

# Department of Environmental Protection Report to the Citizens Advisory Council October 2011

### I. Pending Issues

Water Management

### **Act 167 Stormwater Management Planning:**

Twenty-two county-wide stormwater management planning projects have been approved. County-wide plans together with watershed plans now cover 1,531 municipalities. Work is continuing on approximately eight more county-wide plans plus approximately six watershed plans. Many of the county-wide plans currently in progress will be completed and approved by year-end.

### **NPDES MS4 Permit (PAG-13):**

PAG-13 will be presented to the WRAC on April 13, 2011. PAG-13 should be finalized, approved by EPA, and published within the next few months. Afterward PAG-13's comment/response document, .the NPDES MS4 Individual Permit Package, workshops with DEP's regional offices, finalizing materials for municipal workshops, and holding the municipal workshops will follow. December 9, 2011, is the deadline for permittees to submit NOIs for PAG-13 renewals. DEP is continuing its discussions with EPA Region III regarding provisions in PAG-13 particularly in regards to implementation of TMDLs and the implementation of the Chesapeake Bay TMDL.

#### State Water Plan

### Development of Critical Area Resource Plans (CARPs)

CARPS are problem-solving plans on designated Critical Water Planning Areas (CWPA) that provide investigation and detail on water availability under existing and future demand conditions to identify conflicts among users and provide supply-side and demand-side alternatives to resolve those conflicts. Implementation of recommendations is voluntary.

Two "Pilot" CARPs are being prepared for the CWPA designated areas of: 1) Laurel Hill Creek/Back Creek watersheds in Somerset and Fayette Counties being prepared by the Somerset County Conservation District and 2) the Marsh Creek/Rock Creek Watersheds in Adams County being prepared by the Interstate Commission on the Potomac River Basin (ICPRB).

The Laurel Hill/Back Creek plan is now in stage of initial draft of the plan with additional technical assistance being sought by the Conservation District to supplement work currently being prepared by the USGS. The plan is scheduled to be finished by June 2012. A meeting of the State Water Plan's Ohio River Basin Regional Committee that is charged with overseeing the project is scheduled to meet on October 26<sup>th</sup>.

The Marsh Creek/Rock Creek plan is into its first year with a scheduled completion date of September 2012. The next advisory committee meeting is scheduled for October 12, 2011.

# Water Resource Technical Assistance Center (WRTAC)

DEP has contracted with the Susquehanna River Basin Commission (SRBC) to establish the Water Resource Technical Assistance Center. The establishment of the Center is a requirement of Act 220. After a request for proposal (RFP) solicitation, SRBC selected the PA Environmental Council to develop a plan to establish the Center. The WRTAC advisory committee has met several times to review the work of the contractors selected to develop the WRTAC. The contractors include PA Environmental Council and Eastern Research Group (ERG).

The three goals of the project are to establish a leading edge website, develop a comprehensive business plan and legal non profit incorporation including establishment of a board of directors. As of May 2011 the website is complete and non-profit status achieved. The website is www.savewaterpa.org. The advisory group is looking for volunteers to review the website and recommendations on what groups should constitute the board.

PA Environmental Council (PEC) is encouraging everyone to utilize the website in water conservation outreach efforts. In addition PEC wants to use the website as a marketing tool to leverage outside funding from industrial water users, public water suppliers, foundations and other funding partners. In addition to the web site, PEC is evaluating the use of social media as another tool to implement the mission of the Center. Social media (i.e. LinkedIn) may offer the potential for enhanced collaboration among water resource professionals and enhanced technology transfer of water resource technologies. Opportunities, limitations and a strategy for social media use are being explored.

### Marcellus O&G Water Management Plan Activities

The Department continues to review and approve water sources for Hydrofracing associated with Marcellus gas well operations through approval of Water Management Plans (WMPs). As of August 2011, a total of 717 sources have been approved including water wells, surface water withdrawals and purchase interconnections from public water suppliers. A display of those locations may be found on the DEP website within a GIS tool "WAVE" at:

http://www.wave.dep.state.pa.us/wave/Index.shtml?custom=4&tgtName=WUDS\_WMP\_SOURCES\_V&tgtID= &toolUsed=StateWidet&map=1&Service=wave\_image\_swd&warning=false

Or go to <a href="http://www.depweb.state.pa.us">http://www.depweb.state.pa.us</a> and click on "tools" then "mapping/GIS" then "WAVE tool". Within the tool, click on "Launch WAVE". Once in the application, choose the subject area "Water Withdrawal/Use/Discharge and then select the subject area layer "Marcellus Gas Well Water Sources".

