

MDE Environment

Maryland Department of the Environment

Volume III, No. 4
August 1999

What's Inside...

Low-Sulfur Means Cleaner Air..... page 3

Water Conservation Tips for Your Home..... page 3

Wastewater Treatment Plants and BNR..... page 4

Flood Relief for Western Maryland..... page 5

IS YOUR ORGANIZATION REPRESENTED?
Environmental Education Supplement.....page 5

Ozone: An Hour on the Air..... page 5

For the Record..... page 6

Seasonal Tips for Clean Boating..... page 10

Enforcement and Compliance..... page 10

Meetings and Hearings..... page 11

Conserve Paper
- Share with
others in your
office!



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

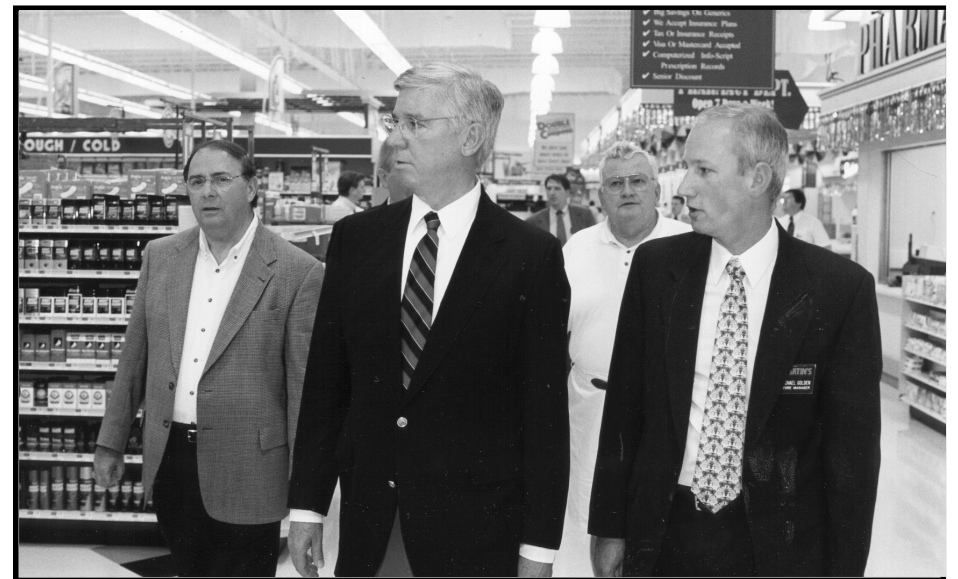
Glendening Celebrates Redevelopment of CSX Bolt Fabrication Site

by Susan Woods

Governor Parris N. Glendening and Speaker of the House Casper R. Taylor, Jr. last month celebrated the redevelopment of the former CSX Bolt and Forge property in the Rolling Mill section of Cumberland, Allegany County, with a ribbon-cutting for a new supermarket and shopping center.

"What was once the site of a contaminated vacant lot and former manufacturing facility will soon be a thriving retail center for the citizens of Cumberland," Governor Glendening said. "This is the essence of Smart Growth."

The new shopping center – owned by Ahold USA of Atlanta – features a 55,000-square foot Martin's Food that will employ an estimated 240 people. The new supermarket, which is owned by Giant Food of Carlisle, PA, is



House Speaker Casper Taylor (left), Governor Parris N. Glendening (center) and Cumberland Mayor Edward C. Athey take a tour of Martin's Food with Store Manager Michael Golden.

expected to open later this month.

"If anyone questions the benefits of Smart Growth policies or the

Brownfields program, they should come here to Cumberland — to this site," said Speaker Taylor. "Not too

(continued on page 2)

Governor Declares Drought Emergency Calls for Voluntary Water Conservation

Prompted by the most severe drought in more than 30 years, Governor Parris N. Glendening today issued an Executive Order declaring a statewide drought emergency. The Governor called upon all Marylanders to voluntarily conserve water until a newly appointed task force recommends further measures, and announced that he would seek federal financial assistance for Maryland farmers adversely affected by the drought and provide \$3 million in State funds for agricultural relief.

