



OFFSHORE OPERATORS COMMITTEE
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July 4, 2020

Submitted via https://www.reginfo.gov/public/do/PRAViewICR?ref_nbr=202005-1010-001

SUBJECT: COMMENTS ON AIR QUALITY CONTROL, REPORTING, AND COMPLIANCE (30 CFR 550,
SUBPART B, PLANS AND INFORMATION
FORM: BOEM-0139
OMB CONTROL NUMBER: 1010-0151
ICR REFERENCE NUMBER: 202005-1010-001
AGENCY TRACKING NUMBER: 1010-0151 RENEWAL/AE02

To Whom It May Concern:

The Offshore Operators Committee (OOC) respectfully is providing the attached comments on the above-captioned regulatory action. Specifically, the OOC is providing comments on Bureau of Ocean Energy Management (BOEM) Form-0139, the Air Quality Report (AQR) for Development Operations Coordination Documents (DOCD) and Development and Production Plans (DPP). However, many of the attached comments would also be applicable to BOEM Form-0138, the AQR for Exploration Plans (EP).

The OOC is an offshore oil and natural gas trade association that serves as a technical advocate for companies operating on the US Outer-Continental Shelf (OCS). Founded in 1948, the OOC has evolved into the principal technical representative regarding regulation of offshore oil and natural gas exploration, development, and producing operations. The OOC's member companies are responsible for more than 90% of the oil and natural gas production from the OCS. The comments contained in this letter are submitted without prejudice to any of our members who may have differing or opposing views.

The attached comments and recommendations provide specific details regarding the AQR, including:

- Improvements to air emission factors and calculations,
- Enhancements to improve transparency and clarity in the AQR instructions, and
- Recommendations to improve the alignment of the AQR with the recently revised Outer-Continental Shelf (OCS) air quality regulations ("the Final Air Rule") published on June 5, 2020.

Of particular concern to OOC and its members, is that in some instances it appears that the AQR does not fully align with the Final Air Rule, and it adds additional burdensome requirements for the regulated community. Some examples include:

- The addition of new categories of the type of flaring activities to the AQR. This change was not addressed in the Final Air Rule (see page 4, item 4 in the attached comments).
- The inclusion of emissions from offshore support vessels in the AQR. BOEM has not provided adequate justification for why vessel emissions are being requested (see page 3, items 1 and 2).
- The inclusion of ammonia emissions in the AQR when the preamble to the Final Rule states that BOEM will not implement reporting of emissions data for ammonia (see page 5, item 5).
- OOC questions whether the omission of particulate matter emissions calculations from the AQR would necessitate additional public comment on Form-0139 (see page 6, item 6).
- OOC questions how the AQR requirements would be implemented in the event the Final Air Rule becomes effective but the revised AQR is not available for use by the regulated community (see page 6, item 7).

OOO appreciates the efforts of BOEM since 2016 to finalize an effective, implementable Final Air Rule for the OCS. The Final Air Rule offers many practical solutions to ensure that the onshore air quality of the United States remains protected without unduly burdening critical offshore energy production. The attached comments on the AQR are offered as constructive suggestions to further improve BOEM's air quality program.

If you have any questions or require additional information please contact me at greg@theooc.org.

Sincerely,



Greg Southworth
Associate Director
Offshore Operators Committee

A. General Comments

Support Vessels

1. Can BOEM explain why the AQR and plans require inclusion of emissions from vessels within 25 miles of a facility? Per the Preamble of the Final Rule, *“The CAA explicitly authorizes the Administrator of the USEPA to regulate emissions from vessels servicing or associated with an OCS source within 25 miles of the OCS source in specific areas of the OCS. 42 U.S.C. 7627. In contrast, OCSLA only authorizes the Secretary to regulate air pollutants from “activities authorized” by OCSLA. OCSLA, section 5(a)(8). The Office of the Solicitor has previously opined that vessel traffic to and from OCS facilities is not an activity “authorized” under OCSLA, rendering requirements to count vessel emissions in regulating facilities potentially beyond the scope of the Secretary’s statutory authority.”* BOEM staff, during a June 25 workshop on the Final Air Rule, verbally stated that “NEPA” analysis is the reason for requiring transiting vessel emissions to be included on the AQR sheet. Please provide clarification on the specific NEPA requirements that authorize BOEM to collect information, such as transiting vessel emissions, from oil and gas operators. If such emissions are required to be included in NEPA analyses, please cite the statutory section(s) that allows BOEM to request this information from oil and gas operators.

