The Allegheny County Sportsmen's League

www.acslpa.org

Conservation Committee Report

Volume 12 Issue 7 | By Jack Walters, ACSL Conservation Chair | July 2010

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!

Inside this issue:

Cattle from Tioga County Farm Quarantined after Coming in Contact with Natural Gas Drilling Wastewater

The Department of Agriculture announced today that it has quarantined cattle from a Tioga County farm after a number of cows came into contact with drilling wastewater from a nearby natural gas operation.

Agriculture Secretary Russell Redding said uncertainty over the quantity of wastewater the cattle may have consumed warranted the quarantine in order to protect the public from eating potentially contaminated beef.

"Cattle are drawn to the taste of salty water," said Redding. "Drilling wastewater has high salinity levels, but it also contains dangerous chemicals and metals.

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EPA Moves to Terminate All Uses of Insecticide Endosulfan to Protect Health of Farm workers and Wildlife

The U.S. Environmental Protection Agency (EPA) is taking action to end all uses of the insecticide endosulfan in the United States. Endosulfan, which is used on vegetables, fruits, and cotton, can pose unacceptable neurological and reproductive risks to farm workers and wildlife and can persist in the environment.

New data generated in response to the agency's 2002 decision have shown that risks faced by workers are greater than previously known. EPA also finds that there are risks above the agency's level of concern to aquatic and terrestrial wildlife, as well as to birds and mammals that consume aquatic prey which

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Cattle from Tioga County Farm Quarantined after Coming in Contact with Natural Gas Drilling Wastewater (continued)

We took this precaution in order to protect the public from consuming any of this potentially contaminated product should it be marketed for human consumption."

Redding said 28 head of cattle were included in the quarantine, including 16 cows, four heifers and eight calves. Those cattle were out to pasture in late April and early May when a drilling wastewater holding pond on the farm of Don and Carol Johnson leaked, sending the contaminated water into an adjacent field where it created a pool. The Johnsons had noticed some seepage from the pond for as long as two months prior to the leak.

The holding pond was collecting flowback water from the hydraulic fracturing process on a well being drilled by East Resources Inc.

Grass was killed in a roughly 30- x 40-foot area where the wastewater had pooled. Although no cows were seen drinking the wastewater, tracks were found throughout the pool. The wet area extended about 200-300 feet into the pasture.

The cattle had potential access to the pool for a minimum of three days until the gas company placed a snow fence around the pool to restrict access.

Subsequent tests of the wastewater found that it contained chloride, iron, sulfate, barium, magnesium, manganese, potassium, sodium, strontium and calcium.

Redding said the main element of concern is the heavy metal strontium, which can be toxic to humans, especially in growing children. The metal takes a long time to pass through an animal's system because it is preferentially deposited in bone and released in the body at varying rates, dependent on age, growth status and other factors. Live animal testing was not possible because tissue sampling is required.

The secretary also added that the quarantine will follow the recommended guidelines from the Food Animal Residue Avoidance and Depletion Program, as follows:
Adult animals: hold from food chain for 6 months.
Calves exposed in utero: hold from food chain for 8 months.
Growing calves: hold from food chain for 2 years.

In response to the leak, the Department of Environmental Protection issued a notice of violation to East Resources Inc. and required further sampling and site remediation. DEP is evaluating the final cleanup report and is continuing its investigation of operations at the drilling site, as well as the circumstances surrounding the leaking holding pond.
Source: PA DEP

Terminate All Uses of Insecticide Endosulfan

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have ingested endosulfan. Farm workers can be exposed to endosulfan through inhalation and contact with the skin. Endosulfan is used on a very small percentage of the U.S. food supply and does not present a risk to human health from dietary exposure.

Makhteshim Agan of North America, the manufacturer of endosulfan, is in discussions with EPA to voluntarily terminate all endosulfan uses. EPA is currently working out the details of the decision that will eliminate all endosulfan uses, while incorporating consideration of the needs for growers to timely move to lower-risk pest control practices.

