

Offshore Petroleum and Natural Gas Production



Final Rule: Petroleum and Natural Gas Production (40 CFR 98, subpart W)

*Under the Greenhouse Gas Reporting Program (GHGRP), owners or operators of petroleum and natural gas facilities that emit 25,000 metric tons of carbon dioxide equivalent (CO₂e) or more from process operations and stationary fuel combustion must report GHG emissions to EPA. Owners or operators are required to collect emission data; calculate GHG emissions; and follow the specified procedures for quality assurance, missing data, recordkeeping, and reporting. Subpart W covers eight segments of the petroleum and natural gas industry: onshore petroleum and natural gas production, offshore petroleum and natural gas production, onshore natural gas processing, natural gas transmission compression, underground natural gas storage, liquefied natural gas (LNG) storage, LNG import and export equipment, and natural gas distribution. **This information sheet addresses only the offshore petroleum and natural gas production industry segment.***

How Is This Industry Segment Defined?

Offshore petroleum and natural gas production is defined as any platform structure, affixed temporarily or permanently to offshore submerged lands, that houses equipment to extract hydrocarbons from the ocean or lake floor and that processes and/or transfers such hydrocarbons to storage, transport vessels, or onshore. In addition, offshore production includes secondary platform structures connected to the platform structure via walkways, storage tanks associated with the platform structure and floating production and storage offloading equipment (FPSO). The industry segment consists of both platforms that are under the jurisdiction of the U. S. Department of Interior, Bureau of Ocean Energy Management (BOEM) and those that are not. Please note that on October 1, 2011, the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE), was replaced by the Bureau of Ocean Energy Management (BOEM) and the Bureau of Safety and Environmental Enforcement (BSEE) as part of a major reorganization. Part 98 still requires that subpart W reporters' reporting is based on the BOEMRE regulations. If you look for BOEMRE information, you should look at the website BOEM.GOV.

This industry segment does not include reporting of emissions from offshore drilling and exploration that is not conducted on production platforms.

What Gases Would Be Reported?

Offshore platforms must report the following emissions:

- Methane (CH₄) emissions from the equipment types identified in the latest published Gulfwide Offshore Activities Data System¹ (GOADS) emissions study, excluding fuel combustion equipment.
- Carbon dioxide (CO₂), CH₄, and nitrous oxide (N₂O) emissions from flares, as reported in the latest GOADS report.

¹ Year 2008 Gulfwide Emissions Inventory Study: U.S. Department of the Interior, Bureau of Ocean Energy Management, Regulation and Enforcement, Gulf of Mexico OCS Region, New Orleans, LA. OCS Study BOEMRE 2010-045, December 2010.
http://www.gomr.boemre.gov/homepg/regulate/environ/airquality/gulfwide_emission_inventory/2008GulfwideEmissionInventory.html

- CO₂, CH₄, and N₂O emissions for stationary fuel combustion sources following the requirements of 40 CFR 98, subpart C (General Stationary Fuel Combustion Sources). Stationary fuel combustion sources include but are not limited to boilers, heaters, burners, gasoline/diesel engines, natural gas engines, and natural gas, diesel, or dual-fuel turbines. Emissions from portable/mobile equipment are not required to be reported.

When Must Reporting Take Place?

Platforms that are subject to subpart W must submit the report for emissions from offshore petroleum and natural gas production by September 28, 2012 for 2011 emissions.

Starting in 2013 and each year thereafter, reports must be submitted to EPA by March 31 of each year, unless the 31st is a weekend or federal holiday, in which case the reports are due on the next business day. For example, the report must be submitted on March 31, 2013 for 2012 emissions.

Who Has to Report?

