

Conservation Committee Report

Volume 14 Issue 8-9

Jack Walters—Conservation Chairman

August--September 2012



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 Reduces Mine Subsidence Insurance Premiums

Agency Encourages Residents in Mining Areas to Consider Coverage

The Department of Environmental Protection announced today that it has reduced rates for Mine Subsidence Insurance (MSI). Such insurance covers losses resulting from abandoned coal or clay mining and from

damage caused by the sudden discharge of water that may be contained in a mine void.

The MSI premium for a residence has been reduced by about 15 percent. The premium for a non-residence was reduced by more than 50 percent, so that it now matches residential rates. The maximum coverage

available for a single structure is \$500,000.

The risks associated with mine subsidence are typically excluded from standard homeowner's insurance policies. So in 1961, the General Assembly established the MSI Fund to provide a reliable and

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Emerald Ash Borer found in six more counties; public urged not to transport firewood

Emerald Ash Borer beetle has been discovered in Bucks, Franklin, Jefferson, Perry, Snyder and Venango counties. With these new finds, 28 counties are now dealing with the invasive ash tree-killing pest.

"Emerald Ash Borer beetles have plagued Pennsylvania since 2007 with new positive sites found each year," said Agriculture Secretary George Greig. "You can help prevent the further spread of these pests by not hauling firewood

from place to place. Burn it where you buy it."

The beetle was recently found in:

- Warrington, Bucks County;

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DEP Reduces Mine Subsidence Insurance Premiums (continued)

affordable source of compensation against mine subsidence losses. The cost to repair mine subsidence damage can be very high. While the average loss is \$50,000, many claims have been paid in excess of \$200,000.

MSI, which DEP administers, is a non-profit insurance fund sustained by its policyholders' premiums. It is the largest provider of mine subsidence protection in Pennsylvania. This is the second time the MSI Fund has reduced its premium rates in the past five years, and the fund has never failed to compensate for a valid claim.

All residents who own structures in a mining region are encouraged to visit www.paMSI.org or call 800-922-1678 to check mining conditions and determine whether it is necessary to apply for coverage.

To make an informal request for mining information and mine maps, contact DEP's California District Mining Office by email at EP-CSR@pa.gov, by phone at 724-769-1100 or by U.S. mail at DEP, California District Office, 25 Technology Drive, Coal Center, PA 15423.

For more information, visit www.dep.state.pa.us, keyword: MSI.

Source: The PA Department of Environmental Protection

Emerald Ash Borer found in six more counties

(continued)

- Along I-76 close to Willow Hill, Franklin County;
- Near Brookville, Jefferson County;
- At a campground near Liverpool, Perry County;
- Near the state hospital in Selinsgrove in Snyder County;
- At a campground close to Emlenton, Venango County.

"We have targeted invasive pests as a priority to protect our state's forests," said DCNR Secretary Richard J. Allan. "Actions taken cooperatively by state and federal partners are helping us detect and prevent further spread of the Emerald Ash Borer."

As part of a national survey, Pennsylvania Department of Agriculture Emerald Ash Borer crews began hanging more than 750 triangular purple traps from ash trees in eastern Pennsylvania in May. The traps are designed to attract flying adult beetles to help detect further spread. Additionally, more than 350 non-trap survey sites were investigated for presence of the pest. Crews will continue to monitor the traps and sites through August.

DCNR is providing support to communities and state parks to develop management plans for the Emerald Ash Borer, including creating a model management plan with the Borough of West Chester and West Chester University. The agency is also working to obtain grants to protect trees against attack and releasing biological control agents to fight the pest.

A federal Emerald Ash Borer quarantine restricts moving ash nursery stock, green lumber, and any other ash material, including logs, stumps, roots and branches, from the state. The U.S. Department of Agriculture may allow some movement of wood products within the 16 infected states. Contact your USDA inspector for details.

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. No firewood may be moved into Pennsylvania from another state without proper inspection and certification.

Emerald Ash Borer beetles can kill an ash tree within three years of the initial in-

festation. Native to Asia, 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.

The invasive Emerald Ash Borer beetle was first detected in Michigan in 2002 before spreading to Butler County, Pa., in the summer of 2007. It has since been found in other counties, including Allegheny, Armstrong, Beaver, Bedford, Centre, Clarion, Cumberland, Fulton, Huntingdon, Indiana, Juniata, Lawrence, Lycoming, Mercer, Mifflin, Somerset, Sullivan, Union, Washington, Westmoreland and Wyoming in addition to the recent discoveries in Bucks, Franklin, Jefferson, Perry, Snyder and Venango.

