

Conservation Committee Report

Volume 13 Issue 5

May 2011



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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Water Treatment System Cleans Marcellus Shale Wastewater

DOE-Funded Field Demonstration Speeds Commercialization of Mobile Desalination System

A water treatment system that can turn wastewater into clean water has been shown to reduce potential environmental impacts associated with producing natural gas from shale formations in the Appalachian basin.

Altela Inc.'s Alte-laRain® 4000 water

desalination system was tested at BLX, Inc.'s Sleppy well site in Indiana County, Pa. as part of a National Energy Technology Laboratory (NETL)-sponsored demonstration. During nine continuous months of operation, the unit successfully treated 77 percent of the water stream onsite, providing distilled water as the product. The average treated water cost per barrel over the demonstration period was approximately 20

percent lower compared to the previous total conventional disposal costs at the site. The system also significantly reduced the need for trucking wastewater from the site.

Based on field data generated from the NETL demonstration, Altela increased the efficiency of its technology by more than 30 percent.

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DEP Calls on Natural Gas Drillers to Stop Giving Treatment Facilities Wastewater

Efforts in Motion to Quickly Stop Drilling Wastewater from Going to Treatment Works 'Grandfathered' by the Previous Administration

At the direction of Governor Tom Corbett, acting Department of Environmental Protection Secretary Michael Krancer today called on all Marcellus Shale

natural gas drilling operators to cease by May 19 delivering wastewater from shale gas extraction to 15 facilities

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Water Treatment System Cleans Marcellus Shale Wastewater (continued)

All of the clean water produced at the demonstration site was suitable for beneficial re-use by well operators for additional stimulations and was also suitable to be discharged to surface waterways, thus reducing the economic and environmental impacts of clean water usage.

As a result of the DOE demonstration project, Altela designed larger towers for the system and four AltelaRain® 600 modules

were sold and installed in Williamsport, Pa. to treat approximately 100,000 gallons per day of produced and flowback water from hydraulic fracturing. This commercial installation is a 50-fold increase in capacity over the demonstration unit and represents the first of many planned facilities to be developed in the Marcellus Shale Basin and similar shale gas basins throughout the United States.

Shale is fine-grained sedimentary rock that can be rich sources of petroleum and natural gas. According to the Energy Information Administration, U.S. shale gas production has increased 14-fold over the past decade and reserves have tripled. Tapping this resource with hydraulic fracturing (using pressurized liquids to fracture subsurface rock) and other techniques pioneered by NETL and its re-

search partners has played an increasingly important role in greater U.S. domestic oil and natural gas production over the past decade.

The water resources needed to hydraulically fracture the Marcellus Shale and the potential effects of hydraulic fracturing on surface and subsurface water sources have become key con-

cerns for state legislatures, land owners, and the public. This is especially true as the number of issued permits continues to increase and drilling expands to new areas of the Appalachian Basin.

The Altela demonstration was one of nine research projects funded by NETL through the Office of Fossil Energy's Oil &

Natural Gas Program in fiscal year 2009. The nine projects, which have a total value of \$10.2 million (\$7 million DOE; \$3.2 million cost share), are developing environmental tools and technologies to improve management of water resources, water usage, and water treatment required for shale gas development across the United States.

Several additional demonstrations focusing on other water treatment technologies will be conducted during the remainder of fiscal year 2011.

Source: U.S. DOE



DEP Calls on Natural Gas Drillers to Stop Giving Treatment Facilities Wastewater (continued)

that currently accept it under special provisions of last year's Total Dissolved Solids (TDS) regulations.

"While the prior administration allowed certain facilities to continue to take this wastewater, conditions have changed since the implementation of the TDS regulations," Krancer said. "We now have more definitive scientific data, improved technology and increased voluntary wastewater recycling by industry. We

used to have 27 grandfathered facilities; but over the last year, many have voluntarily decided to stop taking the wastewater and we are now down to only 15. More than half of those facilities are now up for permit renewal. Now is the time to take action to end this practice."

The 2010 revised regulations require publicly owned treatment works and centralized waste treatment facilities to treat new or increased discharges of TDS to more stringent standards. Re-

moving TDS from water also removes bromides. The previous administration, however, chose to allow facilities that had historically accepted drilling wastewater to continue to accept it, as long as they did not increase their input load of wastewater.

