U.S. Environmental Protection Agency Office of Administrator Lisa Jackson Docket No. EPA-HQ-OAR-2010-0505 RIN No. 2060-AP76 Oil and Natural Gas Sector: New Source Performance Standards and National Emission Standards for Hazardous Air Pollutants Reviews

INTRODUCTION:

Thank you for the opportunity to comment on the Environmental Protection Agency's (EPA) proposed rule "Oil and Natural Gas Sector: New Source Performance Standards and National Emission Standards for Hazardous Air Pollutants Reviews." I am submitting this comment from the perspective of the public interest, and I have no direct interest in the regulation of oil and natural gas emissions.

OVERVIEW:

On August 23, 2011, the EPA published in the Federal Register a proposal to expand the scope of its regulation of air emissions from oil and natural gas exploration, production, transmission, and storage facilities. This proposal was developed per a consent decree between EPA and environmental groups. This decree required EPA to issue a final rule by a deadline of February 28, 2012.

In response, EPA has proposed a New Source Performance Standard (NSPS) that will regulate volatile organic compound (VOC) and sulfur dioxide (SO2) emissions from non-combustion sources in the upstream oil and gas industry, as well as the midstream natural gas industry. Section 111 of the Clean Air Act (CAA) is cited as the statutory authority for the proposed NSPS revisions.

Secondly, EPA has proposed to amend and expand two existing National Emissions Standards for Hazardous Air Pollutants (NESHAP), which regulate emissions of air toxics from industry sectors. The new rules will regulate emissions from several types of emission sources that are currently not subject to federal standards, including hydraulically fractured natural gas wells. An estimated 1.1 million wells that are already producing oil and gas will be subject to regulation, as well as 500,000 existing gas wells and the 11,400 new gas wells being drilled each year. The proposed rules also apply to approximately 600 natural gas processing plants, 3,000 compressor stations and 1.5 million miles of pipelines. Section 112 of the CAA is cited as the statutory authority for the proposed NESHAP revisions.

Through these regulations, EPA expects to reduce emissions during the oil and natural gas supply chain, with a claim of significant cost savings to industry resulting from greater efficiency. The agency also claims added public health and environmental benefits from the reduction of methane, a non-VOC, non-hazardous air pollutant.

However, the desired outcome of the regulatory actions will not be accomplished by the proposed NSPS and NESHAP revisions for the following reasons:

- The premise of the regulation assumes that markets have failed to properly incentivize industry to contain emissions, yet the cost-benefit analysis predicts that the regulatory change will result in significant cost savings to industry through efficiency. These are incongruous positions.
- The agency's assumed price for natural gas does not reflect the fluctuating nature of that market's prices.
- New regulations on natural gas production and supply could have the unintended effect of incentivizing industry to shift its resources toward oil development, which is a related capability. This shift could have negative consequences for EPA's other air quality proposals, such as Boiler MACT and greenhouse gas regulations.
- Cost-savings and environmental benefits resulting from claimed methane emissions reductions are overstated and do not correspond to the stated intent of the proposed rule.
- According to the Agency, its analysis of stated public health benefits lacks substantive scientific data.
- Regulating industry now ignores the significant progress toward emissions reductions that have been made through voluntary programs, such as the Agency's own Natural Gas STAR program.
- State regulatory agencies share EPA's interest in protecting public health and improving air quality, and in most cases are better endowed to respond to these challenges. Programs like the State Review of Oil and Natural Gas Environmental Regulations (STRONGER) provide peer-review of state regulatory plans, facilitate continued improvements through the communication of best practices between states, and allows greater collaboration between government, industry, and the public than the federal regulatory process.
- The proposed rule, as written, may have the unintended consequence of disincentivizing operators from upgrading to new equipment that will be subject to the new maximum attainable control technology.
- Alternatives to the proposed regulation—including providing positive economic incentives to industry—were not evaluated in the cost-benefit analysis.
- The proposed rulemaking may have the unintended consequence of reducing workplace safety by specifying behaviors for industry to adopt that may differ from practices recommended by experts.

