

EPA's Actions to Reduce Methane Emissions from the Oil and Natural Gas Industry: Final Information Collection Request for Existing Sources

Overview

- On Nov. 10, 2016, the U.S. Environmental Protection Agency (EPA) issued a final Information Collection Request (ICR) to require oil and natural gas companies to provide information needed to develop regulations to reduce methane emissions from existing sources in the oil and natural gas industry. The final ICR marks a critical step toward meeting the Obama Administration's commitment to reduce emissions from existing oil and gas sources, as part of the President's *Climate Action Plan: Strategy to Reduce Methane Emissions*.
- Methane, the key constituent of natural gas, has a global warming potential more than 25 times greater than that of carbon dioxide. Methane is the second most prevalent greenhouse gas emitted in the United States from human activities, and nearly one-third of those emissions come from oil production and the production, processing and transmission of natural gas. The oil and gas industry is the largest industrial methane source.
- The ICR seeks a broad range of information, such as how equipment and emissions controls are, or can be, configured, and what installing those controls entails. This information will help the agency determine how best to address methane emissions from the oil and gas industry, including through rulemaking to reduce emissions. The final ICR reflects a number of changes EPA made based on comments the agency received on two drafts of the ICR issued earlier this year for public comment.
- EPA has designed the ICR so that it will not duplicate information industry already must submit through federal programs such as the Greenhouse Gas Reporting Program. Under the final ICR, industry will provide information on numerous sources and activities, including natural gas venting that occurs as part of existing processes or maintenance activities, such as well and pipeline blowdowns, equipment malfunctions and flashing emissions from storage tanks. Recent studies have identified these processes and activities as likely large sources of methane emissions. The ICR also seeks information on existing low-producing wells.
- In accordance with the Clean Air Act, ICR recipients have a legal obligation to respond and to attest to the accuracy of the information they provide.

What the Final ICR Covers

- The ICR seeks information from the following segments of the oil and gas industry: onshore production, gathering and boosting, gas processing, transmission, storage, and liquefied natural gas (LNG) import/export. It does not request information from offshore production or local natural gas distribution facilities that provide gas to businesses and homes.

- Like the two draft ICRs that were made available for public comment earlier in 2016, the final ICR comprises two parts:
 - An “operator survey” designed to obtain readily available information on the number and types of equipment at all onshore oil and gas production facilities in the United States; and
 - A “facility survey,” to collect detailed information on emissions sources and emissions control devices or practices in use at facilities in the onshore production, gathering and boosting, processing, compression/transmission, pipeline, natural gas storage, and LNG storage and import/export facilities. EPA expects much of the information requested in the facility survey to be readily available from company records; however, owners/operators may have to collect some information – such as counts of pneumatic devices. This more detailed survey will be sent to a representative sample of facilities rather than to all facilities, in order to reduce the burden to the industry.
- The operator survey will be sent to approximately 15,000 owners/operators in the oil and gas industry; the more detailed facility will be sent to approximately 4,650 owners/operators.
- EPA carefully considered comments on both drafts of the ICR and has made a number of changes that are reflected in the final ICR to improve the information the agency receives and to reduce the burden on industry. Those changes include:
 - *Providing additional time to respond to both surveys.* The final ICR provides owners/operators 60 days to respond to the operator survey and 180 days to respond to the facility survey. Under the second draft ICR, owners/operators would have had 30 days to respond to the operator survey and 120 days to respond to the facility survey.
 - *Categorizing wells based on their gas-to-oil ratio (GOR).* The GOR indicates whether the primary product of a well site is likely to be oil or gas, which, in turn, will give EPA information about the types of equipment likely to be located at the site. For each GOR category, the ICR seeks information on low-production wells, which produce 15 barrels of oil equivalent per day on average over a 12-month period, and wells that are not low production.
 - *Shifting certain questions from the operator survey to the facility survey.* Under the final ICR, questions about access to electricity, the number of facilities that are manned or unmanned, liquids unloading, and hydraulic fracturing have been moved from the broader operator survey to the facility survey, which will reduce the reporting burden for the industry.
 - *Splitting the gathering and boosting segment of the industry into two segments to reduce confusion.* The final ICR splits the gathering and boosting segment into compressor stations and pipeline facilities (pipeline facilities are defined as the

collection of pipelines and associated equipment on a county basis). These segments are covered by the facility survey. Owners/operators will be asked to enter basic information about all of all of their gathering and boosting compressor stations and pipeline facilities and provide more detailed information for about 10 percent of those, which will be randomly selected.