DEP's Water Use Planning Division and Bureau of Information Technology are continuing in the development of an improved system for the submission of WMP applications that will help streamline the process and improve data quality. Water withdrawal information is submitted to the department by Marcellus operators through the DEPGreenport website.

### **Chesapeake Bay Program:**

### Chesapeake Bay TMDL/WIP:

EPA published a Total Maximum Daily Load (TMDL) for the Chesapeake Bay on December 24, 2010, which establishes a 'budget' for nitrogen, phosphorous and sediment loadings. As part of the process, EPA directed states to submit Watershed Implementation Plans (WIPs) intended to demonstrate "Reasonable Assurance" that

TMDL objectives would be met. EPA's evaluation of Pennsylvania's Final Phase 1 WIP determined that it contains significant improvements, including strategies to increase compliance with agricultural regulations. EPA felt that the WIP lacked clear strategies to achieve urban stormwater reductions, however. Pennsylvania meets its nutrient and sediment allocations for each basin in the final TMDL. After adjusting for EPA-approved nitrogen and phosphorus exchanges, Pennsylvania's WIP input deck resulted in statewide loads that are 2% over for nitrogen and phosphorus, and 5% under for sediment allocations. EPA and DEP reached agreement on further nonpoint source reductions in order to achieve allocations both statewide and in each basin, as documented in the final TMDL. The further reductions are supported by contingencies included in the WIP and EPA's commitment to track progress and take any necessary federal actions to ensure these reductions are achieved and maintained. In the Final TMDL, EPA imposed a "backstop" on the urban stormwater sector, transferring 50% of the urban stormwater load that is not currently subject to NPDES permits from the load allocation to the wasteload allocation. EPA is doing this to signal that it is prepared to designate discharges as requiring NPDES permits to ensure nutrient and sediment reductions are achieved and maintained. This does not trigger any immediate changes to the NPDES permitting program. Pennsylvania's final allocations in the Chesapeake Bay TMDL are described in the following table. The Final TMDL calls for 100 percent of the necessary actions to meet Bay water quality standards to be implemented by 2025, with 60 percent to be implemented by 2017.

### PA Reduction Targets

Phase 5.3 Watershed Model

Nitrogen (TN), Phosphorus (TP), Suspended Solids (TSS)

#### Million Pounds/Year

	TN	TP	TSS
1985	135.17	5.08	2,971
2009	106.41	3.96	2,576
Draft TMDL	76.77	2.74	2,013.62
Final TMDL	73.93	2.93	1,983.78
Remaining	32.48	1.03	592.22
Reductions			
By 2025			
60% by 2017	19.488	0.618	355.332

Note: This table will be updated to reflect the new Chesapeake Bay Model, referred to by EPA as "Version 5.3.2", when the data is finalized for the 2010 Progress Run.

Over 125 individuals representing a broad range of organizations and interest volunteered to participate on a Management Team and workgroups that provided input throughout the development of the WIP. There is a lot of information on planned efforts in the WIP, including these examples: Collecting information on un-reported BMPs; implementing recent regulatory changes to Chapter 102; integrating funds for an annual "Million Pound" project; quantifying legacy sediment impacts; and quantifying reductions associated with air quality programs/regulations. Efforts have been made to include, as much as possible, state-wide programs and changes in the document, which hopefully will help integrate those efforts into the work needed to support the WIP.

The Pennsylvania WIP documents are posted at:

http://www.depweb.state.pa.us/portal/server.pt/community/chesapeake\_bay\_program/10513 . EPA has established a website specifically for the TMDL, which can be accessed at http://www.epa.gov/chesapeakebaytmdl/ .

