OFFICE OF ATMOSPHERIC PROTECTION
WASHINGTON, D.C. 20460

January 19, 2024

MEMORANDUM

SUBJECT: Examples of charge calculations under the proposed Waste Emissions Charge

Background

The Environmental Protection Agency (EPA) is proposing a regulation, "Waste Emissions Charge for Petroleum and Natural Gas Systems" ("WEC Rule"), to implement the requirements of Clean Air Act (CAA) section 136(c) through (g). The proposed WEC Rule would implement a charge on methane emissions that exceed statutorily specified waste emissions thresholds from owners or operators of applicable facilities. The waste emissions threshold is a facility-specific quantity of metric tons (mt) of methane emissions calculated using the segment-specific methane intensity thresholds defined in CAA section 136(f)(1) through (3) and a facility's natural gas throughput (or oil throughput in certain circumstances). The waste emissions charge, or WEC, is specified in CAA section 136(e) to begin for emissions occurring in 2024 at $900 per mt of methane exceeding the threshold, increasing to $1,200 per mt of methane in 2025, and to $1,500 per mt of methane in 2026 and each year thereafter. The WEC only applies to the subset of a facility's emissions that are above the waste emissions threshold.

The purpose of this memorandum is to illustrate the steps to determine the WEC obligation (i.e., the amount owed) for a WEC obligated party under the proposed rulemaking to assist interested parties in understanding the proposal and to enable them to provide more thorough comments on the proposed rulemaking. This document provides an overview of the WEC calculation and illustrative examples under different scenarios; please see the proposed WEC Rule and other supporting documents for additional details on individual elements of the proposal (e.g., common ownership or control, implementation of exemptions). An accompanying Excel spreadsheet shows the calculations for the quantitative examples used in the memorandum.

General Procedure for Determination of WEC Obligation

The proposed WEC Rule relies primarily on data reported pursuant to the Greenhouse Gas Reporting Program (GHGRP) petroleum and natural gas systems source category (i.e., 40 CFR Part 98 subpart W, also referred to as subpart W) for determining applicability and any charge. In general, the inputs to the calculation equations in the proposed WEC Rule are data elements present in, or derived from, the annual report submitted pursuant to subpart W.

Before calculating any WEC amount owed, WEC obligated parties would first determine if their subpart W facilities would be subject to the proposed WEC Rule. As defined by Congress, the proposed WEC Rule is applicable to subpart W facilities in nine industry segments:

- Onshore petroleum and natural gas production
- Offshore petroleum and natural gas production
- Onshore petroleum and natural gas gathering and boosting
- Onshore natural gas processing
- Onshore natural gas transmission compression
- Onshore natural gas transmission pipeline
- Underground natural gas storage
- Liquified natural gas (LNG) import and export equipment
- LNG storage

Facilities in these segments must report more than 25,000 mt of carbon dioxide equivalent (CO_2e) under subpart W to be subject to the proposed WEC Rule. Subpart W facilities that report 25,000 mt CO_2e or less under subpart W (i.e., report certain emissions under 40 CFR Part 98 subpart C or are on the GHGRP reporting offramp) would not be subject to the proposed WEC Rule. For subpart W facilities with equipment in multiple industry segments (e.g., a single subpart W facility that includes equipment in both the transmission compression and underground storage industry segments), the 25,000 mt CO_2e threshold would be assessed using the sum of CO_2e across all industry segments.

Facilities in the nine industry segments listed above that report more than 25,000 mt CO_2e under subpart W would be considered "WEC applicable facilities" and could be subject to charge if their emissions exceed the waste emissions thresholds. The steps below summarize how the WEC is calculated for individual WEC applicable facilities and the WEC obligated parties that will be required to pay any charge.

