

New Source Performance Standard (NSPS) Subpart OOOO – Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution



On April 17, 2012, the U. S. Environmental Protection Agency (EPA) published New Source Performance Standards (NSPS) Subpart OOOO – Standards of Performance for Crude Oil and Natural Gas Production, Transmission, and Distribution. The rule applies to facilities that commence construction, reconstruction, or modification after August 23, 2011. On August 2, 2013, EPA issued updates to NSPS Subpart OOOO with the primary focus of extending some compliance deadlines and clarifying compliance requirements for subject storage vessels.

Overview

On August 2, 2013, the EPA updated NSPS Subpart OOOO. The rule is intended to regulate volatile organic compound (VOC) and sulfur dioxide (SO₂) emissions, along with emissions and work practice standards for the following affected facilities: hydraulically fractured/re-fractured natural gas wells, centrifugal and reciprocating compressors, gas-driven pneumatic devices, and on-shore natural gas processing plants. These updates also clarify compliance requirements for storage vessels, provide an extension and phased-in VOC emission control deadlines, and establish alternative emission limits for storage vessels whose emissions decrease below the applicability threshold.

Applicability

Any production, gathering, gas processing, or transmission facility that commenced construction, reconstruction or modification after August 23, 2011 is subject to NSPS Subpart OOOO. Affected sources under the subpart include the following:

- Each storage vessel at a production, gathering, gas processing, or transmission site;
- Each centrifugal (wet seal) or reciprocating compressor at a gathering or gas processing site;
- Each pneumatic controller (continuous) at a production, gathering, or gas processing site;
- Each gas well at a production site;
- Each sweetening unit at a gas processing site; and
- Fugitive emissions at a gas processing site.

Standards for Hydraulically Fractured Natural Gas Wells – Natural gas wells that are hydraulically fractured, and for which well completion operations begin before January 1, 2015, are required to capture and direct flowback emissions to a completion combustion device (e.g., flare). Natural gas wells that are hydraulically fractured, for which well completion operations commence on or after January 1, 2015, are required to also employ reduced emission completion (REC) technology (i.e., “green completion” technology) to control emissions during flowback.

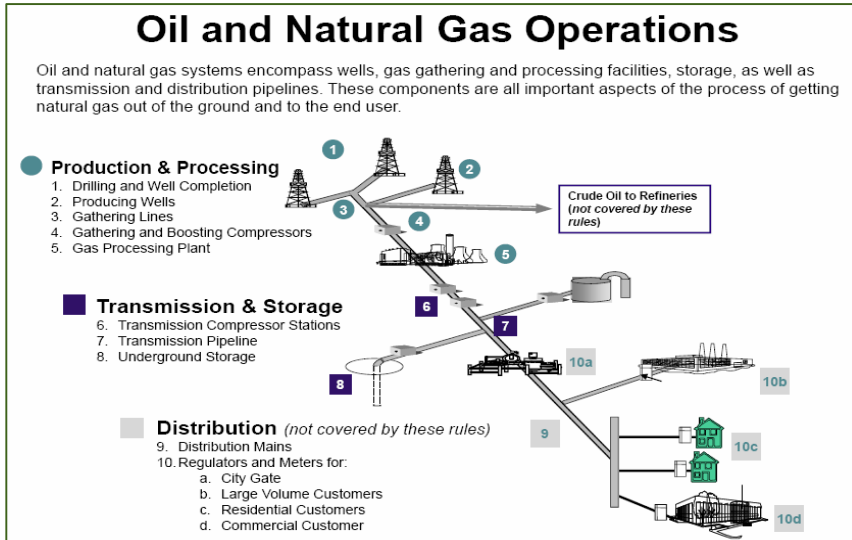
Standards for Compressors – Centrifugal compressors with wet seals located between the wellhead and point where natural gas is transferred to the natural gas transmission and storage segment (excluding compressors at well sites) are required to utilize a control system that captures emissions from the wet seal fluid degassing system and routes them to a control device in order to reduce VOC emissions by at least 95%. The control device is subject to performance testing, recordkeeping and reporting requirements. Reciprocating compressor operators are required to either track and record hours of operation and change rod packings every 26,000 hours or, alternatively, change rod packings every 36 months and track and record only the dates when the rod packings are changed.

Standards for Pneumatic Controllers – Continuous bleed natural gas-driven pneumatic controllers that are operating at a natural gas bleed rate greater than six standard cubic feet per hour (scfh), and located between the wellhead and point at which natural gas is transferred to the natural gas transmission and storage segment, or that are located at natural gas well sites, are required to be tagged with the month and year of installation, reconstruction, and/or modification, as well as the design bleed rate. Continuous bleed natural gas-driven pneumatic controllers at natural gas processing plants are required to be zero bleed.



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Standards for Storage Vessels – Storage vessels with VOC emissions above six tons per year (tpy) are required to reduce VOC emissions by 95% through the use of a control device such as a floating roof or closed vent system and control device. The August 2, 2013 amendments to the rule allow for tanks that demonstrate having reduced monthly uncontrolled emissions to below four tpy for at least 12 consecutive months to conduct ongoing monthly evaluation of uncontrolled VOC emissions as an alternative to complying with the 95% control efficiency requirements.



Equipment Leaks – The rule requires implementation of a leak detection and repair (LDAR) program for equipment (excluding compressors) at natural gas processing plants.

Sweetening Units – The rule requires SO₂ emission reductions based on sulfur feed rate and sulfur content of acid gas (up to 99.9%). Determinations are made based on detailed performance test procedures and daily sulfur accumulation, acid gas hydrogen sulfide (H₂S) concentration, and continuous acid gas flow measurements.

Compliance Dates

Group 1 Tanks – Tanks Constructed Prior to April 12, 2013 – April 15, 2015

Group 2 Tanks – Tanks Constructed After April 12, 2013

- Tanks brought online after April 12, 2013 – **April 15, 2014**
- Tanks brought online after February 14, 2014 – **within 60 days of startup**

Pneumatic Controllers

- Located at a natural gas processing plant – **October 15, 2012**
- Located between gas well and natural gas processing plant – **October 15, 2013**

Gas Wells

- Combustion Completion Devices – **October 15, 2012**
- REC – **January 1, 2015**

Compressors – October 15, 2012

Equipment Leaks – October 15, 2012

Sweetening Units – October 15, 2015



For further questions concerning this and other air quality issues, please contact us at:

WWW.PROVIDENCEENG.COM

Kevin Calhoun, PE
Senior Managing Engineer – Air Quality
kevincalhoun1@providenceeng.com

Carley Williams
Director of Business Development
carleywilliams@providenceeng.com

Providence Headquarters: 1201 Main Street | Baton Rouge, Louisiana 70802 | Phone: (225) 766-7400 | Fax: (225) 766-7440

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