

**American Rivers \* Clean Air Task Force \* Clean Water Action \* Defenders of Wildlife \*  
Earthjustice \* Earthworks \* Environment America \* Environmental Defense Fund \*  
Green For All \* League of Conservation Voters \* Natural Resources Defense Council \*  
Physicians for Social Responsibility \* Sierra Club**

April 9, 2012

Valerie Jarrett  
Senior Advisor to the President  
The White House  
Washington, DC 20500

Re: EPA's Proposed Emissions Standards for Natural Gas Production and Transmission

Dear Ms. Jarrett:

In his State of the Union Address, President Obama committed to developing shale gas resources “without putting the health and safety of our citizens at risk.” We deeply appreciate the President’s efforts to implement this commitment.

In his Blueprint for a Secure Energy Future (Mar. 30, 2011), the President charged the Secretary of Energy’s Advisory Board with identifying “consensus recommended advice to the agencies on practices for shale extraction to ensure the protection of public health and the environment.”

The Advisory Board’s Natural Gas Subcommittee, made up of a balanced group of industry and environmental experts, responded to the President’s charge by identifying the Environmental Protection Agency’s proposed air pollution standards as a “critical step forward” in their Second Ninety Day Report (Nov. 18, 2011). They called for these standards to be further strengthened and finalized as soon as possible.

The Clean Air Act standards for oil and gas production currently under OMB review would be a major step towards fulfilling the President’s commitment and the advisory committee’s recommendations. All of the measures needed under the standards are common sense, in common use already, cost-effective, and necessary to protect the public.

Without these rules, there will be no federal standards limiting air pollution from hydraulically fractured natural gas wells such as shale gas wells. But these wells and other sources in this sector release very large amounts of dangerous air pollution – pollutants that can cause cancer, that form ozone smog, and that contribute to climate change. This pollution is a threat to our children, our communities and our planet. Unless EPA takes action, these health threats will continue and indeed will dramatically increase as the gas drilling boom continues and moves into new areas of our country.

The limited federal performance standards that exist for new sources in the natural gas sector cover only natural gas processing plants and are more than a quarter-century old. They critically need updating and modernizing. The revised standards that EPA has proposed will cut air pollution from this sector by about 25 percent.

Rather than imposing costs on industry, the new standards as a whole actually make the industry money, because in many instances they result in the recovery of natural gas that would otherwise have leaked into the air. When that recovered gas is sold, the resulting revenue stream greatly offsets or, in many cases, more than pays for the costs of compliance. Additionally, EPA estimates that the new standards will create nearly 3,000 jobs.

The heart of the new standards is the requirement to capture the whoosh of pollution from newly fracked and refracked natural gas wells using portable tanks on trucks. This “green completion” technology will capture hundreds of thousands of tons of smog-forming emissions annually, along with millions of tons of methane.

Green completions have been required in Colorado and Wyoming for several years and oil and gas production has increased in those states, which demonstrates that the federal standards will not slow down domestic natural gas production. Further, the proposed standards will have no impact on oil production or gasoline prices, because the green completions requirement is for natural gas production.

Officials from Ohio, Pennsylvania, Colorado, New York, the National Association of Clean Air Agencies, and key public health groups are among the many experts who support these common sense standards.

Additionally, all government and private forecasters project an increase in natural gas use for generating electricity. EPA has just proposed carbon pollution standards consistent with that forecast. Without limits on dangerous air pollution where natural gas is produced, the public health protections provided by the new power plant standards will be undermined.

The American Petroleum Institute (API) and other industry organizations which have pressured EPA to exempt the sources of nearly all the air pollution from the standards have made unsupportable claims about the cost and impact of these standards. In the attachment to this letter, we respond to the most important misinformation contained in the most recent API comments.

Finally, while this letter focuses primarily on the importance of green completions for hydraulically fractured natural gas wells, it is important to note that we support all of the positive steps forward made by the proposed standards, which must not be weakened. These common sense standards are the single most important step the

President can take this year to reduce the health and environmental consequences of the natural gas boom.

