

Publications

Oil and Gas Alert: U.S. EPA Enforcing Emissions Standards for Storage Vessels

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In September 2015, U.S. EPA published a **Compliance Alert** addressing compliance concerns regarding emissions from controlled storage vessels at oil and natural gas production facilities. Under the federal New Source Performance Standards for Crude Oil and Natural Gas Production, Transmission, and Distribution, 40 CFR Part 60, Subpart OOOO (NSPS OOOO), all new, reconstructed, or modified storage vessels with the potential for volatile organic compound (VOC) emissions of greater than or equal to six tons per year (tpy) are required to reduce VOC emissions by at least 95%. With respect to the VOC performance standards for storage vessels, tanks: (i) that come online after April 12, 2013 were required to be in compliance with NSPS OOOO by April 15, 2014 or within 60 days after startup, whichever is later, and (ii) constructed between August 23, 2011 and April 12, 2013 were required to be in compliance by April 15, 2015.

The Compliance Alert notes that U.S. EPA and state inspectors have observed several instances of detectable emissions from storage vessels, which is an indication that the storage vessel may be emitting VOCs in excess of NSPS OOOO or applicable state regulations. U.S. EPA identified two primary reasons for the detectable emissions: (1) inadequate design and sizing of vapor controlled systems resulting in flash emission events when pressurized liquid is transferred into atmospheric storage vessels, and (2) inadequate vapor control system operation and maintenance practices preventing the control system from achieving its full control capacity.

U.S. EPA identified the following engineering and maintenance practices in the Compliance Alert to help operators reduce VOC emissions and achieve compliance with NSPS OOOO and state regulations:

1. Reduce liquid pressure prior to transferring the liquid to atmospheric storage vessels;
2. Increase the size of piping used for vent lines;

3. Prevent liquid collection in vent lines;
4. Eliminate unintentional natural gas carry-through;
5. Ensure that pressure relief valves are installed and maintained to function as emergency relief valves, rather than a process vent;
6. Install proper thief hatch gaskets to minimize emissions from thief hatches; and
7. Conduct sampling and modeling to estimate potential peak flow of emissions.

U.S. EPA's regulation of air emissions from the oil and natural gas industry is old news. That the Agency has honed in on a particular issue – VOC emissions from storage vessels – however, cannot be ignored. To avoid falling victim to U.S. EPA enforcement initiative, operators with regulated storage vessels should undertake whatever action is necessary to ensure compliance with NSPS OOOO and state regulations.

If you have any questions about the U.S. EPA's Compliance Alert or emissions standards for storage vessels, please contact: [Anthony Giuliani](#) (614.464.6279) or [Ryan Elliott](#) (614.464.5483).