1. **Calculate Waste Emissions Threshold.** The waste emissions threshold is calculated at the facility level by multiplying facility-level throughput by the industry segment-specific methane intensity thresholds set by Congress in CAA section 136(f). Table 1 shows the throughput metrics and industry segment-specific methane intensity thresholds for each industry segment. Natural gas throughput is reported under subpart W in volumetric units of thousand standard cubic feet (Mscf), while methane emissions are reported by mass in metric tons. The industry segment-specific methane intensity thresholds are percentages, which requires both the numerator (methane emissions) and denominator (throughput) to be in like units. Further, the WEC is assessed in dollars per metric ton of methane. The proposed WEC Rule calculates the waste emissions threshold for a WEC applicable facility directly in metric tons methane by multiplying the product of facility throughput and the segment-specific methane intensity threshold by the density of methane (0.0192 mt/Mscf)[1]. This waste emissions threshold equals the metric tons of methane at the segment-specific methane intensity threshold given a facility's individual throughput. For onshore and offshore production facilities that do not send

[1] Density of methane at standard temperature and pressure of 60° F and 14.7 psia.

any natural gas to sale, oil production is used as the throughput metric. The waste emissions threshold for these facilities is calculated by multiplying the barrels of oil sent to sale from the facility by ten and 10^{-6}. This calculates the waste emissions threshold equal to the intensity value of ten mt methane per million barrels of oil sent to sale established by Congress in CAA section 136(f). For WEC applicable facilities with equipment in multiple industry segments, the facility's waste emission threshold is calculated as the sum of the waste emissions threshold for each industry segment at the facility.

Table 1. Industry Segment Throughput Metrics and Methane Intensities

Industry Segment	Throughput Metric [a]	IRA-Established Industry Segment-Specific Methane Intensity
Onshore petroleum and natural gas production	The quantity of natural gas produced from producing wells that is sent to sale in the calendar year, in thousand standard cubic feet; or the quantity of crude oil produced from producing wells that is sent to sale in the calendar year, in barrels, if facility sends no natural gas to sale	0.20 percent of natural gas sent to sale from facility; or 10 metric tons of methane per million barrels of oil sent to sale from facility, if facility sends no natural gas to sale
Offshore petroleum and natural gas production		
Onshore petroleum and natural gas gathering and boosting	The quantity of natural gas transported through the facility to a downstream endpoint such as a natural gas processing facility, a natural gas transmission pipeline, a natural gas distribution pipeline, a storage facility, or another gathering and boosting facility in the calendar year, in thousand standard cubic feet	0.05 percent of natural gas sent to sale from or through facility
Onshore natural gas processing	The quantity of residue gas leaving that has been processed by the facility and any gas that passes through the facility to sale without being processed by the facility in the calendar year, in thousand standard cubic feet	

Onshore natural gas transmission compression	The quantity of natural gas transported through the compressor station in the calendar year, in thousand standard cubic feet	0.11 percent of natural gas sent to sale from or through facility
Onshore natural gas transmission pipeline	The quantity of natural gas transported through the facility and transferred to third parties such as local distribution companies or other transmission pipelines in the calendar year, in thousand standard cubic feet	
Underground natural gas storage	The quantity of natural gas withdrawn from storage and sent to sale in the calendar year, in thousand standard cubic feet	
LNG import and export equipment	For LNG import equipment, the quantity of LNG imported that is sent to sale in the calendar year, in thousand standard cubic feet; for LNG export equipment, the quantity of LNG exported that is sent to sale in the calendar year, in thousand standard cubic feet	0.05 percent of natural gas sent to sale from or through facility
LNG storage	The quantity of LNG withdrawn from storage and sent to sale in the calendar year, in thousand standard cubic feet	

[a] Throughput metrics in this table are based on the proposed subpart W reporting elements in the Greenhouse Gas Reporting Rule: Revisions and Confidentiality Determinations for Petroleum and Natural Gas Systems proposal (88 FR 50282).

2. **Determine Facility Methane Emissions.** The WEC is applied to the amount of facility methane emissions that exceed the waste emissions threshold. The proposed rule uses facility methane emissions as reported under subpart W as the value that is compared against the waste emissions threshold. For WEC applicable facilities with equipment in multiple industry segments, the facility's methane emissions are calculated as the sum of methane emissions from each industry segment at the facility.