REVISIONS TO THE NEW SOURCE PERFORMANCE STANDARDS (NSPS)

The revised NSPS will regulate new affected facilities that commence construction after August 23, 2011, the date that the proposed rule was first published in the Federal Register. Furthermore, the rule would regulate existing affected facilities that are modified or reconstructed after August 23, 2011.

For each individual facility, the rule mandates that the owner or operator submit to EPA a written notification of the date of start of construction within 30 days after that date, and a written notification of the actual date of commencement within 15 days after that date. For existing affected facilities that become subject to the NSPS because they undergo a modification, the owner or operator must submit to EPA a written description of the modification, within 60 days,

or as soon as practicable before the modification has begun. Detailed annual reports providing specified information for each affected facility will also be required.

1) Standards for Hydraulically Fractured Natural Gas Wells

Under the proposed NSPS revisions, all natural gas wells that are hydraulically fractured will be required to control emissions during production, except in a few limited cases. These standards will apply to both new and existing wells that are hydraulically fractured or refractured, and will apply to wells that either commence construction or are completed after August 23, 2011.

For all hydraulically fractured natural gas wells, the owner or operator will be required to inform EPA in writing of the date of start of construction within 30 days after that date. Furthermore, a written notification of the actual date of startup must be submitted within 15 days after that date.

For existing wells that become subject to the NSPS because they are modified, the owner or operator must describe the modification to EPA in writing at least 60 days or as soon as practicable before the modification begins. Detailed annual reports providing specified information for each affected facility will also be required.

2) Standards for Equipment Leaks at Onshore Natural Gas Processing Plants

More stringent leak detection and repair standards are proposed for compressors, pumps, pressure relief devices, valves, and flanges to reduce VOC emissions at onshore natural gas processing. Under the proposed rule, EPA will lower the definition of leak from 10,000 parts per million (ppm) to 500 ppm and will require the monitoring of connectors.

3) Other Regulated Sources and Processes

Other proposed new sources include compressors, pneumatic controllers, storage vessels, and sweetening units at onshore natural gas processing plants. The rule also provides new standards for startups, shutdowns, and malfunctions.

REVISIONS TO THE NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR POLLUTANTS (NESHAP)

EPA has also proposed to amend two existing NESHAPs: 40 C.F.R. 63, Subpart HH, which applies to oil and natural gas production facilities; and 40 C.F.R. 63, Subpart HHH, which applies to natural gas transmission and storage facilities. Under the rule, all control devices—except those to be used in a condenser—will be required to undergo initial performance testing and be retested every five years, or any time new operating limits are proposed.

These amendments will only apply to facilities considered "major sources," defined as those that could emit 10 tons per year or more of any single hazardous air pollutant (HAP) or 25 tons per year or more of any combination thereof. Affected sources include glycol dehydrators, storage tanks, and valves at oil and natural gas production and processing facilities, as well as glycol dehydrators at natural gas transmission and storage facilities.

1) Glycol Dehydrators

Emissions from major glycol dehydrators are currently regulated under Subparts HH and HHH of NESHAP; the proposed revision would apply emissions limits to small glycol dehydrators, defined as those with an actual annual average natural gas flow rate less than three million standard cubic feet per day, or actual average benzene emissions less than one ton per year. Specifically, unit-specific emission limits will be set on annual emissions of benzene, toluene, ethylene, and xylenes.

EPA's proposal would also remove the one ton per year benzene compliance option for glycol dehydrators at regulated facilities. This would result in all large glycol dehydrators being required to reduce emissions by 95 percent by employing a control device.

For existing small glycol dehydrators and storage vessels that are currently unregulated under NESHAP Subparts HH and HHH, compliance with the newly applicable emission standards must be attained no later than three years after the date of publication of the final rule in the Federal Register.