"This drought is a serious problem. But we do not intend to let it become unmanageable," said

Governor Glendening. "With water supplies severely stressed across the State, and with forecasters predicting minimal relief, it is vital that we take a coordinated, comprehensive approach to the drought on a statewide basis."

The Governor's Executive Order urges all Marylanders to take voluntary steps to immediately reduce their consumption of water and take other actions in response to the drought, including:

- Do not water flowers or grass;
- Do not wash your car;
- Do not wash paved surfaces such as sidewalks or patios;
- Do not use water in ornamental

fountains, waterfalls or reflecting pools;

- Refrain from outdoor burning;
- And take other common sense measures. (see Side Bar)

The Governor made the announcement on the banks of the drought-stricken Liberty Reservoir, which is owned by the City of Baltimore. The Governor pointed out that Liberty Reservoir is more than 24 feet below normal, the Pretty Boy Reservoir is down more than 18 feet, and Loch Raven Reservoir is down 5 feet.

"These three serve the Baltimore

(continued on page 2)

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

Arthur Ray, Deputy Secretary

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

Bob Maddox, Public Participation Coordinator,
 Air & Radiation Management

Jim George, Section Head, Technical &
 Regulatory Services Administration

Judy Marsh, Outreach Coordinator,
 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:

Shirley Garner, OC Carolyn Kuciara, TARSA
 Fran Stierstorfer, OC Pat Coll, AESA
 Quentin Banks, OC Denise Brown, AESA
 Georgia Allen, AESA John Verrico, WAS
 Marya Levelev, WMA Bob Maddox, ARMA
 Tim Shepherd, ARMA Robert Hagans, AESA
 Bill Price, WAS Beth Valentine, DNR
 Gregory McKibbin, TARSA
 Chris Bivens, FPO

For the Record Section

Meetings and Hearings Calendar

Joane Mueller, Production Coord.

Contributors:

Gail Castleman, WAS Ta-Shon Yu, WMA
 Lorrie Del Pizzo, EPSC Jim Metz, WAS
 Christy Kowalski, WMA Bob Maddox, ARMA
 Sheila Franklin, WMA Rick Trickett, WMA
 Jeanette Wolfe, ARMA
 Melody Thrower, WMA

Enforcement & Compliance Notes

Bernard Penner, Office of the Secretary

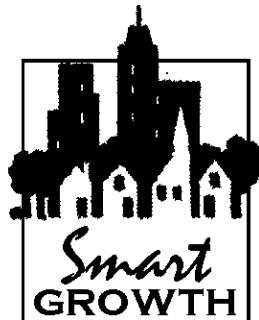
Contributors:

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

Send comments or inquiries to:

MDEnvironment
 Christine Plummer, Managing Editor
 2500 Broening Highway
 Baltimore MD 21224
 cplummer@mde.state.md.us
 (410) 631-3012

continued from front page...



long ago, this property was littered with the remnants of its industrial past and now it will soon provide a brand new retail center for this community and much needed jobs.”

Cumberland Mayor Edward C. Athey said that the project “will provide Cumberland residents with a convenient, broader shopping area within easy reach. I am sure that the Martin’s Food Store will be a success. I can’t thank Governor Glendening enough for his support of this project.”

The project was the first to apply for the state’s Voluntary Cleanup Program and the first one to qualify for the Brownfields Property Tax Credit.

CSX Transportation Inc. purchased the property in 1987 from Mount Clare Property Inc., which had acquired the property in 1983 from the Baltimore and Ohio Railroad. From 1920 to the early 1970s, the site was used for steel bolt fabrication and metal forging. The buildings on the property were demolished in the mid 1980s. Soils on the site were contaminated with volatile organic chemicals and petroleum hydrocarbons.