3. **Facility WEC Calculation.** The facility waste emissions threshold and reported facility methane emissions are used to determine if the facility's methane emissions are below or exceed the waste emissions threshold. Depending on if a facility's emissions exceed the waste emissions threshold and if the facility is eligible for exemptions, this may be a two-step process.

    a. **Facility Applicable Emissions.** As a first step, the waste emissions threshold is subtracted from reported methane emissions. This yields a value in metric tons methane, the facility applicable emissions, that is positive if the facility's emissions exceed the waste emissions threshold and negative if the facility's emissions are below the waste emissions threshold (or zero if emissions are equal to the waste emissions threshold).

b. **WEC Applicable Emissions.** Under the proposed rule, WEC exemptions would only be available to facilities whose emissions exceed the waste emissions threshold. The next step is therefore to apply the exemptions where eligible. For onshore and offshore petroleum and natural gas production facilities whose facility applicable emissions exceed the waste emissions threshold, any eligible methane emissions caused by "unreasonable delay", as determined by the EPA pursuant to Section 136(f)(5), and any emissions subject to the plugged well exemption pursuant to Section 136(f)(7), are subtracted from facility applicable emissions.[2] This yields WEC applicable emissions, the final value of tons of methane below or exceeding the waste emissions threshold for each WEC applicable facility. For facilities that qualify for the regulatory compliance exemption, WEC applicable emissions would be zero. For WEC applicable facilities that are not receiving the regulatory compliance exemption and for facilities that are not eligible for the unreasonable delay or plugged well exemptions, WEC applicable emissions equal facility applicable emissions.

EPA proposes that unreasonable delay exempted emissions would be limited to those from flaring; vented emissions would not be eligible. WEC applicable facilities would need to demonstrate that four proposed criteria have been met in order to qualify for the unreasonable delay exemption:

- Total WEC facility emissions must exceed the waste emissions threshold
- The production facility seeking the exemption and the gathering or transmission entity must not have contributed to the delay in permitting
- Exempted flaring emissions limited to those occurring in compliance with relevant regulations
- A set period of time must have passed from the time of a complete permit application (EPA proposes a range of 30 to 42 months, and requests comment on the specific period of time that would be appropriate)

EPA proposes that the regulatory compliance exemption would become available to facilities when two criteria, as required by Congress, have been met: 1) final NSPS and plans implementing the Emission Guidelines have been approved and are in effect in all states, and 2) EPA has determined that the methane emissions reductions achieved by the final NSPS and plans are equivalent to, or greater than, those that would have been achieved by the proposed rule entitled *Standards of Performance for New, Reconstructed, and Modified Sources and Emissions Guidelines for Existing Sources: Oil and Natural Gas Sector Climate Review*, 86 Fed. Reg. 63110 (November 15, 2021), had

[2] Under the proposed rule, only methane emissions that exceed the waste emissions threshold are eligible for the unreasonable delay and plugged well exemptions. In cases where eligible exempted emissions are greater than positive facility applicable emissions, facility WEC applicable emissions are zero (i.e., a facility with the unreasonable delay or plugged well exemption cannot have negative WEC applicable emissions). See the proposed rule for details of the requirements for each exemption.

that proposed rule had been finalized and implemented. To receive the regulatory compliance exemption, all of the CAA section 111(b) and (d) facilities that are located within a WEC applicable facility would be required to have no deviations or violations of the methane emissions requirements promulgated pursuant to the applicable NSPS or CAA section 111(d) plans.

For the plugged well exemption, EPA proposes that only methane emissions directly associated with a plugged well would be eligible for exemption. These include emissions from wellhead equipment leaks, liquids unloading, and workovers that occur in the reporting year in which a well was plugged. Methane emissions from other production segments or well pad equipment could not be exempted.

4. **Netting.** CAA section 136(f)(4) allows WEC applicable facilities under common ownership or control of a WEC obligated party to net emissions from facilities exceeding the waste emissions threshold (positive WEC applicable emissions) with emissions from facilities below the waste emissions threshold (negative WEC applicable emissions). To calculate net WEC emissions for a WEC obligated party, WEC applicable emissions (both positive and negative) from all WEC applicable facilities under common ownership or control of a WEC obligated party are summed. Under the proposed rule, a facility's WEC obligated party is the reported owner or operator associated with the facility under GHGRP reporting. For WEC obligated parties with common ownership or control of a single facility, net WEC emissions are equal to that facility's WEC applicable emissions.