For large glycol dehydrators that have been complying with the one ton per year benzene compliance option under Subparts HH and HHH, compliance with the 95 percent reduction standard must be attained no later than 90 days after the date of publication of the final rule in the Federal Register.

2) Standards for Crude Oil and Condensate Storage Tanks

EPA's current regulations apply NESHAP emission limitations only to those storage tanks with the potential for flash emissions. In its proposed amendments, EPA seeks to apply the current standards to all storage tanks, such that all crude oil and condensate storage tanks located at major sources, which will be required to control air toxics by a minimum of 95 percent.

For oil and gas production facilities, the new storage tank emissions must be included in the analysis of whether to designate the facility as a major source. This could result in some sources that currently qualify as area sources under Subpart HH losing area source status, and becoming subject to the more stringent requirements that apply to major sources.

Production facilities that were previously area sources under Subpart HH, but become major sources because they now must include HAP emissions from storage tanks in their emissions total, will be required to achieve compliance within three years after the date of publication of the final rule in the Federal Register.

3) Standards for Equipment Leaks for Oil and Natural Gas Production Facilities

The proposed rule will make the definition of a leak from valves located at oil and natural gas production facilities that are major sources subject to Subpart HH more restrictive; specifically, EPA proposes to lower the leak definition for valves to 500 ppm.

ISSUES TO CONSIDER PRIOR TO REGULATION:

1) Cost-Benefit Analysis Has Flawed Assumptions

EPA estimates the total annualized engineering costs will be \$740 million for the proposed NSPS and \$16 million for the proposed NESHAP. However, the Agency claims that these costs will be offset by controls mandating the capture of natural gas that industry has been emitting and the subsequent sales of the captured natural gas. Specifically, the Agency claims the capture of 3.4 million tons of recovered natural gas with a benefit of \$30 million annually.

This approach is flawed for several reasons. First, EPA assumes that only a small percentage of facilities are capturing this vented gas and thus creates an economic benefit on a premise that is likely already occurring in situations where this practice is feasible. Furthermore, the assumption that a government agency possesses more industry knowledge on how to create profits from technology investments is flawed. If one believes in efficient markets, one has to then assume that any profit-inducing technologies would be implemented quickly by industries in an attempt to create higher profits and a larger share of the market. It would make no logical sense for companies to ignore technology that allows them to earn higher profits through efficiency.

Second, these rules divert investments from capital and energy development into regulatory compliance efforts, leading to less energy production in natural gas. The notification, record keeping, monitoring, reporting, and performance testing requirements are burdensome to industries and the state regulators required with process the paperwork. They also do not take into account that many facilities are in remote and unmanned locations, making paperwork compliance all the more difficult. These provisions require significant administrative costs with little impact on actual emissions reductions. These costs – both from diverted resources and administrative costs – are not figured into the cost-benefit analysis.

Third, EPA's model is based on an assumed wellhead price of \$4/thousand cubic feet (Mcf) for natural gas. EPA's model shows that "\$1/Mcf change in the wellhead price causes a change in estimated engineering compliance costs of about \$180 million," with annualized engineering costs increasing to about \$140 million under a \$3/Mcf price and decreasing to about -\$230 million under a \$5/Mcf price.

As of September 2011, two months preceding EPA's analysis, wellhead price fell to \$3.70/McF. Based on the Agency's own analysis, this should result in \$125 million in additional cost. Historically, wellhead prices have fluctuated substantially, with decade-averages of \$1.92/McF in the 1990s, \$5.26/McF in the 2000s, and \$4.16/McF today. This includes dramatic price shifts from year to year during the past decade, as seen below:

2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
3.68	4.00	2.95	4.88	5.46	7.33	6.39	6.25	7.97	3.67	4.16
%change	8.7%	-	65.4%	11.9%	34.2%	-	-2.2%	27.5%	-54%	13.4%
_		26.2%				12.8%				

Given these stark year-to-year changes, placing an accurate estimate on future compliance costs is difficult.

