

FINAL UPDATES AND CLARIFICATIONS FOR REQUIREMENTS FOR WELL COMPLETIONS, STORAGE TANKS AND NATURAL GAS PROCESSING PLANTS

The U.S. Environmental Protection Agency (EPA) is finalizing updates and clarifications to its cost-effective regulations 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 updates do not change the emission reductions in the rules, which include the first federal air standards for natural gas wells that are hydraulically fractured, along with requirements for storage tanks and other equipment.

SUMMARY OF ACTION

- On Dec. 19, 2014, the U.S. Environmental Protection Agency finalized updates and clarifications to its 2012 New Source Performance Standards for the oil and natural gas industry. Today's amendments respond to requests for clarification and issues raised in administrative petitions for reconsideration.
- The updates:
 - Provide additional detail on requirements of handling of gas and liquids during well completion operations;
 - Clarify requirements for storage tanks;
 - Define low-pressure wells;
 - Clarify certain requirements for leak detection at natural gas processing plants;
 - Update requirements for reciprocating compressors; and
 - Update the definition of "responsible official."

Clarifications to well completion requirements

- EPA is identifying two distinct stages of a well completion operation known as "flowback," with specific requirements for handling gas and liquids during each stage, including clarifying when green completion equipment must be used.
- During flowback, fracturing fluids, water, and reservoir gas come to the surface at a high velocity and volume. This mixture includes a high volume of VOCs and methane, along with air toxics such as benzene, ethylbenzene and n-hexane. The typical flowback process lasts from three to 10 days.
- Today's clarifications define two stages for the flowback process:
 - The initial flowback stage extends from the beginning of flowback following hydraulic fracturing or refracturing of a gas well and ends when it is technically feasible for a separator (also known as "green completion" equipment) to function.

- The next stage is the “separation flowback stage.” In this stage, special equipment separates gas, liquid hydrocarbons and water that come from the well as it is being prepared for production. The captured gas and hydrocarbons can then be treated and sold.
- Wells subject to green completion requirements must begin using green completions no later than Jan. 1, 2015. Wells not subject to these requirements, such as exploratory wells, must flare the gas during separation.
- The separation flowback stage ends when either: 1) the well is shut in and the flowback equipment is permanently disconnected from the well; or 2) the startup of production.

Updates and clarifications to storage tanks requirements

- EPA is making several updates and clarifications for its requirements for storage tanks used in the oil and gas industry. They include updates to requirements for:
 - *Determining potential emissions.* The updates clarify that VOC emissions that are captured as a result of permit requirements do not count toward determining whether a tank is subject to emission control requirements under these air regulations.
 - *Thief hatch requirements.* EPA is allowing other mechanisms besides weighted thief hatches to ensure these hatch lids remain properly sealed.
 - *Replacement storage tanks.* Tanks that replace storage tanks that already are considered affected facilities are immediately subject to the same requirements as the tanks they are replacing.
 - *Storage tanks removed from service.* EPA is requiring that the date a storage tank is removed from service and the date a storage tank is returned to service be included in the notification requirements that are part of an operator’s annual report. EPA is also clarifying that storage tanks that are permanently removed from service are not affected by any requirements.
 - *Storage tanks placed into/returning to service.* For storage tanks removed from service and then returned to service at a different location, the updates clarify that potential emissions must be estimated at the new location to determine if requirements apply. However, tanks that are removed from service and subsequently used for purposes other than holding crude oil, condensate, intermediate hydrocarbon liquids, or produced water, are not covered by this rule.

Other updates and clarifications

- *Definition of low-pressure well.* In its 2012 rules, EPA defined low-pressure wells in response to public comments. While the agency believes the definition was a logical outgrowth of public comments on the proposed rules; EPA re-proposed the definition in response to a reconsideration petition in order to provide further opportunity for comment. EPA is finalizing the same definition.
- *Leak detection requirements for certain natural gas processing plants.* EPA is updating the definition of equipment to clarify that equipment leak detection and repair requirements for addressing equipment leaks apply to equipment only at onshore natural gas processing plants. The agency also is correcting an inadvertent omission in the 2012 regulations, to include connectors in the list of equipment exempt from leak detection requirements for small gas processing plants and gas processing plants on the Alaskan North Slope.
- *Reciprocating compressors:* EPA is adding a third alternative for the work practice options for controlling emissions from rod packing in compressors. This alternative allows operators to reduce VOC emissions by routing gas that would have been emitted as part of a compressor's routine operation to the engine that powers the compressors for use as fuel.
- *Certifying official definition:* EPA is updating its definition of the official responsible for certifying that annual reports on well completions are true accurate and complete. The updates allow officials responsible for facilities employing up to 250 employees and that have less than \$25 million gross annual sales or expenditures to delegate this authority after notifying the agency rather than after approval. Requirements for officials responsible for facilities employing more than 250 employees or that have gross annual sales or expenditures exceeding \$25 million remain unchanged. EPA is also changing the term from "responsible official" to "certifying official" for these provisions in order to avoid confusion with Title V permitting requirements for "responsible officials."

BACKGROUND

- On April 17, 2012, EPA issued cost-effective regulations that, as required by the Clean Air Act, 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 2012 final rules, the agency received petitions for reconsideration from several industry and environmental organizations, and the Texas Commission on Environmental Quality. Today's action responds to some of the issues raised in those petitions; EPA is continuing to evaluate other issues.

- 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.
- On August 2, 2013, EPA updated the standards for storage tanks to 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.
- After EPA updated the storage tank requirements, the agency received additional petitions for reconsideration.
- Today’s updates respond to some of the issues raised petitions for reconsideration of the 2012 and 2013 rules; the agency is continuing to evaluate other issues raised in the petitions.

FOR ADDITIONAL INFORMATION

- Today’s updates and additional information on EPA’s air regulations for the oil and natural gas industry are available at <http://www.epa.gov/airquality/oilandgas>.