5. **Calculate WEC Obligation.** Net WEC emissions represent the final number of metric tons of methane exceeding or below the waste emissions threshold(s) for a WEC obligated party. If net WEC emissions are equal to or below zero, the WEC obligated party does not owe any WEC. If net WEC emissions are greater than zero, the amount of metric tons methane is multiplied by the annual WEC amount (e.g., $900/mt for 2024 emissions) to calculate the total WEC obligation.

   EPA proposes that all reporting related to the WEC rule would be required to be submitted in a WEC filing due March 31 that covers the previous reporting year. The first WEC filing would be due March 31, 2025, covering the 2024 reporting year. EPA proposes that payment of any WEC obligation owed must be included in the WEC filing. The proposed WEC rule includes a verification process that EPA would use to verify information submitted in WEC filings. If errors are discovered during the verification process or independently by WEC obligated parties, data could be resubmitted and the WEC obligation adjusted (i.e., WEC obligate parties pay any additional charge or receive a refund). Data revisions for the purposes of WEC would not be allowed after November 1 of each year for the previous reporting year. For example, WEC filings originally submitted on March 31, 2024, for the 2025 reporting year could not be revised after November 1, 2025.

Example Facility Calculations

Tables 2 through 5 present WEC calculations for four hypothetical WEC obligated parties. The tables and accompanying text illustrate how WEC applicable emissions are calculated at the facility and then "netted" across facilities under common ownership or control of the WEC obligated party to calculate net WEC emissions and the total WEC obligation for each hypothetical WEC obligated party. In addition to showing the general mechanics of the WEC calculation, each example highlights specific circumstances that may apply to WEC applicable facilities and WEC obligated parties, as described in the table titles. These examples use a WEC of $900/mt.

Table 2. WEC Obligated Party A – Facility with Exempted Emissions

Facility	Industry Segment	Subpart W Total GHG (mt CO_2e)*	Subpart W Methane (mt)	Throughput (Mscf)	Segment Methane Intensity Threshold	Waste Emissions Threshold (mt)	Facility Applicable Emissions (mt)	Potentially Exempt Emissions (mt)	WEC Applicable Emissions (mt)
1	Offshore Production	56,250	900	18,000,000	0.2%	691.2	208.8	0	208.8
2	Onshore Production	165,000	3,000	60,000,000	0.2%	2,304	696	40	656
3	Onshore Production	97,125	2,100	76,000,000	0.2%	2,918.4	-818.4	20	-818.4
4	Gathering & Boosting	99,000	1,800	140,000,000	0.05%	1,344	456	0	456
WEC Obligated Party A Net WEC Emissions									**502.4 mt**
WEC Obligated Party A WEC Obligation									**$452,160**

* Total subpart W CO_2e includes emissions from CO_2 and N_2O that are not identified separately in table; while the WEC is based only on methane emissions, all subpart W greenhouse gas emissions are considered for the 25,000 mt CO_2e WEC applicability threshold. In this example, 100-year global warming potentials of 28 and 265 are applied for methane and N_2O, respectively, as proposed in EPA's May 22, 2023, supplemental notice of proposed rulemaking for revisions to the GHGRP.
Note: calculated values in table are rounded.