People who suspect they have found Emerald Ash Borer beetles in a new area should call the department's toll-free automated pest hotline at 1-866-253-7189.

For more information, visit www.agriculture.state.pa.us, or www.dcnr.state.pa.us.

Source: PA DCNR

EPA and USDA Announce First-Ever Microbial Risk Assessment Guidance

Guideline will help better determine health risks from food and waterborne pathogens

The Environmental Protection Agency (EPA) and the USDA's Food Safety and Inspection Service (FSIS) today announced the first-ever Microbial Risk Assessment (MRA) Guideline. This new MRA Guideline lays out an overarching approach to conducting meaningful assessments of the risks to Americans posed by pathogens in food and water. Pathogens ingested in food and water can result in acute gastrointestinal-related illnesses; some gastrointestinal-related illnesses can result in long-term and permanent health effects as well as premature death. This new guideline will improve the quality of the data collected by public health scientists charged with protecting Americans from pathogen-related risks in food and water.

"This guidance contributes significantly to improving the quality and consistency of microbial risk assessments, and provides greater transparency to stakeholders and other interested parties in how federal agencies approach and conduct their microbial risk assessments," said Dr. Glenn

Paulson, EPA Science Advisor. "Based on the success of this project, we are seeking further opportunities to combine our technical expertise in our continuing efforts to protect the Americans' health."

"The microbial risk assessment guideline developed by FSIS, the EPA and our other public health partners will help protect consumers by allowing us to uniformly assess and reduce health risks from pathogens," USDA Under Secretary for Food Safety Dr. Elisabeth Hagen said.

"We're proud to have worked with our partners on this guideline that will provide our risk assessors with a transparent and scientifically rigorous document to use in protecting public health."

Formal risk assessments for food, water, and environmentally-relevant chemicals have been undertaken for decades. However, an overarching microbial risk assessment guideline has not been available until now. The guideline announced today meets this need by providing comprehensive, yet specific and descriptive information for developing assessments of microbial risk in food and water.

More information on the guideline:

<http://www.epa.gov/raf/microbial.htm>

Favorable Supplies, Costs, Environmental Profile for Natural Gas Revealed in New Department of Energy Study

The nation's large resource base of natural gas can be used for cost-effective power generation, with environmental burdens coming primarily from fuel combustion, not resource extraction, according to a new Department of Energy (DOE) study.

The report, *Role of Alternative Energy Sources: Natural Gas Power Technology Assessment*, was prepared by the Office of Fossil Energy's National Energy Technology Laboratory (NETL). Analysts focused on seven criteria to evaluate the role of natural gas in the U.S. energy supply chain: resource base, growth, environmental profile, cost profile, barriers, implementation risks, and expert opinion from stakeholders in academia, government, and private industry. Four natural gas power technologies were evaluated: natural gas combined cycle, natural gas combined cycle with carbon capture and sequestration, gas turbine simple cycle,

and the U.S. fleet baseload average.

The U.S. resource base for natural gas has exhibited recent growth that is expected to continue because of the expanded extraction potential of various shale gases. As an example, horizontal drilling and hydraulic fracturing could allow the technical recovery of natural gas from Marcellus Shale sufficient to provide 20 years' supply to the nation at historic demand levels. The growth in natural gas supply may be hindered by the possibility of surface water deterioration and legislative uncertainty. However, property engineered and implemented natural gas systems have favorable environmental and cost profiles in comparison to other energy sources.

The development of shale gas and other unconventional natural gas wells requires the use of technologies that could release higher levels of methane, a greenhouse gas (GHG), than do conventional well technologies. However, power plant GHG emissions far outweigh those of natural gas extraction and transport, and improvements to policy and technology could reduce these upstream burdens. The current fleet of baseload natural gas power plants

running on the domestic profile of natural gas has lifecycle GHG emissions of 514 kilograms of CO₂ equivalent per megawatt-hour. If switched to an unconventional mix of natural gas, the lifecycle emissions of baseload power increase to 520 kilograms of CO₂ equivalent per megawatt-hour—an increase of only 1 percent. In addition to GHG emissions, the report also inventories other air emissions, water use and quality, and resource consumption.