In 1997, the Maryland Department of the Environment accepted CSX’s application for the site into the Voluntary Cleanup Program. In December of that year, a second application submitted by Ahold Real Estate Company of Atlanta was approved. Ahold was seeking inculpable person status for the pur-

Smart Growth Success

chase of 11.5 acres in the center section to develop into a supermarket and shopping center. The inculpable status provisions are designed to encourage new investment in properties by significantly limiting the purchaser’s liability for environmental contamination.

“Projects such as this one really highlight the advantages of a voluntary approach to cleaning up contaminated sites,” Governor Glendening said. “The property owner benefits from a streamlined regulatory process that does not involve enforcement; the developer is encouraged to buy the property because of environmental liability relief and the community benefits from the aesthetics and economic boost of redevelopment.”

Since the start of the Voluntary

Cleanup/Brownfields program, 43 properties have applied for participation in the program. This represents approximately 1,174 acres. Other program successes include the American Can Company in Baltimore City, the Engineered Polymer Solutions property in Washington County, and the 40 West Auto Park property in Baltimore County.

To date, six jurisdictions have signed up to participate in the Department of Business and Economic Development’s Brownfields Tax Credit program, including Allegany, Baltimore, and Montgomery counties; the cities of Baltimore and Salisbury and the Town of Colmar Manor in Prince George’s County.



Governor Glendening (center), CSX executives, Martin’s Food executives and state and local officials participated in the ribbon cutting of Allegany County’s newest shopping center.

Drought Emergency

continued from page 1...

area and provide water to over 1.8 million people in greater Baltimore,” said Governor Glendening. “The fact is, if water consumption continues at the current rate, there is only a 35-day supply in these reservoirs.”

All across the state low rainfall has produced dangerously dry conditions. Flow in the Susquehanna River is down by two-thirds. In the Potomac River—which provides water to the Washington Metropolitan Region—flow is down by 50 percent.

Over the past three years, Maryland’s precipitation has been far below normal. The cumulative impact of these

conditions has resulted in farmers’ crops and livestock being threatened; low water levels in several Bay tributaries, resulting in large fish-kills; and twice as many wild fires as last year. Conditions have worsened to the point where the National Weather Service has declared that the Mid-Atlantic region is the most severely impacted part of the country.

In addition to water supply concerns, the drought is having a serious impact on Maryland’s agricultural industry. The Governor’s Executive Order provides for \$3 million in emergency assistance for Maryland’s farmers.

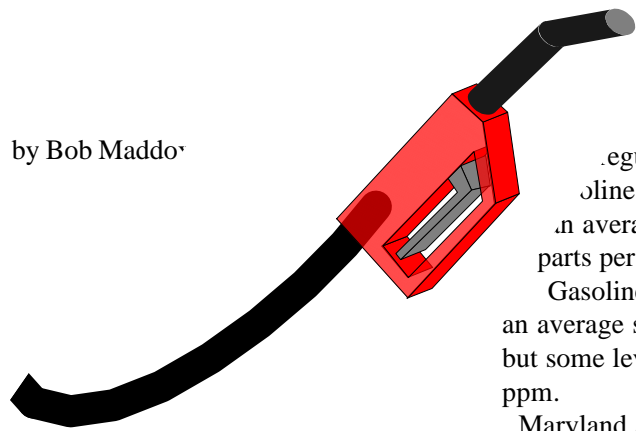
“The money will help provide for such aid as cover crops and hay distribution,” said Governor Glendening. “In addition, I have contacted U.S. Agriculture Secretary Dan Glickman and received his assurance that he is willing to work with us to secure federal assistance for our drought-stricken farmers.”

In response to the drought, the Governor appointed a Drought Emergency Coordinating Committee, chaired by Maryland

(continued on page 3)

Low-sulfur Gasoline Means Cleaner Air

by Bob Maddox



regulate the sulfur content in Ohio and California gasoline to an average sulfur content of 30 to 50 parts per million (ppm).