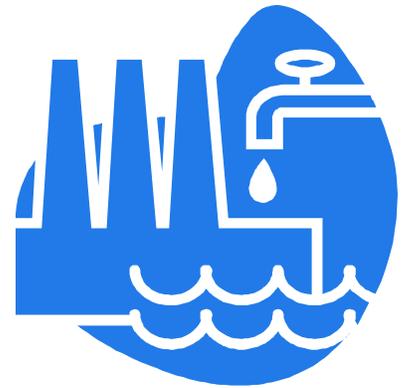
Recent surface water sampling has found elevated levels of bromide in rivers in the Western portion of the state, where the majority of natural gas drilling is taking place. Bromide, itself non-toxic, turns into a combina-

tion of potentially unsafe compounds called Total Trihalomethanes once it is combined with chlorine for disinfection at water treatment facilities.

"While there are several possible sources for bromide other than shale drilling wastewater, we believe that if operators would stop giving wastewater to facilities that continue to accept it under the special provision, bro-

mide concentrations would quickly and significantly decrease," Krancer said.

Source: PA Department of Environmental Protection



Japan 2011 Earthquake/Tsunami – U.S. Government Information

In the United States

Environmental Monitoring

The EPA has its radiation air monitoring (RadNet) data, frequently asked questions, and other resources on <http://www.epa.gov/japan2011/>. Here you can:

- Read the daily data summary.
- Find a map of air monitoring stations and view graphs of the data.
- View laboratory analyses of air, precipitation, milk, and drinking water.
- Read frequently asked questions about EPA's radiation monitoring.
- Learn about EPA's RadNet radiation air monitoring data.

Food Safety

The U.S. Food and Drug Administration (FDA) has deemed that based on current information, there is no risk to the U.S. food supply.

In response to the ongoing situation in Japan, the EPA has taken steps to increase the level of nationwide monitoring of milk, precipitation, drinking water, and other potential exposure routes.

- EPA conducts radiological monitoring of milk under its RADNET program
- [The U.S. Food and Drug Administration](#) has jurisdiction over the safety, labeling and identity of milk and milk products in interstate commerce.

- States have jurisdiction over those facilities located within their territory.

Results from a screening sample taken March 25 from Spokane, WA detected 0.8 pCi/L of iodine-131, which is more than 5,000 times lower than the Derived Intervention Level set by the U.S. Food and Drug Administration.

- These types of findings are to be expected in the coming days and are far below levels of public health concern, including for infants and children.
- Iodine-131 has a very short half-life of approximately eight days, and the level detected in milk and milk products is

therefore expected to drop relatively quickly.

Radiation is all around us in our daily lives, and these findings are a miniscule amount compared to what people experience every day. For example, people are exposed to low levels of radiation on round trip cross country flights, watching television,

and even from construction materials.

- The U.S. Food and Drug Administration has jurisdiction over 80 percent of the food supply, including seafood, dairy, and produce. The U.S. Department of Agriculture regulates meat, poul-

try, and processed egg products, while FDA regulates all other food products.

- The U.S. Department of Agriculture has stated that Japan has not exported any

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Japan 2011 Earthquake/Tsunami – U.S. Government Information (continued)

beef products to the United States for nearly a year.

- The U.S. Department of Agriculture has stated that Japan is not currently eligible to export any poultry or processed egg products to the U.S.
- The [U.S. Food and Drug Administration](#) and Customs and Border Protection carefully screen all food products for unsafe substances, including ra-

diological material at Ports of Entry.

- Learn more about keeping food safe during an emergency.

Potassium Iodide (KI)

The Centers for Disease Control (CDC) does **not** recommend that people in the United States take potassium iodide supplements (also called KI) in response to the damaged nuclear reactors in Japan.

- Only take KI on the advice of emergency management officials, public health officials, or your doctor.
- There are health risks associated with taking KI.

Food, Mail, Ships, and Cargo from Japan

The U.S. Customs and Border Protection (CBP) is monitoring developments in Japan carefully

and uses several types of radiation detection equipment in air and sea ports, mail facilities, and elsewhere to ensure safety.

- CBP and the U.S. Food and Drug Administration carefully screen all food products for unsafe substances, including radiological material, at Ports of Entry.

- All inbound travelers, baggage, and cargo are screened for radiological materials.
- CBP employs radiation monitors at international mail facilities.

American Citizens in Japan

American Embassy in Japan

All U.S. citizens in Japan should continue to carefully monitor the situation and follow the guidance of the U.S. and Japanese governments.

- If you are seeking assistance, contact the U.S. Embassy and Consulates.
- Provide information about yourself or your

loved ones to the U.S. State Department.

- If you're concerned about a U.S. citizen in Japan, contact the State Department at 1.888.407.4747 within the U.S. or 1.202.501.4444 outside the U.S.