Sincerely,

Michael Brune  
Executive Director  
Sierra Club

Catherine Thomasson, MD  
Executive Director  
Physicians for Social Responsibility

Armond Cohen  
Executive Director  
Clean Air Task Force

Wm. Robert Irvin  
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Fred Krupp  
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Robert Wendelgass  
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Defenders of Wildlife

Gene Karpinski  
President  
League of Conservation Voters

cc:

L. Jackson, EPA  
C. Sunstein, OIRA  
H. Zichal, WH EOP  
G. McCarthy, EPA  
J. McCabe, EPA  
S. Page, EPA  
P. Tsirigotis, EPA  
D. Mancini, OIRA  
C. Higgins, OIRA

**Attachment 1:**  
**Modern Pollution Control Standards in the Gas Fields Are Urgently Needed**<sup>1</sup>

While all of the pollution controls measures that the natural gas industry would need to adopt under EPA's proposed standards are critical to reduce air pollution, this document focuses on measures to reduce pollution from hydraulically fractured natural gas wells, because these are the most important measures in the proposed standard.

**1. To Fulfill the President's Commitment to Develop Shale Gas Without Putting the Public Health at Risk, EPA Must Clean Up Hydraulically-Fractured Gas Wells**

A single shale gas well without pollution controls will typically emit more than 9,000,000 cubic feet of air pollutants when it is being "completed" – i.e., first brought on line – and will emit more pollution in operation. Thousands of wells are being completed every year, pouring pollutants into the air that cause smog, increase cancer risk, and disrupt the climate. A recent study by the Colorado School of Public Health found that those living near natural gas wells have higher risks of a wide range of neurological and respiratory health problems.<sup>2</sup> The public health risk is high, especially in states in the midst of the shale gas boom, including Ohio, Pennsylvania, and Colorado. We urgently need to control this pollution.

Doing so is particularly important now, both because of the industry's rapid increase in natural gas well drilling and because all government and private analysts project that the use of natural gas in electricity generation will expand. EPA has just proposed carbon pollution standards consistent with that forecast. Without limits on dangerous air pollution where natural gas is produced, the public health protections provided by the new power plant standards will be undermined.

**2. Green Completions Can Help Solve This Problem**

Green completions, a proven and effective technique already used by many operators, can clean up hydraulically fractured gas wells.

Green completions are a straightforward technique that uses a cost-effective set of pipes and tanks, generally mounted on a truck bed, to capture emissions from a newly completed well. The captured gases are sold rather than dumped into the atmosphere. Green completions have been performed for years, all across the country, in a range of natural gas formations and on thousands of wells. The value of the gas sold typically

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<sup>1</sup> We have documented our analysis of these questions in great detail in comments and expert reports submitted to EPA and OMB; these documents are in the EPA docket for this rulemaking.

<sup>2</sup> Lisa M. McKenzie, Roxana Z. Witter, Lee S. Newman, and John L. Adgate, Colorado School of Public Health, *Human Health Risk Assessment of Air Emissions from Development of Unconventional Natural Gas Resources* (Mar. 2012). The study will be published in an upcoming edition of *Science of the Total Environment*.

exceeds the cost of the green completion, so this requirement not only protects communities from harmful air pollution, but will pay for itself across the industry: EPA estimates that its rules, as a whole, will save gas producers more than \$30 million per year.

Colorado and Wyoming already require green completions in many instances. Natural gas production has increased in those two states, at rates that were often substantially greater than the national growth rate, since they began to require green completions.

EPA's proposed standards would extend this proven practice nationwide to areas and companies that currently do not invest in green completions. Officials and air quality experts in many states, including Ohio, Pennsylvania, Colorado, and New York have written EPA to support this approach. So have the National Association of Clean Air Agencies and many public health organizations, including the American Lung Association.

### **3. Industry's Last-Minute Efforts to Add Loopholes Must Be Rejected**

Lobbyists from the American Petroleum Institute (API) and other industry groups are pressing the White House to riddle the EPA standards with loopholes. In a March 28th letter to Valerie Jarrett, Senior Advisor to the President, API portrayed these gaping loopholes as small changes. In fact, they would exempt millions of tons of air pollution each year and put public health and the environment at risk.