#### Phase 2

To facilitate local implementation of reduction actions needed to meet the Chesapeake Bay goals, EPA has directed the Chesapeake watershed jurisdictions to sub-divide nutrient and sediment reductions by local areas in

a Phase 2 WIP. DEP is considering sub-dividing at the county-level, as the EPA Chesapeake Bay watershed model is based in part on county level data. The reduction targets are for planning purposes only, and do not become regulatory allocations at the county level.

Phase 2 will be addressed in a process similar to Phase 1. DEP staff are re-convening the Management Team that was formed to help develop the WIP and will meet with workgroups as needed. DEP staff have already met with some county groups, and will expand that effort over the fall. Draft Phase 2 WIPs are due to EPA by *December 15, 2011*, and the Final Phase 2 WIPs are to be submitted by March 30, 2012.

### Next Steps:

- Implementation of Phase 1 WIP
- Current Schedule for Phase II WIPs
  - October and November 2011: Regional county workshops
  - o December 15, 2011: Draft Phase 2 WIP due to EPA
  - o December 15, 2011 to January 28, 2012: Public comment period on draft Pennsylvania Phase 2 WIP
  - o March 31, 2012: Final Phase 2 WIP due to EPA
  - o Any necessary modifications to the Bay TMDL to be completed later in 2012.

<u>Chapter 105 Regulation Revisions</u>: The Division of Waterways, Wetlands, and Stormwater Management is currently working to revise the Chapter 105 Dam Safety and Waterway Management regulations and are proposing new permitting fees and a new submerged land license *charges*.

The proposed fees were shared with WRAC at the May 11, 2010 meeting and the July 14, 2010 meeting for comment. After a few questions, WRAC motioned for the draft regulations be forwarded to the *Environmental Quality Board (EQB)*.

Program staff presented the draft rulemaking to EQB on December 21, 2010. After some discussion, John Arway, Executive Director, PA Fish and Boat Commission, moved to adopt the proposed rulemaking, with a 30-day public comment period. Walter Heine, Citizens Advisory Council, seconded the motion, which was approved by a majority of the Board members. Joe Deklinski, on behalf of Rep. Scott Hutchinson, voted in opposition to the motion.

<u>Chapter 102 Regulation</u>: Additional training sessions with the regulated community have been scheduled for December and February. They are as follows:

December 14, Williamsport February 8, Harrisburg February 10, Allentown February 24, Cranberry Township

More information will be posted concerning these trainings on the stormwater management website at <a href="http://www.portal.state.pa.us/portal/server.pt/community/stormwater\_management/10628">http://www.portal.state.pa.us/portal/server.pt/community/stormwater\_management/10628</a>.

Staff issued a Frequent Asked Questions (FAQ) document to all conservation districts and regional offices with many questions and answers related to the implementation of the new Chapter 102 regulations. Staff are also working on updating and creating new forms and guidance, including riparian buffer waiver guidance, to aide in implementing the new regulations.

Revisions to the Delegation Agreements: DEP staff has been working with the 102 Advisory Workgroup regarding changes to the delegation agreements and required output measures (ROMs) for the NPDES Construction Stormwater Program. Changes have been made to address changes in delegation caused by the new Chapter 102 regulations and other programmatic changes. A meeting was held in State College on February 17 to discuss changes to the delegation agreement. The Chapter 102 advisory committee will be discussing the proposed changes to the delegation agreement at an upcoming call and are proposing to present the changes to the State Conservation Commission at its July meeting for approval.

<u>Revisions to the construction stormwater general permit PAG-02:</u> The Department sent the draft construction stormwater general permit (PAG-02) to the Environmental Protection Agency for their review. The Department has incorporated requirements from the new regulations into the PAG-02. The federal numeric effluent limitations for turbidity have been stayed by EPA and therefore were not incorporated into the draft permit.

### II. Pending Issues

### Waste Management

Leaking Underground Storage Tank ARRA: Under the ARRA, \$200 million is provided for Leaking Underground Storage Tank (LUST) cleanups, nationwide. EPA has awarded a grant for \$6,163,000.00 to Pennsylvania to conduct cleanups at LUST sites where a private party is unable to perform the work or has abandoned the site. DEP is performing corrective action work under the Storage Tank laws and regulations at 70 eligible sites where properties owners have voluntarily agreed to provide DEP access. As of August 30, 2011, DEP contractors have completed approximately \$6.1 million worth of work and DEP expended approximately \$5.8 million. The grant term expires on September 30, 2011.