Authorized Departures

The U.S. government has authorized the voluntary departure from Japan of eligible family members of U.S. government personnel assigned to the U.S. Embassy in Tokyo, the U.S. Consulate in Nagoya, the Foreign Service Institute Field School in Yokohama, and U.S. Forces Japan.

Evacuations

- The U.S. government has issued an evacuation for U.S. citizens who are within 50 miles of the Fukushima Daiichi nuclear power plant.
- If you are seeking assistance, contact the

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Japan 2011 Earthquake/Tsunami – U.S. Government Information (continued)

U.S. Embassy and Consulates.

- Find transportation options from the affected areas.

Travel to and from Japan

The State Department strongly urges U.S. citizens to defer travel to Japan at this time and those in Japan should consider departing.

- Read the official travel warning for Japan.

- Enroll in the Smart Traveler Enrollment Program.
- Follow the Centers for Disease Control’s health advice and precautions for travel abroad.

Disaster Preparedness

The tragic events in Japan remind us that disasters can strike at any time. The best way to make sure your family is taken care of when disaster strikes is to be prepared.

- Visit Ready.gov to build your family's emergency plan.
- Prepare for an earthquake.
- Prepare for a tsunami.
- Prepare for a flood.

Donations and Relief Efforts

- Donate – Your donation to the American Red Cross will support disaster relief efforts in Japan.

- Convoy of Hope – Tsunami to 50555
- GlobalGiving – Japan to 50555
- World Relief Corp. – Wave to 50555
- Project HOPE – Health to 90999

- Text your donation
 - Red Cross – Redcross to 90999
 - Operation Blessing – Bless to 50555
 - Southeast – VOA to 27722

Technical Assistance to Japan

The United States has deployed highly skilled teams to Japan, along with 17,200 pounds of equipment, to conduct aerial and ground monitoring, provide technical assistance, and help Japan track and assess the impact of the situation at the Fukushima nuclear power plants. This includes both Aerial Monitoring Systems and Consequence Management Teams from the Department of Energy's National Nu-

clear Security Administration, which have unique skills, expertise, and equipment to help assess, survey, monitor, and sample areas for radiation.

Nuclear experts from the Department of Energy and the independent U.S. Nuclear Regulatory Commission are also providing advice, analysis, and technical

assistance to the Japanese government.

- Learn more about the assistance and expertise that the U.S. Department of Energy is providing to Japanese response and recovery efforts.
- Learn more about the U.S. Agency for Interna-

tional Development's Disaster Assistance Response.

Additional Information

- Earthquake in Japan – See facts from the U.S. Geological Survey about the 9.0 earthquake.

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Japan 2011 Earthquake/Tsunami – U.S. Government Information (continued)

- Earthquake Preparedness and Response – The U.S. Centers for Disease Control and Prevention provides helpful tips on how to prepare for an earthquake and what to do during a quake.
- Earthquakes, Flooding, and Radiation – The National Institutes of Health provides information and resources about natural disasters and their effects.
- Tsunami Health Effects– The U.S. Centers for Disease Control and Prevention describes the immediate, secondary, and long-term health effects of a tsunami.
- Tsunami Preparedness – The Federal Emergency Management Agency explains what a tsunami is and provides guidance on what to do during a tsunami watch or warning.
- Radiation – Read about the assistance and expertise that the U.S. Department of Energy is providing to Japanese response and recovery efforts.
- Food Safety – The U.S. Department of Agriculture's Food Safety and Inspection Service provides guidance on food safety in the event of a tsunami.

Source: usa.gov



Pennsylvania State Parks to Help First-Time Campers Gear Up

The Department of Conservation and Natural Resources is partnering with Gander Mountain to provide first-time campers with needed gear and a reservation for two nights at a participating state park for just \$20.

“For a low price, we’re offering hands-on instruction on how to set-up camp; use of campsite gear; and the chance to have fun and create some fantastic family memories,” acting DCNR Secretary Rick Allan said. “Camping

at a state park is an affordable vacation that comes complete with many opportunities to hike, fish, attend an educational program or just enjoy some solitude at our nationally-recognized state parks.”

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Pennsylvania State Parks to Help First-Time Campers Gear Up (continued)

Fourteen state parks around the state are participating in the program, including: Black Moshannon, Centre County; Caledonia, Franklin County; Colonel Denning, Cumberland County; Gifford Pinchot, York County; Hickory Run, Carbon County; Keystone, Westmoreland County; Laurel Hill, Somerset County; Little Pine, Lycoming County; Locust Lake, Schuylkill County; Ohiopyle, Fayette County; Ole Bull, Potter County; Parker Dam, Clearfield County;

Pymatuning, Crawford County; and R.B. Winter, Union County.

