

### Maryland Department of the Environment

What's Inside

TMDL Education Materials 

SWQAC Needs You......3

Zones of De-watering Influence......3

**MDE's Standard Permit Turn**around Times .....4

Financing Available for Your Government......5

Investigating Pfiesteria: MDE and MDA Teams are down on the farm......5

**Environmental Education** Via Satellite......5

UST Info for Real Estate *Pros......*5

Watershed Based Permitting in Maryland......6

WET Testing: Common Sense Testing for the *Environment......*6 For the Record......7 Calendar of Meetings .....10 Enforcement and Compliance Notes......11

Cecil County Partnership.....BP



Visit MDE's home page at http://www.mde.state.md.us

# **Environmental Justice in Maryland Creating a Vision**

By Suzanne Bond and Christine Bivens

Environmental justice is quickly becoming an important rallying cry for predominantly poor and minority communities who feel they are disproportionately burdened with environmental pollution. For decades poor and minority communities have

spoken anecdotally about the potentially harmful environmental impacts within their neighborhoods, but strategies to combat the perceived problems were isolated at best. Currently, national, state and local organizations are undertaking the process of defining environmental justice, dialoguing with the public and (continued on page 2)



State of Maryland Advisory Council on Environmental Justice. Pictured with the Governor (from left to right) Mae Rupert, Special Assistant, Community and Public Health Administration, Department of Health and Mental Hygiene representative; John Chlada, Director of Environmental Programs for Perdue Farms, Inc. located in Salisbury, Member at Large; Joseph Lewandowski, a Principal Consultant with Environmental Resources Management, a consulting firm in Annapolis, State or Local Business Association representative; Bonnie Wilson, Community Affairs Specialist with Browning-Ferris Industries in Annapolis, State or Local Business Association representative; Roger Lyons, President/CEO of the Baltimore Urban League, Inc., Notfor-Profit Advocacy Group representative; Samuel Sanchez, President of Raising Hispanic Academic Achievement, Inc. in Montgomery County, Community Association representative; Nathaniel Oaks, Maryland House of Delegates, District 41 in Baltimore City, Member at Large; Jean Yarborough, Park Heights Networking Community Council, Community Association representative and Chairperson of the Council; Cheyenne Watson, Prince George's County Commissioner, Maryland Municipal League representative; James Hubbard, Maryland House of Delegates, sponsor of the legislation that created the Council, Appointed by the Speaker of the House; Joan Carter Conway, Maryland State Senate, Appointed by the President of the Senate; John Mathias, County Attorney for Frederick County, Maryland Association of Counties representative; Norris McDonald, President of the African American Environmentalist Association, Not-for-Profit Advocacy Group representative; and Arthur Wiley Ray, MDE Deputy Secretary, MDE representative.

### 1998 Legislative Session

In a few days, the 1998 Session of the Maryland General Assembly will convene in Annapolis for what is expected to be another critical and exciting session for Marylanders.

In the area of a healthy environment, Pfiesteria is expected to be among the top items on the legislative agenda; one of the most significant environmental challenges facing Maryland in recent years. It is anticipated that legislation will be introduced to reduce the toxic effects of this dinoflagellate to protect human health and the environment while preserving the economic viability and health of our seafood, tourism and agricultural industries.

On the clean air front, efforts will continue to support the vehicle emissions inspection program's dynamometer test. which has been running smoothly since it became mandatory October 1. This test is critical to reducing Maryland's serious ground-level ozone pollution problem.

Out-of-state rubble waste also is likely to be a hot topic this session. In recent months there have been numerous news reports concerning the amount of out-of-state rubble coming to Maryland for disposal, and recent court decisions overturning local authority in this area. Governor Glendening is assembling a task force of interested parties to study the solid waste

(continued on page 2)



January 1998

MDEnvironment is a monthly newspaper published by the Maryland Department of the Environment. Information contained within this publication is not intended to fulfill any legal or regulatory community information requirement.

Parris N. Glendening, Governor
Kathleen Kennedy Townsend, Lieutenant Governor
Jane T. Nishida, Secretary of Environment
Susan E. Woods, Director of Communications
Christine F. Plummer, Managing Editor

**Editorial Board Members** Sue Battle, Project Manager Environmental Permits Service Center Suzanne Bond, Special Asst, Air and Radiation Management Admin. Jim George, Section Head, Technical & Regulatory Services Administration Lauren Gibson, Administrative Specialist, Water Management Administration Marie Halka, Program Development & Business Services Manager, 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

#### **Contributing Writers:**

Suzanne Bond, ARMA Susan Woods, OC Bonnie Berardelli, WAS Shirley Garner, OC Carolyn Kuciara, TARSA Sue Battle, ESPC Fran Stierstorfer, OC Pat Coll, AESA Janet Hamilton, WMA Gail Knott, OS Ernie Brown,WMA Ed Larrimore,WMA Steve Luckman, WMA Tom Boone, WMA Rebecca Williams, TARSA Chris Bivens, OFP Lorrie Del Pizzo, EPSC Regina Rochez, WAS Diane Shaw, OS Bill Schmidt, WAS Mel Knott, TARSA

#### For the Record Section

Meetings and Hearings Calendar Joane Mueller, Production Coord.

Contributors: Suzanne Bond, 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

Cathy Wagenfer, Office of the Secretary Contributors: Angelo Bianca, ARMA Frank Courtright, ARMA Frank Whitehead, ARMA Robin Grove, WAS Jack Bowen, WMA Send comments or inquiries to: MDEnvironment Christine Plummer, Managing Editor 2500 Broening Highway Baltimore MD 21224 mdedit@charm.net Environmental Justice Council Appointed

developing recommendations for ensuring equal protection from environmental harm and human health effects to all citizens regardless of race, culture or socioeconomic status.

continued from page 1....