- Subpart W applies to offshore platforms that emit 25,000 metric tons of CO₂e per year or more in combined emissions from stationary fuel combustion and equipment leak and vented emissions from offshore petroleum and natural gas production equipment. How CO₂e emissions are estimated for applicability purposes depends on whether or not you were under BOEMRE jurisdiction.
 - If so, determine applicability based upon emissions reported in the latest published GOADS emissions study (e.g., for reporting year 2011 (RY2011), reporters should use emissions from the 2008 GOADS report²).
 - If not, determine applicability using the emissions estimation methodologies contained in the latest published GOADS³ emissions study. To assist non-GOADS reporters in estimating emissions, EPA has developed an on-line Applicability Tool. The tool uses a simple calculator based on a statistical analysis of the 2008 GOADS reported emissions. While the tool may be helpful in identifying platforms that are clearly above or below the threshold, it is the responsibility of owners and operators to determine if the rule applies. The Applicability Tool is available at <http://www.epa.gov/climatechange/emissions/GHG-calculator/index.html>.

If not subject to the rule for RY2011, then owners and operators must reassess the threshold determination each year in which operating hours increase or when a new GOADS study is published. If an offshore facility that initially exceeded the threshold subsequently reports less than the 25,000 metric tons of CO₂e for 5 consecutive years or less than 15,000 metric tons of CO₂e for 3 consecutive years, then that facility may cease reporting.

² The GOADS inventories are published on a 3-year cycle (i.e., for years 2005, 2008, 2011, etc...).

³ Year 2008 Gulfwide Emissions Inventory Study: U.S. Department of the Interior, Bureau of Ocean Energy Management, Regulation and Enforcement, Gulf of Mexico OCS Region, New Orleans, LA. OCS Study BOEMRE 2010-045, December 2010.
http://www.gomr.boemre.gov/homepg/regulate/envIRON/airquality/gulfwide_emission_inventory/2008GulfwideEmissionInventory.html

How Must GHG Emissions Be Calculated?

Emissions will be calculated differently depending upon whether or not the platform would be under BOEMRE jurisdiction. Offshore platforms are to follow the data collection and QA/QC requirements in the BOEMRE regulations that apply to the GOADS program (30 CFR 250).

- **BOEMRE jurisdiction reporters:** Report emissions from the latest published GOADS emissions study (e.g., for RY2011, use emissions from the 2008 GOADS emissions study).
- For any year that does not coincide with the latest GOADS publication year, report the most recent GOADS emissions, adjusted based on the operating time for the facility relative to the operating time in the most recent GOADS emissions study.

Non-BOEMRE jurisdiction reporters:

- Estimate emissions using the methodologies in the latest published GOADS emissions study.
- For any calendar year that does not coincide with publication of a GOADS emissions study, report the most recent emissions data reported to EPA, adjusted based on the operating time for the facility relative to the operating time in the previous reporting period.

Discontinued or Delayed GOADS Inventories:

In the event that the GOADS program is discontinued or delayed by more than 4 years, then once every 4 years both GOADS and non-GOADS reporters must use the most recent GOADS emissions study methodologies to report emissions, beginning in the year that the GOADS emissions study would have been published.

What Information Must Be Reported?

Facilities would report the following information:

- Annual emission of all greenhouse gases combined, expressed in metric tons of CO₂ e.
- Annual CO₂, CH₄, and N₂O emissions, expressed in metric tons of each gas.
- Annual CO₂, CH₄, and N₂O emissions as applicable to the source type (in metric tons CO₂e per year at standard conditions) individually for all of the emissions source types listed in the most recent BOEMRE study.

For More Information

This document is provided solely for informational purposes. It does not provide legal advice, have legally binding effect, or expressly or implicitly create, expand, or limit any legal rights, obligations, responsibilities, expectations, or benefits in regard to any person. The series of information sheets is intended to assist reporting facilities/owners in understanding key provisions of the final rule. Visit EPA's Web site (www.epa.gov/climatechange/emissions/ghgrulemaking.html) for more information, including all rulemakings related to the Greenhouse Gas Reporting Program, additional information sheets on specific industries, the schedule for training sessions, and other documents and tools. For additional assistance, please submit your questions to our GHGRP help desk, using the following webform: www.epa.gov/climatechange/emissions/ghgrule_contactus.htm.