

Conservation Committee Report

Volume 20 Issue I

Jack Walters—Conservation Chairman

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Allegheny County Health Dept. Awards 10 Mini-Grants For Lead Prevention Outreach

The Allegheny County Health Department

Thursday announced it has recently awarded 10 mini-grants totaling \$38,900 to community organizations to educate residents on the sources and consequences of lead exposure, as well as the importance of prevention and universal blood lead level testing.

The 10 organizations receiving a mini-grant are: Circles of Greater Pittsburgh – Mon Valley (\$6,000), Clairton Cares, Inc. (\$4,000), Consumer Health Coalition (\$3,000), Environmental Occupational & Public Health Consultants Inc. – EOPHC (\$4,500), Homewood Children's Village (\$3,000), Perry Hilltop Citizens

Council (\$5,000), Pittsburgh Learning Commons (\$5,000), United Somali Bantu Community of Greater Pittsburgh (\$2,000), Women for a Healthy Environment (\$4,400) and Youth Enrichment Services (\$7,000).

"We are excited to partner with these organizations to

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The Conservation Pledge

I give my pledge as an

American to save and faithfully defend from waste, the natural resources of my country; the soil, the water, the air, the minerals, the plant life and the wildlife.

This is my Pledge!

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DEP Spotlights Clean Local Water Actions in Educational Exhibit, Activities at Pennsylvania Farm Show

The Department of Environmental Protection's (DEP's) exhibit at the [102nd Pennsylvania Farm Show](#) focuses on steps that farms, towns, industry, and residents can take to help clean up local streams and rivers. The exhibit is in the

Main Hall of the Farm Show Complex and Expo Center from January 6 to 13.

"Although Pennsylvania is making some progress in cleaning up the thousands of pollution-impaired rivers and streams in the

commonwealth, much work remains to be done," said DEP Secretary Patrick McDonnell. "All individuals and organizations are part of the solution to help reduce sediment, nutrients,

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Allegheny County Health Dept. Awards 10 Mini-Grants For Lead Prevention Outreach (continued)

boost education about lead safety in our community, and to better ensure that information get into the hands of those who need it most.” said Dr. Karen Hacker, ACHD Director. “Harmful lead exposure from multiple sources is a reality in our county, and educating the public about the risks is a priority. We expect that this funding of investment will result in even larger returns.”

Proposals were evaluated based on innovation and creativity, their emphasis on priority areas identified by ACHD, knowledge of the target population, demonstrated ability to meaningfully involve a large number of residents, inclusion of minority groups and low-income residents, and cost-effectiveness of the proposed budget.

The selected organizations will conduct workshops, organize community meetings and carry out door-to-door outreach to educate residents on how to prevent and mitigate lead exposure.

Proposed activities include, developing educational videos, creating interactive exhibits, and planning gatherings at residents’ homes to share information on lead exposure and prevention. Organizations will also share information about available programs and resources with families in these areas.

Activities will take place over the course of six months in 2018, from February through July, and focus on those neighborhoods where populations are more likely to be at risk of lead exposure.

These priority areas include many Mon Valley municipalities, McKees Rocks, and portions of the East End, Northside, and South Hills areas within and around the City of Pittsburgh.

The Health Department identified the priority areas based on proportion of individuals under five years of age, aggregated (2012-2016) proportion of individuals tested for lead with a confirmed elevated blood lead level ≥ 5 ug/dL, proportion of houses built prior to 1950, high school education rate and percent poverty rate.

This mini-grant program is part of a communications strategy that was developed by the Health Department thanks in large part to a \$300,000 grant that it received from the Henry L. Hillman Foundation in May of 2017.

This comprehensive communications plan was put in place to prepare families, physicians, school nurses, and other community stakeholders, to comply with Allegheny County’s universal blood lead level testing regulation that went into effect on January 1, 2018.

For more information on the universal blood lead level testing regulation, visit the Allegheny County Health Department’s [Lead Information for Doctors](#) and [Lead Exposure](#) webpages.

Source: PA Environment Digest

DEP Spotlights Clean Local Water Actions in Educational Exhibit, Activities at Pennsylvania Farm Show (continued)

and chemicals in our local waters.”

The exhibit, created by the [DEP Environmental Education Center](#), includes a beanbag toss game for kids and panels presenting simple steps that can help clean up water at home, on the farm, at work, and in communities.