Recycling Fund and Solid Waste Advisory Committees: At the September 15<sup>th</sup> meeting, the Recycling Fund and Solid Waste Advisory Committees reelected Tanya McCoy-Caretti as chairperson and David Strong as Vice-Chairperson. At the September 15th Recycling Fund Advisory Committee meeting, the Department reviewed the FY 2010-2011 Recycling Fund Expenditures and presented the FY 2012-12 Recycling Fund Spending Plan. The Committee approved the 2011-2012 Recycling Fund Spending Plan as presented by the Department.

At the September 15<sup>th</sup> Solid Waste Advisory Committee meeting, the Department presented the draft proposed Municipal Waste Regulations — Chapter 284 Regulated Medical Waste. The Solid Waste Advisory Committee approved the request to submit the draft proposed Municipal Waste Regulations — Chapter 284 Regulated Medical Waste to the Environmental Quality Board as a draft proposed rulemaking. The Department also presented the 2011 Draft Hazardous Waste Facilities Plan, which was updated to include 2003, 2005, 2007 and 2009 hazardous waste biennial report information. The Solid Waste Advisory Committee approved the 2011 Draft Hazardous Waste Facilities Plan as presented by the Department.

# **Energy Initiatives**

#### Electric Vehicle Infrastructure

Alternative Fuels Incentive Grant Program: The annual 2011 AFIG competitive round opened on Friday April 15 and closed on Friday June 17th. The AFIG staff met with Secretary Krancer and completed the recommendations list of projects being considered for the FY2011 AFIG awards as well as the PA Turnpike EV Infrastructure grant which closed on July 29<sup>th</sup> 2011. Awards are expected in Mid-October.

# The Pennsylvania Energy Development Authority (PEDA)

The PEDA Board of Directors will meet by conference call on October 12, 2011, to vote on the 2011 PEDA projects that were reviewed at the September 23, 2011, meeting. This meeting was one (1) vote short of a quorum. A quorum was not reached due to an issue with the Commonwealth conference bridge that did not connect Board members calling in for the meeting.

### Small Business

Small Business Advantage Grant: The SBAGP closed on September 28, 2011, after receiving 111 applications totaling almost \$602,000.00. Eight (8) applications have been determined to be ineligible. This year's Advantage grants were primarily heating, cooling, lighting upgrades, digital radiography, and auxiliary power units for class 7 and 8 trucks. The average grant request is up from an average request of \$4,857.00 in 2010 to \$5,423.00 in the 2011 opportunity.

### American Recovery and Reinvestment Act Energy Funds

ARRA Keystone HELP/Geothermal and Residential Energy ELoan Program: The Residential Geothermal Loan Program opened Oct. 22 and the Residenial Energy Efficiency Loan Program opened on December 20<sup>th</sup> 2010 and is accepting applications through Keystone HELP: <a href="www.keystonehelp.com">www.keystonehelp.com</a>. The programs are each funded with \$5 million from the American Recovery and Reinvestment Act (ARRA). The program is a joint venture between DEP (providing buy-down of interest rates available to borrowers) and PA Treasury (providing loan capital for borrowers). The PA Housing Finance Authority is also a partner, providing loan capital for certain whole-house improvement loans. The program is administered by AFC First Financial.

To date; DEP supported Keystone HELP has provided a total of 1453 consumer loans valued at \$11,626,455.23 to PA home-owners resulting in annual energy savings of 3,748,401 kwh of electricity; 12,712,938 kBTU reduction in heating fuel consumption; and a 6,293,796 lb reduction in CO2 emissions through installed residential energy conservation and efficiency measures for the current 2011 calendar year. The Geothermal Loan Program funded 152 of those loans, totaling \$1,887,926.00. In addition, there have been 117 PHFA Renovate and Repair loans totaling \$2,459,861.00.

As of the week of October 7, 2011, According to the DOE SEP Dashboard, Pennsylvania ranks 3rd among the States in the percentage of State Energy Program ARRA funds actually spent (\$84,977,586.00) of the \$99,684,000.00 received (or 85%). Pennsylvania has actually spent \$85,811,886 (86%) as DOE's reporting is a few weeks behind. The two states ranked above PA (WI and TN) have much smaller \$ allocations. PA ranks 6th in allocations while WI ranks 19th and TN 15th respectively. Currently the national average for expenditures is 56%.

