozone. Using a typical gasoline-powered lawn mower for one hour produces the same amount of air pollution as driving a car for 50 miles. In addition, by recycling lawn wastes through the use of electric or rechargeable mulching mowers, waste can be kept out of landfills and incinerators. During peak summer and fall months, yard trimmings can represent as much as 25 to 50 percent of municipal solid waste.

Ozone Map and Air Quality Hotline

Many of Maryland's citizens count on daily ground-level ozone information from the television news animated mapping system or MDE's Air Quality Hotline. The Baltimore/Washington metropolitan area was the first in the country to benefit from ozone mapping technology in 1995. During the 1998 ozone season it was available in 22 Midwestern, Eastern and South-eastern states receiving data from over 400 ozone monitors.

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Ozone Action Days

Since May of 1996, over 300 businesses, government agencies and organizations in the Baltimore/Washington region have signed on as Ozone Action Day partners. The program, a small part of a broader effort called ENDZONE - Partners to End Ground-Level Ozone, advocates air pollution prevention measures when meteorologists predict that the weather is likely to form ozone. Ozone Action Day partners helped to reduce air pollution on poor air quality days by educating employees and customers, selecting employees to coordinate Ozone Action Days activities for their workplace, and deferring ozone-forming activities.

National Low Emission Vehicle

by Dorothy Guy & Ron Lipinski

Maryland joined a voluntary national agreement with other Northeast states, the U.S. Environmental Protection Agency, and American and international car manufacturers in January 1998 to require the sale of cleaner-burning vehicles throughout the country. The new vehicles will emit nearly 70 percent less hydrocarbons (also known as volatile organic compounds or VOCs) and 50 percent

less nitrogen oxides (NOx) than vehicles now in showrooms. The agreement will also reduce air emissions from most sport utility vehicles, minivans, and pickup trucks as the new set of exhaust emission standards that result from the agreement affects vehicles at or below 6000 lbs gross vehicle weight rating (GVWR). The added cost will be less than \$100 per vehicle.

Because the federal Clean Air Act prevents EPA from tightening emission standards from vehicles until 2004, the voluntary agreement will achieve cleaner air in Maryland and around the country at least 5 years ahead of schedule. Maryland and other Northeast states have been working collectively for several years to get the manufacturers to produce cleaner vehicles in order to reduce the ground-level ozone problems that we experience every summer. With this agreement, the cleaner cars will start to be sold in Maryland and other Northeast states in 1999 and nationwide by 2001.

Implementation of the NLEV program is expected to achieve nationwide NOx emission reductions of 400 tons/day in 2005 and 1250 tons/day in 2015, and nationwide reductions in VOCs of 279 tons/day in 2005 and 778 tons/day in 2015. These

additional motor vehicle emission reductions are necessary for Maryland and the Northeast states to meet the federal health-based standard for ozone. Marylanders now drive 135 million miles a day and this number continues to grow by 2 percent every year.

Maryland is now preparing draft regulations which will incorporate the State's commitment to the NLEV program into its clean air plans. The Department of the Environment is planning to discuss these draft regulations with its Air Quality Control Advisory Council in October and schedule them for public hearing in late 1998 or early 1999.

Maryland Efforts to Curb Ozone Transport Reach Fruition

In September 1998, the U.S. Environmental Protection Agency (EPA) announced its final rule for regional nitrogen oxide (NOx) reductions to address the regional transport of ozone smog. This action brought to fruition a two-year study on ozone transport conducted by the Ozone Transport Assessment Group, a collective of 37 eastern states, the U.S. Environmental Protection Agency, and other stakeholders, including industry, health, and envi-

ronmental groups. Maryland played a major role in OTAG having co-chaired with EPA the workgroup that developed many of the control strategy recommendations that were delivered to EPA for action. EPA's rule will reduce ozone transport by requiring upwind states to reduce nitrogen oxide emissions, allowing each state to choose which sources to target.

Even before EPA's action, Maryland had taken steps to reduce NOx emissions. As a member of the Ozone Transport Commission, Maryland committed to a regional plan to reduce NOx throughout the Northeast. In addition, in May 1998, Maryland adopted a NOx reduction rule which requires major sources to reduce NOx emissions by 65 percent by May 1999. Affected sources have the option of achieving compliance by controlling emissions or obtaining allowances from other sources.