Four clean water success stories are highlighted:

Mark and Beth Steck, who earned a 2017 Clean Water Farm Award for sediment and nutrient reduction measures at their Green Valley Farm in Franklin County;

Mack Trucks Remanufacturing Center, Middletown, Dauphin County, for stormwater pollution reduction on plant grounds;

Lemoyne Borough, Cumberland County, for their numerous rain gardens and other stormwater management measures; and

John and Barbara Schleicher, who use rain barrels at their home in York County.

One panel addresses the special challenge of cleaning up local water in Pennsylvania’s 43 counties in the Chesapeake Bay Watershed.

The exhibit was created with funding support from the U.S. Environmental Protection Agency.

The Farm Show runs January 6 to 13, starting at 8:00 AM daily. Admission is free and parking is \$15.

The following is a list of DEP public activities:

Daily

8:00 AM-close, Clean Local Waters in Pennsylvania, DEP Exhibit (Booth 705, near butter sculpture), Main Hall: Interactive educational exhibit with beanbag toss game.

Sunday, January 7

7:00 PM, Bunny Hop, Small/Sale Arena: Secretary McDonnell participates in the Celebrity Rabbit Hopping Contest.

Tuesday, January 9

3:30–4:00 PM, Tips to Be Stormwater Smart, Lancaster Farming/Ag 101 Stage, Expo Hall: Environmental Education Director Bert Myers demonstrates actions anyone can take to reduce or reuse stormwater runoff from their roof, driveway, and street and help clean up nearby streams.

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DEP Spotlights Clean Local Water Actions in Educational Exhibit, Activities at Pennsylvania Farm Show (continued)

Wednesday, January 10: Public Officials Day

8:30–9:00 AM, Secretary McDonnell Media Availability, DEP Exhibit (Booth 705), Main Hall.

11:00 AM, Secretary McDonnell's participation in Public Officials Luncheon, Expo Hall.

Friday, January 12: Resource Conservation Day

11:30–noon and 2:30–3:00 PM, Agricultural Plan Reimbursement Program, Lancaster Farming/Ag 101 Stage, Expo Hall: TeamAg shows how farmers in Pennsylvania's 43 counties in the Chesapeake Bay Watershed can get reimbursed for the cost of developing manure and/or nutrient management plans.

Source: The Department of Environmental Protection's (DEP)

PA State Parks, Forests Offering Visitors a Winter Playground

With the official arrival of winter, Department of Conservation and Natural Resources Secretary Cindy Adams Dunn is reminding outdoors enthusiasts Pennsylvania's state forest and park systems again are rolling out the welcome mat for winter visitors intent on enjoying cold-weather, outdoor fun.

"As the temperatures turn seasonable and snow and ice begins to accumulate, our state forests and parks extend an invitation to head to their woodlands, lakes, and trails and enter a new world of outdoor excitement and adventure," Dunn said. "We are hoping families seek out a sledding hill at a nearby state park or stroll on a forest trail and enjoy the beauty and peace winter landscapes offer. For others, snowmobile and ATV trails have opened, and hunters and anglers will be heading to our state forests and parks for late-season hunting and ice fishing."

Following the December 9 close of Pennsylvania's regular deer hunting season, snowmobiling began December 11 and closes April 1, 2018, in state forests and parks where conditions permit. This season, snowmobile riders in Pennsylvania's state forests and parks have access to almost 3,000 miles of marked joint-use state forest roads, closed roads, and trails in 18 of the state's 20 state forest districts and in 32 state parks.

Winter ATV trails stretching more than 170 miles in seven state forest districts also opened December 11.

DCNR again is providing condition updates on its toll-free, snowmobile hot lines, 1-877-SNOMBLE (1-877-766-6253); or 717-787-5651. Recorded messages, providing reports on snow depths and trail conditions across the state, are updated at about noon each Tuesday and Thursday. DCNR also provides weather and condition reports online for state parks and forests.

All snowmobiles and ATVs in Pennsylvania must be registered with DCNR's snowmobile/ATV Unit. For more information on registration, call toll free (866) 545-2476 or visit DCNR's website.

When winter weather cooperates, state parks and forests also are the scene of coordinated winter festivals with games, dog-sled races, sleigh rides and fun competitions for families.