Gasoline in most of the nation has an average sulfur content of 330 ppm, but some levels are as high as 1,000 ppm.

Maryland and other states that form the Ozone Transport Commission, an organization of officials from northeast states responsible for regional ozone control plans, have called upon the EPA to adopt stringent gasoline sulfur limits in the participating states. The Ozone Transport Commission would like limits to be established by the end of 1999 and to be fully implemented by vehicle model year 2004. This

“The vehicle technology exists now to greatly reduce pollution. Our fuel must keep pace with this technology. Without low-sulfur fuel, we will miss the opportunity for emission reductions and ultimately good air quality.”

**--John A. Paul, Director
Ohio Regional Air
Pollution Control Agency**

until...
...
...ect on the...
...oved lead. In...
...placed on...
...refo...
...which added...
...oxygena...
...reduce carbon...
...monoxide. In the future, according...
to new Environmental Protection Agency proposed standards, depends on changes in engine design, improvements in catalytic converters, and, once again, the reformulation of fuels to reduce sulfur content.

In 1998, the U.S. Environmental Protection Agency (EPA) released information on the impact of gasoline sulfur on vehicle emissions and what gasoline producers can do to reduce sulfur's impact on emissions. Sulfur dioxide, a by-product of fuel combustion, can constrict breathing passages and irritate the lungs. Sulfur dioxide also is one of the main chemicals in air pollution that contributes to acid rain. Acid rain damages buildings, harms trees and pollutes water.

Gasoline sulfur also is detrimental to automotive air pollution controls. It poisons catalytic converters used to cleanse tailpipe fumes, causing increased emissions of nitrogen oxides, a precursor to the formation of ground-level ozone.

“Sulfur ruins the catalysts in catalytic converter on newer model, low emission vehicles and doesn't allow them to be fully efficient,” explained Tim Shepherd of MDE's mobile sources control program.

Air pollution control regulators nationwide have concluded that limiting sulfur in gasoline is one of the most effective ways to reduce urban air pollution. The State and Territorial Air Pollution Program Administrators and the Association of Local Air Pollution Control Officials are urging the EPA to limit sulfur in gasoline nationally by January 1, 2003 to levels already established in California.

California was the first state to

would give gasoline producers five years to install the technology that reduces sulfur content.

The EPA has responded to concerns about gasoline sulfur and is proposing a major national program of stricter emission standards and low sulfur fuel to significantly reduce emissions from cars and light trucks, including sport utility vehicles (SUVs), minivans and pickup trucks. Under this proposal referred to as Tier 2 standards, automakers would sell cleaner cars by model year 2004, and refineries would produce low-sulfur gasoline for distribution nationwide by calendar year 2004 to fuel those cars. Under the current standards, SUVs, minivans, and pickup trucks pollute three times more than cars. EPA believes new, more stringent emissions standards are needed and that reducing sulfur in gasoline is technologically feasible and cost effective.

“The low-sulfur fuel now being sold in the Atlanta [Georgia] area has a sulfur content of about 150 parts per million,” according to Ben Franco of EPA's Region IV office in Atlanta. “Officials in Birmingham [Alabama] are also thinking about using low-

sulfur gasoline. Birmingham is currently a marginal area for ozone nonattainment.”

The American Petroleum Institute (API), the major national trade association representing the petroleum industry, supports the reduction of gasoline sulfur to improve air quality. The industry, however, is recommending its own proposal for reducing sulfur only in regions that are in non-attainment no later than January 1, 2004. To reduce gasoline sulfur, refineries would need to install new desulfurization equipment. The petroleum industry wants a longer phase-in of regulations to develop less expensive desulfurization

technology. API believes EPA's proposal would impose higher costs to refiners and to consumers.

“It will be a daunting challenge to meet the proposed schedule,” says William F. O'Keefe, API executive vice president. “Many refiners will need major engineering modifications. It means getting permits, scheduling contractors, ordering equipment and completing construction. There may not be sufficient engineering and manufacturing capacity to

accomplish the work as quickly as the agency [EPA] has assumed.”