In addition, BOEM also referenced EPA’s National Emissions Inventory (NEI) on the AQR spreadsheet for the vessel emission factors (see figure below). OOC believes that including vessel emissions on the AQR for NEPA and NEI purposes is inappropriate because the purpose of an AQR is to estimate worst-case, potential emissions from planned activities subject to BOEM regulation, which transiting/unattached vessels are not.

NEPA assessments and the NEI should be based on estimates of actual emissions. Therefore, vessel emission estimates compiled as part of the GOM Air Quality System reporting are more appropriate as the basis for NEPA reviews and inclusion in the NEI. BOEM has, for the last several years, collected vessel data from sources other than oil and gas operators for emission estimates as part of the GOM emissions inventory process and has provided that to EPA for inclusion in the NEI. In addition, actual vessel emission estimates were included in the most recent BOEM OCS Air Quality Modeling Study. The Modeling Study would be a more appropriate document for use in NEPA assessments. Worst case, potential emissions included in the AQR are not intended to be an accurate representation of actual impacts on air quality.

Vessels – Propulsion	g/hp-hr	0.32	0.268452	12.6769	0.469791	2.237E-05	1.0440	0.0022	EPA CMV model (2019); PM: refer to Diesel Recip. > 600 hp reference	3/19	https://www.epa.gov/air-emissions-inventories/2017-national-emissions-inventory-nei-data
Vessels – Drilling Prime Engine, Auxiliary	g/hp-hr	0.32	0.313194	10.29066	0.313194	2.237E-05	0.6711	0.0037	EPA CMV model (2019); PM: refer to Diesel Recip. > 600 hp reference	3/19	
Vessels – Diesel Boiler	g/hp-hr		0.439963	1.4914	0.082027	3.729E-05	0.1491	0.0003	EPA CMV model (2019)	3/19	
Vessels – Well Stimulation	g/hp-hr	0.32	0.268452	12.6769	0.469791	2.237E-05	1.0440	0.0022	EPA CMV model (2019); PM: refer to Diesel Recip. > 600 hp reference	3/19	

In addition, we recommend that BOEM provide additional guidance on what the agency considers to be a “transiting vessel.” Further definition of this term will assist the regulated community in determining what types of vessels are included in Emission Exemption Threshold (EET) totals, thereby, improving plan submittals to the agency.

2. The draft AQR also includes vessels in the EET calculations when a vessel is attached to an OCS facility. At a June 25 workshop on the Final Air Rule, BOEM representatives stated that a vessel would need

to be attached to an OCS facility for a “significant amount of time” to be included in the EET calculations. However, the term “significant amount of time” is not defined in the new rule or within the AQR. We recommend that BOEM develop criteria to clarify when potential emissions from a vessel attached to an OCS facility would need to be included in the EET calculations. The absence of specificity could lead to inconsistency in the data submitted and confusion for industry professionals submitting plans for review, as well as agency staff responsible for reviewing plans.

Sources of Emission Factors

3. Most of the emission factors shown in the revised AQR are described with a corresponding reference document that provides the source of the emission factor. However, in many instances it is not clear how the emission factor was derived from the reference source. It is important for the regulated community to fully understand how the emission factors were developed so that the factors can be appropriately applied to the various equipment types. Inclusion of descriptions, including any agency calculations such as unit conversions, in the instructions for the AQR would be a valuable tool to promote full understanding, transparency and proper use of the emission factors. For example, it is not clear how the vessel activity emission factors referenced in Comment #2 above were developed from the reference document listed in the AQR.

In addition, the number of decimal places for various emission factors vary widely in the AQR spreadsheet. Some categories contain emission factors to 2 decimal places, some categories to 4 decimal places and some categories to 6 decimal places. Although this likely will not have a significant impact on estimated emissions, it would be more appropriate for emission factors, where possible, to be shown with consistent decimal places.