Nitrogen oxides are a major contributor to ozone. Throughout 1998, Maryland has experienced 10 exceedances of the health-based federal ozone standard. Maryland is committed to working with EPA and other states to ensure timely implementation of the EPA rule and to achieve clean air in Maryland and other states affected by ozone pollution.

Fighting Pfiesteria as a Team

by Bob Summers

MDE is currently part of an inter-agency team that is handling all aspects of the Pfiesteria problem in Maryland. The Department of

Natural Resources (DNR) is responsible for the monitoring of Pfiesteria, water quality and fish health in Maryland waters. The Department of Health and Mental Hygiene (DHMH), along with researchers from the University of Maryland Medical

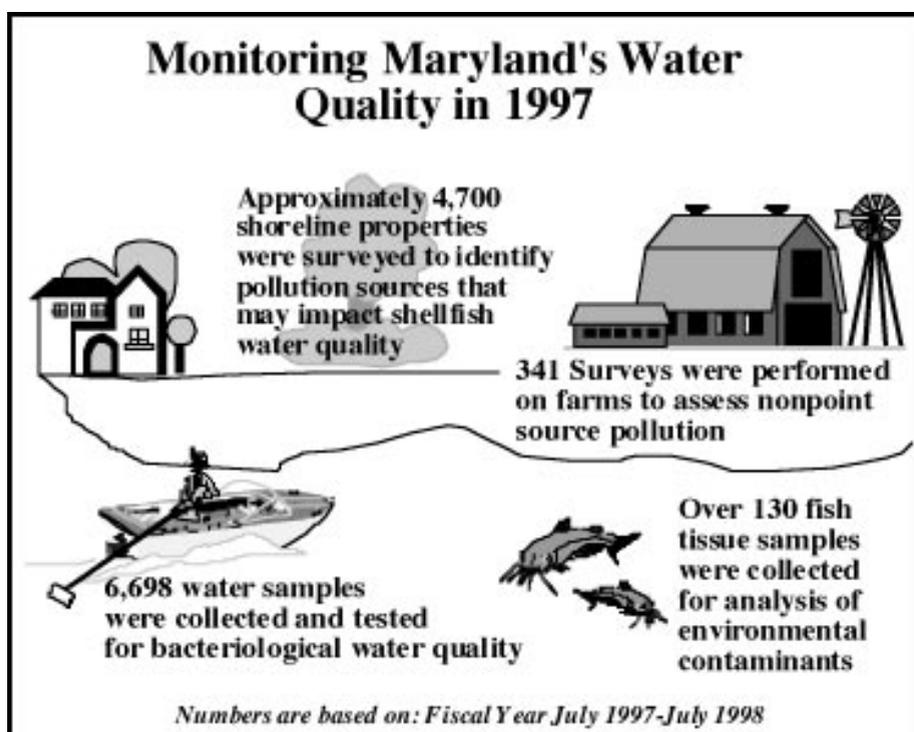
School and Johns Hopkins School of Medicine, are tracking human health effects. MDE is responsible for the monitoring of point and nonpoint source pollution in the affected watersheds. MDE and the Maryland Department of Agriculture conducted a joint survey of agricultural operations to ensure that there are no major water quality problems associated with agriculture in the affected watersheds.

As of mid-September, DNR monitoring has shown much lower levels of fish health problems compared to last year. Only two small areas have been suspected of having a Pfiesteria problem this year, the Shiles Creek (tributary of the lower Wicomico) and the Chicamacomico River. Both of these areas are suspected of having a low-level concentration of Pfiesteria, causing some lesions on fish, but without any indication of a toxic episode or fish kill. Likewise, reports of human illness have been limited, with no confirmed incidents associated with Pfiesteria.

Regulated sources of nutrient

pollution in the affected watersheds are being inspected and monitored by MDE (including samples at 14 major and 10 minor waste water treatment plants). Watershed nonpoint source pollution surveys have been completed for all of the watersheds of the Lower Eastern Shore, from the Choptank south. Over 160 stream/river sites have been sampled 5 times since January, with one more survey scheduled during September. Data are currently being compiled and verified prior to analysis. Storm event samples for pesticides and herbicides also were taken in May and June from streams discharging to the lower Pocomoke River.

