

# Conservation Committee Report

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Jack Walters—Conservation Chairman

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## EPA Works to Help the Nearly 26 Million Americans with Asthma

*Highlights Asthma Awareness Month in May*

The U.S. Environmental Protection Agency (EPA) is encouraging Americans to take action against asthma by learning more about the disease and how it affects their families and communities. Nearly 26 million Americans, including

more than 7 million children, are affected by this chronic respiratory disease, including low income and minority populations at the highest rates.

"Asthma is a disease that touches the lives of American families every day. EPA is working hard to clean the air we breathe and reduce the environmental causes of asthma and other respi-

ratory illnesses," said EPA Administrator Lisa P. Jackson. "As we mark Asthma Awareness Month, it's important for parents and children to learn more about the disease and its triggers, so we can prevent asthma attacks and better protect our health and our children's health."

(continued on page 2)

### 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:

Obama Administration Announces New Partnership on Unconventional Natural Gas and Oil Research

DEP Signs Agreement to Restore Former Erie County Landfill Site for Commercial, Recrea-

Ohio River Sweep Saturday, June 16,

5

## U.S. and Japan Complete Successful Field Trial of Methane Hydrate Production Technologies

7

**Methane Hydrates May Exceed the Energy Content of All Other Fossil Fuels Combined; Could Ensure Decades of Affordable Natural Gas and Cut America's Foreign Oil Dependence**

8

U.S. Energy Secretary Steven Chu announced the completion of a successful, unprecedented test of technology in the North Slope of Alaska that was able to safely extract a steady flow of natural gas from methane hydrates – a vast, entirely untapped resource that

holds enormous potential for U.S. economic and energy security. Building upon this initial, small-scale test, the Department is launching a new research effort to conduct a long-term production test in the

(continued on page 3)

The annual economic cost of asthma, including direct medical costs from hospital stays and indirect costs such as lost school and work days, amount to approximately \$56 billion. Through the Clean Air Act, EPA has helped prevent millions of asthma attacks across the country and continues to work alongside federal, state and local partners to address this nationwide problem. In 2010 alone, pollution prevention standards under the Clean Air Act lead to reductions in fine particle matter and ozone pollution that prevented more than 1.7 million incidences of asthma attacks. Recent standards, such as the 2011 Mercury and Air Toxics Standards, will further reduce air pollution and help prevent asthma attacks.

Americans who suffer from asthma can learn to control their symptoms and still maintain active lifestyles. Here are some simple steps:

**Know your Asthma Triggers and Avoid Them:** Air pollution, dust mites, mold, secondhand smoke and even cockroaches can trigger asthma attacks. Learn your triggers and avoid them in your home and neighborhood.

#### **Create an Asthma Action**

**Plan:** You can help avoid the emergency room by managing your asthma daily. With a doc-

tor's help, you can create an asthma action plan to help you effectively manage your asthma and reduce exposure to triggers.

**Get Active:** Even if you have asthma, by taking the appropriate medications and avoiding your triggers, you can still participate in sports and activities.

**Be 'Air Aware':** Check local air quality conditions at [airnow.gov](http://airnow.gov) and make informed decisions about participating in outdoor activities. To help, an Air Quality Index mobile app is available for smart phones.

As part of Asthma Awareness Month, EPA is honoring exceptional health plans, health care providers and communities in action for their efforts to improve the lives of people with asthma in underserved communities across the country. The winners of the 2012 National Environmental Leadership Award in Asthma Management include Connecticut Children's Medical Center, Hartford, Conn., L.A. Care Health Plan, Los Angeles, Calif., Michigan Department of Community Health's Asthma Prevention and Control Program, Lansing, Mich., and Mission Health, Asheville, N.C.

More on Asthma and the 2012 award winners:

<http://www.epa.gov/asthma>

More on the Air Quality Index Mobile App:

<http://m.epa.gov/apps/airnow.html>

Source: The U.S. Environmental Protection Agency (EPA)

# Field Trial of Methane Hydrate Production Technologies (continued)

Arctic as well as research to test additional technologies that could be used to locate, characterize and safely extract methane hydrates on a larger scale in the U.S. Gulf Coast.

"The Energy Department's long term investments in shale gas research during the 70s and 80s helped pave the way for today's boom in domestic natural gas production that is projected to cut the cost of natural gas by 30 percent by 2025 while creating thousands of American jobs," said Secretary Chu. "While this is just the beginning, this research could potentially yield significant new supplies of natural gas."

## What are Methane Hydrates?

Methane hydrates are 3D ice-lattice structures with natural gas locked inside, and are found both onshore and offshore – including under the Arctic permafrost and in ocean sediments along nearly every continental shelf in the world. The substance looks remarkably like white ice, but it does not behave like ice. When methane hydrate is "melted," or exposed to pressure and temperature conditions outside those where it is stable, the solid crystalline lattice turns to liquid wa-

ter, and the enclosed methane molecules are released as gas.