During the last legislative session, the General Assembly created the State of Maryland Advisory Council on Environmental Justice. The 15-member Council will examine environmental justice issues and make recommendations to the Governor and General Assembly in 1999. To accomplish this, the council will involve affected communities, enhance public participation, increase the awareness and sensitivity of state and local entities, and assess the impact of state policies, programs and activities on affected communities, among other things (MDEnvironment October 1997). The council, under the leadership of community activist Jean Yarborough, is currently developing procedural guidelines that will govern how it develops its final product. The immediate task will be to develop a working definition of environmental justice, and long range plans call for community meetings across the state to involve all sectors of the public in creating a greater understanding of the issue, and crafting recommendations for the report.

The issues surrounding environmental justice bear a direct relationship to the civil rights movement. However, as recently as the 1980s, environmental justice as a concept did not have a name, explained MDE Deputy Secretary Ray. As a young attorney with the U.S. Environmental Protection Agency in 1980, Ray litigated an Alabama case where for decades a company polluted the water and food supply that sustained a minority community. By the time the case was over, the company had admitted that corporate practices had impacted the community, dedicated cash payments to residents, and earmarked some \$5 million to provide health care to ailing community members.

The focus on environmental justice as a national issue sharpened with the United Church of Christ's 1987 report, "Toxic Wastes and Race in the United States" written by Dr. Charles Lee, now director of environmental justice for the United Church of Christ's Commission for Racial Justice. This report followed the mid-1980s protest of a PCB contaminated soil landfill in a poor minority community in Warren County, North Carolina. Before Warren County, many individuals within regulatory agencies and environmental groups felt that the environment was not a concern to some sectors of society, Ray said.

After numerous meetings with representatives of impacted communities, former President Bush created the Office of Environmental Equity in the early 1990s. Then, President William Clinton's 1994 Executive Order on environmental justice gave the issue more high level government focus. The order encouraged "each federal agency to make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionally high and adverse human health or environmental effects of its programs, policies and activities on minority populations and low income populations in the United States." The order also created an interagency working group on environmental justice, which became the National Environmental Justice Advisory Council (NEJAC). MDE responded to the Presidential Executive Order on environmental justice in 1994 by designating an internal program to review and assess what impacts its actions may have on poor and minority communities in the state of Maryland. Granted, trying to review the activities of a regulatory agency such as MDE for potential environmental justice issues is arduous, at best. Yet, the department has seen the need to address this emerging issue for some time. The Department designated environmental justice coordinators from each administration to work with Wallace Baker, director of fair practice and Deputy Secretary Ray. These coordinators are tasked with developing a mechanism that would consider any environmental justice concern before the department could make permitting or other decisions (similar to the way an environmental assessment is required before a permit can be issued).

It is important that everyone understand what environmental justice (or environmental equity) entails. It is not limited to poor and minority communities appearing to bear the brunt of environmental pollution. The issue of environmental justice involves a more global concept. Learning more about environmental justice is as important to businesses, all levels of government, not-for-profit organizations, and academia as it is to communities. Brownfields (the redevelopment of formerly contaminated sites), economic development, the Smart Growth initiative, public safety, transportation, highways, and education, are but a few of the varied aspects that must be considered when one proposes to discuss environmental justice.

Maryland is one of the states that is taking action in this area by the creation of the Advisory Council on Environmental Justice. This council will help state agencies, local governments, and municipalities to better understand environmental justice, and therefore be better equipped to address the concerns of citizens. Keeping in mind, in the very broad sense, that the environment is "where we live, work, play," and learn.

Anyone wishing further information about environmental justice activities should contact W. Wallace Baker or Christine Bivens, MDE's Office of Fair Practices, at (410) 631-3964.

#### Continued from page 1....

## Legislative Preview

disposal practices and investigate ways of improving these practices.

It is also anticipated that restructuring of the electric utility industry will receive considerable attention this session. A joint task force of representatives from the legislative and executive branches, along with an advisory group of business and citizen representatives, have been conducting hearings since September on a variety of issues including stranded costs, taxation and universal access.

As we begin a new year and a new legislative session, let us all pledge to listen, learn and commit to the wise stewardship of Maryland's environment.

In the coming months, MDEnvironment will offer legislative updates on all pertinent environmentsal issues

# MDEnvironment

# MDEnvironment

### **Quarry Zones of Dewatering Influence Announced**

By Ed Larrimore and Ernie Brown

After six years of litigation and much discussion, the Maryland Department of the Environment (MDE) has established the first three zones of dewatering influence to protect property owners affected by the quarry operations in Baltimore, Carroll, Frederick, and Washington counties. Based on a 1991 Maryland General Assembly amendment to the non-coal surface mine law, the zones have already begun to protect property and water resources.

State Treasurer Richard Dixon was the primary sponsor of the legislation during his term as a state delegate from Carroll County. Treasurer Dixon has remained active in the process of zone development attending several public hearings and many meetings regarding zone of influence implementation.

The Redland Genstar Inc. Medford Quarry Zone near Westminster, Carroll County; the H. B. Mellott Estate Inc. Rockdale Quarry Zone in Washington County; and the Lehigh Portland Cement Company Woodsboro Quarry Zone, near Woodsboro, Frederick County, represent the first of 18 zones to be established by MDE in the four county area.