Agricultural nutrient sources are the subject of joint MDA/MDE assessment teams who have completed the surveys of the three targeted watersheds (Pocomoke River, Kings Creek, and Chicamacomico River). Contact was made with 598 agricultural owners/operators; 341 surveys were performed on farms where permission was granted (approximately 57 percent voluntary participation).



New Directions for Wetlands Management in Maryland

by Gary Setzer

Through its nationally recognized regulatory program, the Maryland Department of the Environment (MDE) has been able to achieve a "no-net-loss" of wetland acreage. Beginning in 1997, however, the department began to focus on other initiatives to enhance the success of the regulatory program and address wetland management issues in a comprehensive manner.

- In May 1997, a new Wetland Recovery Goal was introduced to strengthen Maryland's policy of "no net loss" of wetlands by including a goal to increase the state's wetland acreage base by 10 percent. This ambitious effort is a commitment to create, restore or enhance 60,000 acres of wetlands and restore Maryland's wetland base to post-World War II levels.

- To help guide the state's efforts to restore lost wetlands, the Governor appointed a Wetlands Restoration Steering Committee. Initially, the committee is undertaking a review of existing programs and policies to identify measures that will facilitate attainment of the 60,000-acre goal. The committee also will identify restoration priorities and recommend incentives for wetland creation.

- The development of a State Wetland Conservation Plan (SWCP) is being funded through an U.S. Environmental Protection Agency State Wetland Program Development Grant. The SWCP will focus primarily on non-regulatory aspects of wetland management and provides a framework to protect, restore and create wetlands that will complement Maryland's regulatory program.

- The Montgomery County Pilot Project is a collaborative effort among the Maryland Department of the Environment (MDE), the U.S. Army Corps of Engineers, the Montgomery County Department of Public Works and Transportation, Montgomery County Department of Water Resources Management, and the Maryland National Capital Park and Planning Commission. The goal of this initiative is to establish procedure to document information generated during the development of the County's comprehensive master plan and subsequent subdivision review process that can be used to enhance the efficiency and effectiveness of the State/federal nontidal wetlands permitting process.

- A guidance book for developing watershed management plans to address wetland management issues and direct wetland regulatory review has been completed. The guide is intended for use by local governments and other parties interested in addressing and coordinating wetland issues early in the local planning process.

- Improved implementation of the Maryland State Programmatic General Permit (MDSPGP) by MDE and the U.S. Army Corps of Engineers has enhanced the regulatory process. The MDSPGP has relied on the State regulatory process to provide wetlands protection for the majority of permit applications. In addition to eliminating State/federal duplication, the MDSPGP has freed resources and enabled the Corps to devote staff to historically neglected areas of wetland protection, such as advanced wetland identification and watershed planning and functional assessments

Smart Development

by Steve Dawson

Is it possible to build a desirable residential subdivision and protect, restore and enhance wetlands? Wetlands in and around developments can



Captains Knoll under construction

add attractive, aesthetic open space, entice wildlife to our backyards and recreational areas, act as visual buffers and lessen dangers of flooding, while at the same time protecting our rivers, bays and groundwater from the discharge of pollutants associated with human activities. With a little smart planning the value of your property may increase.

The Ocean City area is just one example where market pressure is so great that land containing significant areas of wetlands is still very attractive for development. Scenic saltmarsh and tidal swamps enjoyed by travelers to Maryland's Lower Shore have been protected by both state and federal regulatory programs for years. Yet, development of extensive wetland areas with seasonally high water tables was routine which has resulted in a loss of critical wetland functions such as flood control and water quality enhancement. Today, however, Maryland's Nontidal Wetlands Protection Act has helped to protect these areas. More importantly, developers have learned of the positive aspects of retaining, and even creating wetlands within their developments.

New sections of Ocean Pines, outside of Ocean City, recently slated for development have incorporated wetland protection into their subdivision plans. Although this development strategy may reduce the number of lots available, remaining

lots are often larger in size and, because they are marketed as being "in tune with the environment," command a higher price. As a result, retaining forested wetlands, in and around individual lots, becomes a marketing plus.

Captains Knoll, in West Ocean City, is a small subdivision which has incorporated wetlands protection and even more aggressively, wetlands creation. Because this 7.2 acre parcel was a rubble dump, it had been ignored by developers, even though it was in a high market area. The vision of Spencer Rowe, the developer of Captains Knoll, has resulted in a desirable 4-lot residential development, while limiting wetland impacts to less than 5,000 square feet, primarily for necessary access to uplands. The remaining wetland, which was dominated by undesirable vegetation (*Phragmites australis*), has been enhanced through control of that vegetation and replanting of some desirable plants, including trees and shrubs.

