U.S. EPA Proposes New Rules on Air Emissions from the Oil and Gas Sector: Impacts to Owners and Operators

LEGAL ALERT

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On August 18, 2015, the U.S. Environmental Protection Agency (EPA) issued a suite of proposed actions affecting the oil and gas industry. EPA’s proposed Clean Air Act rules address methane emissions from new and modified sources in oil and gas production and transmission, volatile organic compound (VOC) emissions from existing oil and gas production, and permitting for conventional air pollutants from new and modified oil and gas production sources.

1. A proposed New Source Performance Standard (NSPS) would regulate methane and VOC emissions from oil and gas production and transmission activities.
2. Draft Control Techniques Guidelines would provide states with recommendations for reasonably available control technologies to reduce VOCs from existing oil and gas production.
3. A proposed source determination rule affecting the applicability of Clean Air Act New Source Review (NSR) and Title V permitting for adjacent oil and gas production facilities.
4. A proposed Federal Implementation Plan (FIP) to apply EPA’s minor NSR permit program for oil and gas production in Indian Country.

Comments may be submitted on any aspect of EPA’s proposals for 60 days following their publication in the Federal Register.

Oil and Gas NSPS

Impact to owners and operators: Regulation of methane and VOC emissions through additional equipment requirements, monitoring, recordkeeping. Applies to oil and gas well sites, including completions of hydraulically fractured wells, production gathering and boosting stations, and natural gas processing plants and compressor stations.

In 2012, EPA adopted an NSPS to control VOCs from oil and gas production. The required controls under the 2012 NSPS also reduced methane emissions. The 2015 NSPS would directly regulate methane, as well as VOC emissions, at all of the sources that were subject to the 2012 NSPS, and generally expand the types of regulated equipment and
processes. Equipment and processes already subject to the 2012 NSPS that are also covered by the proposed 2015 NSPS would not have to install additional controls. The proposed regulation implements President Barak Obama’s Climate Action Plan, issued in June 2013, that aims to cut methane emissions from the oil and gas sector by 40% to 45% from 2012 levels by 2025.

Sources Affected by the Proposed NSPS

The proposed NSPS affects oil and gas facilities nationwide. In particular, the NSPS would place new requirements to control emissions from the following five types of oil and gas production and transmission facilities: natural gas wells, oil wells, oil and gas production gathering and boosting stations, natural gas processing plants, and natural gas compressor stations. Each of these production and transmission facilities was covered under the 2012 NSPS, but additional categories of equipment and processes at each would be regulated under the new NSPS. Specific requirements are proposed for fugitive emissions, pneumatic pumps and controllers, compressors, and completions of hydraulically fractured wells.

The most notable differences in scope between the 2012 NSPS and 2015 NSPS:

- Equipment leaks and pneumatic pumps would be newly regulated at all five types of facilities.
- Completions of hydraulically fractured wells were regulated only for natural gas production under the 2012 NSPS; the 2015 NSPS would also regulate completions of hydraulically fractured oil wells.
- Compressors and pneumatic controllers would be newly regulated at natural gas compressor stations. Compressors at production gathering and boosting stations and natural gas processing plants are already covered under the NSPS.
- Storage tanks will continue to be addressed at all of the five types of facilities without change.

EPA Seeking Comment

EPA has outlined specific provisions of the proposed NSPS that it is soliciting feedback on. For equipment leak monitoring surveys:

- Whether to allow surveys to be conducted using EPA Method 21 as an alternative to optical gas imaging.
- Whether surveys should be required annually or quarterly. The 2015 NSPS proposes a biannual survey, with the requirement dropping to annual surveys if leaks from less than 1% of covered components are found and increasing to every quarter if leaks from more than 3% of covered components are found in two consecutive surveys.
- Criteria that could be used to determine whether a corporate-wide leak detection and repair program, already in place, could be deemed to meet the proposed NSPS requirements.