Flares

4. Emissions for flaring have been separated into 4 separate categories: no smoke, lightly smoking, medium smoking, heavy smoking. This is a significant change to the AQR that was not described in the final OCS air rule and did not undergo public comment prior to the publication of the revised AQR. However, the emission factor for each of these types of flaring activities is identical in the AQR. In practice, the level of flare smoking is difficult, if not impossible, to predict at the planning stages of a project. The amount of smoke from a flare will also vary widely dependent upon the operating conditions. Typically, plans are submitted for review and approval months, and even years, in advance of actual facility construction and operation. Even flares of smokeless design are only smokeless during events associated with a certain gas flow and composition and could smoke based on variations in operations and the heating value of the gas at a specific facility. OOC recommends the removal of the separate subcategories of flare emissions. If the separate subcategories are not removed, BOEM should clarify when a flare is considered to be in each of the categories.

Also, it is unclear how the emission factors for flaring activities were developed from the associated reference document (EPA AP-42 – Miscellaneous Sources) listed in the AQR. The document

references “soot” which is typically associated with particulate emissions of 2.5 micrometers (PM_{2.5})¹, and provides the following reference to the associated categories of flaring:

- ^d Soot in concentration values: nonsmoking flares, 0 micrograms per liter (µg/L); lightly smoking flares, 40 µg/L; average smoking flares, 177 µg/L; and heavily smoking flares, 274 µg/L.

This is the only description in the reference document that specifies emission factors for the 4 categories of flaring. However, it is inappropriate to use “soot” emission factors to calculate Total Suspended Particulates (TSP) or particulate matter less than 10 micrometers (PM₁₀). In addition, if the 4 categories of flaring are being included on the AQR to address “soot” (as it appears to be from the associated reference document), then BOEM is creating additional AQR inputs based on the emission factors for a pollutant (PM_{2.5}) that does not have an EET.

For the reasons discussed above, we strongly recommend that the 4 flaring categories be removed from the AQR and a single line item for flaring be included in the AQR.

Ammonia

5. Ammonia should not be included in the AQR form. It is not listed as a NAAQS criteria pollutant subject to the regulations. The preamble of the Final Air Rule states the following related to ammonia:

- “BOEM’s ability to regulate air quality is limited to the authority provided to the Secretary in section 5(a)(8). The authority granted in section 5(a)(8) is limited to ensure compliance with the NAAQS, and therefore that provision does not grant authority to regulate emissions that have no relation to attaining a NAAQS.”
- “This final rule also does not implement the proposed rule requirement that operators report emissions data for ammonia.”
- “As noted previously, BOEM refers to air pollutants that contribute to the formation of a criteria air pollutant as precursor air pollutants. In order to ensure that the NAAQS standards for these pollutants are not exceeded, DOI must also regulate the emissions of both the criteria air pollutants and the precursor air pollutants. Historically, the major precursor air pollutant that DOI has regulated is Volatile Organic Compounds (VOCs). In addition to VOCs, the proposed rule identified Hydrogen Sulfide (H₂S) as a precursor for Sulfur Dioxide (SO₂); Nitrogen Oxides (NO_x), VOCs and Carbon Monoxide (CO), as precursors for Ozone (O₃); and NO_x, VOCs, Fine Particulate Matter (PM_{2.5}), Sulfur Oxides (SO_x) and Ammonia (NH₃), as precursors for PM_{2.5}. The proposed rule suggested that DOI require the collection of additional data on these precursors and that new formulas be created to evaluate precursor pollutants in their capacity as precursors. In particular, DOI suggested that lessees and operators be required to start reporting ammonia emissions. VOCs and ammonia were classified as “major precursor pollutants” under the proposed rule because these precursors were included in the list of pollutants for which States would be required to gather emissions data to comply with USEPA requirements. The final rule does not adopt the concept of “major precursor pollutant” that was included in the proposed

¹ See EPA’s *Emission Estimation Protocol for Petroleum Refineries* that says “Additional emission factors for soot (i.e., PM) are also provided AP-42; however, the soot factors provided in units of concentration in the flare exhaust steam. These factors have been converted to heating value-based factors to allow calculation of soot (PM) emissions using Equation 6-2. To calculate the soot (PM) emissions from flares, each measurement period would be assigned a flare operation category based on the amount of smoke generated by the flare during that measurement period, so the appropriate emission factor could be applied. **It should be assumed that all flare soot is fine PM (PM_{2.5}-FIL).** (emphasis added).