Under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), EPA must consider endosulfan's risks and benefits. While EPA implemented various restrictions in a 2002 re-registration decision, EPA's phase-out is based on new data and scientific peer review, which have improved EPA's assessment of the ecological and worker risks from endosulfan. EPA's 2010 revised ecological risk assessment reflects a comprehensive review of all available exposure and ecological effects information for endosulfan, including independent external peer-reviewed recommendations made by the endosulfan Scientific Advisory Panel.

Endosulfan, an organochlorine insecticide first registered in the 1950s, also is used on ornamental shrubs, trees, and herbaceous plants. It has no residential uses.

For more information: http://www.epa.gov/pesticides/reregistration/endosulfan/endosulfan-cancl-fs.html

Source: U.S. EPA

EPA Proposes Updating Drinking Water Rule to Better Protect Public Health

The U.S. Environmental Protection Agency (EPA) is proposing to revise a national primary drinking water regulation to achieve greater public health protection against waterborne pathogens in the distribution systems of public water systems. Waterborne pathogens can cause a variety of illnesses with symptoms such as acute abdominal discomfort or in more extreme cases, kidney failure, hepatitis or chronic concerns.

EPA is proposing to revise the 1989 Total Coliform Rule to incorporate improvements recommended by a federal advisory committee that included representatives from a broad range of stakeholder groups, including public health and public interest groups, environmental groups, state drinking water agencies and drinking water utilities. EPA used a transparent, collaborative process with stakeholders to help make this regulation more effective.

The revised rule will better protect people from potential exposure to dangerous microbes because it requires water systems to take action when monitoring results indicate that contamination or a pathway to contamination may be present. Water utilities are required to regularly monitor for microbial contamination in the distribution system. Although microbes detected in monitoring are not necessarily pathogens themselves, the detection can indicate that there is a pathway that would allow pathogens to enter the system, such as a water main break or an opening in a storage tank. Under the proposed rule, when monitoring results are positive, systems must find and fix any pathways leading to microbial risk.

The proposal also provides incentives for better system operation by improving the criteria for public water systems to qualify for and stay on reduced monitoring, which provides an opportunity to reduce system burden. In addition, the proposed rule updates conditions that will trigger public notices to better represent the relative health threat identified. It also makes the wording required in these public notices more clear. These changes increase consumer confidence in the safety of their water and understanding of the risks when contamination occurs.

EPA is seeking public comment on this proposed rule for 60 days following publication in the Federal Register.

More information about the proposed rule: http://www.epa.gov/safewater/disinfection/tcr/index.html

Source: U.S. EPA

Governor Rendell Praises Regulatory Panel Vote Protecting PA's Stream, Rivers from Drilling Wastewater

IRRC Also Votes to Enhance Erosion and Sediment Control, Stormwater Regulations

Governor Edward G. Rendell today praised two votes by members of the Independent Regulatory Review Commission that he said will protect Pennsylvania's streams and drinking water supplies against total dissolved solids pollution from Marcellus Shade drilling wells and other sources from stormwater runoff.

The new total dissolved solids, or TDS, rules the commission approved today will ensure that rivers and streams in Pennsylvania do not exceed the safe drinking water standard of 500 milligrams per liter, the Governor said. The rules also will protect businesses by grandfathering all existing discharges and allowing businesses to use a stream's ability to absorb those discharges while not exceeding drinking water standards.

"Today's IRRC vote is a great step forward in our efforts to protect one of the state's greatest natural and economic assets—our waterways," said Governor Rendell. "Millions of Pennsylvanians rely on the state's rivers and streams for drinking water; countless numbers of our residents and visitors from out-of-state come here to fish these waters or use them for recreation; and some of our largest industrial employers wouldn't be able to operate here if not for the clean, reliable supply of water they offer. So, we cannot allow new, heavily polluted sources of wastewater to contaminate them.

"That's why these regulations are so important," added the Governor, who noted the approved regulations now await review from the environmental resources and energy committees in the state house and senate.