Historically, the price of natural gas has been volatile. This price volatility is due to supply uncertainty driven by natural and economic variables. However, some utilities expect natural gas prices to stay low in the long term and have decided to invest in new natural gas power plants. At a natural gas price of \$5 per million Btu, the cost of electricity delivered by a new natural gas combined cycle power plant is \$53.4 per megawatt-hour.

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Favorable Supplies, Costs, Environmental Profile for Natural Gas Revealed in New Department of Energy Study (continued)

The report also includes the cost of electricity from other natural gas power systems, including simple cycle gas turbines and power plants with carbon capture, and evaluates the cost uncertainty caused by natural gas price volatility and capital cost contingencies.

Source: U.S. Department of Energy (DOE)

Pennsylvania Mine Reclamation Project Wins National Award

Elk County Project is the Second Straight National Award-Winning Project for Pennsylvania

The Department of Environmental Protection announced today that the U.S. Office of Surface Mining Reclamation and Enforcement has given the 2012 national Abandoned Mine Land Reclamation Award to a \$14.2-million mine reclamation project in the Dents Run watershed in Benzetette Township, Elk County.

The project, which began in 2002 and was completed in March 2012, restored and revegetated 320 acres of abandoned mine lands that will now serve as crucial habitat for the state's wild elk herd, which roam the adjacent Elk State Forest and game lands, and other wildlife. In addition, the reclamation restored nearly five miles of the lower Dents Run stream by neutralizing acid mine water, marking the first time in more than a century the stream can support aquatic life. Waterways north of the impacted streams provide habitat for wild trout.

"This award rightly recognizes that a key part of Pennsylvania's ecosystem has been restored and, by extension, a key part of the state's tourism

industry," DEP Secretary Mike Krancer said. "Trout fishing and sightseeing for the elk herd have a bright future as a direct result of this project, which could not have happened without the many partners who worked on this with our staff."

More than half a million tons of limestone were mined at the site and used to neutralize the thousands of gallons of acidic mine water that was flowing through the site from 14 different discharge points. This represents the largest use of alkaline materials to neutralize acid mine drainage in Pennsylvania history.

More than 5,000 cubic yards of waste coal were removed from the site and used as fuel at a coal-fired power plant, providing electricity to homes and businesses.

DEP also closed or remediated 23 mine openings and re-graded ten dangerously steep highwalls that totaled 30,850 feet. The cost of the project was paid out of state and federal abandoned mine land funds, which are supported by fees paid by the active mining industry, as well as funding from the U.S. Army Corps of Engineers and contributions from P&N Coal Co.

DEP's Bureau of Abandoned Mine Reclamation worked with the Bennett Branch Watershed Association; Pennsylvania Game Commission; U.S. Army Corps of Engineers; U.S. Office of Surface Mining; Pennsylvania Department of Conservation and Natural Resources; Elk County Conservation District; Rocky Mountain Elk Foundation; Elk County Commissioners; Western Pennsylvania Conservancy; local mining companies P&N Coal Co. and Original Fuels; and contractors Stream Restoration Inc. of Pittsburgh, Gannett-Fleming Consultants of Clearfield County; and Berner Construction Inc. of Lancaster County.

Mining began at the site in the late 1800s and continued through the 1960s, when the site was abandoned, leaving devastating environmental degradation.

The project, which is part of broader efforts to restore the entire Bennett Branch watershed, won the federal award, beating out entries from Arkansas, Illinois, Indiana, Kentucky, Maryland, Montana, New Mexico, Ohio, Virginia, West Virginia and Utah. This is the tenth year that a DEP

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Pennsylvania Mine Reclamation Project

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mine reclamation project has been recognized by the U.S. Office of Surface Mining and the second year in a row that a project has won the national award.

In 2011, a reclamation project in Newport Township, Luzerne County, won. DEP worked to reclaim 36 acres of abandoned mine lands at the Newport North site and re-graded more than 3,150 feet of dangerous highwalls that were up to six stories in height. Most importantly, the reclamation filled in a hazardous water-filled pit that stood at the foot of one of the now re-graded highwalls that had claimed the lives of six people over the years who had been off-roading at the site in 4x4 vehicles.

For more information, visit **www.dep.state.pa.us** or call 717-783-2267.

