

FINAL UPDATES TO REQUIREMENTS FOR STORAGE TANKS USED IN OIL AND NATURAL GAS PRODUCTION AND TRANSMISSION

Storage tanks are used to temporarily hold liquids produced during the production and transmission of oil and natural gas. These storage tanks can emit ozone-forming volatile organic compounds (VOCs), along with several toxic air pollutants, including benzene. Storage tanks used in oil or natural gas production, and transmission are subject to EPA's 2012 New Source Performance Standards (NSPS) for VOCs if they have the potential to emit 6 or more tons of VOCs a year.

ACTION

- On Aug. 2, 2013, EPA updated its 2012 performance standards for oil and natural gas to address VOC emissions from storage tanks used by the crude oil and natural gas production industry. The updates will ensure the tanks likely to have the highest emissions are controlled first, while providing tank owners and operators time to purchase and install VOC controls. The amendments reflect recent information showing that more storage tanks will be coming on line than the agency originally estimated.
- All tanks subject to the NSPS must control VOC emissions by 95 percent or meet the alternative emissions limit EPA is finalizing today.
- The updates:
 - phase in the date by which storage tanks must install VOC controls;
 - establish alternative emission limits for tanks where emissions have declined;
 - clarify test protocols for control equipment;
 - clarify the types of tanks subject to the rule;
 - streamline compliance monitoring requirements to ensure leaks are repaired while EPA addresses monitoring issues raised in reconsideration petitions; and
 - adjust requirements for submitting annual reports.
- The updates respond to issues raised in several petitions for reconsideration of the 2012 standards. EPA is continuing to evaluate other issues raised in the petitions.

SUMMARY OF UPDATES

Tanks Subject to the Rule

- The updated rule clarifies the type of storage tanks that are subject to the NSPS. Tanks are considered “affected facilities” if they: were constructed after Aug. 23, 2011; have potential VOC emissions of 6 or more tons per year; and are used to store crude oil, condensate, unrefined petroleum liquids known as “intermediate hydrocarbon liquids,” or produced water. Fuel tanks, for example, are not covered by these rules.
- Tanks with enforceable permit limits under federal, state, local or tribal authority are not affected facilities if those limits are less than 6 tons a year.
- Storage tanks subject to the rule may be located anywhere along the oil and natural gas production and transmission process. For natural gas, this process extends from the natural gas well to the point where gas enters the distribution system; for oil, it extends from the well to the point where oil is transferred to the pipeline for crude oil transmission. Storage tanks located at refineries are not covered by this rule.

Phased-In Control Deadlines

- The 2012 standards required that storage tanks subject to the rule install controls to reduce VOC emissions by Oct. 15, 2013. After those standards were issued, EPA received information that led the agency to substantially increase its estimate of storage tanks that are subject to the rule. In light of that information, and information received during public comment on the proposed changes, EPA is adjusting the compliance date for tanks subject to the rule.
- Emissions from storage tanks generally decline over time, because the amount of liquid that moves through the tank declines as production from a well slows. EPA is setting two compliance dates, based on the date storage tanks were constructed or modified. This phased approach will help ensure the tanks likely to have the highest emissions are controlled first, while giving tank owners/operators time to purchase and install controls.
 - **April 15, 2014** is the compliance deadline for tanks that come online after April 12, 2013, or within 60 days after startup, whichever is later.
 - Within 30 days of startup, owners/operators of these tanks (known as Group 2 tanks) must estimate their tanks’ potential emissions and determine whether their tanks are subject to the rule. Vapors that are collected and re-routed to a process do not have to be counted as potential emissions.
 - If a tank’s potential emissions are 6 or more tons of VOCs per year, the tank owner/operator has an additional 30 days to control VOC emissions.

- **April 15, 2015** is the compliance deadline for tanks constructed between Aug. 23, 2011, and April 12, 2013 (known as Group 1 tanks).
 - Owners/operators of Group 1 tanks have until Oct. 15, 2013 to estimate their tanks' potential emissions and determine whether their tanks are subject to the rule. Vapors that are collected and re-routed to a process do not have to be counted as potential emissions.
 - If a tank's potential emissions are 6 or more tons of VOCs per year, the owner/operator has to control VOC emissions by April 15, 2015.
 - Based on public comment and additional information the agency received about the availability of VOC controls, EPA is not finalizing a proposed requirement that Group 1 tanks control VOC emissions only if there is a change that potentially would increase the tank's emission – such as the addition of a well supplying the tank, or the refracture of an existing well. All Group 1 tanks subject to the rule must control VOC emissions.