## Successful Field Test on the Alaska North Slope

The Department of Energy has partnered with ConocoPhillips and the Japan Oil, Gas and Metals National Corporation to conduct a test of natural gas extraction from methane hydrate using a unique production technology, developed through laboratory collaboration between the University of Bergen, Norway, and ConocoPhillips. This ongoing, proof-of-concept test commenced on February 15, 2012, and concluded on April 10. The team injected a mixture of carbon dioxide (CO<sub>2</sub>) and nitrogen into the formation, and demonstrated that this mixture could promote the production of natural gas. Ongoing analyses of the extensive datasets acquired at the field site will be needed to determine the efficiency of simultaneous CO<sub>2</sub> storage in the reservoirs.

This test was the first ever field trial of a methane hydrate production methodology whereby CO<sub>2</sub> was exchanged in situ with the methane molecules within a

methane hydrate structure. As part of this exchange demonstration, the depressurization (i.e., production through decreasing pressure of the deposit) phase of the test extended for 30 days. The prior longest-duration field test of methane hydrate extraction via depressurization was six days (Japan-Canada 2007/2008 Mallik well testing program).

This testing will provide critical information to advance the Department's efforts to evaluate various potential gas hydrate production technologies. The next stages of the Department's research effort will be aimed in part at evaluating gas hydrate production over longer durations, likely through depressurization, with the eventual goal of making sustained production economically viable. While this may take years to accomplish, the same could be said of the early shale gas research and technology demonstration efforts that the Department backed in the 1970s and 1980s.

## A New Research Effort

Today, the Department is announcing two major new steps in the overall methane hydrate research effort:

(continued on page 4)

# Field Trial of Methane Hydrate Production Technologies (continued)

1. The Department is making \$6.5 million available in Fiscal Year 2012 Funding Opportunity Announcement for research into technologies to locate, characterize and safely extract natural gas from methane hydrate formations like those in the Arctic and along the U.S. Gulf Coast. Specifically, projects will address (1) deepwater gas hydrate characterization via direct sampling and/or remote sensing field programs; (2) new tools and methods for monitoring, collecting, and analyzing data to determine reservoir response and environmental impacts related to methane hydrate production; and (3) clarifying methane hydrates role in the environment, including responses to warming climates.

2. As part of the President's budget proposal for Fiscal Year 2013, the Department is requesting an additional \$5 million to further gas hydrates research both domestically, and in collaboration with international partners. The exact nature of that research effort will be de-

termined in the coming months; however, a longer duration test of methane hydrate extraction on the North Slope on an existing gravel bed pad that can accommodate year-round operations is envisioned. Such an effort would again require engaging private sector and international partners.

Source: U.S. Department of Energy



## Obama Administration Announces New Partnership on Unconventional Natural Gas and Oil Research

Three federal agencies announced a formal partnership to coordinate and align all research associated with development of our nation's abundant unconventional natural gas and oil resources. The partnership exemplifies the cross-government coordination required under President Obama's Executive Order released earlier today, which created a new Interagency Working Group to Support Safe and Responsible Development of Unconventional Domestic Natural Gas Resources. This new partnership will help coordinate current and future research and scientific studies undertaken by the U.S. Department of Energy, the U.S. Environmental Protection Agency and the U.S. Department of the Interior – better positioning the Obama administration to ensure that continued expansion of natural gas and oil production happens safely and responsibly as part of an all-of-the-above approach to American energy in which science plays a guiding and critical role. The Memorandum of Agreement outlining this coordination is available [here](#).

As the President has made clear, domestic natural gas and oil resources will continue to play a key role in America's energy future. Already, technological ad-

vancements like hydraulic fracturing – innovation supported by public research – have allowed development of previously uneconomic natural gas and oil deposits. In fact, since 2008, U.S. oil and natural gas production has increased each year. In 2011, U.S. crude oil production reached its highest level in 8 years, increasing by an estimated 110,000 barrels per day over 2010 levels to 5.59 million barrels per day. And U.S. natural gas production grew in 2011 as well – the largest year-over-year volumetric increase in history – easily eclipsing the previous all-time production record set in 1973. Overall, oil imports have been falling since 2005, and oil import dependence declined from 57 percent in 2008 to 45 percent in 2011 – the lowest level since 1995.

As the United States continues to expand domestic natural gas and oil production, it is critical that the public have full confidence that the right safety and environmental protections are in place – guided by the best available science. Leveraging each agency's core competencies and strengths will enhance efforts to explore the significant new resource development opportunities made possible in recent years by hydraulic fracturing and other new technologies, and meet high-priority challenges in a coordinated and common-sense way.

"Science, research and innovation continue to play a vital role in our efforts to further expand oil and gas production in the United States and make sure it's done safely and responsibly," said Department of the Interior Deputy Secretary David J. Hayes.