Reservations should be made by calling the park office directly. The program will run from Memorial Day weekend through the summer.

The gear provided for use by Gander Mountain is a four-person tent; tarp; two sleeping pads; two camp chairs; flashlight; lantern; camp stove; and four hot dog/marshmallow

sticks. Participants must return the gear upon departure.

Participants will need to bring their own food, cooking utensils and bedding. Suggested packing lists will be provided.

“Recognizing that first-time campers may need some extra help, park staff will help them set-up camp and provide tips on outdoor living upon arrival,” Allan said.

With 117 state parks covering 295,000 acres, there is a state

park within 25 miles of nearly every Pennsylvanian. They feature an array of recreational opportunities, provide a forum for multiple environmental education programs and conserve thousands of acres of unique natural areas, among many other features.

State parks also serve as economic generators to the communities that surround them, with

visitors spending about \$928 million annually.

More information about Pennsylvania state parks is found online at www.visitPAParks.com.

Source: PA DCNR



WPC Completes Protection of Three Properties in the Ligonier Valley on the Same Day

Two farms and property owned by the Ligonier Camp and Conference Center (LCCC) in Ligonier Township, Westmoreland County are permanently protected through conservation easements completed by the

Western Pennsylvania Conservancy (WPC).

“These easements will protect three important places in the Ligonier community,” said Tom Saunders, president and CEO of the Western Pennsylvania Con-

servancy. “The farm easements will conserve prime agricultural land and all three will help protect the undeveloped, scenic character of the valley.”

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WPC Completes Protection of Three Properties in the Ligonier Valley on the Same Day (continued)

These three most recent conservation outcomes build upon the Conservancy’s longstanding focus on the Ligonier Valley, bringing total acres conserved since 1979 to more than 8,000.

The two farms will be protected under agricultural conservation easements, voluntary agreements with landowners that keep property in private hands while permanently restricting future uses to farming or sustainable for-

estry. WPC acquired the easements in collaboration with the Westmoreland County Agricultural Lands Preservation Board (WCALP), which will assume stewardship responsibilities for the easements.



Kevin and Debra McVicker own more than 139-acres of picturesque sloping hills that roll through Westmoreland County. Their farm is one of several

highly visible farms that surround Ligonier Township. The land includes a section of Hanna’s Run, a tributary that drains into Upper Loyalhanna Creek.

The second farm is a 48-acre property owned by sisters, Julie and Ann Donovan that includes a house, barns and outbuildings. The property shares about one mile of the Loyalhanna Creek

with the Camp and Conference Center property.

“My sister and I appreciate the Conservancy’s commitment toward the preservation of our great-grandfather’s farm, which is one of the Ligonier Valley’s original homesteads,” said Julie Donovan. “I think that it is especially important that this beautiful land which

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is located along a main entrance to Ligonier will remain intact.”

The conservation tool used by the LCCC, a donated conservation easement, provides the property owner with the best of both worlds: continued private ownership and permanent protection of the land’s conservation values. The privately owned 58-acre property, which is used for camp operations, includes

2,000 feet of stream frontage and is easily viewed from Route 30.

The property is also historically significant. The pond on the property was constructed in the 1880s for ice harvesting. The harvested ice was stored in an icehouse, and in the summer was shipped to Pittsburgh by train. A spur of the Ligonier Valley Railroad once ran around the lake.

The conservation easement not only ensures that this land will be conserved for the benefit of future generations, it also protects water quality in the upper Loyalhanna Creek watershed. It is located next to several other conserved properties in the Laurel Highlands, so it expands the zone of protected lands and serves as a link between them.

These broader swaths of conserved lands and waterways also benefit wildlife by safeguarding habitats.

“We greatly appreciate the McVicker and Donovan families as well as our friends from Ligonier Camp and Conference Center for their help in adding to the Conservancy’s conservation efforts in the Ligonier Valley,” said

WPC Completes Protection of Three Properties in the Ligonier Valley on the Same Day (continued)

Mike Kuzemchak, the Laurel Highlands Project Director at WPC.

These beautiful properties, which reflect the rural character of the Ligonier Valley, fall within the Conservancy's Laurel Highlands conservation priority area. Close to 82,000 acres are already protected by WPC in the Laurel Highlands.

The easements reflect a growing trend in the Laurel Highlands and nationwide, as more private

landowners learn about the effectiveness of conservation easements in safeguarding cherished family lands. The Conservancy has been working with landowners for decades to establish conservation easements tailored to meet their objectives, and has helped to usher in the significant increase in use of this proven conservation method in Western Pennsylvania.