What makes this project especially unique, is that it is a mitigation site for tidal wetlands impacts taking place within downtown Ocean City. The expansion of the Seacrets Restaurant had been complicated by a small, disturbed area of tidal wetland. Through the permitting process, an agreement was reached that allowed the wetland to be filled if tidal wetlands were created nearby. Mr. Rowe incorporated the required tidal wetland creation within his subdivision, along with additional nontidal wetlands.

Captains Knoll has transformed a degraded piece of property into a desirable West Ocean City neighborhood. The development has not only been a financial success, but it also has provided environmental benefits to Maryland's Coastal Bays. Although planning and designing for wetland protection, retention, and even creation may have required additional effort, the benefits to both the aquatic resources and the developer have proven to be worth it. Wetland protection as part of development is truly growth the smart way!

According to Mr. Rowe, "People have a strong desire to live next to the natural world." The real estate market and abundant buyers has supported Mr. Rowe's belief. Today, however, there is one less lot available on the market — Mr. Rowe has decided to become a resident of Captains Knoll himself. Pretty smart!

Federal, State and Local Reports on Drinking Water

This year, the public has better access to information on the quality of their drinking water than ever before. Reports at the federal, state and local level are available to educate and help consumers make healthful drinking water decisions. These improvements are part of the Safe Drinking Water Act Amendments of 1996. Recently, the Environmental Protection Agency (EPA) released the 1996 Annual Compliance Report. Maryland's 1997 Safe Drinking Water Act Annual Compliance Report summarizing Maryland's compliance data for the 1997 calendar year. Beginning in 1999, all community water systems will prepare and distribute an annual water quality report to their customers.

The EPA Compliance Report compiled the individual 1996 reports from all 50 states, and provides an overall look at the drinking water compliance nationwide. For more information, the report can be obtained by contacting the Safe Drinking Water Hotline at 1-800-426-4791, or through the Internet at <www.epa.gov/OGWDW>.

In 1997, Maryland's water systems improved compliance with drinking water standards from 1995, and 1996. Over 98 percent of the population that is on a community water supply received drinking water that was in compliance with state and federal

drinking water standards. Maryland has over 500 community water systems which serve year round residents, and over 500 non-transient non-community systems that serve businesses, schools, and day cares.

Beginning in 1999, Maryland's 506 community water systems will deliver to their customers an annual report that provides information on: the source of the drinking water; treatment; water quality results and standards; violations and health risks, if any. The annual reports will be prepared by all community water systems across the United States. Public systems which serve over 100,000 persons will also be required to provide their report on the Internet; this includes Anne Arundel County-Glen Burnie system, Baltimore City/Baltimore County, Howard County, and Washington Suburban Sanitary Commission.

You can help improve your environment and your water quality by conserving water and protecting our resources.

For a copy of the 1997 Maryland Safe Drinking Water Act Compliance Report, contact Nancy Reilman, Water Supply Program at (410)631-3729.



Protecting Resources

A local citizen was taking a shower and noticed the odor of gasoline coming from the well water. After reporting this matter to MDE, sampling confirmed that gasoline had indeed impacted the groundwater. An investigation performed by MDE, assisted by local county health officials, found the source of the gasoline to be from a tank installed in 1946 at a local store. The investigation further confirmed that the water supply for the store also had been

contaminated by gasoline. An alternative water supply was arranged for both the store and the neighbor and the tanks were removed.

"The Department, especially Mr. Jones, (Oil Control Program Inspector) has made us feel comfortable and has helped us through this very trying situation regarding our underground tanks," said Audrey and Albert Coughenour of Choptank Grocery in Caroline County.

FY 1998 Oil Stats

- 456 confirmed releases of oil
- 350 clean-up actions initiated by responsible persons
- 743 cleanup actions completed (some of which were started in the previous year)
- 1,097 long-term remediations currently being managed by MDE.