The VOC Percentage Threshold. API argues EPA should exempt *all* oil and natural gas pollution sources – not just hydraulically fractured natural gas wells – where less than 10% of their total air pollution consists of smog-forming volatile organic compounds (VOCs). This is the classic exemption that swallows the rule. It would gut the standards because, as API's own numbers show, the percentage of VOCs from most wells falls below this arbitrary threshold. This includes most wells in the booming Marcellus Shale of Pennsylvania (where API states that pollution from wells contains, on average, 6.9% VOC). Even a threshold based on a lower percentage of VOCs would exempt many wells that produce significant pollution. These wells are major pollution sources and they must not be exempted from the rules simply because thousands of tons of VOC pollution are diluted with millions of tons of methane.

API's exemption would worsen dangerous smog across the country and would threaten public health in heavy shale gas drilling areas. Drilling in the Marcellus Shale gives a good sense of the magnitude of the loophole which API requests, since according to API's data, a typical Marcellus well, with 6.9% VOC, would be excused from the green completion requirement under API's exemption. For instance, 429 Marcellus wells were drilled in Bradford County, Pennsylvania, in 2010. A single typical Marcellus well would emit 15.7 tons of smog-forming VOCs when drilling is completed – so drilling without pollution controls can fill a single county's air with more than 6,700 tons of smog-

forming pollution in a single year. Even if these wells contained only 1% VOCs, they would collectively produce almost 1,000 tons of VOCs in a year. Smog pollution threatens public health, causing heart attacks and childhood asthma attacks. Already, some gas production basins are battling very serious smog problems.

There is no economic reason to allow this exemption. Green completions are cost-effective and profitable for very low-VOC content wells. The cost is reasonably estimated at as little as \$8,700-\$14,000 per well (EPA very conservatively estimates the cost at about \$33,000 per well), *without* taking funds from reselling captured gas into account. The investment in building and using a green completion rig can be recovered, and profits recouped, in 6 months to a year. Even if one ignored the profitable sale of the captured natural gas, these expenses would be a tiny cost for a multi-billion dollar industry, and one very worth paying to protect the public.

API's control cost estimates, in contrast, are wildly inflated – at least six times higher than any other estimate. In fact, not a single company has ever submitted cost data supporting API's inflated estimates.

Delay. API also calls for years of delay before the standards go into force. This delay is not necessary. Green completion equipment is simple to construct, and has long been used. The gas industry constructs literally thousands of miles of pipeline and thousands of complex compressors and other well-field equipment every year. It will not be difficult for natural gas producers to quickly construct several hundred more sets of tanks and pipes to capture fracking emissions.

Weak Enforcement. API seeks to pollute first, and ask questions later. Under its proposed loophole, operators would be allowed to guess whether the VOC content of an as-yet drilled well will exceed the proposed percentage threshold. Operators could then exempt themselves from green completion pollution controls based on their own guesses. If the operator guesses wrong, it will be too late: The horse will be out of the barn. The public will suffer the impacts of the uncontrolled air pollution, as the opportunity to use a green completion will have passed.

Exemptions for Leaking Storage Tanks. Emissions of toxic and smog-forming pollution from storage tanks are significant, totaling tens of thousands or more tons of VOC annually. EPA standards would sensibly require operators to capture these emissions. Product not leaked to the atmosphere can be resold at a profit. API proposes to badly weaken the standards by doubling EPA proposed threshold for covering storage tanks – from 6 to 12 tons of VOCs per year. Because thousands of tanks are used in the industry, this exemption would radically increase emissions. API's loophole should be rejected.

#### **4. EPA Is Long Overdue for Updating These Public Health Standards**

Any further delay is unwarranted. The Clean Air Act requires EPA to comprehensively review and update its emissions standards every 8 years. EPA has not updated many of the standards for this industry for more than twenty-five years. EPA is operating under a consent decree with citizens' groups in Colorado that requires issuance of final standards, which must be based on a comprehensive review of the inadequacies of the existing rules, by April 17. Hydraulically fractured wells are the dominant pollution source in the industry. The old standards do not control them. EPA has a legal duty to plug this gap and develop standards that control this dangerous pollution. The new standards to be issued on April 17<sup>th</sup> will respond to that duty, and to the President's commitment to safely exploit our shale gas resources.