

EPA Waste Emissions Rule



Greenhouse Gas Reporting Rule: Revisions and Confidentiality Determinations for Petroleum and Natural Gas Systems

On May 14th, EPA published the final version of its revisions to the Greenhouse Gas Reporting Program which is generally referred to as "Subpart W". These revisions were mainly necessitated by the creation of a waste emissions charge (WEC) in the Inflation Reduction Act. This charge will apply to "facilities" that emit more than 25,000 metric tons of carbon dioxide equivalent. At the same time, the IRA directed EPA to update Subpart W to accurately reflect emissions and use "empirical data" from facilities.

Who Reports?

Starting in 2024, the WEC is a new fee imposed on methane emissions at facilities that emit more than 25,000 metric tons of CO₂e, as reported in Subpart W, for:

- (1) the onshore and offshore production sector (Items 1, 2, 5, 6, and 7 in Figure 1);
- (2) the onshore natural gas gathering and boosting, processing, transmission, and storage sector (Items 8, 9, 10, 11, and 12 in Figure 1); and
- (3) the liquified natural gas ("LNG") storage, export, and import sector (Item 14 in Figure 1).

Subpart W rules define a "facility" in the production and gathering and boosting sectors as the combination of all individual units under common ownership or control in a single hydrocarbon basin.

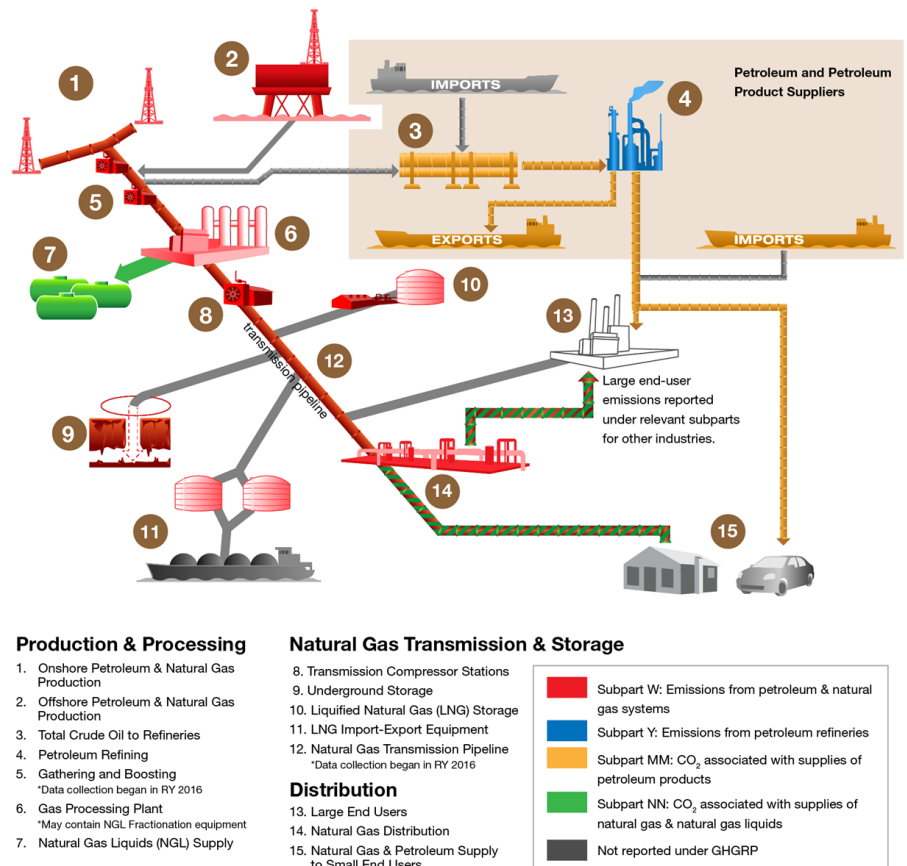


Figure 1: Oil and Gas Industry Overview Diagram (EPA)



Definitions and Impact

The most relevant part for most of EWTC members will be Onshore Production Facility

Onshore Production

All petroleum or natural gas equipment on a single well-pad or associated with a single well-pad and CO₂ EOR operations that are under common ownership or common control including leased, rented, or contracted activities by an onshore petroleum and natural gas production owner or operator and that are located in a single hydrocarbon basin as defined in §98.238. Where a person or entity owns or operates more than one well in a basin, then all onshore petroleum and natural gas production equipment associated with all wells that the person or entity owns or operates in the basin would be considered one facility.