"Improvements in technologies like hydraulic fracturing are responsible for greatly increasing our capacity to develop America's abundant unconventional resources in recent years. Through a close collaboration across the government that reduces redundancy and streamlines our research, we are positioning the Obama administration to best meet the critical need of increasing public understanding and public confidence of these critical technologies so that we can continue safe and responsible exploration and production for many decades to come."

"The development of American shale gas resources is having a transformative impact on the U.S. energy landscape, helping to improve our energy security while spurring economic development and job

(continued on page 6)

## Obama Administration Announces New Partnership on Unconventional Natural Gas and Oil Research (continued)

creation around the country," said Acting Under Secretary of Energy Arun Majumdar. "The Energy Department remains committed to the safe and responsible development of this American resource, and continued cooperation between government and private industry partners under President Obama's all-of-the-above approach to American energy."

"We are moving into a new era of American energy, one that has the potential to create jobs, strengthen our energy independence and security, and cut pollution. President Obama has created this interagency working group to ensure that these energy innovations happen safely and responsibly, without compromising the environment or the health of the American people," said EPA Deputy Administrator Bob Perciasepe. "We will continue to rely on the best available science to oversee the responsible development of these energy sources."

A primary goal of this effort will be to identify research topics where collaboration among the three agencies can be most effectively and efficiently conducted to provide results and technologies that support sound policy decisions by the agencies re-

sponsible for ensuring the prudent development of energy sources while promoting safe practices and human health. The new research partnership is an example of the Obama Administration's effort to coordinate activities across the federal government to support development of our abundant domestic natural gas resources in a safe and responsible way. Today the Administration announced that a broader set of activities will be coordinated under an Executive Order issued by President Obama to create a new Interagency Working Group to Support Safe and Responsible Development of Unconventional Domestic Natural Gas Resources.

Source: U.S. Department of Energy

# DEP Signs Agreement to Restore Former Erie County Landfill Site for Commercial, Recreational Use

The Department of Environmental Protection announced today it has signed a consent order and agreement with Moxie Nein LLC and Millcreek Township, Erie County, for the remediation and reuse of a former landfill site.

DEP is currently cleaning up the site, which is part of the Presque Isle Bay watershed. Once remediation is complete, Moxie Nein will subdivide the property and keep four acres for commercial and industrial activity, donating the rest to the township.

“As part of this innovative agreement, Millcreek Township will receive 19 acres of recreational property, valued at roughly \$195,000, to be used as much-needed ball fields,” DEP Regional Director Kelly Burch said. “The commitment and cooperation that the township and Moxie Nein have shown have been paramount to the success of this public-private partnership.”

Through the Hazardous Sites Cleanup Act (HSCA) fund, DEP began in late March a \$4.1 million cleanup to remove municipal and industrial waste from nearby Cascade Creek, consolidate the waste at the former landfill and apply a protective cap over the waste.

Currie Landfill closed in 1966 and the current site owner, Erie Drive-In Theatre, has not occu-

pled the site for a number of years and does not have the assets to remediate the property. The drive-in owner owes Erie County about \$195,000 in property taxes, and there is a \$55,131 mortgage on the property.

Moxie Nein, an Erie-based development company, will settle the outstanding tax and mortgage issues and will have 367 days after acquiring the property to donate the recreational parcel to the township lien-free.

The consent order and agreement is available for public review during normal business hours at DEP’s Northwest Regional Office, 230 Chestnut St., Meadville. The 60-day public comment period on the consent order and agreement will open April 21 and close June 20. Comments may be sent to the Northwest Regional Office to the attention of the Environmental Cleanup and Brownfields program.

The HSCA fund is paid for by a portion of the Capital Stock and Franchise Tax.

For more information, visit [www.dep.state.pa.us](http://www.dep.state.pa.us) or call 814-332-6945.

Source PA Department of Environmental Protection



# Ohio River Sweep

## Saturday, June 16, 2012

### History of the Ohio River Sweep

Since 1989, River Sweep has been organized by the Ohio River Valley Water Sanitation Commission, an interstate water pollution agency for the Ohio River Valley, along with environmental protection and natural resource agencies from Illinois, Indiana, Ohio, Kentucky, West Virginia, and Pennsylvania.

The Allegheny County Sportsmen's League (ACSL) decided that since the Ohio River is formed by the Monongahela and the Allegheny rivers the member clubs of the ACSL could band together and clean those river banks. Together with the PA DEP we have collected many tons of debris from the river banks.

Later the Beaver and Youghiogeny rivers and their tributaries were added to the task.

The River Sweep is the largest organized volunteer river cleanup effort in the country, winding through Pennsylvania, Ohio, Kentucky, Indiana, West Virginia and Illinois, covering more than 2,400 miles of shoreline.

2012 marks the 22<sup>rd</sup> year of the ACSL's involvement. Let's hope that the next generation of ACSL member clubs will continue this excellent project.

Click here for a copy of the 2012 Brochure:

<http://www.orsanco.org/brochure>