John A. Paul, Director of the Regional Air Pollution Control Agency in Ohio, challenges the petroleum industry's assertion about the cost to consumers, forecasting that the fuel innovations can be accomplished for one to two cents a gallon. “The vehicle technology exists now to greatly reduce pollution,” according to Paul. “Our fuel must keep pace with this technology. Without low-sulfur fuel, we will miss the opportunity for emission reductions and ultimately good air quality.”

The widespread use of low-sulfur gasoline will be a helpful ozone air pollution control measure. Low-sulfur gasoline will allow automotive pollution controls to be more efficient in reducing harmful tailpipe emissions. Americans will breathe cleaner air and enjoy a healthier environment.

For more information on alternative fuels, new gasoline regulations and cleaner air contact MDE's Mobile Sources Program at (410) 631-3270

Drought

Department of the Environment Secretary Jane Nishida, to develop recommendations for potential mandatory water conservation measures. The committee's recommendations are expected by August 3.

In addition to Secretary Nishida, the task force members include: DNR Secretary Sarah Taylor-Rogers; Health and Mental Hygiene Secretary Benjamin Georges, MD; Maryland Emergency Management Director David McMillion; Agriculture Secretary Henry Virts, DVM; John Morton, Vice-President of the Mid-Atlantic Region for NationsBank; Mike Hirshfield, Vice-President of the Chesapeake Bay Foundation; and Dutch Ruppertsberger, Baltimore County Executive.

“I have asked the committee to develop a phased-in, graduated series of steps we will take if drought conditions continue to worsen,” said Governor Glendening. “I have seen Marylanders pull together as one community under difficult circumstances. Through blizzards, floods, and droughts, Marylanders have time and again proven that they are ready, willing, and able to do whatever is necessary.”

Water Conservation for Your Home

- Turn off water when brushing teeth, shaving or shampooing.
- Take shorter showers.
- Use laundry and dishwashers only when loads are full.
- If handwashing dishes, fill up a rinse water bucket instead of letting water run.
- Installing water-saving devices in the home, such as a low-flow toilet or showerhead.
- Check for leaks at inside and outside faucets.
- Collect any available rain water from downspouts in a bucket for watering your garden.
- Let grass go dormant. It will turn green again after the drought ends.
- Use covers on pools to help keep water from evaporating.

Wastewater Treatment

by Marya Levelev

As of July 1999, 92 percent of the 65 wastewater treatment plants in Maryland identified as eligible to obtain funding through the Maryland Department of the Environment's (MDE) innovative biologic nutrient removal program have either installed biologic nutrient removal technologies or have signed cost-share agreements with MDE to do so. Of the five remaining wastewater treatment plants, preliminary engineering studies were completed for all five facilities in the spring of 1999, with the expectation that these plants will reach a flow of 500,000 gallons per day, the participation threshold, in the near future.

In creating the biologic nutrient removal program in 1984, MDE recognized that the success of a Bay-wide nutrient reduction plan would require the full cooperation and participation of Maryland's local governments. The experimental status and the costly nature of biologic nutrient removal led to a voluntary program where 50 percent state funding provides an incentive to local governments to proceed with preliminary engineering, pilot testing and full-scale biologic nutrient removal