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PA State Parks, Forests Offering Visitors a Winter Playground

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For the cross-country skiing enthusiast, more than 330 miles of marked cross-country ski trails are offered on Pennsylvania's more than 2.3 million acres of state forestland. Also available are nearly 400 miles of groomed and un-groomed cross-country ski trails in 73 state parks. Downhill skiing is offered at Blue Knob State Park, Bedford County; Laurel Mountain State Park, Westmoreland County; and Camelback (Big Pocono State Park), Monroe County. Skiing again is not being offered this season at Denton Hill State Park, Potter County.

Most state parks with bodies of water are open, weather permitting, for ice-skating, ice fishing, and ice boating. Sledding, tobogganing, and snowshoeing also are available at many parks.

Archers, muzzle-loaders, and other late-season hunters are reminded that more than 400 miles of normally gated state forest roads were opened for the late fall and early winter seasons to provide easy access to often remote areas. As much as 3,040 miles had been open to hunters, but openings and closings are at the discretion of local forestry officials and are weather-dependent. Hunters are urged to check with forest district offices about specific roads.

Several state parks have winter cabin rentals available. Cabin reservations can be made by calling the toll-free information and reservation line, 1-888-PA-PARKS (1-888-727-2757). It operates Monday through Saturday from 7:00 AM to 5:00 PM.

The Nature Inn at Bald Eagle is one of Pennsylvania's great launching points for winter activities like cross-country skiing at Bald Eagle State Park, Centre County, or for those seeking outdoor adventures in the Pennsylvania Wilds. The Nature Inn offers modern overnight accommodations and breakfast. Guests can relax in front of a large stone fireplace in the great room to warm up after outdoor activities.

For details on ice and snow conditions, or winter festivals at state parks and forests, visitors also may call the nearest state park or state forest district office.

For more information, visit www.dcnr.pa.gov or call 717-783-7941 (Bureau of Forestry) or 717-772-0239 (Bureau of State Parks). To view scheduled activities around the state, visit <http://getoutdoorspa.org/>.

Source: Department of Conservation and Natural Resources

PENNSYLVANIA'S RARE, THREATENED, AND ENDANGERED PLANTS

Pennsylvania is home to approximately 3,000 plant species, roughly two-thirds of those are considered native to the commonwealth. Of these native plants, 604 are classified by DCNR, with 347 considered rare, threatened, or endangered in Pennsylvania.

DCNR is moving through the process of updating the regulations that apply to the conservation of native wild plants in Pennsylvania. The rulemaking change is posted in the [Pennsylvania Bulletin](#).

Pennsylvania's rare plants are currently classified as follows:

Classification	Current Number of Species listed under Chap-
Extirpated	106
Endangered	228
Threatened	78
Vulnerable	3
Rare	41
Tentatively Undeter-	148
Special Populations	0
TOTAL	604

WHY ARE NATIVE PLANTS IMPORTANT?

Different plant species make up a [plant community](#) or an ecosystem. The balance of an ecosystem can be impacted by the loss of a species. This can have negative effects on all species, plants, and animals in an ecosystem.

Native plants are important to native wildlife and pollinators, and provide greater ecosystem services (such as flood prevention and soil stabilization) than non-native plants.

Rare native plants can indicate the health of an ecosystem. Plants can be rare because their habitats are uncommon or have become degraded. When a common plant becomes rare, it often indicates that a habitat needs help.

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PENNSYLVANIA'S RARE, THREATENED, AND ENDANGERED PLANTS (CONTINUED)

WHAT MAKES PLANTS RARE?

Many factors can threaten populations of plants and cause them to become rare. These include situations that limit gene flow among populations, loss of individuals, or competition for resources.

Some of the most common threats to plants in Pennsylvania include:

- Habitat loss and fragmentation, due to development or conversion of habitat
- Invasive plants displacing native plants
- Creation of more edge habitat, increasing the threat of invasive plant species
- Selective browsing by white-tailed deer or other wildlife may prevent plants from reproducing
- Over-collected by humans of showy, edible or medicinal plants

WHAT IS DCNR DOING ABOUT RARE PLANTS?

DCNR collects and analyzes data about plants. When the Department has enough information to change a species' status, it does so through a regulation change. By classifying plants, DCNR communicates the level of protection a plant needs.