The issuance of a zone requires limestone mining operations in the four county area to repair sinkholes within the zone if MDE determines that the sinkhole resulted from quarry dewatering. Additionally, companies



**Maryland's Zones of Dewatering Influence** 

also are required to replace a water supply that fails due to declining water levels caused by quarry operations at no cost to the property owner. If the damage caused by quarry dewatering cannot be repaired, the responsible company must compensate the property owners. Since the issuance of these zones, there has already been a documented claim of well failure within a defined zone. This well failure was determined to be a result of quarry dewatering and replaced under the zone provisions. As with all future zones, the remedies provided only apply to improvements that are made within the zone prior to the effective date of issuance.

The zones are based upon local topography, watersheds, geologic, and hydrogeologic factors. Field investi-

**State Water Quality Advisory** 

**Committee Needs You!** 

gations are conducted and evaluations of available information such as groundwater studies, and well monitoring data are done. The public is notified at the beginning of the review process and invited to submit data they feel is pertinent. A public informational hearing is held once a tentative zone is established.

The cooperation of the industry is an integral part of zone development. Redland Genstar, Inc., H. B. Mellott Estate, Inc. and Lehigh Portland Cement Company provided important data such as well monitoring reports, bores, sinkhole history and hydrogeologic reports.

For more information on quarry dewatering zones contact Ernie Brown at (410) 631-8081.

### Info Available on TMDLs

by Rebecca Williams

Total Maximum Daily Loads (TMDLs) have become a pressing issue for Maryland as well as its local governments. During the months of October and November, three briefings were conducted for local government officials to inform them about TMDLs and to explain the important role that local governments should play in developing solutions to these sometimes difficult multi-jurisdictional water quality problems. Over 125 individuals, including local government staff, soil conservation district and extension service personnel, and interested community representatives attended the three regional meetings. Several briefings have also been given to Maryland's Tributary Strategy Implementation Teams.

A TMDL is an estimate of the maximum amount of a given pollutant that a waterbody can assimilate without violating water quality standards. That load is then allocated between point and non-point sources, a margin of safety and a growth factor. The margin of safety is intended to account for uncertainties naturally associated with estimates while the growth factor is intended to account for future increases in pollutant loads due to changes in land use, population growth and the expansion of business activity. All states are required by the federal Clean Water Act to develop TMDLs. Every two years states must submit a prioritized list of waterbodies that currently do not meet water quality standards after all technology-based pollution controls are in place. Maryland's most recent TMDL list was approved by the U.S. Environmental Protection agency (EPA) in 1996. The next list must be submitted to the EPA by April 1, 1998.

TMDLs can be crafted to serve local priorities and develop reasonable allocations between point and nonpoint sources of pollution. If Maryland does not develop the needed TMDLs, EPA may step in and complete them for the state. This may result in TMDLs that do not fully reflect the priorities of the state, local governments or our citizens.

The Maryland Department of the Environment has educational materials to inform the public about the TMDL program. For more information contact Wayne Jenkins at (410) 631-3578.

#### By Linda Silversmith

Maryland's State Water Quality Advisory Committee (SWQAC) has issued an open invitation to Maryland residents to drop in and participate—and apply for membership!

SWQAC advises the Department of the Environment and the Department of Natural Resources on programs and activities that may impact water quality. Subjects range from Chesapeake Bay initiatives and coastal bays to tidal and nontidal wetlands, acid mine drainage, and protection of watersheds. The 32 committee members and their alternates are from different geographic areas of the state and represent citizens, public interest organizations, public officials, and economic interests.

SWQAC does much of its work through subcommittees. Membership on the subcommittees is open to all. The 1997-98 subcommittee projects include emerging agricultural issues, watershed protection for drinking water, onsite wastewater treatment, and wetlands creation and protection and stream restoration. SWQAC usually meets from 9:30 am to 12 noon or 1 pm on the first Friday of even-numbered months at a location near Baltimore and/or Annapolis. For further information, contact Sonja Koutsoutis at the Maryland Department of the Environment (410-631-3567 or 1-800-633-6101, x3567) or one of the following: David Carroll, SWQAC chair,(410-664-4818,

ROSPECTHUS@aol.com); Bill Kennedy,co-vice-chair, (301-206-8081, BKen@erols.com; Linda Silversmith, co-vice chair, 301-294-0566, lindas@capaccess.org).

### MARYLAND DEPARTMENT OF THE ENVIRONMENT 1998 STANDARD PERMIT APPLICATION TURNAROUND TIMES

The Maryland Department of the Environment (MDE) has established standard turnaround times for all types of permit applications. Standard turnaround times were first established in 1996. MDE revisited the standard setting process in 1997 and developed, in consultation with businesses, environmental advocates, and others, the following table of standard application turnaround times for 1998.

Please note the following important points about these standard times:

1) These standards refer to the time between MDE's receipt of a <u>complete</u> permit application and MDE's issuance or denial of the permit, excluding delays caused by factors beyond MDE's control. Many applications are incomplete when they first arrive at MDE. The Environmental Permits Service Center (410-631-3772) or the appropriate MDE permit writer can provide tips on how to ensure that an application is complete when submitted.

2) Unfortunately, many factors beyond MDE's control can delay the processing of permit applications. Examples include delays in receiving information needed from the applicant and delays in obtaining necessary approvals from local or federal government agencies. MDE's permitting personnel can provide advice about avoiding such delays.

3) In most permitting programs, each application has unique characteristics which influence its processing time. For each program listed, the standard time represents the time in which 90 percent of applications can be processed. Many applications will require less time; a few will require more time due to unusual circumstances.

MDE welcomes comments on these standard application turnaround times which will be reviewed, updated and published each year by January 1. Comments or questions about these standard turnaround times should be directed to Sue Battle at (410) 631-4111.

