SUMMARY OF REQUIREMENTS FOR EQUIPMENT AT NATURAL GAS COMPRESSOR STATIONS

Natural gas compressor stations move gas along a pipeline. In addition to compressors, compressor stations often include equipment to remove and store water vapor, condensate and other remaining impurities. Equipment and processes at natural gas compressor stations may be covered by requirements under the New Source Performance Standards (NSPS) for volatile organic compounds, and the National Emissions Standard for Hazardous Air Pollutants (NESHAP) for Natural Gas Transmission and Storage. EPA has made a number of changes in the final rules based on public comments.

NSPS Requirements for Compressors and Pneumatic Controllers Do Not Apply

- EPA is not finalizing standards for compressors or pneumatic controllers in the transmission segment of this industry. Based on public comment, the agency concluded it needed additional information in order to set cost-effective standards for compressors and controllers in this segment, where VOC content of the gas generally is low.

REQUIREMENTS FOR OTHER EQUIPMENT

NSPS Requirements for Storage Vessels at Compressor Stations

- Storage tanks at compressor stations are commonly used to store condensate, and water. New storage tanks with VOC emissions of 6 tons a year or more must reduce VOC emissions by at least 95 percent. EPA expects this will generally be accomplished by routing emissions to a combustion device.
  - To ensure enough combustion devices are available to meet this requirement, the final rule provides a one-year phase-in for this requirement.

Air Toxics Requirements for Glycol Dehydrators

- Glycol dehydrators, used to remove water vapor from gas, are subject to one of two air toxics standards, depending on their location. Glycol dehydrators located at compressor stations are subject to the NESHAP for Natural Gas Transmission and Storage.

- Today’s rule retains the existing standards for large glycol dehydrators and sets new standards for small glycol dehydrators. A glycol dehydrator is used to remove excess water vapor from natural gas.
  - Large dehydrators: The final rule also retains the existing the 1-ton-per-year benzene compliance option for large glycol dehydrators, meaning operators may reduce benzene emissions from large dehydrators to less than 1 ton per year as an alternative to reducing total air toxics emissions by 95 percent.
  - Small dehydrators: A dehydrator is considered small if it has an annual average natural gas flow rate of less than 283,000 standard cubic meters per day or
annual average benzene emissions of less than 1 ton.

- Both existing and new small glycol dehydrators must meet a unit-specific limit for emissions of BTEX (benzene, toluene, ethylbenzene and xylene) that is based on the unit’s natural gas throughput and gas composition. The limit is determined by applying a formula set out in the final rule.

- New small glycol dehydrators must comply with the air toxics requirements immediately upon startup or within 60 days after the final rule is published in the Federal Register, whichever is later. Existing small glycol dehydrators must comply within three years after the effective date of the rule. A small glycol dehydrator is considered existing if construction or reconstruction began before Aug. 23, 2011.

  - Today’s air toxics standards apply only to sources that are considered “major sources” of air toxics. A major source emits 10 or more tons of a single air toxic or 25 tons or more of a combination of toxics in a year.

MORE INFORMATION

- For summary information on requirements for other types of facilities, or to read the final rules, visit www.epa.gov/airquality/oilandgas