#### **MEMORANDUM**

SUBJECT:	Final Rule: Oil and Natural Gas Sector: New Source Performance Standards and National Emission Standards for Hazardous Air Pollutants Reviews (Tier 1; SAN 5369; RIN 2060-AP76)ACTION MEMORANDUM
FROM:	Gina McCarthy Assistant Administrator (6101A)
THRU:	Office of Policy (1806A) Office of Executive Secretariat (1105A)
то:	Lisa P. Jackson EPA Administrator (1101A)

#### PURPOSE

Attached for your signature is a final rule for three regulations for the Oil and Natural Gas sector: (1) new source performance standards (NSPS) for oil and natural gas production, processing, transmission and storage, (2) national emission standards for hazardous air pollutants (NESHAP) for oil and natural gas production facilities, and (3) NESHAP for natural gas transmission and storage facilities.

In this final rule, we are also amending the existing NSPS for natural gas processing plants to reflect that they are being incorporated into the Oil and Natural Gas Sector NSPS. These NSPS were promulgated in 1985. The Clean Air Act (CAA) requires the agency to review and revise the NSPS, if necessary, and provides the agency the discretion to add emission limits for pollutants not previously regulated for that source category.

For this final rule, we are addressing the residual risk and technology reviews (RTR) for oil and natural gas production facilities and natural gas transmission and storage facilities regulated by NESHAP. The NESHAP were promulgated in 1999 and were based on maximum achievable control technology (MACT). The CAA requires the agency to review and revise the NESHAP (also known as MACT standards), if necessary, taking into account developments in practices, processes and control technologies. The CAA directs the agency to assess the risk remaining (i.e., residual risk) after application of the MACT standards and to promulgate additional standards, if required, to provide an ample margin of safety to protect public health or to prevent an adverse environmental effect. In addition to completing the required RTR, we are addressing several uncontrolled subcategories.

# DEADLINE

The EPA has entered into a settlement agreement to sign a final rule by April 3, 2012.

### **OVERVIEW**

<u>Review of the NSPS</u>. We reviewed the NSPS that currently apply to the Oil and Natural Gas Production source category. As a result of this review, we are expanding the Oil and Natural Gas Production source category to include operations not covered by the existing source category. We are also expanding the NSPS to cover several oil and natural gas-related operations, including well completions, centrifugal and reciprocating compressors, natural gas-operated pneumatic controllers and storage vessels.

<u>Technology Review of the NESHAP</u>. For the technology review of the NESHAP, we reviewed the developments in practices, processes and control technologies to assess whether any significant and cost-effective further reduction in emissions could be achieved. We did not identify any changes in technology. However, we identified emission sources that were unregulated or under-regulated in the current NESHAP. As a result, in the final rule, we are: (1) removing exemption criteria and establishing emission limits for small glycol dehydration units, (2) requiring all crude oil and condensate tanks at major sources to control their air toxics by at least 95 percent and count the emissions from these tanks toward determining whether a facility is a major source, and (3) tightening the definition of a leak for valves at natural gas processing plants.

<u>Risk Review of the NESHAP</u>. In parallel with the technology review, we assessed the remaining risks due to emissions of hazardous air pollutants (HAP) from existing facilities in the Oil and Natural Gas Production and the Natural Gas Transmission and Storage source categories. The results of the chronic inhalation cancer risk assessments indicated that the maximum lifetime individual cancer risk could be as high as 10 in 1 million for oil and natural gas production facilities, and as high as 20 in 1 million for natural gas transmission and storage facilities, with emissions of benzene dominating the risk. For both source categories, estimated maximum *chronic* noncancer risks were well below the health effects thresholds, while the maximum *acute* noncancer risk estimates were above the protective levels, mainly due to emissions of benzene.

<u>Conclusions from the RTR</u>. We conclude that risk levels for both source categories are acceptable and the existing rules protect health with an ample margin of safety. We also conclude that implementation of the controls and other requirements described above will result in decreases in emissions as well as a slight decrease in risk levels.

<u>Startup, Shutdown and Malfunction</u>. We also reviewed the impact of the vacatur of the startup, shutdown and malfunction provisions on these source categories. We are not aware of any concerns regarding compliance with the standards during startup or shutdown so we are removing the exemption for these periods. In addition, we are removing the malfunction provisions.

#### ANTICIPATED PUBLIC AND STAKEHOLDER RESPONSE

We expect environmental groups to remain generally supportive of the rule. However, they will likely express concern that the final rule does not regulate methane and does not cover existing sources. Environmental groups may also express concern that we did not make changes to attain greater reductions of more pollutants in the final rule and further expand controls for unregulated sources of HAP. We expect industry to be supportive of changes that reduce compliance burden, although they are likely to remain opposed to our expansion of coverage under the NSPS to cover a number of previously unregulated emission sources, and with our broad review of the existing NESHAP.

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# INTERNAL DEVELOPMENT AND REVIEW PROCESS

This action was developed under Tier 1. The work group consisted of a large cross-section of the agency and included representatives from OECA, OGC, OP, ORD and Regions 2, 3, 5, 6, 8 and 10. The Options Selection meeting was held on February 1, 2012, and the Final Agency Review meeting was conducted on February 16, 2012.

# **OMB TRANSACTION**

Pursuant to the terms of Executive Order 12866, OMB has designated this action a "significant regulatory action" and subject to their review. This action was submitted to OMB on [February xx, 2012] and cleared OMB on [add date].

## **IMPACTS**

This final rulemaking would revise the current emission standards and implement new standards. The costs for the final NSPS are estimated to be approximately \$330 million per year when savings due to the recovery of salable natural gas products are not considered. When revenues from selling recovered products are included, the proposed NSPS result will save the industry about \$20 million per year. The NSPS is estimated to reduce volatile organic compound (VOC) emissions by approximately 300,000 tons of VOC per year. The NSPS would also achieve co-reductions of approximately 1.7 million tons of methane or about 31 million metric tons of carbon dioxide equivalents. The costs for the final amendments to the NESHAP are estimated to be approximately \$18 million per year, with associated emission reductions of approximately 1,300 tons of HAP per year.

## STAKEHOLDER INVOLVEMENT

We received over 156,000 comments from stakeholders, including the oil and gas industry, the environmental community, state and local government agencies and one tribe. In addition, we held three public hearings on the proposed rule in September 2012; these took place in Pittsburgh, Pennsylvania, Denver, Colorado, and Arlington, Texas.

#### PEER REVIEW

The risk assessment methodology has been peer reviewed by the Science Advisory Board (SAB), who stated "[t]he Panel commends the Agency on its efforts to develop a technically sound and practical approach for the challenging task of residual risk assessment." The SAB recommendations have been incorporated into these assessments, as appropriate.

#### RECOMMENDATION

I recommend that you sign the attached rulemaking.

Attachment

cc: Linda Chappell/OA (1101A)

OAQPS/SPPD/FIG:bmoore/jcr(x7946):RTP/E143-03:23Feb12:G://user/share/\_FIG/Oil&Gas/ Subpart OOOO/OMB Feb12/Action Memo for OMB – Oil and Natural Gas – 022312 - jcr.docx