As of the week of October 7, 2011, the Department Of Energy listed Pennsylvania as ranked third nationally in terms of percent of total funds outlaid (86%) and first in actual dollars outlaid \$20,390,456 for state-level Energy Efficiency Conservation Block Grant recipients.

DEP received the final report for the Department of Energy's Office of Inspector General final audit report of the of the ARRA supported Energy Efficiency and Conservation Block Grant (EECBG) program. The report contained no findings. "The audit found that the State of Pennsylvania developed and implemented a monitoring system designed to provide reasonable assurance that Energy Efficiency and Conservation Block Grant projects would improve energy efficiency, be completed timely, and that funding would be accounted for and spent properly. For the specific projects tested, the controls appeared to be generally effective and we did not identify any material issues with project monitoring and execution. Therefore, no recommendations are

being made to this report." Pennsylvania, due to its accelerated spending and program performance, was one of the first state's EECBG program to be audited.

# Mining/Reclamation/AMD Issues

<u>ABS BF Discharge Treatment</u>: Progress is being made in systematically approaching the problem, with designs underway for many of the treatment facilities. Initial work has begun in order to prepare a draft NPDES permit for these sites. Water Quality Based Effluent Limit Calculations have been started. Revisions to a number of TMDLs are required to account for some of these discharges.

<u>Proposed Rulemaking-Coal Permit Fees:</u> DEP presented a proposed rulemaking package to the MRAB at the October meeting. This package included fees for coal mining permit applications. The MRAB objected to the fee amounts and recommended that the rulemaking proceed with out the fee revisions. In the meantime, BMR is working with the MRAB's Regulation, Legislative and Technical Committee (RLT) to establish a fee approach that is in line with recommendations the MRAB made at the January 2010 meeting.

On April 22, 2010 the MRAB made a recommendation that the Department prepare a rulemaking package that includes permit fees that would generate about \$400,000 per year. This rulemaking package was approved at the October 2010 EQB meeting. The regulation was published for comment in December 2010. No comments were received. Based on processing delays, republication is necessary. *The Department is awaiting approval to advance the rulemaking process*.

Noncoal Program Fees-preliminary work has commenced for fees to support he noncoal mining program. The fees have been calculated to support the program costs (about \$3M). Outreach meetings have been held to explain the reason for the fees and how the amounts were calculated. The proposed fees were approved at the June EQB meeting. The proposed regulations were published in the August 28 PA Bulletin, with a 30-day comment period. Comments were received from about 20 commentors. IRRC also provided comments. The Department is awaiting approval to advance the rulemaking process.

NPDES Permitting for mine sites. The mining program has focused its attention on improving the documentation for NPDES permit reviews. This is necessary due to recent initiatives by EPA and OSM. Efforts will focus on dealing with the conductivity/TDS requirements and reasonable assurance of meeting the state water quality standards. EPA has conducted a permit quality review for NPDES permits for mine sites. The Department has engaged EPA in discussions intended to improve NPDES permitting for mining permits. New issues continue to be raised by EPA. The Department has focused it's attention on the regulatory requirements. Some of EPA's objections seem to go beyond the regulations. Comments have been received on about 60 of the 140 permits sent to EPA as of September 2011. A preliminary draft guidance document has been prepared and informal comments have been received from the PA Mining Professionals and the PA Coal Association.

<u>Act 54 Report-BMR</u> is reviewing the Act 54 report and the comments provided by the Citizen's Coal Council. The Department is gearing up to initiate the contracting process in order to get started on the next report as soon as possible.

#### Office of Homeland Security

The Pennsylvania's Homeland Security Directorate resides within the Pennsylvania Emergency Management Agency (PEMA). The Directorate staff consists of:

Ronald C. Stanko, Esq. Deputy Director for Homeland Security

Mary D. Johnston, Assistant Deputy Director for Homeland Security Steven T. Hoffman, Assistant Director for Infrastructure Protection Activities Kristin M. Daniels, Critical Infrastructure Protection Specialist

The Deputy Director for the Homeland Security Directorate reports directly to the PEMA Director in support of Emergency Preparedness activities, programs, and initiatives across the Commonwealth.

