April 4, 2011

The President
The White House
1600 Pennsylvania Ave, NW
Washington, DC  20500

RE:  Natural Gas Extraction from Marcellus Shale and the Chesapeake Bay

Dear Mr. President:

We the undersigned businesses, organizations, elected officials, and individuals are extremely concerned about the many potential and unknown consequences and cumulative impacts of natural gas extraction from the Marcellus shale formation on the environment, drinking water, and human health. There currently exists a large knowledge gap that science must fill. It is our request that you direct the Council on Environmental Quality (CEQ), pursuant to the National Environmental Policy Act, to undertake a scientific, comprehensive study via the coordination of a federal agency Programmatic Environmental Impact Statement (PEIS). The PEIS would examine the risks and cumulative impacts of the extraction of natural gas from the Marcellus shale formation in the Chesapeake Bay states and make appropriate decisions about the need for new regulatory action.

While natural gas in the Marcellus shale offers an abundant source of domestically-produced energy that can create jobs and provide income, the history of resource extraction in this country is littered with long-lasting environmental degradation and risks to human health. From the deforestation that clear cut thousands of acres to power the industrial revolution to the coal boom that left abandoned mines that pollute our waterways to this day, society must better examine and manage both risks and benefits.

For decades, extracting natural gas involved vertical drilling to reach shallow reserves. In the last 25 years, however, technological advancements have led to deeper drilling, often through horizontal drilling which employs hydraulic fracturing (“fracking”) to access these deeper pools of gas. While drilling in the Marcellus shale formation is the current focus of much extraction, further technological advancements with horizontal drilling and fracking will intensify extraction by accessing even deeper formations.

This industry currently enjoys exemptions from nearly all federal environmental laws. From the so-called Halliburton Loophole eliminating fracking fluids from the controls of the federal Safe Drinking Water Act, to the exemptions from Clean Water Act stormwater permit requirements for certain drilling construction sites, to Clean Air Act exclusions, no other industry in the United States has
been granted so much freedom from fundamental environmental and human health and welfare laws as the oil and gas industry.

As a result of these and other exemptions, little unbiased scientific information exists regarding the cumulative environmental impacts from drilling in the Marcellus shale formation. And though there are several risk assessments underway, none is comprehensive or complete. Their incompleteness will leave holes in our knowledge and our ability to ensure responsible and safe development of this resource. EPA itself has identified pollution from surface runoff, increased air pollution, and disposal of drilling waste as primary concerns. Contamination of ground and surface water (including drinking water supplies) from fracking or the storage and disposal of fracking fluids and improper sediment and erosion controls; human health risks from fires, blowouts and explosions, and releases of toxic chemicals; air and water quality impacts from land conversion—all of these and more threaten our health and our environment with the full extent of the threats not known.

What little information that does exist, however, indicates that the potential environmental and human health impacts are significant:

- A 2008 study conducted in Texas concluded that drill site construction activities greatly increased the amount of sediment pollution in streams. The pollution levels were found to be on par with that coming from residential and commercial construction sites regulated under the Clean Water Act. Sediment is one of the leading causes of pollution to the Chesapeake Bay; in fact, it is one of the three pollutants managed by the new Bay-wide Total Maximum Daily Loading (TMDL). Currently, there is no available information regarding sediment pollution from Marcellus shale drilling sites in the Chesapeake watershed.
- Leakage and overflows from storage pits designed to store a variety of potentially toxic liquid and solid wastes pose another concern. If these storage pits leak or overflow they can cause pollution to the soil, groundwater, and surface waters. Between 1996 and 2002, EPA conducted nearly 500 field inspections and found problems with well pits at more than 60% of the sites. Several incidents have already occurred in Pennsylvania: an 8,000 gallon spill in Dimock, Susquehanna County, caused a fish kill while a storage pit leak in Tioga County forced the Pennsylvania Department of Agriculture to institute a quarantine of cattle.
- The heavy trucks used to transport equipment to far-flung sites as well as pumping stations needed to move gas along new pipelines are known sources of air pollution. And methane, hydrogen sulfide, polycyclic aromatic hydrocarbons, and numerous volatile organic compounds are part of natural gas; methane, ton for ton, traps 25 times more heat than carbon dioxide. These chemicals can have significant impacts on human-health and the environment.
- Drilling sites produce tons of debris. The debris may contain hazardous chemicals, metals, naturally occurring radioactive materials, salts, and various other contaminants. This debris is either buried onsite or shipped in unmarked containers and trucks to landfills. Burial of such debris onsite holds numerous concerns and potential routes of contamination.

