

Oil and Natural Gas Sector: Emission Standards for New, Reconstructed, and Modified Sources Reconsideration Proposal

Introductory Briefing for Interagency Workgroup
May 2, 2018

Overview

- ▶ Background
- ▶ Proposal Overview
 - ▶ Fugitive Emissions Requirements
 - ▶ Alternative Means of Emissions Limitations
 - ▶ Other Proposed Changes
- ▶ Regulatory Impact Analysis

Background

- ▶ **June 3, 2016**, EPA finalized New Source Performance Standards (NSPS) for the oil and gas industry.
 - ▶ The NSPS built on requirements of a 2012 NSPS to reduce VOC emissions by covering sources not previously regulated and added requirements to reduce emissions of greenhouse gases (by setting an emissions limit for methane).
- ▶ **August 2016**, EPA received petitions for reconsideration and judicial review on the 2016 NSPS.
 - ▶ The petitions for reconsideration addressed technical and implementation challenges.
 - ▶ The petitions for judicial review included policy issues such as the regulation of methane and source category definition.
- ▶ **April 18, 2017**, EPA granted reconsideration on the fugitive emissions requirements and on **June 5, 2017**, granted reconsideration on the well site pneumatic pumps standards and the requirements for closed vent systems to be certified by a professional engineer.
 - ▶ In June 2017, EPA also issued a 90-day administrative stay of these **three provisions** which was vacated by the U.S. Court of Appeals for the D.C. Circuit on **July 3, 2017**.
- ▶ **June 16, 2017**, EPA published two proposals to stay **three provisions** of the 2016 NSPS – to give the agency time to complete the reconsideration process.
- ▶ **November 8, 2017**, EPA issued two Notices of Data Availability (NODAs) to address implementation challenges of the proposed stayed requirements and the agency's legal authority to issue a stay.
- ▶ **March 12, 2018**, in response to the proposed stays and NODAs, EPA finalized two narrow technical amendments to OOOOa, to address immediate compliance concerns.
 - ▶ Removes requirements that “delayed repairs” of fugitive emissions be repaired during unscheduled or emergency shutdowns.
 - ▶ Provides a separate monitoring schedule for well sites on the Alaskan North Slope to accommodate the area's arctic climate.

Proposal Overview: Technical and Implementation Challenges

- ▶ The key areas being addressed are the fugitive emissions requirements and the state equivalency determinations under the alternative means of emission limitations (AMEL) process.
- ▶ Proposing additional changes to streamline implementation and reduce compliance burden.
- ▶ Proposing an overall streamlining of the recordkeeping and reporting requirements, and technical corrections to OOOOa.
- ▶ Five technical issues:
 - ▶ Applicability of the fugitive emissions requirements to low production well sites.
 - ▶ Process and criteria for an AMEL.
 - ▶ Technical infeasibility determination relative to controlling pumps at well sites.
 - ▶ Greenfield site definition.
 - ▶ Professional engineer certification requirements for closed vent systems.

Proposal Overview: Fugitive Emissions Requirements

- ▶ Reduce the monitoring frequency for well sites:
 - ▶ Non-low production – semiannual for 2 years, followed by annual
 - ▶ Low production – annual
 - ▶ Allow an offramp from monitoring when a site later becomes a wellhead only site
 - ▶ Expanding the Alaskan North Slope amendments to compressor stations, proposing annual surveys for these compressor stations
- ▶ Exempt third party /midstream equipment at well sites by redefining a well site to not include fugitive components downstream of the custody meter.
- ▶ Clarifying how a well site that only contains a centralized tank battery is modified
- ▶ Propose to align closed vent system monitoring for pneumatic pumps with storage vessels
- ▶ For the monitoring plan, allow two options as alternatives to the observation path: use of an inventory, or providing a description of each major production and processing equipment and how it will be monitored.

Proposal Overview: AMEL

- ▶ *Emerging Technology* -- Proposing to allow owners and operators, manufacturers and vendors, and trade associations to apply for an AMEL, aligning the requirements with the Clean Air Act section 111
- ▶ *State Equivalency* – Proposing separate application criteria for state programs, and proposing alternative fugitive standards for monitoring, repair, and recordkeeping for specific state programs (California, Colorado, Ohio, Utah, Texas, and Pennsylvania)

Proposal Overview: Other Changes

- ▶ *PE Certifications* – allow certification of closed vent systems by either a PE or an in-house engineer
- ▶ *Pneumatic Pumps* – remove distinction between greenfield and non-greenfield sites, allowing all well sites to claim a technical infeasibility exemption for routing pneumatic pumps to an existing control device.
- ▶ *Well completions* – clarify the location of a separator during well completions, and exempt screenouts, coil tubing cleanouts, and plug drill outs from the definition of flowback.

Regulatory Impact Analysis

Cost Savings, Forgone Benefits and Emissions Increases of the Proposed Option Compared to the 2018 Baseline, 2019 through 2025 (millions 2016\$)

	7%		3%	
	Present Value	Equivalent Annualized Value	Present Value	Equivalent Annualized Value
Benefits (Total Cost Savings)	\$218	\$38	\$277	\$43
Total Annual Cost Savings	\$246	\$43	\$313	\$49
Forgone Value of Product Recovery	\$28	\$4.9	\$36	\$5.6
Costs (Forgone Domestic Climate Benefits)¹	\$7.8	\$1.3	\$31	\$4.8
Net Benefits²	\$210	\$36	\$246	\$38
Emissions	Total Change			
Methane (short tons)	220,000			
VOC	60,000			
HAP	2,300			
Methane (million metric tons CO2E)	4.9			

¹ The forgone benefits estimates are calculated using estimates of the social cost of methane (SC-CH₄). SC-CH₄ values represent only a partial accounting of domestic climate impacts from methane emissions.

² Estimates may not sum due to independent rounding.

- ▶ Baseline updates include using the 2018 AEO, the April 2018 release of the GHGI, updated data from DrillingInfo, estimating the cost of professional engineer certifications and using the interim domestic social cost of methane in the benefits estimates
- ▶ Present values are discounted to 2016

Questions?