With abundant supplies much of these price swings can be mitigated. Therefore it has been argued that stabilization in prices has come with improved technologies in recent years. In some ways this is correct, which is good for consumers. However, regulating on this premise is flawed because it assumes a constant state of production from producers.

Many of the resources for the two sectors are exchangeable (equipment and labor) and studies are showing that in recent years natural gas has not met the break-even prices for companies to produce it. If companies are able to obtain greater profits from the exploration of oil, they will pursue that avenue, and indeed we are already observing this shift. Natural gas drilling is down 10% while oil drilling is up 80%, and earlier this year, more companies were drilling for oil than natural gas – the first time since 1995.

Moreover, more regulations on the natural gas sector could affect other regulations currently being promulgated by EPA. A recent study of the state of natural gas in the nation found that "the price of natural gas has a very significant impact on the competitiveness of some U.S. manufacturing industries". This ties directly into EPA regulations aimed at curbing emissions from coal and petroleum based sources, such as Boiler MACT. It has been acknowledged by the Agency, industry, and outsiders that a switch to natural gas may be the only option for plants faced with either adding expensive pollutant capturing technologies, fuel switching, or closure.

More stringent regulations on the natural gas industry could have an unintended consequence of raising residential energy costs from natural gas by driving up the production of oil, while allowing demand for natural gas to catch up with supply.

Lastly, in its cost-benefit analysis, EPA has overstated the environmental benefit that would be derived from regulation. Although EPA's analysis shows that the proposed changes will result in VOC emissions reductions of 540,000 tons, the Agency's own data indicates that oil and gas production represents just 2.3 percent of VOC emissions—indicating that the sector is already a low source of these pollutants. Furthermore, while the proposed changes would reduce air toxic emissions by 38,000 tons, the Agency itself writes that the status quo emissions levels are within the acceptable range. As such, EPA should evaluate whether the stated environmental benefits are appropriately balanced with the cost to industry and new compliance requirements.

2) Methane Emissions Reductions Should Not Be Cited In Cost Savings

In its cost-benefit analysis, EPA claims that the resulting reduction in methane will yield about \$1.6B in public health and environmental benefits; however, because methane is not a VOC or air toxic—the two types of emissions targeted by the proposed revisions—the decision to cite it as a co-benefit is questionable.

However, even if methane emissions reductions were to be cited as a co-benefit, EPA's analysis of its environmental impact is flawed. Namely, when detailing the impact of methane on anthropogenic global warming, no sense of proportion or the scope of its impact is provided.

Instead, EPA lists problems occasioned by anthropogenic global warming such as increasing ocean temperatures, increasing air temperatures, and rising sea levels, with the assumption then being that the methane emissions decrease created by this rule will have an impact on these issues. However, by comparing the claimed methane reductions with proposed greenhouse gas reductions measures of a much greater scale, it is apparent that the proposed rule will have a negligible effect on climate issues.

Methane is a potent greenhouse gas and as EPA explains, "Methane, in addition to other GHG emissions, contributes to warming of the atmosphere, which, over time, leads to increased air and ocean temperatures..." EPA however, does not model the *temperature* impact this rule will have. In calculating any impacts of reduced greenhouse gases, this is an unavoidable step. EPA's failure to do so is arbitrary and capricious.

It is an exceedingly great omission for EPA not to include the temperature impacts of this rule because EPA has access to and has paid for multiple models to aid this very kind of decision. One option is the MAGICC/SCENGEN models and another is the Mini-Climate Assessment Model (MiniCAM).

Were one to employ these models, the impact of the proposed rule would be shown to be negligible. The MAGICC model would have shown an exceedingly small temperature impact created by this rule—possibly on the order of a couple thousandth of a degree Celsius by the year 2010. For comparison's sake, the 2009 Waxman-Markey bill—which would have required an 80 percent reduction in greenhouse gas emission by 2050—would only result in a temperature impact of 0.05 C by 2050 and 0.112 C by 2100. If an 80 percent reduction in total U.S. greenhouse gas emission would only result in 0.112 C of temperature avoided, reducing methane emissions by 65 MMT CO2e¹ out of a total of 6,633 MMT CO2e total U.S. annual emissions would be much less.