Of Particular Note for Well Stimulation:

Can be found on bottom of page 593 –

Subpart W—Petroleum and Natural Gas Systems 10. Amend § 98.230 by revising paragraphs (a)(2), (3), and (9) to read as follows: § 98.230; Definition of the source category:

Onshore petroleum and natural gas production. Onshore petroleum and natural gas production means all equipment on a single well-pad or associated with a single well-pad (including but not limited to compressors, generators, dehydrators, storage vessels, engines, boilers, heaters, flares, separation and processing equipment, and portable non-self-propelled equipment, which includes well drilling and completion equipment, workover equipment, and leased, rented or contracted equipment) used in the production, extraction, recovery, lifting, stabilization, separation or treating of petroleum and/or natural gas (including condensate). This equipment also includes associated storage or measurement vessels, all petroleum and natural gas production equipment located on islands, artificial islands, or structures connected by a causeway to land, an island, or an artificial island. Onshore petroleum and natural gas production also means all equipment on or associated with a single enhanced oil recovery (EOR) well pad using CO₂ or natural gas injection.

When does this go into effect?

Most revisions will become effective on January 1, 2025 for submission of reporting year 2025 report submitted by March 31, 2026.

One exception is the reporting of the quantities of natural gas and crude oil that is sent to sale in the calendar year for each well permanently shut-in and plugged; those provisions also become effective on January 1, 2025, but reporters must include that information in 2024 annual reports.

Importantly, the final rule both added new emissions sources and extended certain existing sources into new industry segments:

New Emission Sources by Industry Segment (Effective for reporting year 2025 and later)

Industry Segment	Mud Degassing	Produced Water Tanks	Nitrogen Removal Units	Crankcase Venting	Other Large Release Events
Offshore Production					✓
Onshore Production	✓	✓	✓	✓	✓
NG Processing		✓	✓	✓	✓
Transmission Compression				✓	✓
Underground Storage				✓	✓
LNG Storage			✓	✓	✓
LNG Import/ Export			✓	✓	✓
NG Distribution				✓	✓
Gathering & Boosting		✓	✓	✓	✓
Transmission Pipeline					✓

Industry Segments that will need to begin reporting:

Additional Industry Segment Reporting for Existing Source Types

* - These segments report combustion emissions under Subpart C
Blue Check = new emissions source for the segment, effective for RY25

Industry Segment	Pneumatic Devices	Pneumatic Pumps	Acid Gas Removal	Dehydrators	Liquids Unloading	Completions & Workovers with HF	Completions & Workovers without HF	Blowdown Vents	Hydrocarbon Liquids Storage Tanks	Condensate Storage Tanks	Well Testing	Associated NG	Flare Stacks	Centrifugal Compressors	Reciprocating Compressors	Equipment Leaks	EOR Injection Pumps	EOR CO ₂ in Hydrocarbon Liquids	Combustion Equipment
Offshore Production																	✓		*
Onshore Production	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
NG Processing	✓		✓	✓				✓	✓				✓	✓	✓	✓			*
Transmission Compression	✓			✓				✓		✓			✓	✓	✓	✓			*
Underground Storage	✓			✓				✓	✓				✓	✓	✓	✓			*
LNG Storage			✓					✓					✓	✓	✓	✓			*
LNG Import/ Export			✓					✓					✓	✓	✓	✓			*
NG Distribution	✓							✓								✓			✓
Gathering & Boosting	✓	✓	✓	✓				✓	✓				✓	✓	✓	✓			✓
Transmission Pipeline								✓								✓			

Technologies for Calculations:

	Pneumatic Devices	Pneumatic Pumps	Acid Gas Removal	Dehydrators	Liquids Unloading	Completions & Workovers with HF	Completions & Workovers without HF	Blowdown Vents	Hydrocarbon Liquids Storage Tanks	Condensate Storage Tanks	Well Testing	Associated NG	Flare Stacks	Centrifugal Compressors	Reciprocating Compressors	Equipment Leaks	EOR Injection Pumps	EOR CO ₂ in Hydrocarbon Liquids	Combustion Equipment
Direct Emissions Measurement	✓	✓	✓				✓	✓		✓		✓	✓	✓	✓	✓			✓
Measurement + Engineering Calculations			✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓		✓	✓
Engineering Calculations			✓	✓	✓	✓		✓	✓		✓	✓	✓				✓		✓
Emission Factors	✓	✓		✓			✓		✓					✓	✓	✓			✓

EOR = Enhanced Oil Recovery; HF = Hydraulic Fracturing; NG = Natural Gas

Red check marks indicate that the final rule includes a calculation methodology in a new calculation method category for that source type (e.g., final rule includes a direct measurement option where subpart W currently requires use of an emission factor).

Blue check marks indicate that the final rule adds a second type of calculation methodology in this category (e.g., adding a leaker emission factor option to the "Emission Factors" category for a source type that currently has population emission factors).

Figure 2: Subpart W Calculation Method Types (EPA)