

SUMMARY OF REQUIREMENTS FOR PROCESSES AND EQUIPMENT AT NATURAL GAS PRODUCTION GATHERING & BOOSTING STATIONS

On May 12, 2016, EPA issued final updates to its New Source Performance Standards for the oil and gas industry to reduce emissions of greenhouse gases – most notably methane – along with smog-forming volatile organic compounds (VOCs). Gathering and boosting compressor stations collect gas from multiple wells and move it toward a natural gas processing plant. For these stations, the final updates add requirements for detecting and repairing leaks.

Finding and Repairing Leaks

- Leaks, also known as “fugitive emissions,” can occur at a number of points at a natural gas gathering and boosting station when connections are not properly fitted, hatches are not properly weighted and sealed, or when seals and gaskets start to deteriorate. Leaks can be a significant source of methane and VOC emissions in the rapidly growing oil and gas industry.
- The final NSPS requires that owners/operators of gathering and boosting stations develop and implement a leaks monitoring plan. Owners/operators must use a technology known as optical gas imaging to conduct a leaks survey. Optical gas imaging equipment uses a special camera to “see” emissions of methane and VOCs.
 - Owners/operators may use “Method 21” as an alternative to optical gas imaging. Method 21 is an EPA method for determining VOC emissions from process equipment. The method is based on using a portable VOC monitoring instrument, such as an organic vapor analyzer (sometimes referred to as a “sniffer”).
- The leaks survey covers a number of components, including valves, connectors, pressure-relief devices, open-ended lines, flanges, compressors and thief hatches on controlled storage tanks, among others.
- Owners/operators must conduct an initial leaks survey within one year after the final rule is published in the Federal Register or within 60 days of the startup of a new or modified gathering and boosting station, whichever is later. Monitoring must be repeated quarterly following the initial survey.
- Any leaks found during the surveys must be repaired within 30 days, unless the repair would require shutting down production. In that case, owners/operators are required to fix the leak at the next scheduled shutdown, or within two years.
 - Equipment that vents natural gas as part of normal operation is not considered to be leaking and is not covered by this requirement; however, leaks surveys can also

help operators detect malfunctions in these devices, such as pneumatic controllers.

- The final rule also creates a pathway for EPA to approve the use of emerging alternative leaks monitoring technology, which is developing rapidly. The rule outlines the information owners/operators must submit to demonstrate that using the alternative technology is capable of achieving equivalent methane and VOC reductions that can be achieved by using optical gas imaging or Method 21 to find leaks, and then repair them.

New & Modified Pneumatic Pumps

- EPA is not finalizing requirements for pneumatic pumps used at gathering and boosting stations. After considering information that became available during the comment period on the proposed rule, EPA has determined that the agency does not have reliable information about the prevalence of pneumatic pump use at these sites at this time.

Requirements for Equipment Covered by the 2012 Rules

- The final updates to the NSPS add greenhouse gas standards (in the form of methane emissions limits) for the equipment and processes that were covered in the 2012 NSPS for VOCs. EPA's analyses have determined that the best systems for reducing methane and VOC emissions are the same. As a result, the final requirements for new, modified and reconstructed centrifugal and reciprocating compressors and the requirements for pneumatic controllers, remain the same as in the 2012 rule.
- In addition, the 2012 rules included requirements for storage tanks across the oil and gas sector. The 2016 final NSPS does not change those requirements.

MORE INFORMATION

- To read the final rule and summary information on requirements for other types of facilities in the oil and gas industry, visit www.epa.gov/airquality/oilandgas