Oil Control

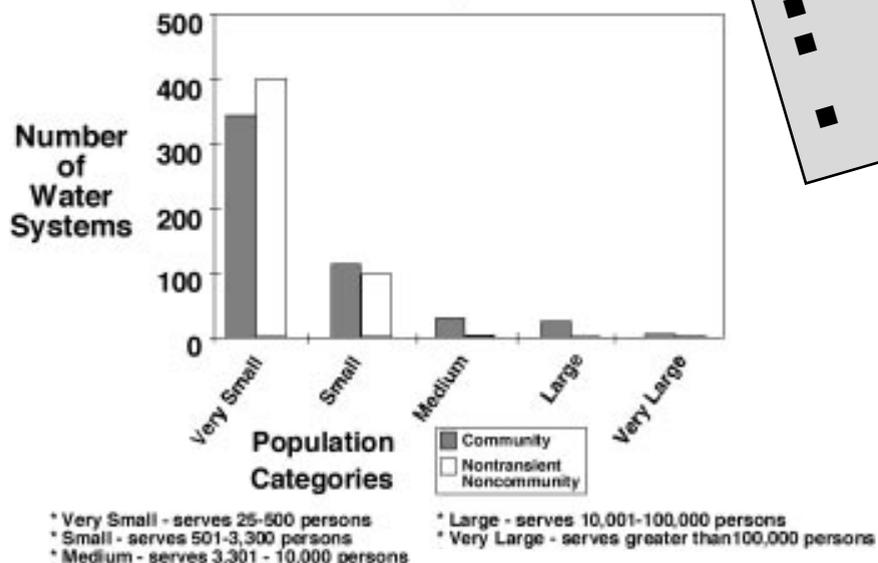
by Herb Mead & Bonnie Berardelli

Since December 1988, the EPA has required all underground storage tank owners and operators to bring their tanks into compliance with new federal requirements designed to prevent contamination to soil and groundwater. The deadline for this

requirement is December 1998. In FY 1998 alone, MDE supervised the removal of 2,251 tanks.

The 1988 requirements state that underground storage tanks must be equipped with devices that protect the environment from accidental spills and tank overfills. They call for underground storage tanks to be made of corrosion-resistant materials, to be provided with cathodic protection or to have an interior lining to prevent corrosion. The requirements for leak detection, when properly installed, operated and maintained can provide the "early warning system" necessary to prevent big cleanup headaches.

Public Water Systems in Maryland



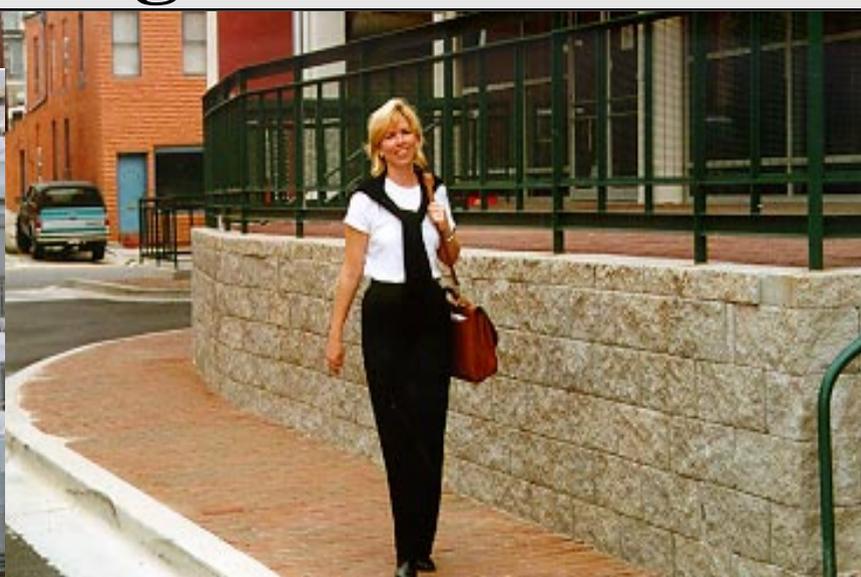
by Shari Wilson and Bonnie Berardelli

MDE's mission commits the department to protect and restore the quality of Maryland's land resources. In 1997, MDE aggressively supported two new programs, the Voluntary Cleanup Program and the Brownfields Site Assessment Program, both key elements of Governor Parris N. Glendening's Smart GROWth effort.