rule. As is the case in the existing regulations, the only non-criteria air pollutants included in the final rule are VOCs and TSP. The proposed rule would also have included ammonia under the heading of “major precursor pollutant.” BOEM has decided not to add ammonia at this time. There were several reasons for this. First, as is the case with all the EETs, BOEM does not believe that it has an adequate scientific basis for establishing new formulas. Indeed, BOEM never had an EET for ammonia. Second, it is not clear that ammonia is emitted from OCS facilities in quantities sufficient to cause a significant effect to any State. Third, since ammonia is primarily a precursor for PM_{2.5} and BOEM does not have an EET for PM_{2.5}, it is unclear how a formula should be determined. Although BOEM is modifying the air quality spreadsheets to calculate ammonia emissions on behalf of operators, BOEM has determined not to add an EET for ammonia or to add any requirements (including requirements for photochemical modeling) for ammonia to this final rule, though BOEM will continue to evaluate and review its study results.”

It is clearly stated in the preamble to the Final Air Rule that there is no requirement to provide ammonia emissions to BOEM which has no authority to regulate those emissions. In addition, the preamble states emissions in the AQR are calculated “on behalf” of the operator. Operators take exception to BOEM calculating ammonia emissions on their “behalf” for constituents not regulated and using factors and/or methodology without a clear regulatory basis for calculating such emissions.

Particulate Matter (PM)

6. In addition to the comments regarding PM emissions from flares discussed in Comment #4 above, we have additional questions regarding the inclusion of PM_{2.5} and PM₁₀ emissions in the revised AQR. The AQR available for review on OMB’s website does not include categories for PM 2.5 and PM₁₀ emissions. However, at a June 25 workshop on the Final Air Rule, BOEM staff indicated that the exclusion of PM_{2.5} and PM₁₀ was an omission error and that calculations for PM_{2.5} and PM₁₀ would be added to the final AQR. BOEM staff also indicated that PM_{2.5} and PM 10 emissions would not have an associated EET; PM_{2.5} and PM₁₀ emissions estimates would only be used for dispersion modeling purposes if the EET for TSP is exceeded.

Omitting PM_{2.5} and PM₁₀ emission calculations from the AQR released for public review raises the question whether public review should be re-started with these columns added to ensure transparency. If there are inaccuracies with the PM_{2.5} and PM₁₀ calculations added to the AQR then the regulated community will be left with a final document that does not accurately depict estimated emissions.

Use of the Current AQR Post-Effective Date of the Final Air Rule

7. The AQR is being revised to align with BOEM’s recently published Final Air Rule. However, release of the final AQR may not coincide with the effective date of the new regulations. Therefore, the regulated community may find itself in the situation of utilizing the current AQR, which does not align with the new regulations, to comply with the requirements of the new rule. It would be extremely beneficial if BOEM could provide guidance on how, if applicable, the current AQR will be utilized in the interim period between the effective date of the new regulations and release of the final, revised AQR. Will the regulated community be allowed to modify on a case-by-case basis, the current AQR to align with the new regulations? For example, will BOEM allow removal of vessel emissions estimates

from the EET calculations as specified by the new regulations? Or, will operators be allowed to update any emission factors in the current AQR to align with those described in the revised AQR?

B. “Factors” Worksheet Comments

The following comments are provided to the worksheet titled “Factors” in the draft AQR.