Alternative Emissions Limit

- EPA also is establishing an alternative emissions limit for storage tanks that allows owners/operators to either:
 - Reduce VOC emissions at a tank by 95 percent, as required in the 2012 rule; or
 - Demonstrate emissions from a tank have dropped to less than 4 tons per year of VOCs without emission controls.
 - This alternative limit reflects the decline in emissions that occurs at most tanks over time and allows owners/operators to shift control equipment to higher-emitting tanks.
 - To qualify for this emissions limit, owners/operators have to document that a tank's monthly uncontrolled emissions have been below 4 tons per year for at least 12 consecutive months.
 - In addition, owners/operators must re-evaluate uncontrolled VOC emissions on a monthly basis. If emissions increase (at or above the 4 ton-per-year limit), owners/operators have 30 days to meet the 95 percent reduction requirement. However, if the increase was associated with the fracture or re-fracture of a well supplying the storage tank, owners/operators must meet the 95 percent control

limit as soon as liquids from the fractured or re-fractured well are routed to the tank.

- Similar requirements apply to storage vessels that have been taken out of service and then returned to service.

Clarifying Test Protocols for Control Equipment

- The 2012 NSPS allows owners/operators to use manufacturer-tested emission control device models (combustors) that have been demonstrated to reduce VOC emissions from storage tanks by 95 percent, rather than requiring field performance testing of these devices.
- Today's updates align the protocol that emission control manufacturers must use in testing the controls with the testing protocol required in EPA's 2012 air toxics regulations for storage tanks.
- EPA also is allowing tank owners/operators to use control devices that are designed to reduce VOC emissions by 95 percent, while the agency reviews issues raised in the reconsideration petitions related to field testing protocol requirements. EPA expects to address this issue by the end of 2014.

Reviewing Monitoring Requirements for Tanks That Already Have Controls

- The 2012 final NSPS required that tank owners/operators conduct a performance test and use a continuous parametric monitoring system (CPMS) to demonstrate that they are meeting requirements to reduce VOC emissions from tanks by 95 percent.
- EPA received several petitions asking that the agency reconsider this requirement, based on the large number of storage tanks affected each year and the remoteness of many of the well sites where the tanks are located. EPA is continuing to evaluate this issue and will address it by the end of 2014.
 - While the agency completes its evaluation of monitoring issues raised in the reconsideration petitions, the agency is streamlining compliance and monitoring requirements for tanks that have already installed VOC controls. For tanks with controls, the updates require monthly inspections of covers, closed-vent systems and control devices. This step is expected to minimize VOC emissions by leading to prompt repairs of leaks, while requiring little or no specialized monitoring training or equipment.

Timing of Annual Reports

- The 2012 final NSPS required that owners/operators submit an annual report on well completions, along with information on storage tanks and other equipment constructed or modified during the year. The rule gave owners/operators 30 days to submit the report, which must be certified by a senior company official. Several of the reconsideration petitions noted that 30 days is not enough time to compile the required information and obtain a senior official's signature. These updates give owners/operators 90 days to submit this report.

BACKGROUND

- On April 17, 2012, EPA issued cost-effective regulations, as required by the Clean Air Act, that reduce harmful air pollution from the oil and natural gas industry, while allowing continued, responsible growth in U.S. oil and natural gas production. The final rules included the first federal air standards for natural gas wells that are hydraulically fractured, along with requirements for several of other sources of pollution in the oil and gas industry that were not previously regulated at the federal level.
- After EPA issued the final rule, the agency received petitions for reconsideration from several industry and environmental organizations, and the Texas Commission on Environmental Quality. EPA is continuing to evaluate other issues raised in those petitions.
 - Industry groups that petitioned for reconsideration are: the America's Natural Gas Alliance; the American Petroleum Association; Gas Processors Association; the Interstate Natural Gas Association of America; the Texas Oil and Gas Association; the Western Energy Alliance; REM Technology Inc.; and (jointly) the Independent Petroleum Association of America, Independent Oil and Gas Association of West Virginia, Inc., Kentucky Oil & Gas Association, Inc., Indiana Oil and Gas Association, Pennsylvania Independent Oil & Gas Association, Ohio Oil and Gas Association, and the Illinois Oil & Gas Association.
 - Environmental groups that petitioned for reconsideration are: Earthjustice; and (jointly) Clean Air Council, the Clean Air Task Force, Environmental Defense Fund, Group Against Smog and Pollution, the Natural Resources Defense Council and the Sierra Club.