All four of WEC Obligated Party A's subpart W facilities are in industry segments subject to the proposed WEC Rule and report more than 25,000 mt CO_2e under subpart W; they are all therefore WEC applicable facilities. For each facility, the waste emissions threshold is calculated by multiplying throughput by the segment-specific methane intensity and the density of methane (0.0192 mt CH_4 / Mscf). The waste emissions threshold is then subtracted from reported methane emissions to calculate facility applicable emissions. Facilities 1-3 are in the production segments and therefore potentially have eligible exempt emissions under the unreasonable delay or plugged well exemptions. Facility 1 does not have any eligible exempted emissions, and facility applicable emissions are equal to WEC applicable emissions. Facility 2's emissions are above the waste emissions threshold, and its 40 mt of eligible exempted emissions are subtracted from facility applicable emissions to calculate WEC applicable emissions. Facility 3's methane emissions are below the waste emissions threshold, and therefore the 20 mt from that facility associated with unreasonable delay or plugged wells is not subtracted; facility applicable emissions are equal to WEC applicable emissions. This is also true for Facility 4, which is in the gathering and boosting segment and therefore not eligible for the unreasonable delay and plugged well exemptions. At such time when the regulatory compliance exemption becomes available, any facility meeting the exemption's requirements would have WEC applicable emissions of zero. This could apply to Facilities 2 and 4. Facility 1 is in the offshore production segment, which is not currently regulated under the NSPS/EG and therefore not eligible for the regulatory compliance exemption. Facility 3's emissions are below the waste emissions threshold and therefore it would not be eligible for the regulatory compliance exemption. The WEC applicable emissions from all four facilities are summed, yielding net WEC emissions of 502.4 mt. This represents the total tons of methane exceeding the waste emissions thresholds for all facilities under common ownership or control of WEC Obligated Party A. WEC Obligated Party A's total WEC obligation is calculated by multiplying net WEC emissions (502.4 mt) by the annual WEC amount ($900/mt in this example), resulting in a total WEC obligation of $452,160.

Table 3. WEC Obligated Party B – Production Facility with no Natural Gas Sales

Facility	Industry Segment	Subpart W Total GHG (mt CO_2e)*	Subpart W Methane (mt)	Throughput	Segment Methane Intensity Threshold	Waste Emissions Threshold (mt)	Facility Applicable Emissions (mt)	Potentially Exempt Emissions (mt)	WEC Applicable Emissions (mt)
1	Onshore Production	38,000	400	6,000,000 (bbl oil)	10 mt / million bbl	60	340	0	340
2	Processing	60,000	300	400,000,000 (Mscf)	0.05%	3,840	-3,540	0	-3,540
WEC Obligated Party B Net WEC Emissions									**-3,200 mt**
WEC Obligated Party B WEC Obligation									**$0**

* Total subpart W CO_2e includes emissions from CO_2 and N_2O that are not identified separately in table; while the WEC is based only on methane emissions, all subpart W greenhouse gas emissions are considered for the 25,000 mt CO_2e WEC applicability threshold. In this example, 100-year global warming potentials of 28 and 265 are applied for methane and N_2O, respectively, as proposed in EPA's May 22, 2023, supplemental notice of proposed rulemaking for revisions to the GHGRP.
Note: calculated values in table are rounded

Both of WEC Obligated Party B's subpart W facilities are in industry segments subject to the proposed WEC Rule and report more than 25,000 mt CO_2e under subpart W; they are both therefore WEC applicable facilities. Facility 1 is an onshore production facility with zero gas sales and is assessed using the oil-based intensity metric of 10 mt methane per million barrels of oil sent to sale from the facility. The waste emissions threshold for Facility 1 is calculated by multiplying the facility's reported barrels of oil sales by ten and multiplying by 10^{-6} (or dividing by one million). For Facility 2, the waste emissions threshold is calculated by multiplying throughput by the segment-specific methane intensity and the density of methane. For both facilities, the waste emissions threshold is subtracted from reported methane emissions to calculate facility applicable emissions. Facility 1 does not have any eligible emissions associated with the unreasonable delay and plugged well exemptions and these exemptions are not applicable to Facility 2 because it is in the processing segment. WEC applicable emissions are therefore equal to facility applicable emissions for Facilities 1 and 2. If the regulatory compliance exemption were available and Facility 1 met the associated requirements, the facility would have WEC applicable emissions of zero. Facility 2 would not be eligible for

the regulatory compliance exemption because its emissions are below the waste emissions threshold. The WEC applicable emissions from both facilities are summed, yielding net WEC emissions of negative 3,200 mt. This represents the total tons of methane below the waste emissions thresholds for all facilities under common ownership or control of WEC Obligated Party B. Because net WEC emissions are below zero, WEC Obligated Party B does not have any WEC obligation.