- Changed the required methods for pressurized liquids sampling. This sampling, which applies to separators with a throughput of more than 10 barrels per day, will provide information on potential flashing emissions when pressurized liquids enter atmospheric storage tanks. The final ICR requires owners/operators to use one of three Gas Processors Association sampling method, depending on the type of liquid they are sampling. The methods are specified in the ICR.
- Asks owners/operators to voluntarily provide information about costs such as the cost of controls -- that will help EPA better understand the economics of oil and natural gas wells.

Making a number of clarifications, including:

- *Who is responsible for responding:* The final ICR makes clear that the person or entity owning or operating a facility at the time the ICR letter is received is responsible for responding.
 - *How owners/operators must report information on wells* at surface sites and the centralized production areas those wells feed.
 - *The portion of wells the facility survey covers:* The final ICR clarifies that the facility survey will not request detailed information on every well in the industry; rather, it will focus the detailed information request on randomly selected wells, asking for details on those wells, other wells and equipment at that same surface site as the randomly selected well(s) and the centralized production sites those wells feed.
- EPA estimates the industry cost of responding to the ICR at about \$42 million: \$18 million to respond to the operator survey and \$24 million to respond to the more detailed facility survey.

Responding to the final ICR

- Owners and operators will receive the ICR by registered mail and are required to respond. There are two deadlines for responding:
 - Recipients of the operator survey (also referred to as Part 1) will have 60 days after receiving the ICR to complete the survey and submit it to EPA. Owners/operators may download the operator survey from EPA's website at <https://www.epa.gov/controlling-air-pollution-oil-and-natural-gas-industry/oil-and-gas-industry-information-requests> . Owners/operators may submit the operator survey electronically or by hard copy. Instructions for submitting responses are

included in the ICR letter.

- Recipients of the more detailed facility survey (also referred to as Part 2) will have 180 days after receiving the ICR to complete that survey and submit it to the agency. To make it easier for industry to submit responses to the facility survey, EPA will use the agency's electronic Greenhouse Gas Reporting Tool (e-GGRT) to collect the data and information from the facility survey.
- Owners/operators with questions about responding to the ICR may call the contact listed in their ICR letter. Owners/operators responding to the Part 2 facility survey also may contact the e-GGRT Help Desk for assistance at <https://ccdsupport.com/confluence/display/help/Contact+the+Help+Desk>.

Background

- The ICR process, which is governed by the Paperwork Reduction Act, provides the public two opportunities to review drafts of the ICR and supporting materials. EPA issued two drafts of the ICR: an initial draft, published in the Federal Register June 3, 2016, and a second draft, published Sept. 29, 2016.
- EPA announced its plans to issue the ICR on March 10, 2016, as part of a joint commitment between the U.S. and Canadian governments to take new actions to reduce methane pollution from the oil and gas sector, including developing regulations to reduce methane emissions from existing sources. The ICR is the first step in that process; the information that companies will be required to collect and report to EPA will provide the foundation necessary for developing comprehensive regulations to reduce emissions from existing sources in the large and complex oil and gas industry.
- Over the past year, substantial amounts of new information on methane emissions from existing sources, operations and activities in the oil and gas industry have become available from a range of entities, including EPA's Greenhouse Gas Reporting Program, industry organizations, and studies by government, academic and industry researchers. That information shows that methane emissions from existing sources – sources not covered by the NSPS issued May 12 -- are higher than previously understood.
- While this recent information has substantially improved EPA's understanding of the magnitude of emissions from existing oil and gas sources, the agency needs information that is not currently available to develop standards for existing sources under section 111(d) of the Clean Air Act for existing sources and to evaluate the impact of those standards.
- Unlike new source performance standards, which are triggered when a source is newly constructed or modified, standards for existing sources likely would apply to all covered processes and equipment at the same time. There are hundreds of thousands of existing oil and gas sources across the country: some emit small amounts of methane, but others emit methane in very large quantities.

- To determine how to effectively and efficiently address emissions from those sources, EPA needs information that is different from the information the agency needed to develop the NSPS issued in May, such as what emission controls are being used in the field, how those are configured, whether electricity or generating capacity is available, and how often sites are staffed or visited.
- These types of information will help EPA determine how the agency can, working with states, best develop and apply standards to effectively reduce emissions from existing sources. It also will help identify sources with high emissions and the factors that contribute to those emissions. The information EPA receives will build on what state and other federal agencies have learned through their own rules, programs and experiences.

For More Information

- To read the final ICR and the surveys owners/operators are required to answer – visit <https://www.epa.gov/controlling-air-pollution-oil-and-natural-gas-industry/oil-and-gas-industry-information-requests>
- For information on the New Source Performance Standards for new, modified and reconstructed sources announced in May 2016, see: <https://www.epa.gov/controlling-air-pollution-oil-and-natural-gas-industry/new-source-performance-standards-and>