Voluntary Cleanup

The Voluntary Cleanup Program reforms the process used to clean up eligible properties that are, or are perceived to be, contaminated by hazardous wastes. In addition to providing a streamlined cleanup process, the legislation that created the program changes the liability scheme for certain prospective

Revitalizing Communities



Shari Bundy, employee at DAP Inc. and resident of Fells Point, now walks to work each day.



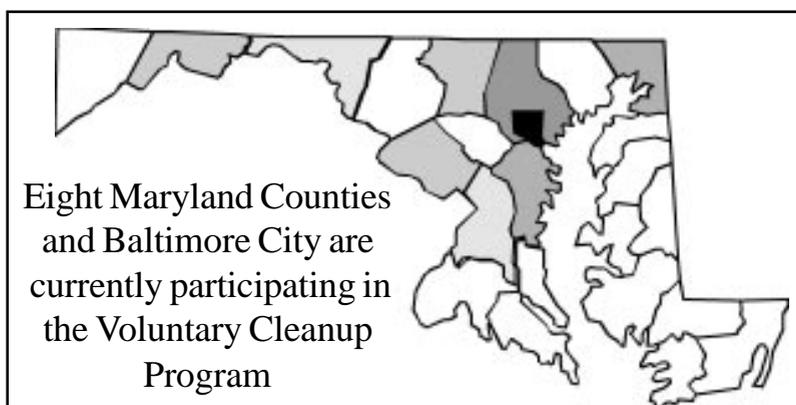
The American Can building prior to redevelopment.

“When DAP Inc. announced its plans to relocate its world wide headquarters from Dayton, Ohio to Baltimore, I was offered a chance to move with them as a graphic designer. My Dad and I flew in to visit the new location...an old warehouse that was going to be refurbished. Dad took one look at the old American Can Company and said ‘you’re not working there!’ It was a mess. I didn’t know much about Baltimore or Brownfields but I fell in love with the city. And after a

lot of hard work by the developers and thanks to a program called Brownfields, 100 new employees have an exciting place to work in a really friendly neighborhood. The entire neighborhood seems re-energized. I bought a townhouse less than a half mile from work. I redid the courtyard outback of my house with Maryland blue stone and am enjoying it with my dog Maverick and my new neighbors. I’m discovering Baltimore and hope to be here a long time.”

owners of eligible properties in the program to encourage the transfer of properties. These changes provide more certainty regarding environmental requirements to both responsible persons and future owners of a property, thereby allowing parties to more accurately predict costs and time lines associated with a cleanup and therefore, increase the likelihood of cleanup and redevelopment.

represent over 614 acres and are located in Baltimore City and Allegany,



Anne Arundel, Baltimore, Carroll, Cecil, Montgomery, Prince George's and Washington counties.

Brownfields

Under the Brownfields Site Assessment Program, assessments were

performed of 33 brownfields sites at no cost to property owners. MDE researched, investigated and sampled the properties to determine whether further investigation was necessary.

- The 33 Brownfields sites met the following criteria:
- ✓ they were vacant or underutilized;
 - ✓ remediation was feasible;
 - ✓ redevelopment had the potential to create jobs and improve the local tax base.

Long-Term Remediation

The cleanup of the abandoned Southern Maryland Wood Treating site in St. Mary's County is another example of the work being done to protect and restore the quality of our state's land resources. The cleanup of this site has been a 10-year project that is now in the final phases. The site occupies 25 acres within a 96-acre parcel near Hollywood.

Four acres of the 25-acre site were used for the pressure treatment of wood, a process that left the soil contaminated. In 1997, both the U.S. EPA and MDE obtained funding for the remediation phase of the site cleanup. The construction of the new wastewater treatment plant began in 1997.

The contaminated soils at the site will be excavated and separated from the contaminants using thermal desorption and returned to the excavated areas. Thermal desorption is an established soil treatment technology that uses an indirect heat source to raise the temperature of the contaminated soils. The contaminants are converted to gases, which are captured by a vapor recovery system that condenses them to liquid for treatment. The water generated by the process will be treated at the on-site wastewater treatment facility. When the cleanup is completed, the site will be regraded, new vegetation will be planted and the land will be classified as “fit for any use.”