Source: The PA Department of Environmental Protection

Pennsylvania Team Comes In 15th In International Envirothon Competition

Pennsylvania's five-member MMI Preparatory School from Luzerne County came in 15th during last week's international Canon Envirothon competition at Susquehanna University in Selinsgrove.

Photo: Members of MMI Preparatory School's winning Envirothon team are, from left: Farrah Qadri, Rebecca Noga, Anjni Patel, Brianna Nocchi, David Polashenski, and adviser Michael Mele.

Fifty-four teams of high school students from 44 states, 9 Canadian provinces and one Canadian territory completed training and testing in natural resource categories such as soils and land use, aquatic ecology, forestry, and wildlife. Every year an additional topic is incorporated into the competition based upon a current environmental issue. This year's topic was Nonpoint Source Pollution/Low Impact Development.

"At a time when the conservation of natural resources is critically important to our planet, it is wonderful to see a large group of bright, dedicated students from across North America test their skills in a challenging environmental competition," said Bunji Yano, senior director and general manager, Corporate Communications, Canon U.S.A. "This year was a very close competition and all of the stu-

dents should be extremely proud of themselves and their effort."

The Pennsylvania Envirothon awarded scholarships to the first, second, and third place teams. The scholarships were sponsored by EXCO Resources (PA), PPL Corporation and Pennsylvania Envirothon. Each of the top ten teams received a plaque and other prizes.

High school students from 62 Pennsylvania counties participated in this year's event.

At the Envirothon, five-member teams participate in a series of field-oriented tests that focus on five topic areas – soils and land use, aquatic ecology, forestry, wildlife, and environmental issues. The 2012 current environmental issue focused on Nonpoint Source Pollution and Low Impact Technology.

The teams also prepare and deliver oral presentations to panels of judges who evaluate each team on its problem-solving capabilities, oral presentation skills and recommendations to help solve the specific environmental challenge, which relates to the current environmental issue.

Teams participating represent the best and the brightest of the thousands of high school teens who have competed in county Envirothon competitions sponsored by conservation districts across the state.

At the state level, the Envirothon is sponsored by Pennsylvania's sixty-six conservation districts, the State Conservation Commission and the PA Association of Conservation Districts.

The program is managed by a board of directors representing those sponsors. Technical expertise is provided by the following agency partners: Department of Environmental Protection, Department of Conservation and Natural Resources, Game Commission, Fish and Boat Commission and the U.S.D.A. Natural Resources Conservation Service.

Sponsors of the 2012 Envirothon are EXCO Resources (PA), The Hershey Company, American Honda Foundation, PPL Corporation, Air Products Foundation, Bayer HealthCare, Canon Envirothon, PA Trappers Association, PA Outdoor Writers Association, Pennsylvania Association of Conservation Districts, State Conservation Commission and the PA Growing Greener Program.

The Hershey Company, Dwight Lewis Lumber, Lewis Lumber Products and Cargill are "Corporate Station Sponsors."

Pennsylvania has won the North American event in 1988, 1989, 1990, 1991, 1994, 1997, 2000, 2001, 2003, 2005 and 2009.

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Pennsylvania Team Comes In 15th In International Envirothon Competition (continued)

For more information, visit the PA Envirothon website program, contact your county conservation district or contact the Pennsylvania Envirothon by phone 814-623-7900 ext. 111 or send email to: paenvirothon@pennswoods.net.

Source: PA Environment Digest

Obama Administration Finalizes Historic 54.5 mpg Fuel Efficiency Standards

Consumer Savings Comparable to Lowering Price of Gasoline by \$1 Per Gallon by 2025

The Obama Administration today finalized groundbreaking standards that will increase fuel economy to the equivalent of 54.5 mpg for cars and light-duty trucks by Model Year 2025.

When combined with previous standards set by this Administration, this move will nearly double the fuel efficiency of those vehicles compared to new vehicles currently on our roads. In total, the Administration's national program to improve fuel economy and reduce greenhouse gas emissions will save consumers more than \$1.7 trillion at the gas pump and reduce U.S. oil consumption by 12 billion barrels.

"These fuel standards represent the single most important step we've ever taken to reduce our dependence on foreign oil," **said President Obama**. "This historic agreement builds on the progress we've already made to save families money at the pump and cut our oil consumption. By the middle of the next decade our cars will get nearly 55 miles per gallon, almost double what they get today. It'll strengthen our nation's energy security, it's good for middle class families and it will help create an economy built to last."