Table 4. WEC Obligated Party C – Facility with Multiple Industry Segments

Facility	Industry Segment	Subpart W Total GHG (mt CO_2e)*	Subpart W Methane (mt)	Throughput (Mscf)	Segment Methane Intensity Threshold	Waste Emissions Threshold (mt)	Facility Applicable Emissions (mt)	Potentially Exempt Emissions (mt)	WEC Applicable Emissions (mt)
1	Transmission Compression	23,540	750	300,000,000	0.11%	6,336	-5,586	0	-5,586
1	Underground Storage	62,000	2,000	35,000,000	0.11%	739.2	1,260.8	0	1,260.8
1	Facility Total	85,540	2,750			7,075.2	-4,325.2		-4,325.2
2	Transmission Pipeline	75,008	2,580	900,000,000	0.11%	19,008	-16,428	0	-16,428
WEC Obligated Party C Net WEC Emissions									**-20,753.2 mt**
WEC Obligated Party C WEC Obligation									**$0**

* Total subpart W CO_2e includes emissions from CO_2 and N_2O that are not identified separately in table; while the WEC is based only on methane emissions, all subpart W greenhouse gas emissions are considered for the 25,000 mt CO_2e WEC applicability threshold. In this example, 100-year global warming potentials of 28 and 265 are applied for methane and N_2O, respectively, as proposed in EPA's May 22, 2023, supplemental notice of proposed rulemaking for revisions to the GHGRP.
Note: calculated values in table are rounded

WEC Obligated Party C has two subpart W facilities, one of which, Facility 1, has operations in two industry segments that are subject to the proposed WEC Rule. Because WEC applicability is based on total subpart W CO_2e from the entire facility, Facility 1's total subpart W CO_2e is calculated as the sum of emissions from both of its constituent segments, which is equal to 85,540 mt CO_2e. Note that while the transmission compression equipment located at Facility 1 reports less than 25,000 mt CO_2e under subpart W, because the combined

subpart W emissions from transmission compression and underground storage equipment are greater than 25,000 mt CO_2e, Facility 1 is a WEC applicable facility. Facility 2 reports more than 25,000 mt CO_2e under subpart W and is also a WEC applicable facility. For Facility 1, the waste emissions threshold is calculated individually for each segment (throughput multiplied by segment-specific methane intensity and the density of methane) and then summed to calculate the WEC applicable facility's waste emissions threshold. Methane emissions from both segments within Facility 1 are also summed, and the waste emissions threshold is subtracted from this value to calculate facility applicable emissions. Because Facility 1 does not contain industry segments eligible for the unreasonable delay and plugged well exemptions, WEC applicable emissions are equal to facility applicable emissions. For Facility 2, the waste emissions threshold is calculated by multiplying throughput by the segment-specific methane intensity and the density of methane. The waste emissions threshold is subtracted from reported methane emissions to calculate facility applicable emissions, and because the unreasonable delay and plugged well exemptions are not available to facilities in the transmission pipeline segment, this value is also equal to WEC applicable emissions. Neither facility would be eligible for the regulatory compliance exemption. Facility 1 would not be eligible because its emissions are below the waste emissions threshold. Facility 2 would not be eligible because the transmission pipeline segment is not currently regulated under NSPS/EG, and thus facilities in the segment are not eligible for the regulatory compliance exemption (the facility's emissions are below the waste emissions threshold, which would also disqualify it from exemption availability). To calculate WEC Obligated Party C's net WEC emissions, WEC applicable emissions from Facility 1 and 2 are summed, yielding negative 20,753.2 mt. This represents the total tons of methane below the waste emissions thresholds for all facilities under common ownership or control of WEC Obligated Party C. Because net WEC emissions are below zero, WEC Obligated Party C does not have any WEC obligation.