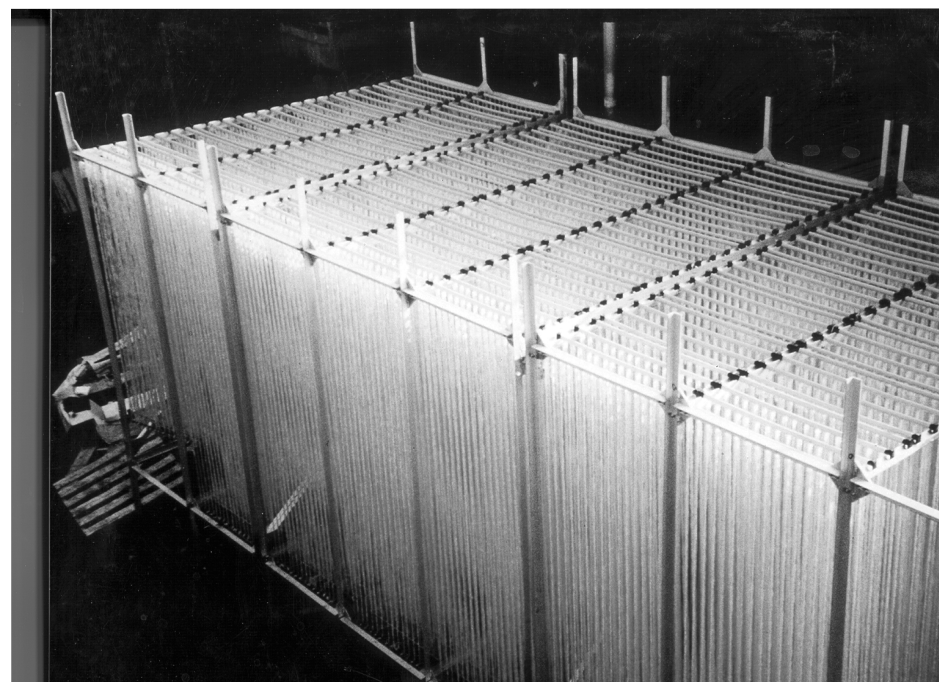
implementation.

The goal of the program is to implement the Chesapeake Bay Agreement's nutrient reduction strategy for point sources through 50 percent cost-share funding biologic nutrient removal and chemical removal at all wastewater treatment plants with flow equal or greater than 500,000 gallons per day.

The biologic nutrient removal program encourages the application of new, innovative, and preferably low energy/low cost technologies to achieve advanced wastewater treatment. Many biologic nutrient removal techniques, which were considered "innovative" during the early years of this program, are now state of the art.

A number of new systems are currently being field-tested including the Algae Turf Scrubber process installed at the Fruitland Plant, the Biolac system at Denton, the Ring Lace which was tested and now is being implemented at Annapolis, and the use of plastic media in the trickling filters at the Salisbury plant.

Members of Maryland's Tributary teams work with MDE and local elected officials to encourage implementation of biologic nutrient removal at wastewater treatment plants. Just



Ring Lace, a BNR technology currently being implemented in the Annapolis Water Reclamation Facility, uses a nylon media to increase the available area for the necessary biological processes to occur.

in the past year, the Mayor and the Council of the City of Havre de Grace in the Upper Western Shore tributary voted in the fall of 1998 to proceed with the design and construction of biologic nutrient removal upgrade. The mayor of the City of Elkton in the Upper Eastern Shore Tributary also signed a biologic nutrient removal agreement in June 1999 to initiate design of the biologic nutrient removal upgrade.