For completion of hydraulically fractured oil wells:
Green completions from hydraulically fractured oil wells would not be required if it is not feasible to get the captured gas to a pipeline. In that vein, EPA is seeking comment on criteria to help define the availability of gathering lines, such as distance from the well, capacity to accept additional throughput, and the ability to obtain rights of way to cross properties.

- Exempting from green completion, wells with a gas-to-oil ratio of less than 300 standard cubic feet of gas per barrel of oil.
- Exempting low production wells, with an average daily production equivalent to 15 barrels a day or less, and how to identify those wells before the well completion phase.
- Whether there would be a sufficient supply of green completion equipment and personnel available by the effective date of the rule, 60 days after the final rule is published in the Federal Register, and whether the green completion requirement should be phased in.

Control Techniques Guidelines

Impact to owners and operators: Increased controls for oil and gas operations in ozone nonattainment areas.

The draft Control Techniques Guidelines would provide recommendations to state and local agencies in determining reasonably available control technology (RACT) for reducing VOC emissions from existing oil and gas production and processing operations, affecting many of the same sources, processes, and equipment covered under the NSPS, including compressors, equipment leaks, pneumatic controllers and pumps, and storage tanks. RACT applies only in ozone nonattainment areas classified as moderate or above and in 11 states in the Northeast in the Ozone Transport Region.

EPA has proposed to tighten federal ozone standards in a final rule anticipated October 1, 2015. Under a more stringent standard, it is expected that the number of areas designated as moderate, serious, severe, or extreme nonattainment for ozone, and requiring the implementation of RACT, would increase. Areas would be redesignated by October 2017 under the revised ozone standard; if the draft Control Techniques Guidelines are adopted, states would have two years to submit State Implementation Plan revisions to incorporate the recommended RACT or otherwise respond to the Guidelines.

Proposed Source Determination Rule

Impact to owners and operators: The more equipment or activities aggregated together as one source, the more likely that source will trigger permitting or exceed major source permitting thresholds.

The existing NSR and Title V permitting programs treat equipment or activities as one “source” for purposes of determining permitting requirements if they (1) are in the same industrial grouping, e.g., have the same SIC code, (2) are under the control of the same person or people, and (3) are located on contiguous or adjacent properties. EPA has proposed to define the term “adjacent” to clarify which oil and gas
equipment and activities would be considered part of one source. EPA has two proposed definitions it is seeking public comment on:

- One definition defines “adjacent” in terms of specific proximity. Equipment or activities would be adjacent if they are located on the same site or sites within a quarter mile of each other. EPA has stated that it prefers this definition.
- The other definition defines “adjacent” in terms of general proximity or function. Equipment and activities would be considered adjacent if they are near each other or related by function, such as being connected by a pipeline.

The new definition would apply to onshore oil and gas production and natural gas processing.

**FIP for Indian Country**

*Impact to owners and operators:* Oil and gas production within Indian Country falling below major source thresholds would be able to register under the FIP rather than obtain site-specific preconstruction permits.

EPA has proposed a federal plan to implement EPA’s minor NSR permitting program for oil and gas production in Indian Country. True minor sources would be able to comply with EPA’s proposed FIP instead of applying for site-specific NSR preconstruction permits. The proposed FIP would incorporate the NSPS for the oil and natural gas industry, including the 2015 NSPS, discussed above, as well as:

- performance standards for VOC liquid storage tanks,
- performance standards for stationary compression ignition internal combustion engines,
- performance standards for stationary spark ignition internal combustion engines,
- air toxics standards for industrial, commercial, and institutional boilers and process heaters, and
- air toxics standards for oil and natural gas production facilities.

These requirements would mean emissions limits for a range of equipment and processes in oil and gas production, including completions of hydraulically fractured oil and gas wells, storage tanks, pneumatic pumps and controllers, compressors, glycol dehydrators, fuel storage tanks, stationary compression ignition and spark ignition engines, and process heaters.

For more information on the proposed regulations, please contact a key contributor.