#### Air and Radiation Management Administration

Air Quality Dermit to Construct	30 days	
All Quality Permit to Construct	view - 3 months	
w/expanded public review but limited public interest - 6 months		
w/expanded public review and extensive public inter	rest - 11 months	
New Source Review Approval	10 months	
Prevention of Significant [air quality] Deterioration	14 months	
Air Quality State Permit to Operate	3 months	
Part 70 (Title V) Permit to Operate 36 months 18 months for renewals ar	for new permits nd modifications	
Ashastas Contractor License	60 dava	
Asbestos Unitractor License Asbestos Training Provider Approval	3 months	
Incinerator Operator Certification	30 days	
Incinerator Training Course Approval	60 days	
Fleet Inspection Station License	30 days	
Certified Emissions Repair Facility Certification	30 days	
Master Certified Emissions Technician Certificate	30 days	
Radiation Machine Facility Registration		
90 days for dental and veter	inary machines	
Certification of Machines Emitting Radiation	6 months	
Radioactive Materials License	7 months	
Private Inspector License For Inspecting X-Ray Machines	60 days	
Reciprocal Recognition of Out-of-State Radioactive Material License	s 21 days	
Waste Management Auministration		
State Refuse Disposal Permit 7 months for transfer stations		
State Refuse Disposal Permit 7 months for transfer stations 9 months for pro-	cessing facilities	
State Refuse Disposal Permit 7 months for transfer stations 9 months for pro- 12 months 12 months for land-clearing	cessing facilities s for incinerators	
State Refuse Disposal Permit 7 months for transfer stations 9 months for pro- 12 months 12 months for land-clearing 24 months for in	cessing facilities s for incinerators g debris landfills dustrial landfills	
State Refuse Disposal Permit 7 months for transfer stations 9 months for prov 12 months 12 months for land-clearing 24 months for in 36 months fo	cessing facilities s for incinerators g debris landfills idustrial landfills r rubble landfills	
State Refuse Disposal Permit 7 months for transfer stations 9 months for prov 12 months 12 months for land-clearing 24 months for in 36 months for months	cessing facilities s for incinerators g debris landfills idustrial landfills r rubble landfills unicipal landfills	
State Refuse Disposal Permit 7 months for transfer stations 9 months for pro- 12 months 12 months for land-clearing 24 months for in 36 months for 36 months for months for months for months for months 36 months for month	cessing facilities s for incinerators g debris landfills idustrial landfills r rubble landfills unicipal landfills <b>6 months</b>	
State Refuse Disposal Permit 7 months for transfer stations 9 months for pro- 12 months 12 months for land-clearing 24 months for in 36 months for 36 months for 36 months for 45 Sewage Sludge Utilization Permit	cessing facilities s for incinerators g debris landfills dustrial landfills r rubble landfills unicipal landfills <b>6 months</b> 5 days - research	
State Refuse Disposal Permit 7 months for transfer stations 9 months for pro- 12 months 12 months for land-clearing 24 months for in 36 months for 36 months for mo <b>Groundwater Discharge Permit for Rubble Landfill</b> Sewage Sludge Utilization Permit 45 3 months	cessing facilities s for incinerators g debris landfills idustrial landfills r rubble landfills unicipal landfills <b>6 months</b> 5 days - research s - transportation landfill disposal	
State Refuse Disposal Permit 7 months for transfer stations 9 months for prov 12 months 12 months for land-clearing 24 months for in 36 months for 36 months for mo <b>Groundwater Discharge Permit for Rubble Landfill</b> Sewage Sludge Utilization Permit 45 3 months 5 months 6 months	cessing facilities s for incinerators g debris landfills idustrial landfills r rubble landfills unicipal landfills <b>6 months</b> 5 days - research s - transportation landfill disposal ths - distribution	
State Refuse Disposal Permit 7 months for transfer stations 9 months for prov 12 months 12 months for land-clearing 24 months for in 36 months for 36 months for 36 months for muthat Sewage Sludge Utilization Permit 5 months 5 months 6 months 6 months	cessing facilities s for incinerators g debris landfills idustrial landfills r rubble landfills unicipal landfills <b>6 months</b> 5 days - research s - transportation landfill disposal ths - distribution land application	
State Refuse Disposal Permit 7 months for transfer stations 9 months for provint 12 months 12 months for land-clearing 24 months for in 36 months for 36 months for 36 months for 36 months 5 months 5 months 5 months 5 months 3 months 5 months 9 months 12 months 12 months 12 months 13 months 14 months 14 months 14 months 14 months 14 months 14 months 15 months 16 months 17 months 18 months	cessing facilities s for incinerators g debris landfills idustrial landfills r rubble landfills <b>6 months</b> 5 days - research s - transportation - landfill disposal ths - distribution land application ermanent facility	
State Refuse Disposal Permit 7 months for transfer stations 9 months for provint 12 months 12 months for land-clearing 24 months for in 36 months for 36 months for 36 months for 37 months 5 months 5 months 5 months 23 months 23 months 23 months 23 months	cessing facilities s for incinerators g debris landfills dustrial landfills r rubble landfills <b>6 months</b> 5 days - research s - transportation landfill disposal ths - distribution land application ermanent facility ths - incineration	
State Refuse Disposal Permit 7 months for transfer stations 9 months for prov 12 months 12 months for land-clearing 24 months for in 36 months for 36 months for months 5 months 5 months 5 months 5 months 23 months 24 months 23 months 24 months 23 months 24 months 23 months 24 months 23 months 24 months 23 months 24 months 23 months 24 months 23 months 24 months 24 months 23 months 24 months 23 months 24 months 23 months 24 months 23 months 24 months 24 months 23 months 24 months 24 months 24 months 24 months 24 months 24 months 24 months 23 months 24 months 25 months 26 months 27 months 28 months 29 months 20 mo	cessing facilities s for incinerators g debris landfills idustrial landfills r rubble landfills unicipal landfills <b>6 months</b> 5 days - research s - transportation landfill disposal ths - distribution land application ermanent facility ths - incineration nths - incovation	
State Refuse Disposal Permit 7 months for transfer stations 9 months for prov 12 months 12 months for land-clearing 24 months for in 36 months for 36 months for 36 months for months 5 months 5 months 5 months 6 months 23 months 24 months 5 months 5 months 6 months 23 months 24 months 24 months 25 months 26 months 27 months 28 months 29 months 20 m	cessing facilities s for incinerators g debris landfills idustrial landfills r rubble landfills unicipal landfills <b>6 months</b> 5 days - research s - transportation landfill disposal ths - distribution land application ermanent facility ths - incineration nths - innovation <b>9 months</b>	