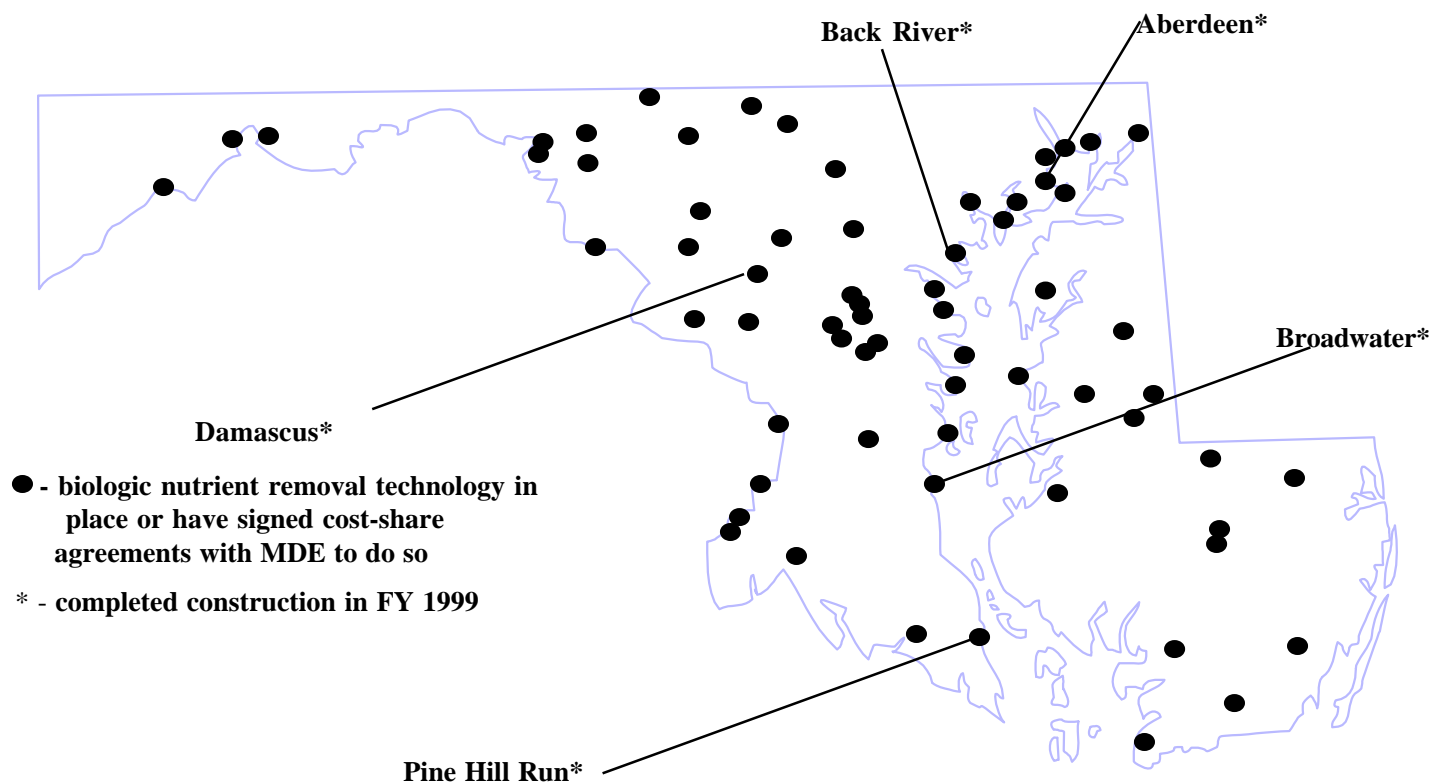
To address Pfiesteria, the schedule for implementing biologic nutrient removal statewide at the 65 targeted wastewater treatment plants are being expedited so that facilities are completed and operational within four years statewide and within two years on the Eastern Shore. Additional capital funding is being requested over the next four years to assure that the state funds are available to local governments to begin construction.

Based on the 1997 data, as a result of Maryland's biologic nutrient removal program, point source nitrogen loads have been reduced from 1985 levels by 36 percent (11.6 million lbs./yr) – 69 percent of the reduction goal achieved. The phosphorus loads have been reduced from 1985 levels by 55 percent (1.38 million lbs./yr.) – 90 percent of the reduction goal has been achieved.

In FY 99, five wastewater treatment plants completed construction including Aberdeen, Back River, Broadwater, Damascus and Pine Hill Run. As a result, Maryland should achieve an additional reduction of more than three million pounds per year in nitrogen and 82 thousand pounds per year in phosphorus.

For additional information, please contact Marya Levelev, biologic nutrient removal coordinator, Capital Program Planning Division, 2500 Broening Highway, Baltimore, MD 21224. Telephone: (410) 631-3720; Fax: (410) 631-3445; e-mail: mlevelev@mde.state.md.us

Maryland Wastewater Treatment



Governor Glendening Tours Flood-Ravaged Bowman's Addition Near Cumberland



Governor Glendening and Bowman's Addition business owner, Linda Hartman, during the Governor's recent tour of the flood-prone community in Allegany County.