This rule will reduce U.S. GHG emissions by less than one percent, compared to Waxman-Markey's 80 percent reduction by 2050. Waxman-Markey's temperature impact was exceedingly small. It is arguable that a 0.112 C impact would result in climate impacts. But reducing U.S. greenhouse gas emissions by 1 percent would have an even smaller impact, possibly around two-thousandths of a degree Celsius. A two-thousandths of a degree change will not have climate impacts.

Instead of using the models it paid to develop to estimate temperature impacts, EPA has opted to use the "social costs of carbon" in its cost-benefit analysis. However, EPA estimates of the social costs of carbon are arbitrary and capricious, because there is no evidence that these values are real. Furthermore, using the social costs of carbon is a misnomer, as not all greenhouse gases contain the element of carbon.

Additionally, from a policy standpoint, overregulation of the natural gas industry can have adverse effects on any efforts to curb CO2 emissions. Melanie Kenderdine, executive director of the MIT Energy Initiative and a co-author of a recent MIT report on the natural gas industry, noted that policies supporting the conversion from traditional fossil fuels to cleaner-burning

natural gas "should be pursued as the only practical option for near-term, large-scale CO2 emissions reductions."

3) EPA Claims of Positive Health Benefits Lack Supportive Data

EPA itself admits that the variances in well locations and the localized nature of air quality responses pose difficulties in modeling public health impacts. EPA writes:

With the data available, we are not able to provide credible health benefit estimates for the reduction in exposure to HAP, ozone and PM (2.5 microns and less) (PM2.5) for these rules, due to the differences in the locations of oil and natural gas emission points relative to existing information and the highly localized nature of air quality responses associated with HAP and VOC reductions.

This is not to imply that there are no benefits of the rules; rather, it is a reflection of the difficulties in modeling the direct and indirect impacts of the reductions in emissions for this industrial sector with the data currently available. In addition to health improvements, there will be improvements in visibility effects, ecosystem effects and climate effects, as well as additional product recovery.

Supportive data prior to proposing new regulations should be prerequisite, and the mere assertion that there will be health benefits is insufficient proof. According to EO 12866, "each agency shall base its decisions on the best reasonably obtainable scientific, technical, economic, and other information concerning the need for, and consequences of, the intended regulation," while Executive Order 13563 states that the regulatory system must be based on the "best available science." EPA's claim of health improvements without credible health benefit estimates violates the spirit of EO 12866 and EO 13563.

In EPA's words, "we do not have sufficient information or modeling available to provide quantitative estimates for this rulemaking..." EPA lists a catalogue of horribles, but that does mean the rule will impact adverse health outcomes in any meaningful way. In fact, because EPA does not quantitatively assess the health effects, it is prima facie evidence that these regulations will not create positive health benefits.

4) Voluntary Programs to Control Emissions Already Exist

According to EO 13563, to the extent possible, "each agency shall identify and consider regulatory approaches that reduce burdens and maintain flexibility and freedom of choice for the public." As such, EPA should consider whether the existing programs to control natural gas emissions are sufficient to achieve the desired result without the need for new regulation, or whether existing voluntary programs or incentives could be improved to achieve these results.

A prime example is the Natural Gas STAR Program, which EPA has overseen since 1993. Natural Gas STAR is a voluntary partnership that encourages oil and natural gas companies to adopt emissions curbing technologies in a cost-effective and flexible way. EPA touts the programs successes on their website: "Since 1993, the Program's domestic partners have eliminated more than 904 billion cubic feet (Bcf) of methane emissions through the implementation of approximately 150 cost-effective technologies and practices."