Table 5. WEC Obligated Party D – Facility Below 25,000 mt CO_2e in Subpart W

Facility	Industry Segment	Subpart W Total GHG (mt CO_2e)*	Subpart W Methane (mt)	Throughput (Mscf)	Segment Methane Intensity Threshold	Waste Emissions Threshold (mt)	Facility Applicable Emissions (mt)	Potentially Exempt Emissions (mt)	WEC Applicable Emissions (mt)
1	Onshore Production	37,188	850	20,000,000	0.2%	768	82	0	82
2	Onshore Production	22,000	400	10,000,000	0.2%	NA	NA	NA	NA
WEC Obligated Party D Net WEC Emissions									**82 mt**

WEC Obligated Party D WEC Obligation	**$73,800**

* Total subpart W CO_2e includes emissions from CO_2 and N_2O that are not identified separately in table; while the WEC is based only on methane emissions, all subpart W greenhouse gas emissions are considered for the 25,000 mt CO_2e WEC applicability threshold. In this example, 100-year global warming potentials of 28 and 265 are applied for methane and N_2O, respectively, as proposed in EPA's May 22, 2023, supplemental notice of proposed rulemaking for revisions to the GHGRP.
Note: calculated values in table are rounded

WEC Obligated Party D has two subpart W facilities in the onshore petroleum and natural gas production segment. Facility 1 reports emissions greater than 25,000 mt CO_2e under subpart W and is therefore a WEC applicable facility. Facility 2 reports subpart W emissions that are not greater than 25,000 mt CO_2e and therefore is not a WEC applicable facility and is not subject to the proposed WEC Rule. Facility 1's waste emissions threshold is calculated by multiplying throughput by the segment-specific methane intensity and the density of methane. The waste emissions threshold is then subtracted from reported methane emissions to calculate facility applicable emissions of 82 mt. Facility 1 does not have any eligible exempted emissions, and facility applicable emissions are equal to WEC applicable emissions. If the regulatory compliance exemption were available and Facility 1 met all eligibility requirements, its WEC applicable emissions would be zero. Because WEC Obligated Party D has only one WEC applicable facility, WEC applicable emissions are equal to net WEC emissions (i.e., there are no other facilities under common ownership or control with which to net). Net WEC emissions are equal to 82 mt, representing the total tons of methane exceeding the waste emissions thresholds for WEC Obligated Party D. WEC Obligated Party D's total WEC obligation is calculated by multiplying net WEC emissions (82 mt) by the annual WEC amount ($900/mt in this example), resulting in a total WEC obligation of $73,800.

Key Terms

Facility Applicable Emissions: Annual methane emissions associated with a WEC applicable facility that are either equal to, below, or exceeding the waste emissions threshold for the WEC applicable facility prior to consideration of any applicable exemptions.

Industry Segment-Specific Methane Intensity Values: The values established by Congress in CAA section 136(f), representing methane emissions as a percentage of natural gas throughput (or methane emissions per barrel of oil sent to sale for facilities with no natural gas throughput).

Net WEC Emissions: The sum of WEC applicable emissions from all facilities under common ownership or control of a WEC obligated party.

Waste Emissions Threshold: The metric tons of methane emissions calculated by multiplying WEC applicable facility throughput by the industry segment-specific methane intensity thresholds established in CAA 136(f) and the density of methane (0.0192 metric ton per thousand standard cubic feet).

WEC Applicable Emissions: Annual methane emissions associated with a WEC applicable facility that are either equal to, below, or exceeding the waste emissions threshold for the WEC applicable facility after consideration of any applicable exemptions.

WEC Applicable Facility: A facility that is 1) within one or more of the following industry segments, as defined in subpart W: Offshore petroleum and natural gas production, onshore petroleum and natural gas production, onshore natural gas gathering and boosting, onshore natural gas processing, onshore natural gas transmission compression, onshore natural gas transmission pipeline, underground natural gas storage, liquified natural gas import and export equipment, liquified natural gas storage, and 2) for which the owner or operator reports GHG emissions under subpart W of more than 25,000 metric tons CO_2e.

WEC Obligated Party: The owner or operator of a WEC applicable facility and the entity responsible for any WEC obligation.

WEC Obligation: The charge owed by a WEC obligated party.