The existing and future extent of extraction magnifies these concerns. According to the Pennsylvania Department of Environmental Protection, the state issued over 1,900 permits for Marcellus shale drilling in 2009. In 2010 it issued over 3,300 more. And, in the first two months of 2011,
Pennsylvania issued an additional 590 permits. If that pace continues, Pennsylvania will approve over 3,500 new permits this year alone. A New York Times article on February 28, 2011 noted that EPA scientists are “alarmed” by the potential impacts and warn of future drinking water contamination in Pennsylvania. Meanwhile, a preliminary report from Philadelphia’s Academy of Natural Sciences concluded that as the number of wells in an area increases, stream water quality deteriorates. Dr. David Velinsky of the Academy said, “This suggests there is indeed a threshold at which drilling—regardless of how it is practiced—will have a significant impact on an ecosystem.”

But the widespread activity of new drilling in the Marcellus shale formation is not only limited to Pennsylvania:

- The state of New York has halted drilling as a result of concerns over potential drinking water contamination.
- Rockingham County, Virginia, is in the midst of local land use debates over the initiation of drilling in the Marcellus shale formation.
- Maryland is debating legislation to add new permitting controls over natural gas drilling.
- West Virginia issued 2,800 permits between 2002 and 2008, the highest number in the nation. In 2010, it issued 443 more.

Mr. President, you have placed a priority on the restoration of the Chesapeake Bay through the issuance of an Executive Order. In parallel, EPA, under the leadership of Administrator Jackson, is leading the nation’s newest Great Waters’ restoration policy by adopting a multi-jurisdictional Total Maximum Daily Load designed to change the way we will work to restore the Chesapeake Bay and its rivers.

Natural gas extraction in the Chesapeake Bay states threatens to change the entire landscape of the region, from special protected lands such as national parks, wilderness areas, and wildlife refuges to rural countryside’s and treasured rivers and streams, bringing unknown threats and complications. It is because of the environmental breadth of the unknown risks from drilling as well as the interjurisdictional nature of the drilling across the Bay watershed states that the federal government must exercise its authority, and its responsibility. It must, pursuant to the National Environmental Policy Act, ensure that activities associated with drilling are not affecting the quality of the environment. No one state can assess the cumulative impact of this drilling. We call on you to direct the Council on Environmental Quality to coordinate a comprehensive and scientific PEIS so that our environment, our health, and the Chesapeake and its waters are protected.

Sincerely,

William C. Baker, President
Chesapeake Bay Foundation
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Baltimore, MD

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**Citizens for Smart Growth in Allegany County**  
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Andrew Fellows, Chesapeake Regional Director  
**Clean Water Action**  
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<th>Title</th>
<th>Organization</th>
<th>City, State</th>
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<td>Patrick Walker, Director</td>
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<td>Cleaner Fuels, Cleaner Hands</td>
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<td>Gil Freedman, President</td>
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<td>Nadine Grabania, Owner</td>
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<td>Melanie Ryan, RLA, LEED AP, Executive Director</td>
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<td>Ellen H. Kelly, Legislative Chair</td>
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<td>Larry Menkes, Sustainability Director</td>
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<td>Donna Smith-Remick, President</td>
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<td>Dan Plummer, Chairman of the Board</td>
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<td>Beth Mullin, Executive Director</td>
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<td>Barbara Jarmoska, President</td>
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<td>Leslie Mitchell-Watson, Executive Director</td>
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<td>Maura McCarthy, Executive Director</td>
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<td>Carol Houser, Robin Lawrence</td>
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The President
The White House
April 4, 2011

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* The views expressed in this letter represent the personal view of those signatories marked with an asterisk, not necessarily the views of their employers, organizations, or affiliations.

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