The OHS Mission is to serve as the lead Commonwealth office for orchestrating and synchronizing protection-related activities for Physical, Cyber, and Human resources, systems, and assets. The Commonwealth departments/agencies provide an all-hazards approach to Homeland Security and Emergency Preparedness that complies with federal Homeland Security legislation and supports Presidential Directives and DHS programs.

The Commonwealth Governance Structure for Emergency Preparedness considers the National Preparedness Goal, the Homeland Security Spectrum of Operations (Prevent, Protect, Respond & Recover from all-hazards incidents), and the 37 federally-defined capabilities required to accomplish those objectives for each of the 17 following critical infrastructure sectors:

- (A) Agriculture and food
- (B) Banking and finance
- (C) Chemical industries
- (D) Commercial facilities
- (E) Commercial nuclear reactors, materials, and waste
- (F) Dams
- (G) The defense industrial base
- (H) Emergency services
- (I) Energy
- (J) Government facilities
- (K) Information technology
- (L) National monuments and icons
- (M) Postal and shipping
- (N) Public health and health care
- (O) Telecommunications
- (P) Transportation systems
- (Q) Water

When planning for protection of Pennsylvania's Critical Infrastructure, OHS and the Commonwealth's departments/agencies consider the following types of threat to the critical infrastructure sectors and to populations in all areas of the Commonwealth, urban and rural:

- (1) Biological
- (2) Chemical
- (3) Cyber
- (4) Explosives
- (5) Incendiary
- (6) Nuclear
- (7) Radiological
- (8) Suicide bombers
- (9) Such other types of threat determined relevant by the Administrator

### **Environmental Education**

# **Environmental Education Grants Program (EEGP)**

The 2012 grant round opened on October 3<sup>rd</sup>. We're getting several summary email proposals each day. We respond with comments and let the applicants know if there are any issued with the proposal. The summary proposals will increase as the deadline for submissions draws closer. Applications are due to the program by December 16<sup>th</sup> 2011.

# **Outreach:** Environmental Education outreach activities include the following:

October 7<sup>th</sup> Energy conservation/audit program for Girl Scout Group EE Center October 8<sup>th</sup> Energy conservation hands on exhibits for youth and general public at Energy Fair Ohiopyle Community Center

### **Workshops Conferences and Board Meetings:**

October 13<sup>th</sup> Pathways to Green Schools meeting with PDE promoting and supporting green technologies in K-12 schools.

# **Upcoming Outreach Events:**

October 25<sup>th</sup> Teacher workshop at the Tom Ridge Education Center Erie The Director will do an EE grants writing workshop.

### Other EE Initiatives:

- ➤ The EE Director is working with the Pa Department of Education (PDE) to continue a 25 year partnership through an MOU designed to integrate DEP initiatives into K-12 education. The MOU has been fully executed.
- > The EE Director is working with the Susquehanna River School/Pride of the Susquehanna Riverboat to explore partnering opportunities in delivering watershed education programming to students and educators.

The Director is working with other agencies and organizations to enhance career opportunities through the Governor's Science, Technology, Engineering and Math (STEM) initiative. The STEM initiative meshes well with DEP's alternative energy technologies related programs. This initiative has been augmented by the new Greening of Pennsylvania's Labor Market initiative with ARRA funding through L&I. DEP's Director of EE is involved regularly with the Pennsylvania Center for Environmental Education (PCEE)

as Board Chair. PCEE is located in Slippery Rock, PA and is funded and administered by the State System of Higher Education. The center serves as a clearing house and resource tool for formal and non-formal educators throughout the state. The Environmental Education and Information Center is developing a Trout in the Classroom exhibit in the Center. Brook trout will be on display in the Center as they are raised from eggs to fingerlings to adults, then released in the spring.

### Falcon Outreach/Education:

CMS is coordinating the purchasing and installation of equipment to upgrade the falcon cam web broadcast **DEP Regulations and Proposals Recently Finalized** 

PA Bulletin Publication Date **Proposals or Regulations**