"As the natural gas industry expands to access the Marcellus Shale reserves in Pennsylvania, the volume of wastewater returned to our streams could increase exponentially, and the only way to protect our water resources is to implement new wastewater treatment standards for the drilling industry," said Department of Environmental Protection Secretary John Hanger. "The National Association of Water Companies and many other individuals and groups across the state strongly support the adoption of this rule and I commend the Independent Regulatory Review Commission for taking this action. All other industries are responsible for the waste they generate and the drilling industry should be no exception."

Hanger noted that drilling wastewater contains very high levels of total dissolved solids – chlorides and sulfides – that must be removed before discharging into surface waters. High TDS levels have damaged industrial equipment, caused drinking water companies to issue drinking water advisories and even led to a massive fish kill on Dunkard Creek. Some of Pennsylvania's rivers are near their capacity to absorb and dilute additional levels of TDS.

The proposed regulations will require drillers to treat drilling wastewater to 500 mg/l or to drinking water quality at the discharge pipe if they choose to return drilling wastewater to rivers and streams. Drillers have several options to dispose of wastewater in Pennsylvania, including: reuse or recycling; disposal in deep

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Regulatory Panel Vote Protecting PA's Stream, Rivers from Drilling Wastewater

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caverns when permitted by the U.S. Environmental Protection Agency; or full treatment to the 500 mg/l for TDS standard.

The last option will only work if polluted water is properly treated to reduce high TDS levels. Several states, including Texas, Oklahoma, New York, Iowa, Virginia, Arkansas and Tennessee, prohibit returning any drilling wastewater to streams.

The panel also approved new regulations to enhance existing rules governing erosion, sediment control and stormwater to protect streams from the effects of new development, reduce localized flooding during heavy storms, and cut sediment and nutrient pollution. The new rules, which also include an updated permit fee structure, bring Pennsylvania into compliance with federal requirements for:

Erosion and sedimentation controls and post-construction stormwater runoff;
Creating mandatory requirements for establishing and protecting existing streamside and riverside buffers in high quality and exceptional value watersheds; and
Enhancing agricultural stormwater management provisions beyond plowing and tilling to include animal-heavy use areas.

For more information, visit **www.depweb.state.pa.us**

House Passes Bill Requiring Recycling Of TVs, Computers, Other Electronics

The House this week overwhelmingly passed House Bill 708 (Ross-R-Chester) which requires manufacturers of computers and televisions to arrange to recycle them. The bill also bans dumping these devices in a landfill.

"After several years and a lot of cooperative effort, I am proud to say that Pennsylvania is finally taking control of a major environmental issue," said Rep. Ross. "A state program is needed because a recycling program has not been enacted on the federal level.

"There are electronic recycling events that are held periodically throughout the state, but participation can be troublesome for consumers. People want to conveniently and responsibly dispose of their computers and televisions, and my bill makes it a lot simpler for them.

"These electronics release toxic materials when they break down," Rep. Ross added. "It's about time we removed them from our landfills. It is far more efficient to recycle materials rather than having to rebuild things fresh each time."

“This is a terrific win for Pennsylvania’s environment and economy,” said Jan Jarrett, PennFuture’s president and CEO. “We will keep electronics out of our landfills and get them recycled for free. And Pennsylvania businesses will flourish. That’s a pretty good deal.”

Ned Eldridge, president and CEO of eLoop llc, a DEP permitted Pittsburgh-based recycler of electronic and universal waste streams that is a pledged e-Stewards Recycler under the Basel Action Network, agreed.

“Over the past five years, there have been amazing improvements in technology – sales of everything from TVs to computers have increased dramatically due to tremendous innovation," said Eldridge. "But this innovation has had a downside: outdated equipment has been dumped into our landfills or exported to developing countries, where it is polluting whole cities with toxic waste. It is gratifying that the state has developed a plan to control the fastest growing waste stream in the world. These actions will assure the toxins in this equipment don’t end up in the ground, but are properly recycled.”

PennFuture Policy Director Steve Stroman praised Rep. Chris Ross, the prime sponsor of House Bill 708, for his exemplary work and leadership in developing the bill and building consensus among diverse stakeholders.