DCNR provides recommendations for active management for these species to preserve and enhance their populations. DCNR provides information through the following:

- [Pennsylvania Conservation Explorer](#) -- users have access to plant community information
- Pennsylvania Natural Diversity Inventory environmental review -- provides review for potential impacts to threatened and endangered plant species; available through the PA Conservation Explorer
- [Education on invasive plants](#) -- provides management information for this threat to native plants
- [Information on using native plants](#) -- provides alternatives to potentially invasive landscaping plants, and benefits native pollinators
- Updating classifications -- maintains an up-to-date list of plants that need protection in Pennsylvania. More information about classification updates can be found on the right

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PENNSYLVANIA'S RARE, THREATENED, AND ENDANGERED PLANTS (CONTINUED)

RARE PLANTS ON DCNR LANDS

From open areas to mature forests, DCNR lands host a wide range of plant communities and the department considers the diversity of plants in its management approach. DCNR uses planning to protect manage common and rare plants on DCNR lands.

Important plant communities are protected or designated for plant conservation such as natural and wild areas, wild plant sanctuaries, or high conservation value forests. These sites are managed using appropriate techniques and practices to promote and improve growing conditions for rare plants or may limit certain activities in other areas to conserve sensitive plant resources.

Invasive plant species are a major threat to plant communities as they can out-compete native species, alter habitats, and disrupt life cycles of native invertebrates.

Invasive species management on DCNR lands is important to limit the impact of invasive plants on native plant communities. Also, part of that approach is supplemental plantings with native plants. Here's what DCNR is doing to benefit native wild plants:

- [Planting and Seeding Guidelines \(PDF\)](#) -- These guidelines focus on native plantings for DCNR lands, which lessens the threat of invasive species.
- Invasive Plant Management Plans -- DCNR has developed several tiers of planning to deal with invasive species, at the Department level, bureau, and site specific levels.
- [Pollinator Planting Guidelines \(PDF\)](#) -- These recommendations help revegetation projects benefit native pollinators.
- Planning and designation of important plant habitats -- DCNR uses special designations to protect some exemplary populations and communities of rare plants in wild plant sanctuaries, wild areas, natural areas, and high conservation value forests.

JURISDICTIONAL RESPONSIBILITY

DCNR obtains authority from two acts -- one gives authority to survey ecological features and the other to classify and manage native wild plants.

[The Wild Resource Conservation Act \(PDF\)](#) (WRCA) established a procedure for the conservation, classification, and protection of wild plants and charged the Department of Environmental Resources with that responsibility. This act required the Department of Environmental Resources to conduct investigations on native wild plants regarding populations, distribution, habitat needs, limiting factors and other biological and ecological data to classify the plants and determine management needs.

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PENNSYLVANIA'S RARE, THREATENED, AND ENDANGERED PLANTS (CONTINUED)

Later, the Conservation and Natural Resources Act (Act 18) of 1995 split the Department of Environmental Resources into the Department of Environmental Protection and created the new Department of Conservation and Natural Resources.

Act 18 gave the WRCA responsibilities to the DCNR. Pennsylvania code Title 17 Chapter 45, the [Conservation of Pennsylvania native Wild Plants](#), is DCNR's regulatory effort to carry out the responsibilities of the WRCA. Since the DCNR Bureau of Forestry's mission includes the conservation of native wild plants, the responsibility of implementing Chapter 45 and the WRCA has been the bureau's.

THE LISTING PROCESS

DCNR has a robust process of public participation, data gathering, and input. Anyone in Pennsylvania can petition DCNR to change a plant's status.

DCNR's process for making changes to the list of classified plants involves stakeholder groups, particularly the Pennsylvania Biological Survey's Vascular Plant Technical Committee (VPTC -- the technical committee of the Pennsylvania Biological Survey focusing on plants), and the Rare Plant Forum (RPF -- the public function of the Vascular Plant Technical Committee).

Through public meetings and technical committee meetings, in addition to DCNR's own investigations, information is obtained on plants to aid in determining classification changes. The VPTC, made up of experts in the botanical field including academics, consultants, natural history museums, and non-profits, meet twice a year to make recommendations on species listings to DCNR.

The RPF includes experts and amateur enthusiasts, and meets once a year to discuss trends and present new research on plants, including species taxonomy, inventories or field surveys, and genetic studies.