State Refuse Disposal Permit 7 months for transfer stations 9 months for prov 12 months 12 months 12 months for land-clearing 24 months for in 36 months for 36 months for months 5 months 5 months 6 months 23 months 24 months 5 months 6 months 23 months 24 months 24 months 5 months 23 months 24 months 24 months 25 months 26 months 27 months 28 months 29 months 20 months 21 months 22 months 23 months 24 months 24 months 25 months 26 months 27 months 27 months 28 months 29 months 20 mont	cessing facilities s for incinerators g debris landfills idustrial landfills r rubble landfills <b>6 months</b> 5 days - research s - transportation landfill disposal ths - distribution land application ermanent facility ths - incineration nths - innovation <b>9 months</b> 60 days <b>60 days</b>	
State Refuse Disposal Permit 7 months for transfer stations 9 months for prov 12 months 12 months for land-clearing 24 months for in 36 months for 36 months for 36 months for months 5 months 5 months 6 months 23 months 23 months 24 months 5 months 6 months 23 months 24 months 5 months 6 months 23 months 24 months 5 months 23 months 24 months 23 months 24 months 23 months 24 months 23 months 23 months 24 months 23 months 23 months 24 months 23 months 24 months 25 months 23 months 24 months 25 months 25 months 26 months 27 months 27 months 28 months 29 months 20 mo	cessing facilities s for incinerators g debris landfills dustrial landfills r rubble landfills <b>6 months</b> 5 days - research s - transportation - landfill disposal ths - distribution land application ermanent facility ths - incineration nths - innovation <b>9 months</b> 60 days <b>60 days</b> 7 months	
State Refuse Disposal Permit 7 months for transfer stations 9 months for prov 12 months 12 months for land-clearing 24 months for in 36 months for 36 months for mu 36 months for mu 5 months - 6 month 5 months - 23 months - 23 months - 24 months 5 months - 23 months - 24 months 5 months - 23 months - 24 months 24 months - 25 months - 26 months - 27 months - 28 months - 29 months - 20 months - 20 months - 20 months - 20 months - 20 months - 21 months - 22 months - 23 months - 24 months - 24 months - 25 months - 26 months - 27 months - 28 months - 29 months - 20 months - 29 months - 20 months - 21 months - 22 months - 23 months - 24 months - 24 months - 25 months - 26 months - 27 months - 28 months - 29 months - 29 months - 20 months -	cessing facilities s for incinerators g debris landfills dustrial landfills r rubble landfills <b>6 months</b> 5 days - research s - transportation landfill disposal ths - distribution land application ermanent facility ths - incineration nths - innovation <b>9 months</b> 60 days <b>60 days</b> 7 months	
State Refuse Disposal Permit 7 months for transfer stations 9 months for prov 12 months 12 months for land-clearing 24 months for in 36 months for 36 months for months 5 months 5 months 5 months 6 month 6 month 23 months 24 months 23 months 24 months 23 months 24 months 24 months 23 months 24 months 23 months 24 months 23 months 24 months 23 months 23 months 24 months 23 months 23 months 24 months 23 months 24 months 25 months 26 months 27 months 28 months 29 months 29 months 20 month	cessing facilities s for incinerators g debris landfills dustrial landfills r rubble landfills <b>6 months</b> 5 days - research s - transportation landfill disposal ths - distribution land application ermanent facility ths - incineration nths - innovation <b>9 months</b> 60 days <b>60 days</b> 7 months <b>7 months</b> 9 months	
State Refuse Disposal Permit 7 months for transfer stations 9 months for prov 12 months 12 months for land-clearing 24 months for in 36 months for 36 months for months 5 months 5 months 5 months 6 month 23 months 24 months 5 months 5 months 6 month 23 months 24 months 5 months 5 months 6 months 23 months 24 months 23 months 24 months 23 months 24 months 25 months 26 months 27 months 27 months 28 months 29 months 20 months 20 months 20 months 20 months 20 months 20 months 21 months 22 months 23 months 24 months 25 months 26 months 27 months 27 months 28 months 29 months 29 months 20	cessing facilities s for incinerators g debris landfills idustrial landfills r rubble landfills unicipal landfills <b>6 months</b> 5 days - research s - transportation landfill disposal ths - distribution land application ermanent facility ths - incineration nths - innovation <b>9 months</b> 60 days <b>60 days</b> <b>7 months</b> <b>7 months</b> <b>9 months</b> <b>9 months</b>	
State Refuse Disposal Permit 7 months for transfer stations 9 months for prov 12 months 12 months for land-clearing 24 months for in 36 months for in 36 months for in 36 months for in 36 months for muther Groundwater Discharge Permit for Rubble Landfill Sewage Sludge Utilization Permit Sewage Sludge Utilization Permit 42 3 months 5 months - 6 month 6 months 23 months - 23 month 24 months 23 months 24 months 23 months 24 months 25 months 26 months 27 months 27 months 28 months 29 months 29 months 20 months 20 months 20 months 20 months 20 months 21 months 22 months 23 months 24 months 25 months 26 months 27 months 27 months 28 months 29 months 29 months 20 mont	cessing facilities s for incinerators g debris landfills dustrial landfills r rubble landfills of months 5 days - research s - transportation landfill disposal ths - distribution land application ermanent facility ths - incineration nths - innovation 9 months 60 days 7 months 9 months 9 months 9 months 9 months 9 months 9 months	
State Refuse Disposal Permit 7 months for transfer stations 9 months for prov 12 months 12 months for land-clearing 24 months for in 36 months for 36 months for 36 months for muther 38 months 5 months 5 months 5 months 5 months 6 month 6 months 23 months 24 months 24 months 23 months 24 months 23 months 24 months 25 months 26 months 27 months 27 months 28 months 29 months 29 months 20 months 20 months 20 months 20 months 20 months 21 months 22 months 23 months 24 months 25 months 26 months 27 months 27 months 28 months 29 months 29 months 20 months 20 months 20 months 20 months 20 months 20 months 21 months 22 months 23 months 23 months 24 months 23 months 24 months 25 months 26 months 27 months 27 months 28 months 29 months 29 months 20 m	cessing facilities s for incinerators g debris landfills dustrial landfills r rubble landfills <b>6 months</b> 5 days - research s - transportation landfill disposal ths - distribution land application ermanent facility ths - incineration nths - innovation <b>9 months</b> <b>60 days</b> <b>7 months</b> <b>9 months</b> <b>9 months</b> <b>9 months</b> <b>9 months</b> <b>9 months</b> <b>60 days</b> <b>60 days</b> <b>60 days</b> <b>7 months</b> <b>9 months</b> <b>9 months</b> <b>9 months</b> <b>9 months</b> <b>9 months</b>	
State Refuse Disposal Permit 7 months for transfer stations 9 months for provint 12 months 12 months for land-clearing 24 months for in 36 months for in 36 months for in 36 months for in 36 months for months 5 months 5 months 5 months 6 month 6 month 6 months 23 months 24 months 23 months 24 months 5 months 5 months 5 months 6 month 6 months 23 months 24 months 24 months 25 months 7 months 9 months for in 36 months 9 months for in 36 months 16 months 17 months 18 months 19 months 10 mon	cessing facilities s for incinerators g debris landfills dustrial landfills r rubble landfills <b>6 months</b> 5 days - research s - transportation landfill disposal ths - distribution land application ermanent facility ths - incineration nths - innovation <b>9 months</b> 60 days <b>60 days</b> 7 months <b>7 months</b> <b>9 months</b> <b>9 months</b> <b>60 days</b> <b>60 days</b> <b>60</b>	

