

# A.C.S.L. Conservation Report

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## AIR QUALITY ACTION DAY FORECAST FOR GREATER PITTSBURGH AREA

### Residents, Businesses Encouraged to Voluntarily Reduce Air Pollution

The Department of Environmental Protection and Southwestern Pennsylvania Air Quality Partnership today announced that air quality action days are forecast for Saturday, Feb. 5 and Sunday, Feb. 6 in the greater Pittsburgh area.

The forecast indicates Saturday and Sunday will be Code Orange days, the first air quality action days since the 2004 summer season.

This code features the U.S. Environmental Protection Agency's standardized Air Quality Index (AQI), which uses colors to report daily air quality (green signifies good, yellow means moderate, orange represents unhealthy pollution levels for sensitive people, and red warns of unhealthy pollution levels for all). Orange and red are air quality action days.

Air quality action days occur when fine particulate matter concentrations—and during the summer, ground-level ozone—reach unhealthy levels and exceed federal health-based air quality standards.

Fine particulate matter, also known as PM 2.5, has a diameter of less than 2.5 micrometers, about one-

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God Bless America



## DEP SECURES \$25,000 FOR ONGOING CLEANUP OF LANDSLIDE IN ALLEGHENY COUNTY

### Tests Results, Analysis Demonstrate No Risk to Public Health, Safety

PITTSBURGH: Environmental Protection Southwest Regional Director Kenneth Bowman today announced that DEP has secured \$25,000 for ongoing cleanup efforts at the site of a hillside collapse last week along River Hill Road in Forward Township, Allegheny County, and underscored that test results and analysis of the landslide residue show the material poses no risk to public health or safety.

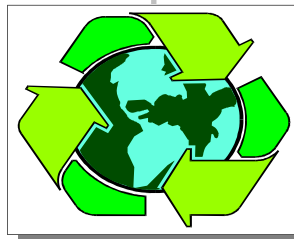
DEP emergency responders have been on the scene since the landslide occurred Jan. 25, when a slab of coal fly ash collapsed from the hillside and temporarily dammed a tributary to the Mongahela River. The department worked immediately with township officials, local public works crews and emergency responders to divert water around the slide area to prevent flooding. Water and residue samples were also collected at that time. DEP staff remains on the scene to oversee stabilization of the streambed and prevent further ash migration from the slide area.

"The department's response to the landslide was swift and effective," Bowman said. "Our crews have been on site every day and will remain there as long as the cleanup progresses."

DEP secured \$25,000 from the Solid Waste Abatement Fund to remove the ash from the parking lot next to

Gallatin Sunnyside Park and dispose of the material at an approved landfill; wash and water the traffic areas in the community to remove ash dust

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**AIR QUALITY ACTION DAYS  
(continued)**

thirtieth the diameter of a human hair. Unlike summertime ozone, particulate matter pollution can occur year-round. These particles can get deep into the lungs and cause significant health problems. PM 2.5 has been determined to be most closely associated with health effects related to increased hospital admissions and emergency room visits for heart and lung disease, increased respiratory symptoms and disease, and decreased lung function.

The particles come from a wide range of sources—from power plants, industry, cars, trucks, buses, wood stoves and forest fires. Some particles are released when fuels are burned; others form in the atmosphere from reactions between gases released from power plants and factories.

On air quality action days, young children, the elderly and people with respiratory problems such as asthma, emphysema and bronchitis are especially vulnerable to the effects of air pollution and should limit outdoor activities.

To help keep the air healthy, residents and businesses are encouraged to voluntarily limit certain pollution-producing activities by taking the following steps:

- Ride the bus or carpool to work.
- Use wood stoves and fireplaces wisely and sparingly.
- Avoid burning leaves, trash and other materials.
- Wash dishes and clothes with full loads.
- Save energy—do not overheat your home.

For more information on PM 2.5, visit DEP's website at [www.dep.state.pa.us](http://www.dep.state.pa.us), Keyword: "DEP Air Quality." To view the air quality forecast, for more information on the Air Quality Partnerships, or to sign up to receive free daily forecasts by e-mail, visit [www.aqpartners.org](http://www.aqpartners.org).

Source: DEP

**CLEANUP OF LANDSLIDE IN  
ALLEGHENY COUNTY  
(continued)**

from the roads and prevent it from becoming airborne; and monitor and clear ash build up in the stream and near culverts due to future rain events to prevent flooding and migration.

Bowman countered claims by a coalition of environmental groups that DEP has not acted to protect the public and underscored that comprehensive test results by the department show the landslide material poses no public health threat. The coalition has raised concerns about levels of arsenic in the coal fly ash.

"These strategies distract from cleanup efforts and unduly alarm residents when in fact there is no risk to the public," Bowman said. "The full resources of this department were deployed and remain on site to address the situation, with our primary objective ensuring the health and safety of area residents."

Stream water sample results showed arsenic levels to be 1.81 milligrams per liter, which is higher than the 0.05 human health standard and the 0.15 allowed for aquatic life. However, Bowman emphasized that neither the groundwater nor the stream water in the area are used as drinking water sources, meaning the material is not ingested.