The Western Pennsylvania Conservancy welcomes inquiries from landowners interested in

learning more about conservation easements. Additional information can be obtained by contacting the Conservancy at 412-288-2777 or at land@paconserve.org or by contacting the Laurel Highlands Regional Office at 724-238-2492 or laurelhighlands@paconserve.org.

Source: The Western Pennsylvania Conservancy

BP Alaska to Pay \$25 Million Penalty for Alaskan North Slope Oil Spill

The U.S. Environmental Protection Agency (EPA), the U.S. Department of Justice and the U.S. Department of Transportation's Pipeline and Hazardous Materials Safety Administration (PHMSA) today announced that BP Exploration Alaska, Inc. will pay \$25 million in civil penalties and implement a system-wide pipeline integrity management program for spilling more than 5,000 barrels of crude oil from the company's pipelines on the North Slope of Alaska. The pen-

alty is the largest per-barrel penalty to date for an oil spill.

"The settlement with BP Alaska imposes a tough penalty and requires the company to take action to prevent future pipeline oil spills on the Alaska North Slope," said Cynthia Giles, assistant administrator for EPA's Office of Enforcement and Compliance Assurance. "The Clean Water Act gives the U.S. authority to assess higher penalties when oil spills are the result of gross negligence, and this case

sends a message that we intend to use that authority and to insist that BP Alaska and other companies act responsibly to prevent pipeline oil spills."

"This penalty should serve as a wake-up call to all pipeline operators that they will be held accountable for the safety of their operations and their compliance with the Clean Water Act, the Clean Air Act and the pipeline safety laws," said Ignacia S. Mo-

reno, Assistant Attorney General for the Environment and Natural Resources Division of the Department of Justice. "Companies like BP Alaska must understand that they can no longer afford to ignore, neglect or postpone the proper monitoring and maintenance of their pipelines. This agreement will help prevent future environmental disasters and protect the fragile ecosystem of Alaska's North Slope."

"This penalty is a stern reminder to pipeline operators to follow orders issued by PHMSA or risk a federal civil lawsuit and steep fines," said PHMSA Administrator Cynthia L. Quarterman. "Also, it is a warning that operators must know, test and maintain their pipelines or risk harming people and the environment and having to spend, as in this

instance, hundreds of millions of dollars replacing those pipelines."

In March 2006, BP Alaska spilled approximately 5,054 barrels of crude oil on the North Slope in Alaska. A second spill occurred in August 2006 with approximately 24 barrels of crude oil spilled. Investigators

from EPA and PHMSA determined that the spills were a result of BP Alaska's failure to properly inspect and maintain the pipeline to prevent corrosion. PHMSA issued a Corrective Action Order to BP Alaska that addressed the pipeline's risks and ordered pipeline repair or replacement. When BP Alaska did not fully comply with the terms

of the corrective action, PHMSA referred the case to the Department of Justice. Today's settlement also addresses Clean Air Act violations arising out of BP Alaska's improper asbestos removal along the pipeline in the aftermath of the spill.

Today's settlement requires BP Alaska to develop a system-wide program to manage pipeline integrity for the company's 1,600 miles of pipeline on the North Slope based on PHMSA's integrity management program. The program will address corrosion and other threats to these oil pipelines and

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BP Alaska to Pay \$25 Million Penalty for Alaskan North Slope Oil Spill (continued)

require regular inspections and adherence to a risk-based assessment system. The program will cost an estimated \$60 million over three years and is in addition to the approximately \$200 million BP Alaska has already spent replacing the lines that leaked on the North Slope.

Of the \$25 million penalty, \$20.05 million will be deposited in the Oil Spill Liability Trust Fund established under the

Clean Water Act. The remainder, \$4.95 million, will be paid to the U.S. Treasury. The funds paid to the Oil Spill Liability Trust Fund will be used to finance federal response activities and provide compensation for damages sustained from future discharges or threatened discharges of oil into water or adjoining shorelines. Oil spills are known to cause both immediate and long-term harm to human health and ecosystems, including the suffocation of wildlife and

the contamination of nesting habitats.

In 2007, BP Alaska pled guilty to one misdemeanor violation of the Clean Water Act for the March 2006 spill and was sentenced to three years probation, ordered to pay a \$20 million criminal penalty, including a \$12 million fine, \$4 million to the National Fish and Wildlife Foundation to support research and activities on the North Slope

and \$4 million in restitution to the state of Alaska.

The consent decree is subject to a 30-day public comment period and final court approval.

More information on the settlement:

<http://www.epa.gov/compliance/re-sources/cases/civil/cwa/bpnorthslope.html>

Source: The U.S. Environmental Protection Agency