Some of the data that is used to determine plant statuses include:

- Number of known populations
- Threats
- Habitat decline
- Level of information available

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PENNSYLVANIA'S RARE, THREATENED, AND ENDANGERED PLANTS (CONTINUED)

STATUS DEFINITIONS

The regulation, Conservation of Native Wild Plants, gives DCNR the status definitions used to classify plants that are in decline in Pennsylvania.

- **Pennsylvania Endangered** -- A classification of plant species which are in danger of extinction throughout most or all of their natural range within this commonwealth, if critical habitat is not maintained or if the species is greatly exploited by man. This classification also includes populations of plant species that have been classified as Pennsylvania Extirpated, but which subsequently are found to exist in this commonwealth.
- **Pennsylvania Extirpated** -- A classification of plant species believed by the department to be extinct within this commonwealth. The plants may or may not exist outside this commonwealth. If plant species classified as Pennsylvania Extirpated are found to exist, the species automatically will be considered to be classified as Pennsylvania Endangered.
- **Pennsylvania Rare** -- A classification of plant species which are uncommon within this commonwealth because they may be found in restricted geographic areas or in low numbers throughout this commonwealth.
- **Pennsylvania Threatened** -- A classification of plant species which may become endangered throughout most or all of their natural range within this commonwealth, if critical habitat is not maintained to prevent their further decline in this commonwealth, or if the species is greatly exploited by man.
- **Pennsylvania Vulnerable** -- A classification of plant species which are in danger of population decline within this commonwealth because of their beauty, economic value, use as a cultivar or other factors which indicate that persons may seek to remove these species from their native habitats.
- **Special Concern Population** -- A classification that is composed of colonies, groups or single individuals of a plant species that the department has determined to be a unique occurrence deserving protection. Among the factors that may be used to classify a plant population within this category are the existence of unusual geographic locations, unisexual populations or extraordinarily diverse plant populations.
- **Tentatively Undetermined** -- A classification of plant species which are believed to be in danger of population decline, but which cannot presently be included within another classification due to taxonomic uncertainties, limited evidence within historical records or insufficient data.

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PENNSYLVANIA'S RARE, THREATENED, AND ENDANGERED PLANTS (CONTINUED)

- **Unlisted** -- Plant species which are native to this commonwealth, presently capable of sustaining their populations successfully, not in need of protection currently and currently not included in classifications under this chapter.
- **Wild Plants** -- Naturally occurring native flora, except those commonly considered an agricultural commodity, including green and non-green species or subspecies, variety or a part, product, seed or progeny thereof.

WHAT CAN YOU DO AT HOME?

There are some things you can do at home to help native wild plants.

First, leave native wild plants where they are. Picking flowers means the plant will not go to seed. For plants with very few individual, this can be detrimental. Take pictures, but leave the flowers in their habitats.

Do not remove plants from the wild to plant home. They generally will not survive and it removing them hurts their natural populations.

You can also help by identifying invasive plants and removing them at home. This will prevent the spread of invasives to other areas.

Also, by choosing a native species suited to your site conditions, you can get the right plant in the right place.

You can also get involved in local friends' groups that help by maintaining parks and trails or removing invasives.

Tell your friends about native landscaping and the importance of plants in our everyday lives -- conservation begins at home.

ADDITIONAL INFORMATION

[PA Natural Heritage Program](#)

[PA Botany Symposium](#)

[Conservation Explorer](#)

PLANT CLASSIFICATION CHANGE INFORMATION

[Summary of Changes \(PDF\)](#)

[Press Release for Regulation Update -- November 2017](#)

[Plant Species Accounts \(PDF\)](#)

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PENNSYLVANIA'S RARE, THREATENED, AND ENDANGERED PLANTS (CONTINUED)

Ch. 45 Regulation Update Webinar (WMV)

[DCNR's Rulemaking Process \(PDF\)](#)

QUESTIONS?

For more information about Pennsylvania's rare, threatened, and endangered plants, you can contact the DCNR Bureau of Forestry at 717-787-3444.