If any risk existed, Bowman said, the department would consider inhalation to be the main route of exposure. However, soil sample results show the highest arsenic level reported to be 268 parts per million by weight, which is more than 200 times lower than the inhalation standard of 57,000 parts per million.

Source: DEP

## DOE Announces R&D Funding for Microhole Technology Projects

Revolutionary New Technology Reduces Drilling Costs, Environmental Impacts  
Tulsa, OK — The Department of Energy has marked another key milestone in its research and development (R&D) initiative to develop "microhole" technologies aimed at slashing the costs and reducing the environmental impacts of drilling America's oil and gas wells. DOE announced the award of funding for 10 projects that are designed to push microhole technology another step closer to commerciality and widespread adoption by the U.S. oil and gas industry. The initiative involves developing technologies associated with drilling wells smaller than 4¾ inches in diameter and related downhole micro-instrumentation. The ultimate result of industry broadly embracing this technology could be a sea change in the way that the Nation's oil and gas producers explore for, drill, and monitor wells. Expectations are that widespread adoption of microhole technology could spawn a wave of "infill development"—drilling wells spaced between existing wells—that could tap potentially billions of barrels of bypassed oil at shallow depths in mature producing areas. At the same time, microhole and related micro-instrumentation technologies offer the opportunity to dramatically cut producers' exploration risk to a level comparable to that of drilling development wells. Together, such efforts hold great promise for economically recovering a sizeable portion of the estimated remaining shallow (less than 5,000 feet subsurface) oil resource in the United States. The Energy Department estimates this targeted shallow resource at 218 billion barrels. Recovering just 10 percent of this targeted resource would mean a volume equivalent to 10 years of OPEC oil imports at current rates.

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**With the microhole technology program, DOE has tapped into an area of significant industry need.**

In addition, the smaller "footprint" of the lightweight rigs utilized for microhole drilling and the accompanying reduced drilling waste disposal volumes offer the bonus of added environmental benefits.

The microhole initiative is in line with the Bush Administration's goal, set forth in the National Energy Policy, of promoting "dependable, affordable, and environmentally sound" energy production.

The projects will be managed by the DOE Office of Fossil Energy's National Energy Technology Laboratory (NETL).

The total value of the projects is nearly \$14.5 million, with DOE providing \$7.7 million and industry partners contributing \$6.8 million. The industry cost share of about 47 percent demonstrates the petroleum industry's strong commitment to these advanced technologies and suggests strong future support for their commercialization and adoption.

"With the microhole technology program, DOE has tapped into an area of significant industry need," said Roy Long, Exploration and Production Technology manager for NETL. Long cited evidence that the U.S. oil industry has been hit hard by drilling cost overruns in the deepwater Gulf of Mexico, the most promising near-term province for significant near-term domestic oil production gains.

"Microhole technology is the only real solution . . . that offers the potential to lower exploratory risk to that of development risk," Long noted. "The entire scope is to drive down drilling costs and reduce exploration risk."

DOE analysis shows that microhole technology has the potential to cut exploratory drilling costs by a third or more and to slash development drilling costs by more than 50 percent.

The technology centers on adapting conventional coiled tubing drilling techniques—in which a drill motor and bit are deployed on the end of tubing coiled around a spool on a trailer pulled by a standard pickup truck—to ultrasmall-diameter holes. Savings in drilling costs come from being able to utilize a smaller drill site, much smaller equipment

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**Microhole Technology Projects  
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for handling pipe and tubing, and a major reduction in drilling and well completion materials. To develop a complete, cost-effective microhole drilling system, industry must develop a full spectrum of subsurface sensors, motors, logging tools, and other borehole instruments small enough to fit into the micro-wellbores, yet rugged enough to survive the harsh downhole environment.

The need to cut drilling costs and reduce exploratory risk is seen in mature producing areas outside the United States as well. Norway, for example, has expressed an interest in microhole technology as part of the solution to slashing drilling costs with its OGJ21 Cost-Effective Drilling Initiative and PETROMAKS research program.

Promoting technology that helps expand sources of global oil supply also dovetails with the goals of the National Energy Policy, Long noted: "Helping to spread this technology internationally aids DOE's goal for diversity of supply in assisting other countries to develop their own resources." An earlier round of solicitations under DOE's microhole technology initiative, announced in June 2004, involved six projects valued at nearly \$5.2 million. This latest round takes the evolution of the microhole initiative a major step further, with field demonstration projects being implemented in addition to technology development projects.

"This is the first solicitation round for demonstrations of advanced technology that might become the future of significantly reduced costs for exploration and development," Long said. "Within 3 years, we'll know whether we have commerciality for most of these technologies."

Source: DOE

**\$760 Million Devoted to Fossil Energy  
Programs in FY 2006**

**Washington, DC** - The Department of Energy's FY 2006 budget request of \$23.4 billion, allocates \$759.9 million for fossil energy activities. Included is \$351 million for the President's Coal Research Initiative, \$50 million for clean coal demonstration projects and \$18 million for FutureGen, the world's first zero-emissions hydrogen and electricity producing power plant.

Fossil Energy's programs focus on supporting the President's top initiatives for energy security, clean air, climate change, and coal research. FY 2006 Fossil Energy programs:

Source: DOE