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excluding customer meters, that physically deliver natural gas to end users and is operated by a Local Distribution Company (LDC) that is regulated as a separate operating company by a public utility commission or that is operated as an independent municipally-owned distribution system. This segment excludes customer meters and infrastructure and pipelines (both interstate and intrastate) delivering natural gas directly to major industrial users and "farm taps" upstream of the local distribution company inlet.

(b) [Reserved]

### § 98.231 Reporting threshold.

- (a) You must report GHG emissions under this subpart if your facility contains petroleum and natural gas systems and the facility meets the requirements of §98.2(a)(2). Facilities must report emissions from the onshore petroleum and natural gas production industry segment only if emission sources specified in paragraph §98.232(c) emit 25,000 metric tons of CO<sub>2</sub> equivalent or more per year. Facilities must report emissions from the natural gas distribution industry segment only if emission sources specified in paragraph §98.232(i) emit 25,000 metric tons of CO<sub>2</sub> equivalent or more per year.
- (b) For applying the threshold defined in §98.2(a)(2), natural gas processing facilities must also include owned or operated residue gas compression equipment.

#### § 98.232 GHGs to report.

- (a) You must report  $CO_2$ ,  $CH_4$ , and  $N_2O$  emissions from each industry segment specified in paragraph (b) through (i) of this section,  $CO_2$ ,  $CH_4$ , and  $N_2O$  emissions from each flare as specified in paragraph (j) of this section, and stationary and portable combustion emissions as applicable as specified in paragraph (k) of this section.
- (b) For offshore petroleum and natural gas production, report  $CO_2$ ,  $CH_4$ , and  $N_2O$  emissions from equipment leaks, vented emission, and flare emission source types as identified in the data collection and emissions estimation study conducted by BOEMRE in compliance with 30 CFR 250.302

through 304. Offshore platforms do not need to report portable emissions.

- (c) For an onshore petroleum and natural gas production facility, report  $CO_2$ ,  $CH_4$ , and  $N_2O$  emissions from only the following source types on a well pad or associated with a well pad:
- (1) Natural gas pneumatic device venting.
- (2) [Reserved]
- (3) Natural gas driven pneumatic pump venting.
- (4) Well venting for liquids unloading.
- (5) Gas well venting during well completions without hydraulic fracturing.
- (6) Gas well venting during well completions with hydraulic fracturing.
- (7) Gas well venting during well workovers without hydraulic fracturing.
- (8) Gas well venting during well workovers with hydraulic fracturing.
  - (9) Flare stack emissions.
- (10) Storage tanks vented emissions from produced hydrocarbons.
- (11) Reciprocating compressor rod packing venting.
  - (12) Well testing venting and flaring.
- (13) Associated gas venting and flaring from produced hydrocarbons.
  - (14) Dehydrator vents.
  - (15) [Reserved]
  - (16) EOR injection pump blowdown.
  - (17) Acid gas removal vents.
- (18) EOR hydrocarbon liquids dissolved  $CO_2$ .
  - (19) Centrifugal compressor venting.
  - (20) [Reserved]
- (21) Equipment leaks from valves, connectors, open ended lines, pressure relief valves, pumps, flanges, and other equipment leak sources (such as instruments, loading arms, stuffing boxes, compressor seals, dump lever arms, and breather caps).
- (22) You must use the methods in  $\S98.233(z)$  and report under this subpart the emissions of  $CO_2$ ,  $CH_4$ , and  $N_2O$  from stationary or portable fuel combustion equipment that cannot move on roadways under its own power and drive train, and that are located at an onshore production well pad. Stationary or portable equipment are the following equipment which are integral to the extraction, processing or movement of oil or natural gas: Well drilling and completion equipment, workover

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equipment, natural gas dehydrators, natural gas compressors, electrical generators, steam boilers, and process heaters.

- (d) For onshore natural gas processing, report  $CO_2$  and  $CH_4$  emissions from the following sources:
- (1) Reciprocating compressor rod packing venting.
  - (2) Centrifugal compressor venting.
  - (3) Blowdown vent stacks.
  - (4) Dehydrator vents.
  - (5) Acid gas removal vents.
  - (6) Flare stack emissions.
- (7) Equipment leaks from valves, connectors, open ended lines, pressure relief valves, and meters.
- (e) For onshore natural gas transmission compression, report  $\text{CO}_2$  and  $\text{CH}_4$  emissions from the following sources:
- (1) Reciprocating compressor rod packing venting.
- (2) Centrifugal compressor venting.
- (3) Transmission storage tanks.
- (4) Blowdown vent stacks.
- (5) Natural gas pneumatic device venting.
  - (6) [Reserved]
- (7) Equipment leaks from valves, connectors, open ended lines, pressure relief valves, and meters.
- (f) For underground natural gas storage, report  $\text{CO}_2$  and  $\text{CH}_4$  emissions from the following sources:
- (1) Reciprocating compressor rod packing venting.
  - (2) Centrifugal compressor venting.
- (3) Natural gas pneumatic device venting.
  - (4) [Reserved]
- (5) Equipment leaks from valves, connectors, open ended lines, pressure relief valves, and meters.
- (g) For LNG storage, report  $CO_2$  and  $CH_4$  emissions from the following sources:
- (1) Reciprocating compressor rod packing venting.
  - (2) Centrifugal compressor venting.
- (3) Equipment leaks from valves; pump seals; connectors; vapor recovery compressors, and other equipment leak sources
- (h) LNG import and export equipment, report  $CO_2$  and  $CH_4$  emissions from the following sources:
- (1) Reciprocating compressor rod packing venting.

- (2) Centrifugal compressor venting.
- (3) Blowdown vent stacks.
- (4) Equipment leaks from valves, pump seals, connectors, vapor recovery compressors, and other equipment leak sources.
- (i) For natural gas distribution, report emissions from the following sources:
- (1) Above ground meters and regulators at custody transfer city gate stations, including equipment leaks from connectors, block valves, control valves, pressure relief valves, orifice meters, regulators, and open ended lines. Customer meters are excluded.
- (2) Above ground meters and regulators at non-custody transfer city gate stations, including station equipment leaks. Customer meters are excluded.
- (3) Below ground meters and regulators and vault equipment leaks. Customer meters are excluded.
  - (4) Pipeline main equipment leaks.
  - (5) Service line equipment leaks.
- (6) Report under subpart W of this part the emissions of  $CO_2$ ,  $CH_4$ , and  $N_2O$  emissions from stationary fuel combustion sources following the methods in  $\S 98.233(z)$ .
- (j) All applicable industry segments must report the  $CO_2$ ,  $CH_4$ , and  $N_2O$  emissions from each flare.
- (k) Report under subpart C of this part (General Stationary Fuel Combustion Sources) the emissions of CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O from each stationary fuel combustion unit by following the requirements of subpart C. Onshore petroleum and natural gas production facilities must report stationary and portable combustion emissions as specified in paragraph (c) of this section. Natural gas distribution facilities must report stationary combustion emissions as specified in paragraph (i) of this section.
- (1) You must report under subpart PP of this part (Suppliers of Carbon Dioxide), CO<sub>2</sub> emissions captured and transferred off site by following the requirements of subpart PP.

## § 98.233 Calculating GHG emissions.

You must calculate and report the annual GHG emissions as prescribed in this section. For actual conditions, reporters must use average atmospheric