page 4

Ground water Discharge Permit for Oli Termina	15	5 months
Underground Storage Tank (UST) Technician and Ren	nover Certification	20 days
<b>Controlled Hazardous Substances Facility Permi</b>	t	26 months
Hazardous Waste; EPA Identification Number		30 days
Controlled Hazardous Substances Hauler, Vehicle	and Driver Certification	30 days
Special Medical Waste (SMW) Hauler and Vehicle Ce	rtification	30 days
Lead Paint Accreditations		30 days
Lead Paint Training Course Approvals		60 days
Lead Paint Instructor Approvals		30 days
Voluntary Cleanup Program 60	days to determine if application	n is accepted
	4 months to review	w action plan

#### Water Management Administration

General Permit for Industrial Wastewater Discharg	ges 150 days for concentrated		
	animal feeding operations		
Surfacewater Discharge Permit (Industrial)	0 months for now minor facilities		
Surfacewater Discharge Fernint (Industrial)	2 months for new major facilities		
	14 months for renewal minor facilities		
	14 months for renewal major facilities		
Surfacewater Discharge Dermit (Municipal)	0 months for new minor facilities		
Surfacewater Discharge Fermit (Municipal)	7 months for now major facilities		
	12 months for renewal minor facilities		
	16 months for renewal major facilities		
Groundwater Discharge Permit (Municipal or Industrial	9 months for new minor facilities		
Groundwater Discharge Fernint (withheipar of industrial	12 months for new major facilities		
	14 months for renewal minor facilities		
	16 months for renewal major facilities		
Toxic Materials Pormit	10 months for renewal major facilities		
Water and Sewerage Construction Permit	45 uays 3 months		
Water Appropriation and Use Permit	) days for under 10 000 gallons per day		
water Appropriation and Ose rerinit 00	months for over 10,000 gallons per day		
Coal Mining Permit	12 months		
Surface Coal Mining Blaster Certification	immediately on passing evan		
Coal Mining Operator License	30 days		
Non-Coal Mining Permit	7 months		
Oil and Gas Exploration and Production	5 months		
Well Construction Permit	30 days		
Drinking Water Sampler Certification	immediately on passing evan		
Nontidal Wetlands (Nontidal Wetlands and Weterways Permits)			
1 volitical vectantis (1 volitical vectantis and valet ways 1 claims)			
	6 months for major projects		
Waterway and 100-year Floodplain (Nontidal Wetlands and Waterways Permits)			
	3 months for minor projects		
	6 months for major projects		
Tidal Wetland Licenses and Permits	30 days for minor projects		
	6 months for major projects		
Erosion/Sediment Control and Stormwater Managemen	t Plan Approvals 6 months		
Erosion and Sediment Control - Responsible Perso	nnel Certification 2 weeks		
Erosion and Sediment Control - Responsible Personnel	Training Program Approval 4 weeks		
General Permit for Construction Activity	2 days		
Municipal Separate Storm Sewer Permit	12 months		
Dam Safety Permit	6 months		
Environmental Sanitarian License	45 days for new licenses		
	30 days for renewals		
Waterworks and Waste Systems Operator Certificat	tion 45 days for new certificates		
	30 days for renewals		
Well Driller License	30 days		

## MDEnvironment

### **Investigating Pfiesteria Issues**

by Tom Boone

Teams of inspectors from the Maryland Department of the Environment (MDE) and the Maryland Department of Agriculture (MDA) have started to survey farms on the Eastern Shore as part of an effort to solve the mystery of last summer's pfiesteria outbreak in several Maryland waterways.