Following a tour last month of flood-prone Bowman's Addition, a community near Cumberland, Allegany County, Governor Parris N. Glendening announced that he will aggressively seek federal funds to assist with the buyout of 45 homes located in the 100-year flood plain of this community. This area has been repeatedly ravaged by flooding, most recently in 1996.

The buyout, which would cost an estimated \$2.1 million, would be financed through \$265,000 from the Maryland Department of the Environment (MDE); \$213,000 from Allegany County; and \$1.57 million from the U.S. Department of Commerce's Natural Resource Conservation Service (NRCS). Maryland

already has allocated its share of the funds in MDE's Fiscal Year 1999 and 2000 budgets. The Governor said he would ask NRCS to fund the buyout during the next federal fiscal year, which begins October 1.

"I personally will never forget the physical and emotional damage left by the relentless waters that tore through Western Maryland in 1996," Governor Glendening said. "I remember one young child who was worried about replacing his shoes so he could go to school. All of his clothing, including his shoes had been swept away by the floodwaters. I could not bear to think that another child – another family – would have to endure this kind of

tragedy again."

The Governor noted that since 1996, when he formed a Flood Mitigation Task Force for Western Maryland, more than \$52 million in state, federal and local funds have been spent to relocate families, repair or replace roads and bridges, upgrade drinking water and sewage treatment infrastructure, remove blockages from waterways and teach citizens how to flood-proof their homes.

"I am extremely proud of the work the dedicated group of individuals on the task force has done and the real, tangible outcomes – such as the relocation of families – that have resulted from their work," Speaker

Casper R. Taylor said. "It is my firm belief that their efforts will help us to prevent the kind of devastation we saw in 1996 in Lonaconing, Westernport, Cumberland, Point of Rocks and other places, including right here in Bowman's Addition."

"I applaud the work of Cas Taylor and the members of the mitigation task force," the Governor said. "We pledge to continue to work to relocate families – such as those here in Bowman's Addition – and to continue to fund through direct grants flood control and stormwater projects that typically would not be eligible for the state's stormwater and flood control funding."



Bowman's Addition resident Ralph Donahue shares photographs of his community after a rainfall with Speaker of the House Casper Taylor and Governor Parris N. Glendening

WANTED: Submissions for Environmental Education Resource Guide

MDEnvironment's September Back-to-School issue will feature a resource guide for K-12 environmental educators and your organization can be part of it! Please send us information about any environmental education resources that your organization, business, association or government offers. These resources may include videos, brochures, experiments, newsletters, field trips, plant or facility tours, exhibits, films, lesson plans, games, websites, reports or speakers bureaus. Help educate Maryland's children about the environment!

To be part of this guide, send **by August 15** the name of your organization, a short description of each educational opportunity, and any other important details, along with the name of a contact person and their phone number, fax number and e-mail address to:

MDEnvironment, 2500 Broening Highway, Baltimore, MD 21224 or e-mail cplummer@mde.state.md.us.

ENDZONE Ozone Action: An Hour On The Air

ENDZONE partners is producing and sponsoring a one hour weekly radio program on Saturdays from 3 to 4 p.m. to educate listeners about ground-level ozone and provide information on how to protect themselves and the family members from the health effects of ozone smog and how to reduce air pollution. The simulcast may be heard on WOLB radio (1010 AM) in Baltimore and WOL radio (1450 AM) in Washington. Ms. LeChez Herring from Towson

University will host the program. Each week LeChez will focus on a particular aspect of ground-level ozone and will feature guest experts. The public is invited to call in and ask questions at 1-800-450-7876.

ENDZONE partners is a coalition of Maryland, Virginia, and Washington D.C. businesses, interested citizens groups and local governments that work to reduce ground-level ozone through its public education campaign.