Preventing Lead Poisoning

by Gerry Gietka & Bonnie Berardelli

Maryland is a national leader in trying new approaches to both reduce childhood lead poisoning and preserve affordable rental housing. These approaches are based on state legislation that gives agencies, parents, tenants and property



owners new tools to work with in response to this common public health and environmental threat. The legislation concentrates on identifying the problem, then addressing it in a two-pronged effort of communication and containment. MDE's commitment to protecting one of Maryland's most valuable resources, namely its children, is most evident by the tremendous achievements in Lead Poisoning Prevention.

Outreach and Screening

The "Childhood Lead Screening Program" law went into effect in 1997. It requires that children up to 6 years of age be screened for lead poisoning as they enter day care. High-risk areas are to be targeted for additional requirements. Outreach efforts can then be focused on areas of greatest need. There has been an important shift away from after-the-fact awareness toward prevention awareness. Now the program receives questions concerning "How do I find lead-safe housing?" MDE will continue expanding outreach to affected communities through local health departments.

Registration

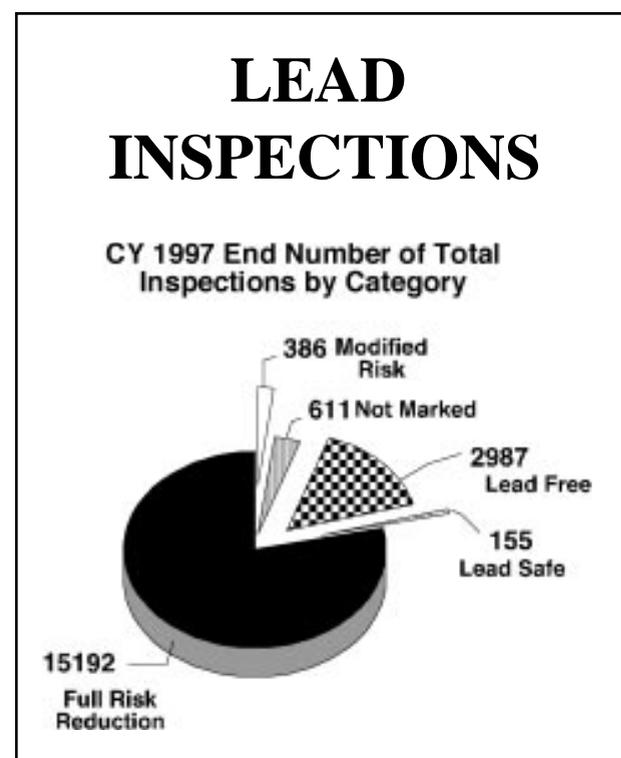
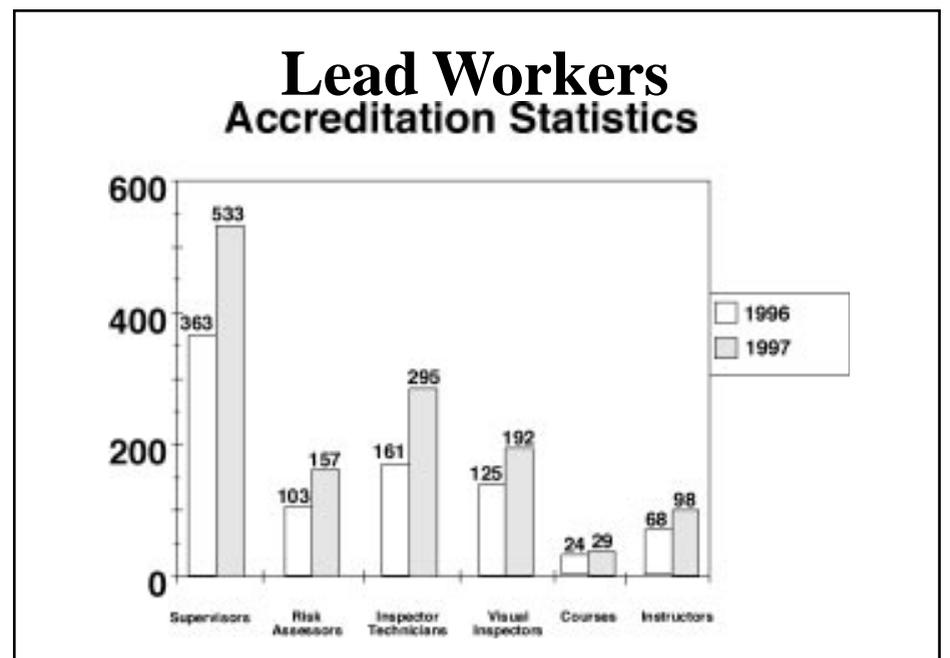
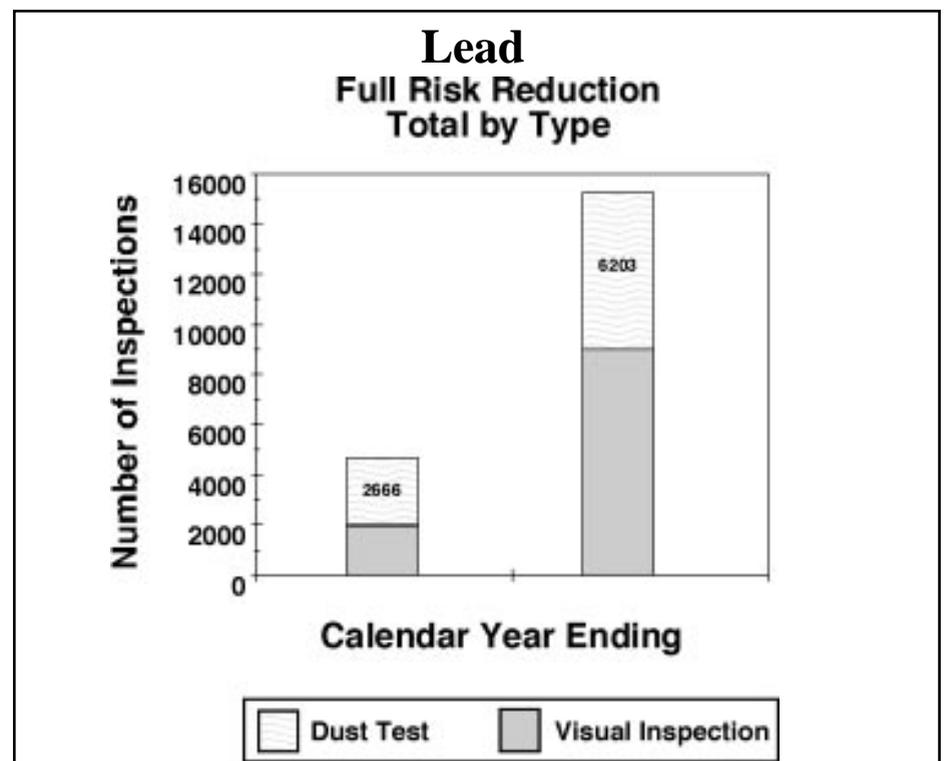
Most of the requirements of the "Reduction of Lead Risk in Housing" law went into effect in February 1996. Registration is the first step in meeting the standard of care required if rental property owners want liability relief. Over 140,000 possible rental property