“Rep. Ross began his work on e-waste several years ago with colleagues at the Council of State Governments to develop a common, multi-state approach. Since then, he has worked skillfully with manufacturers, retailers, the Department of Environmental Protection, and recyclers to find common ground," said Stroman. "PennFuture enjoyed working with Rep. Ross to pass this significant e-waste recycling bill

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House Passes Bill Requiring Recycling Of TVs, Computers, Other Electronics (continued)

in the House, and we look forward to continuing our work with both Republican and Democratic members of the Senate to enact the bill into law."

Stroman also praised the vital role played by Rep. Jennifer L. Mann (D-Lehigh) in passing House Bill 708. "Rep. Mann's leadership and longstanding interest in e-waste recycling was key to building support for the bill among House Democrats and getting a timely vote on the bill in the House."

Source: PA Environment Digest

Research Projects to Convert Captured CO2 Emissions to Useful Products

Six Projects Selected by DOE Will Further Important Technologies for Helping Reduce CO2 Emissions and Mitigate Climate Change

Research to help find ways of converting into useful products CO2 captured from emissions of power plants and industrial facilities will be conducted by six projects announced today by the U.S. Department of Energy (DOE).

The projects are located in North Carolina, New Jersey, Massachusetts, Rhode Island, Georgia, and Quebec, Canada (through collaboration with a company based in Lexington, Ky.) and have a total value of approximately $5.9 million over two-to-three years, with $4.4 million of DOE funding and $1.5 million of non-Federal cost sharing. The work will be managed by the Office of Fossil Energy's National Energy Technology Laboratory.

Converting captured CO2 into products such as chemicals, fuels, building materials, and other commodities is an important aspect of carbon capture and storage technology, viewed by many experts as part of a solution for reducing CO2 emissions and helping mitigate climate change.

It is anticipated that large volumes of CO2 will be available as fossil fuel–based power plants and other CO2-emitting industries are equipped with CO2 emissions control technologies to comply with regulatory requirements. While DOE efforts are underway to demonstrate the permanent storage of captured CO2 through geologic sequestration, there is also a potential opportunity to use CO2 as an inexpensive raw material and convert it to beneficial use. The selected projects will develop or improve scalable processes with the potential to use significant amounts of CO2.

The selected projects are described below:

Research Triangle Institute (Durham, N.C.)—RTI will assess the feasibility of producing valuable chemicals, such as carbon monoxide, by reducing CO2 using abundant low-value carbon sources, such as petcoke, sub-bituminous coal, lignite, and biomass, as the reductant. The team will then evaluate whether additional processes can be added that use the carbon monoxide to produce other marketable chemicals, such as aldehydes, ketones, carboxylic acids, anhydrides, esters, amides, imides, carbonates, and ureas. (DOE share: $800,000; recipient share: $200,000; duration: 24 months).

CCS Materials, Inc. (Piscataway, N.J.)—Investigators will attempt to create an energy efficient, CO2-consuming inorganic binding phase to serve as a high-performing substitute for Portland cement (PC) in concrete. The project team will use a novel near-net-shape forming process that uses a binding phase based on carbonation chemistry instead of the hydration chemistry used in PC concrete. (DOE share: $794,000; recipient share: $545,100; duration: 36 months)

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Research Projects to Convert Captured CO2 Emissions to Useful Products (continued)

Massachusetts Institute of Technology (Cambridge, Mass.)—In this project, researchers will investigate a novel electrochemical technology that uses CO2 from dilute gas streams generated at industrial carbon emitters, including power plants, as a raw material to produce useful commodity chemicals. This integrated capture and conversion process will be used to produce a number of different chemicals that could replace petroleum-derived products. (DOE share: $1,000,000; recipient share: $250,067; duration: 24 months)

Brown University (Providence, R.I.)—Researchers will demonstrate the viability of a bench-scale reaction using CO2 and ethylene as reactants to produce valuable acrylate compounds with low-valent molybdenum catalysts. Exploratory experiments will be conducted to identify the factors that control the current catalyst-limiting step in acrylic acid formation. (DOE share: $417,155; recipient share: $107,460; duration: 24 months).