Both long- and short-term achievements have been applauded by the Agency: "... for 2009, Natural Gas STAR partners reported domestic emissions reductions of 86 Bcf. These methane emissions reductions, voluntarily undertaken by Natural Gas STAR partner companies, have cross-cutting benefits on domestic energy supply, industrial efficiency, revenue generation, and greenhouse gas emissions reductions. In the 2009 reports, partners reported methane emission reductions resulting from the implementation of 82 technologies and practices, including one new activity."

A stated goal of the regulations is an annual reduction of 3.4 million tons of methane, or the equivalent of 65 million metric tons of carbon dioxide equivalent (CO2e). This goal – equivalent to the annual methane emissions of all forest fires globally – is achievable through voluntary means. Through the voluntary STAR Program, companies have been able to meet more than half of that, with the avoidance of 34.8 million tons CO2 equivalent and the carbon sequestration of 7.4 million acres of forest in 2009 alone. An important point is that year after year improvements are occurring. In 2003, the STAR program avoided a cumulative 350 billion cubic feet (BcF). This number rose to 600 BcF in 2006 and over 900 BcF in 2009.

With reduction and sequestration accomplishments already on the rise through flexible, voluntary programs, the need for command and control style regulations is questionable.

5) States are in a Better Position to Regulate

Through both their proximity to the affected facilities and their intimate knowledge of local resources, states are in a better position to regulate toxic air emissions than a federal agency.

In fact, the effectiveness of states' current regulatory efforts have been lauded by a government task force charged with reviewing the state of the natural gas sector. The Natural Gas Subcommittee of the Secretary of Energy's Advisory Board has been tasked, and is in the midst of recommendations to improve the safety and environmental performance of hydraulic fracturing. In testimony before the Senate Energy and Natural Resources Committee, all four representatives from the subcommittee on natural gas remarked on the quality of the states' regulatory process.

Daniel Yergin, Chairman of IHS Cambridge Energy Research Associates and member of the subcommittee noted that he was "very impressed by the extent and the seriousness of the states [regulations], and as I said before, there is a tendency to assume that this isn't going on but it's been going on for decades. The states are the leader and bring that long experience to it." When asked if there is any danger in the federal government stepping in to regulate areas that have historically been regulated by states, Yergin commented: "Certainly you can end up having a kind of super structure on top of a superstructure that would make investment more difficult, would take a much longer time to get things done, and move farther away from communities."

Kathleen McGinty, Former Secretary of the Pennsylvania Department of Environmental Protection and subcommittee member remarked that "there was nothing in the testimony we heard, the substance we focused on, or what needs to be done that lead to a glaring conclusion that there is an actor missing from the [regulatory] scene."

Mark Zoback, Professor of Geophysics at Stanford University noted that the subcommittee recognizes that "the differences geologically from place to place put the states in the right position to do this because we did not see a one size fits all solution. That's why we endorse groups like STRONGER – to allow the states to learn from each other..."

STRONGER – the State Review of Oil and Natural Gas Environmental Regulation – is a not-forprofit organization whose mission is the scientific peer-review of state regulations around oil and natural gas.

"There are other important mechanisms for improving the availability and usefulness of shale gas information among various constituencies. The Subcommittee believes two such mechanisms to be exceptionally meritorious (and would be relatively inexpensive to expand)." State reviews are conducted by a state regulators, environmental organizations, and industry representatives and facilitate the sharing of best practices (environmental protections strategies, regulations, technical aspects, etc.) among states. Both the Environmental Protection Agency and the Department of Education have supported STRONGER.

State-focused programs like this should be supported, not superseded, by the federal government.

The kind of emissions controls employed by facilities are dependent on a variety of factors, including the age, location, and size of a facility. In this case, flexibility is warranted and in fact can yield the same reductions in a more cost-effective fashion. Indeed, as enumerated above, the highly localized nature of air quality responses and the variances in well locations would make states a better candidate to regulate than a federal agency.