owners have been contacted to inform them of their responsibilities under the law. New registration requests

continue to come in every day. Any pre-1950 rental property undergoing changing ownership requires a new registration in addition to the registration which was completed initially. Using 1990 census date, MDE records show that over 50 percent of the pre-1950 properties are now registered, compared to 33 percent in 1996.

Enforcement

In 1996 MDE worked with property owners and contractors to promote compliance. The focus has now begun shifting from outreach and consultation to enforcement to achieve compliance. Enforcement is priori-



tized, with primary emphasis placed on: 1) housing where cases of childhood lead poisoning have been confirmed and 2) housing with reported uncorrected defects. During 1997, MDE conducted 149 oversight field inspections. Appropriate corrective actions have been initiated.

Qualified Offer

"Qualified offers" cap a property owner's liability at \$17,000 in reimbursement for eligible relocation and medical expenses, and provide tenants with support to quickly move a lead-poisoned child to a lead-safe environment. Fewer resources would be necessary if intervention occurs at lower

blood lead levels. Earlier intervention should result in less severe health problems for the affected individuals. Through a contract with MDE, the Coalition to End Childhood Lead Poisoning established a qualified offer counseling service in 1997. As a result, more qualified offers are being made and accepted and Insurance companies have started to provide coverage and to pay claims.

Risk reduction is required in an effort to contain any hazard that may exist. This has effectively created a demand for a new industry. The number of inspections performed in 1997 by individuals accredited by MDE has nearly tripled over the previous year and the number of accredited inspectors has increased by 47 percent.