Source: PA DCNR

DEP Encourages Pennsylvania Residents to Periodically Test Homes for Radon

With 40 percent of Pennsylvania homes having higher levels of radon than the Environmental Protection Agency considers acceptable, the Department of Environmental Protection (DEP) encourages Pennsylvanians to perform a simple test for this known human carcinogen. “Because of the state’s geology, Pennsylvanians are at risk of exposure to high radon levels,” said DEP Secretary Patrick McDonnell. “Fortunately, testing is as simple as one, two, three: Pick up an inexpensive test at a hardware store, open it and set it on a surface in your basement, and in a few days mail the test to the lab. It’s an easy New Year’s resolution to keep and important to your health and the health of your loved ones.”

Radon is an odorless, colorless radioactive gas that occurs naturally from the breakdown of uranium in soil and rocks and enters homes through cracks in the foundation or other openings. High levels of radon tend to be found in basements, but the gas can be found anywhere in the home.

Winter is a good time to test for radon, because doors and windows are generally closed, providing more accurate results. If you’d rather not use a do-it-yourself test kit, hiring a qualified radon professional to conduct a test is another option.

The EPA action level is 4 picocuries per liter (pCi/L) of air. If your home’s radon level is higher than this, the Environmental Protection Agency and U.S. Surgeon General recommend taking action to lower it.

A professionally installed radon reduction system, with a vent pipe and exhaust fan, will help prevent the radon from entering your home and discharge it outside.

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DEP Encourages Pennsylvania Residents to Periodically Test Homes for Radon (continued)

Radon monitoring isn't one-and-done, noted Secretary McDonnell. "If your test results are under 4 pCi/L, we recommend retesting any time home renovation or excavating work is done," he said. "If your test results are above 4 pCi/L and you have a radon reduction system installed, retesting every two years is recommended."

Compared with the associated risk of lung cancer, radon reduction systems are very affordable, generally in the price range of other common home improvements. Having a system installed will also make the future sale of your home easier.

If you're building a new home, DEP recommends installing a passive radon system during construction. There is no reliable way to test the ground in advance for radon, and the cost of installing the radon system during construction should be less than installing one after the fact.

For people buying or selling a home, Pennsylvania's Real Estate Seller Disclosure Act requires sellers to disclose the results of any known radon testing. The DEP website lists radon [testing options for real estate transactions](#).

Pennsylvania law requires all professional radon testers, mitigators, and laboratories to be certified by DEP, which provides a public [list of certified radon service providers](#). People can also obtain a hard copy or verify a company's certification by calling 800-23RADON (800-237-2366).

January is national Radon Action Month. DEP is posting daily radon tips on Facebook and Twitter and airing a public service announcement on TV and radio. A helpful video with [radon testing instructions](#) is provided on the DEP website.

For more information, contact the DEP Radon Division:

Radon hotline: 800-237-2366

Phone: 717-783-3594

Email: ra-epbrpenvpert@pa.gov

Source: Department of Environmental Protection (DEP)

DEP Suspends Mariner East 2 Construction Permits

The Pennsylvania Department of Environmental Protection (DEP) has issued an order suspending the construction permits associated with the Mariner East 2 pipeline until the permittee, Sunoco Pipeline, L.P. (Sunoco) meets the requirements outlined in the order. Sunoco must cease all construction activity on the pipeline project, except for maintenance of erosion controls and limited maintenance of horizontal directional drilling equipment.

“Until Sunoco can demonstrate that the permit conditions can and will be followed, DEP has no alternative but to suspend the permits,” said DEP Secretary Patrick McDonnell. “We are living up to our promise to hold this project accountable to the strong protections in the permits.”

Under the order, all activities permitted under Chapter 102 and Chapter 105 of the PA Code must immediately cease. The permits will be suspended until Sunoco satisfies the terms outlined in the order, including, but not limited to:

- Address all impacts to private water wells in Silver Spring Township, Cumberland County
- Identify all in-progress or upcoming construction activities and detail the specific Chapter 102 and Chapter 105 permit under which the activity is authorized
- Submit a detailed Operations Plan outlining additional measures and controls to minimize inadvertent returns

The full order can be found here:

<http://files.dep.state.pa.us/ProgramIntegration/PA%20Pipeline%20Portal/MarinerEastII/OrderSuspendingConstructionActivities010318.pdf>

A list of the Notices of Violations issued to Sunoco for Mariner East 2 can be found on the DEP website: <http://www.dep.pa.gov/Business/ProgramIntegration/Pennsylvania-Pipeline-Portal/Pages/Mariner-East-II.aspx>

Source: Pennsylvania Department of Environmental Protection (DEP)