In response to concerns that pfiesteria issues on Maryland's lower eastern shore may be related to agriculture, Governor Glendening announced in October that three teams of inspectors would investigate agricultural practices within the affected areas. Each team was to be composed of one inspector from MDA and MDE. Given the urgency associated with the pfiesteria issues and the length of time typically needed to create and fill new positions, experienced staff have begun the extensive inspection process.

Management staff and team members from MDE and MDA determined

that the watersheds should be divided into subwatersheds to provide the best coverage, with all three teams covering agricultural operations in one subwatershed before shifting operations to another. Each team uses a Global Positioning System (GPS) locator and a laptop computer. The GPS unit is being used to locate and document the use of state approved manure storage buildings while the laptop computers enable the teams to capture relevant agricultural and environmental controls information for immediate and future use by MDE and MDA. Letters announcing the inspectors and their objectives have been sent to agricultural operators in the subwatersheds. A team member subsequently contacts the landowner by phone to request permission to enter the property.

Once on the property, the teams conduct a comprehensive site review of both farming practices and potential environmental impacts associated with poultry grower operations and other concentrated animal feedlot

## **Environmental Education** Via Satellite at MDE

The Environmental Protection Agency will broadcast several free courses via satellite downlink. Anyone interested in more information on the topics to be discussed or how to register should call Chris Tsiostias-Cavey as soon as possible at (410) 631-3220. The MDE downlink site is at the Point Breeze Complex on Broening Highway, Baltimore.

> January 7, 1998 from 12:30 to 4 p.m. "Indoor Air Symposium" (#001-98)

January 12, 1998 from 12 noon to 4 p.m. "The Health Care Industry's Impact on the Environment: Strategies for Global Change" (#002-98)

> January 29, 1998 from 1 p.m to 4 p.m. "EPA on Line" (#003-98)

### **UST Info for Real Estate Professionals**

Waste Management's Oil Control Program, with assistance from the EPA's Office of Underground Storage Tanks (UST) in Washington has prepared a booklet to provide real estate agents with basic underground storage tank information. Real estate agents/brokers can feel uneasy when they realize that a property they are showing or listing has USTs on the premises. Part of the unease may stem from not knowing what needs to be done or who to turn to for assistance in dealing with USTs. This booklet will help real estate agents/brokers who deal with USTs on properties in Maryland better understand the requirements. To obtain information on how to get the booklet, contact MDE's Oil Control Program at (410) 631-3442 or 1-800-633-6101, ext.3442.



Pfiesteria team members from MDE include Joe Kincaid, Dave Dammeyer and Harry Hunsicker of the Compliance Program. Shown here: Dave Danmeyer using a hand held GPS at an Eastern Shore farm.

operations. Information collected includes the number of birds produced, the size and type of waste storage facilities, the cropland acreage and land managed under a nutrient management and soil conservation plan, and the potential for environmental impacts from runoff, etc.

Most farmers have agreed to allow the inspectors to meet with them personally to discuss their operations. To date, the Somerset County portion of the Pocomoke drainage area is

nearing completion with good results. Farmers have demonstrated a willingness to address problems that have been identified. It is anticipated that the agencies will work throughout the winter and into the spring to inspect all the acreage in the affected watersheds.

To learn more about MDE and *MDA pfiesteria inspections contact* Tom Boone, Chief of MDE's Water Management Compliance Program at (410) 631-3532.

### **COUNTY AND MUNICIPAL OFFICIALS: TAKE ADVANTAGE**



# **OF LOW-COST FINANCING!**

Are you a County or municipal public works official seeking low cost financing for your wastewater treatment plant, sanitary sewer lines, or pump stations, or capping and handling the leachates from a closed landfill?? Is your community in need of affordable ways to pay for restoring streams, creating wetlands and managing a myriad of non-point source pollution problems? The Maryland Department of the Environment has the perfect solution -the Maryland Water Quality Revolving Loan Funds (SRF) Program!!

Now projects such as wetland creation, stormwater management retrofits and conversions, land acquisition to protect high priority water bodies, and the purchase of major facilities and equipment (such as salt domes, street sweepers, storm drain inlet vacuum trucks) are eligible for low-cost financing. The **Environmental Protection Agency** calls this "expanded uses" of the SRF. We call it expanded opportunities for local governments to do a wide variety of water quality

improvements at a very attractive interest rate.

We've also changed the interest rate to 60 percent of market rate\* to provide the best deal for borrowers, streamlined the application process, reduced programmatic requirements and simplified project review procedures to make loan program easier to use.

Using this low-cost source of financing is a great deal for counties, cities, and towns in Maryland, because the program is a revolving loan fund. Your loan repayments go directly back into the Fund to become available for other water quality projects.

For questions about project eligibility and for applications or other information, contact MDE at (410) 631-3574.