McGill University (Quebec, Canada)—In collaboration with 3H Company (Lexington, Ky.), researchers aim to develop a curing process for the precast concrete industry that uses CO2 as a reactant. To make the process economically feasible, a self-concentrating absorption technology will be studied to produce low-cost CO2 for concrete curing and to capture residual carbon after the process. (DOE share: $399,960; recipient share: $100,000; duration: 24 months)

PhosphorTech Corporation (Lithia Springs, Ga.)—Investigators will develop and demonstrate an electrochemical process using a light-harvesting CO2 catalyst to reform CO2 into products such as methane gas. Researchers hope to achieve a commercially feasible CO2 reforming process that will produce useful commodities using the entire solar spectrum. (DOE share: $998,661; recipient share: $249,847; duration: 36 months)

Source: U.S. DOE

Emerald Ash Borer found in three new counties

With the discovery of Emerald Ash Borer beetles in Centre, Fulton and Somerset counties, the invasive tree-killing pest has now been found in 15 Pennsylvania counties, Agriculture Secretary Russell C. Redding said last week.

Emerald Ash Borer poses a serious threat to Pennsylvania's nation-leading hardwoods industry, which contributes nearly $25 billion to the economy, Redding said.

In Centre County, the beetle was found in Potters Mills at the intersection of routes 144 and 322. The Fulton County infestation is in Valley-Hi Borough along Route 30, and the Somerset County location is in Quemahoning Township on Route 30. A suspect sample found in Gregg Township, Union County, is being tested for confirmation.

"The Agriculture department's summer survey crews are diligently working to assess the spread of the beetle across the state," said Redding. "With the holiday weekend at hand, we urge all campers and travelers to help prevent the further spread of these pests by not hauling firewood from place to place."

State and federal Emerald Ash Borer quarantines restrict moving ash nursery stock, green lumber, and any other ash material, including logs, stumps, roots and branches, from the quarantine area. However, due to the difficulty in distinguishing between species of hardwood firewood, all hardwood firewood and wood chips—including ash, oak, maple and hickory—are considered quarantined.

The department has not yet expanded the existing quarantine, but will draw new quarantine lines based on the survey results through the end of July.

The invasive Emerald Ash Borer beetle was first detected in Pennsylvania in the summer of 2007 in Butler County, and subsequently was found in Allegheny, Armstrong, Beaver, Bedford, Indiana, Juniata, Lawrence, Mercer, Mifflin, Washington and Westmoreland counties.

The wood-boring beetle is native to China and eastern Asia. The pest likely arrived in North America in wooden shipping crates. It was first detected in July 2002 in southeastern Michigan and neighboring Windsor, Ontario, Canada. In addition to Pennsylvania, the beetle is attacking ash trees in Illinois, Indiana, Iowa, Kentucky, Maryland, Michigan, Minnesota, Missouri, New York, Ohio, Virginia, West Virginia and Wisconsin.

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Emerald Ash Borer found in three new counties

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Typically, the Emerald Ash Borer beetles will kill an ash tree within three years of the initial infestation. Adults are dark green, one-half inch in length and one-eighth inch wide, and fly only from early May until September. Larvae spend the rest of the year beneath the bark of ash trees. When they emerge as adults, they leave D-shaped holes in the bark about one-eighth inch wide.

People who suspect they have found Emerald Ash Borer beetles should call the department's toll-free pest hotline at 1-866-253-7189. For more information about the quarantine, contact Walt Blosser at 717-772-5205, and for more information about Emerald Ash Borer, contact Sven-Erik Spichiger at (717) 772-5229.

The Pennsylvania Agriculture Department Emerald Ash Borer survey crews began hanging nearly 6,000 purple panel traps from ash trees in 21 counties on May 21. The traps are designed to attract flying adult beetles to help detect further spread. Crews will continue to monitor the traps all summer and remove them by the end of August.

The national survey is being conducted in cooperation with U.S. Department of Agriculture's Animal and Plant Health Inspection Service, the United States Forest Service and DCNR's Bureau of Forestry.

Source: PA DCNR