6) The NSPS Incentivizes the Use of Outdated Equipment and Deters Development

Because the NSPS standards apply only to new or modified facilities, the rule creates the inadvertent economic incentive for owners and operators to continue using outdated, less-efficient equipment rather than incurring new costs and regulations to change.

Furthermore, because the proposed NSPS revisions would apply to new natural gas wells—approximately 11,400 of which are drilled each year—the rule may cause operators to undertake fewer projects.

7) Regulatory Alternatives Should Be Evaluated Prior To Regulation

Although EPA has indicated its openness to making modifications to a handful of provisions in its proposed rule—including evaluating ways to reduce reporting requirement burdens—no evidence was presented in the proposed rule to indicate that EPA had evaluated the costs and benefits of regulatory alternatives, such as positive incentives to achieve the desired result.

The Agency is obligated to do so under Executive Order 12866 (EO 12866), which states: "In deciding whether and how to regulate, agencies should assess all costs and benefits of available regulatory alternatives, including the alternative of not regulating." Furthermore, EO 12866 directs that "each agency shall identify and assess available alternatives to direct regulation, including providing economic incentives to encourage the desired behavior, such as user fees or marketable permits, or providing information upon which choices can be made by the public."

8) Regulations May Adversely Impact Workplace Safety

Instead of imposing emissions limits for industry to attain, as the CAA dictates, EPA is attempting to specify a work practice in the form of "green completions" for hydraulic fracturing. However, according to EO 12866 and EO 13563, which reaffirmed the former, regulations should "specify performance objectives, rather than specifying the behavior or manner of compliance that regulated entities must adopt."

Furthermore, the Western Energy Alliance indicates that EPA's proposed rule may have the unintended effect of reducing workplace safety. "Rather than petroleum and environmental engineers making the determination of how best to safely meet emissions reductions standards given the technical situation in the field," the Alliance notes that the Agency may be prescribing work practices that may not be sanctioned or recommended by industry experts. EPA should consider whether an overly prescriptive approach that places constraints on industry-tested practices is warranted.

SUMMARY OF POINTS TO CONSIDER:

In summary, we ask EPA to carefully consider these points when finalizing regulations:

- The premise of the regulation assumes that markets have failed to properly incentivize industry to contain emissions, yet the cost-benefit analysis predicts that the regulatory change will result in significant cost savings to industry through efficiency. These are incongruous positions.
- The agency's assumed price for natural gas does not reflect the fluctuating nature of that market's prices.
- New regulations on natural gas production and supply could have the unintended effect of incentivizing industry to shift its resources toward oil development, which is a related capability. This shift could have negative consequences for EPA's other air quality proposals, such as Boiler MACT and greenhouse gas regulations.
- Cost-savings and environmental benefits resulting from claimed methane emissions reductions are overstated and do not correspond to the stated intent of the proposed rule.
- According to the Agency, its analysis of stated public health benefits lacks substantive scientific data.
- Regulating industry now ignores the significant progress toward emissions reductions that have been made through voluntary programs, such as the Agency's own Natural Gas STAR program.

- State regulatory agencies share EPA's interest in protecting public health and improving air quality, and in most cases are better endowed to respond to these challenges. Programs like the State Review of Oil and Natural Gas Environmental Regulations (STRONGER) provide peer-review of state regulatory plans, facilitate continued improvements through the communication of best practices between states, and allows greater collaboration between government, industry, and the public than the federal regulatory process.
- The proposed rule, as written, may have the unintended consequence of disincentivizing operators from upgrading to new equipment that will be subject to the new maximum attainable control technology.
- Alternatives to the proposed regulation—including providing positive economic incentives to industry—were not evaluated in the cost-benefit analysis.
- The proposed rulemaking may have the unintended consequence of reducing workplace safety by specifying behaviors for industry to adopt that may differ from practices recommended by experts.

Thank you for your time and consideration of these comments.

Sincerely,

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