The historic standards issued today by the U.S. Department of

Transportation (DOT) and the U.S. Environmental Protection Agency (EPA) build on the success of the Administration's standards for cars and light trucks for Model Years 2011-2016. Those standards, which raised average fuel efficiency by 2016 to the equivalent of 35.5 mpg, are already saving families money at the pump.

Achieving the new fuel efficiency standards will encourage innovation and investment in advanced technologies that increase our economic competitiveness and support high-quality domestic jobs in the auto industry. The final standards were developed by DOT's National Highway Traffic Safety Administration (NHTSA) and EPA following extensive engagement with automakers, the United Auto Workers, consumer groups, environmental and energy experts, states, and the public. Last year, 13 major automakers, which together account for more than 90 percent of all vehicles sold in the United States, announced their support for the new standards. By aligning Federal and state requirements and providing manufacturers with long-term regulatory certainty and compliance flexibility, the standards encourage investments in clean, innovative technologies that will benefit families, promote U.S. leadership in the automotive sector, and curb pollution.

"Simply put, this groundbreaking program will result in vehicles that use less gas, travel farther, and provide more efficiency for consumers than ever before—all while protecting the air we breathe and giving automakers the regulatory certainty to build the cars of the future here in America," said Transportation Secretary Ray LaHood. "Today, automakers are seeing their more fuel-efficient vehicles climb in sales, while families already saving money under the Administration's first fuel economy efforts will save even more in the future, making this announcement a victory for everyone."

"The fuel efficiency standards the administration finalized today are another example of how we protect the environment and strengthen the economy at the same time," said EPA Administrator Lisa P. Jackson.

"Innovation and economic growth are already reinvigorating the auto industry and the thousands of businesses that supply automakers as they create and produce the efficient vehicles of tomorrow. Clean, efficient vehicles are also cutting pollution and saving drivers money at the pump."

The Administration's combined efforts represent the first meaningful update to fuel efficiency standards in decades. Together, they will save American families more than \$1.7 trillion dollars in

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Obama Administration Finalizes Historic 54.5 mpg Fuel Efficiency Standards (continued)

fuel costs, resulting in an average fuel savings of more than \$8,000 by 2025 over the lifetime of the vehicle. For families purchasing a model Year 2025 vehicle, the net savings will be comparable to lowering the price of gasoline by approximately \$1 per gallon. Additionally, these programs will dramatically reduce our reliance on foreign oil, saving a total of 12 billion barrels of oil and reducing oil consumption by more than 2 million barrels a day by 2025 – as much as half of the oil we import from OPEC each day.

The standards also represent historic progress to reduce carbon pollution and address climate change. Combined, the Administration's standards will cut greenhouse gas emissions from cars and light trucks in half by 2025, reducing emissions by 6 billion metric tons over the life of the program – more than the total amount of carbon dioxide emitted by the United States in 2010.

President Obama announced the proposed standard in July 2011, joined by Ford, GM, Chrysler, BMW, Honda, Hyundai, Jaguar/Land Rover, Kia, Mazda, Mitsubishi, Nissan, Toyota, and Volvo, as well as the United Auto Workers. The State of California and other key stakeholders also supported the announcement and were integral in developing this national program.

In achieving these new standards, EPA and NHTSA expect

automakers' to use a range of efficient and advanced technologies to transform the vehicle fleet. The standards issued today provide for a mid-term evaluation to allow the agencies to review their effectiveness and make any needed adjustments.

Major auto manufacturers are already developing advanced technologies that can significantly reduce fuel use and greenhouse gas emissions beyond the existing model year 2012-2016 standards. In addition, a wide range of technologies are currently available for automakers to meet the new standards, including advanced gasoline engines and transmissions, vehicle weight reduction, lower tire rolling resistance, improvements in aerodynamics, diesel engines, more efficient accessories, and improvements in air conditioning systems. The program also includes targeted incentives to encourage early adoption and introduction into the marketplace of advanced technologies to dramatically improve vehicle performance, including:

- Incentives for electric vehicles, plug-in hybrid electric vehicles, and fuel cells vehicles;
- Incentives for hybrid technologies for large pickups and for other technologies that achieve high fuel econ-

omy levels on large pickups;

- Incentives for natural gas vehicles;
- Credits for technologies with potential to achieve real-world greenhouse gas reductions and fuel economy improvements that are not captured by the standards test procedures.

Source: U.S. Environmental Protection Agency