

Technical Bulletin

Summary of Final Oil and Gas NSPS

On June 3, 2016, the U.S. Environmental Protection Agency (EPA) promulgated Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution (NSPS). This includes promulgated amendments to 40 Code of Federal Regulations (CFR) Part 60, Subpart OOOO (updates on the 2012 rule) and a new Subpart OOOOa. NSPS OOOOa will apply to facilities constructed, modified or reconstructed after September 18, 2015.

EPA's June 2016 actions include three final rules that, together, are intended to curb emissions of methane, volatile organic compounds (VOCs), and toxic air pollutants from new, reconstructed, and modified oil and gas sources. Besides the two NSPS rules, EPA also issued a final rule to clarify when multiple pieces of equipment and activities in the oil and gas industry must be deemed a single source when determining whether major source permitting programs apply.

Along with the final rulemakings, EPA also issued for public comment an Information Collection Request (ICR) that will require companies to provide information that EPA will use to develop regulations to reduce methane emissions from existing oil and gas sources.

EPA is also working to complete final Control Techniques Guidelines (CTGs) for reducing VOC emissions from existing oil and gas sources in certain ozone nonattainment areas and states in the Ozone Transport Region. The agency anticipates issuing the CTGs later this year.

The NSPS rules include the following:

- Requirements to control methane and VOCs from two types of compressors used at natural gas compressor stations: centrifugal compressors and reciprocating compressors.
- Limits on bleed rates for pneumatic controllers at gas transmission stations.
- Zero emission limits on natural-gas driven diaphragm pumps.

- Required capture of natural gas escaping from hydraulically fractured oil wells through the process known as a “reduced emissions completion” or “green completion.”
- Routing gas from diaphragm pumps at natural gas and oil well sites to a control device or process that is available on site.
- Development of a leak monitoring plan and completion of leak testing requirement for compressor stations, gathering and boosting stations, oil well sites, and gas well sites.
- Various recordkeeping, reporting, and notification requirements submitted digitally in the EPA Electronic Reporting Tool (ERT)

The new NSPS does not change any of the following requirements from the 2012 rule:

- Storage tanks.
- Leak testing at gas processing facilities.
- Control requirements for sulfur dioxide (SO_x) at gas sweetening units.
- Pneumatic controllers except at transmission stations.

EPA also chose not to regulate pneumatic pumps or natural gas-fired piston pumps at this time.

The final “Source Determination Rule” clarifies when oil and gas equipment and activities must be deemed a single source under Prevention of Significant Deterioration (PSD), Nonattainment New Source Review (NSR), and Title V permitting programs. The major change is that the term “adjacent” has been revised to include shared equipment on sites within ¼ mile of each other.

Additional rule details are provided in the table below.

For a copy of the rule and related documents:

<https://www3.epa.gov/airquality/oilandgas/actions.html>

For more information contact:

Pat Sullivan, REPA, CPP, BCES

psullivan@scsengineers.com

(916) 361-1297

Sources covered by the 2012 New Source Performance Standards (NSPS) for VOCs and the 2016 NSPS for Methane and VOCs, by site				
Location and Equipment/Process Covered	Required to Reduce Emissions Under EPA Rules	Rules that Apply		
		2012 NSPS for VOCs*	2016 NSPS for methane	2016 NSPS for VOCs
Natural Gas Well Sites				
Completions of hydraulically fractured wells	✓	•	•	
Compressors				
Equipment leaks	✓		•	•
Pneumatic controllers	✓	•	•	
Pneumatic pumps	✓		•	•
Storage tanks	✓	•		
Oil Well Sites				
Completions of hydraulically fractured wells	✓		•	•
Compressors				
Equipment leaks	✓		•	•
Pneumatic controllers	✓	•	•	
Pneumatic pumps	✓		•	•
Storage tanks	✓	•		
Production Gathering and Boosting Stations				
Compressors	✓	•	•	
Equipment leaks	✓		•	•
Pneumatic controllers	✓	•	•	
Pneumatic pumps				
Storage tanks	✓	•		
Natural Gas Processing Plants*				
Compressors	✓	•	•	
Equipment leaks	✓	•	•	
Pneumatic controllers	✓	•	•	
Pneumatic pumps	✓		•	•
Storage tanks	✓	•		
Natural Gas Compressor Stations (Transmission & Storage)				
Compressors	✓		•	•
Equipment leaks	✓		•	•
Pneumatic controllers	✓		•	•
Pneumatic pumps				
Storage tanks	✓	•		
* Note: Types of sources already subject to the 2012 NSPS requirements for VOC reductions that also are covered by the 2016 methane requirements will not have to install additional controls, because the controls to reduce VOCs reduce both pollutants				