\* The interest rate is determined by taking 60% of the value of the average of the Bond Buyer Revenue Bond Index for the month preceding loan closing. The current interest rate is 3.36% plus costs of issuance and administrative fees, equal to an all-in rate of 4.02%.

#### By Steve Luckman

Watershed-based permitting has become one an important concept in recent years for the Environmental Protection Agency and many states. It is closely linked to another "hot" topic - TMDLs (Total maximum daily loads) (See related article this issue) because the TMDLs usually determine a maximum loading for a pollutant for an entire watershed looking at both point and non-point source loadings, which is the central concept in watershed-based permitting. Maryland's work in integrating these concepts into traditional protection efforts will help to continue Maryland's tradition as a national leader in water quality protection.

The idea of watershed-based permitting in Maryland goes back to 1974 when the state first obtained delegation from the EPA to issue National Pollutant Discharge Elimina-

## MDEnvironment Watershed Based Permitting at Work in Maryland

tion System (NPDES) discharge permits for wastewater. Since then, whenever a permit has been issued for any wastewater discharge, the Maryland Department of the Environment (MDE) considers the cumulative effects of all point and non-point source loading on the receiving water. MDE takes into account in each computer model all point sources that are near enough to affect the receiving waters. Generally, each model weighs from one to ten point sources and a segment of 5 to 25 miles along the receiving water. Although all the point sources are evaluated together, MDE does not normally attempt to issue all the discharge permits concurrently. Water quality-based discharge permits have been implemented over the years based on these evaluations.

Maryland is now proposing to issue permits by watershed on a five-year cycle since the NPDES discharge permits are renewed every five years. To accomplish this, the state has been divided into 12 large watersheds these comprise the 10 Chesapeake Bay tributary strategy watersheds plus the Youghiogheny River watershed to the west and the Coastal watershed in the east. There are up to 170 point source discharges in each of these large watersheds. These 12 watersheds will be placed into five groups of basins to facilitate the five-year permitting cycle. Considerable thought will go into how to group the 12 watersheds and then which grouping will be given the highest priorities.

Watershed-based permitting involves far more than trying to issue permits

by watershed in a five-year cycle. Before the permits are issued each watershed will go through periods of intensive monitoring, modeling and assessment, strategy development and public outreach before deciding to issue a permit. The intensive monitoring should help to identify previously unknown problem areas and enable us to prepare much more accurate water quality models.

Because watersheds do not respect state boundaries, efforts will also be made to integrate Maryland's watershedbased permitting activities with those of our neighboring states which share common watersheds. Through watershed-based permitting and the TMDL processes, Maryland will continue to be one of the nation's leaders in protecting the quality of our waters.

For more information about watershed-based permitting contact the author, Steve Luckman, at (410) 631-3671.

#### By Melvin Knott

One way to test the toxicity of wastewater is to let fish take a swim in the effluent water and see what happens to them. Known as Whole Effluent Toxicity (WET) testing, MDE staff use this technique to support compliance and enforcement actions and as one of the tools to help meet our commitment to reduce toxics in the Chesapeake Bay and its tributaries.

The Maryland Department of the Environment administers a WET testing program in support of the department's

municipal and indus-

trial wastewater discharge permitting program. Discharge permits have always contained specific limits on the pollutants that are known to be present in the wastewater. However, it is difficult to know how those pollutants might act together to exhibit harmful effects on the aquatic life in the receiving waters. These tests also serve as a safety net in the event that there is an unknown toxic substance present in the effluent. WET testing evaluates that ability, hence the term "whole effluent toxicity."

The effluents are tested by exposing small fish and crustaceans (figure 1 and figure 2) to various concentrations of the effluent. These tests are known as bioassays. WET testing is required by the permittee in discharge permits and the department operates its own testing laboratory under contract with

# **Common Sense Test of Wastewater Toxicity**

the University of Maryland. This allows the Department to independently test effluents for toxicity.

WET testing required by permits and testing of effluents at the MDE laboratory has allowed the Department to evaluate the effluents of 340 individual industrial dischargers and representative testing for approximately 225 other industrial dischargers including such groups as coal mines,



stone quarries, sand and aggregate mining and seafood processing. This represents virtually all of the individual industrial discharge permits. WET data also has been used to evaluate all major and many smaller sewage treatment plant discharges, representing 158 of the 348 permitted dischargers. Through continued testing at MDE's laboratory, and through permit required testing, all sewage treatment plant effluents will eventually be evaluated.

When an effluent demonstrates an unacceptable level of toxicity, the discharger is required to conduct a Toxicity Reduction Evaluation to determine the cause of the toxicity and to take steps to remove the toxicity. When completed, the discharger is required to retest its effluent to confirm the reduction of toxicity.

When testing began in 1987, nearly 20 percent of Maryland's permitted discharges showed some level of toxicity (figure 3). Since then, the Department has enjoyed excellent cooperation with the responsible dischargers to successfully eliminate effluent toxicity when it is demonstrated. To date, 100 cases of whole effluent toxicity have been eliminated through this process. Fourteen industrial and municipal Toxicity Reduction Evaluation's are ongoing with many of those nearing final resolution. This means that less than two percent of Maryland's dischargers are currently demonstrating effluent toxicity.

MDE will continue to monitor municipal and industrial discharges for aquatic toxicity and aggressively work with discharge permit holders to



eliminate effluent toxicity and to ensure that wastewater discharges remain nontoxic.

"Maintaining MDE's testing laboratory will help the department meet its commitment to the Chesapeake Bay Basinwide Toxics Reduction and Prevention Strategy," said Secretary Nishida "to eliminate acute and chronic toxic impacts of wastewater discharge by 2005 throughout the Chesapeake Bay watershed".