1. Storage tanks, Glycol Dehydrators, and Cold Vents are all based on an equipment quantity. These sources do not account for a volume processed. These emissions will not be accurate, since the emissions are not based on a source count, but the throughput. In addition, does BOEM expect that storage tanks will include all sources of potential VOC emissions? Historically, AQR calculations have only accounted for crude oil storage tanks.
2. 2SLB Natural Gas Engines, 4SLB Natural Gas Engines, and 4SRB Natural Gas Engines: The NO_x and CO factors are at <90% load. These factors will produce lower emissions than the >90% load factors. If the intent is to provide a worst-case scenario in the AQR, the higher factor should be the one used. In addition, use of the <90% load factors could create compliance issues during BSEE air quality inspections; raising questions from the regulator whether the regulated entity has accurately assessed emissions from the facility. This could potentially result in compliance ambiguity because the AQR provides an inaccurate emission factor. Additionally, no PM factor is listed even though AP-42 has a factor available.
3. 4SRB Natural Gas Engines: The VOC factor in the cell calculation was rounded (should be 0.0296, not 0.03 for consistency).
4. NG Turbines: no PM factor is listed in the AQR. However, EPA AP-42 does provide a factor of 6.6 E-03 lb/MMBtu.
5. Diesel Engines <600 hp: the conversion/calculation is not included in the workbook cells like other equipment calculations. The VOC factor should be 1.12 g/hp-hr, not 1.04 g/hp hr.
6. Diesel Engines, >600 hp: The conversion/calculation is not included in the workbook cells like other equipment calculations. The VOC factor should be 0.32 g/hp-hr, not 0.29 g/hp hr.
7. Diesel Boilers: the referenced factors are for boilers greater than 100 MMBtu/hr. There may be diesel boilers operating in the OCS that are below 100 MMBtu/hr. Therefore, we recommend that emission factors be included for diesel boiler less than 100 MMBtu/hr. Also, the table referenced in the AQR appears to be incorrect. The correct reference should be Table 1.3-1.
8. Diesel Turbines: A PM factor is not listed for this category. However, EPA AP-42 has a factor of 1.2 E-02 lb/MMBtu.
9. Dual Fuel Engines: The AQR calculations select the higher of the factors for Natural Gas Turbines and Diesel Turbines for Dual Fuel Turbines. For an aspirated dual fuel engine, EPA AP-42 has factors available (see table below from AP-42).

Table 3.4-1. GASEOUS EMISSION FACTORS FOR LARGE STATIONARY DIESEL AND ALL STATIONARY DUAL-FUEL ENGINES^a

Pollutant	Diesel Fuel (SCC 2-02-004-01)			Dual Fuel ^b (SCC 2-02-004-02)		
	Emission Factor (lb/hp-hr) (power output)	Emission Factor (lb/MMBtu) (fuel input)	EMISSION FACTOR RATING	Emission Factor (lb/hp-hr) (power output)	Emission Factor (lb/MMBtu) (fuel input)	EMISSION FACTOR RATING
NO _x						
Uncontrolled	0.024	3.2	B	0.018	2.7	D
Controlled	0.013 ^c	1.9 ^c	B	ND	ND	NA
CO	5.5 E-03	0.85	C	7.5 E-03	1.16	D
SO _x ^d	8.09 E-03S ₁	1.01S ₁	B	4.06 E-04S ₁ + 9.57 E-03S ₂	0.05S ₁ + 0.895S ₂	B
CO ₂ ^e	1.16	165	B	0.772	110	B
PM	0.0007 ^c	0.1 ^c	B	ND	ND	NA
TOC (as CH ₄)	7.05 E-04	0.09	C	5.29 E-03	0.8	D
Methane	f	f	E	3.97 E-03	0.6	E
Nonmethane	f	f	E	1.32 E-03	0.2 ^g	E

Alternatively, operators could enter data for dual fuel engines as separate line items based the time an engine would be operated in natural gas service, and the time the engine would be operated in diesel service.

10. Reference hyperlinks to online EPA documents is helpful, but these links may become obsolete if EPA restructures their website. It would be helpful to also include the title and year of publication (or edition) of the reference document so that the regulated community could access these documents via other means if necessary.
11. Diesel Reciprocating Engines <600 hp Diesel Reciprocating Engines >600 hp, Vessels – Propulsion, Vessels – Drilling Prime Engine Auxiliary, and Vessels – Well Stimulation: The SO_x emission factors for all of these equipment types should be based on the concentration of sulfur in the fuel and the amount of fuel consumed. In OCS operations, several standards exist for sulfur content of diesel fuel. In most cases in the Gulf of Mexico ultra-low sulfur diesel is used. However, for foreign-flagged vessels entering the Gulf of Mexico from other international areas the diesel fuel may be low sulfur diesel in compliance with the requirement of the Emission Control Areas (ECA) of the International Maritime Organization. Also, MARPOL requirements may apply to certain types of vessels and operations. Therefore, we recommend that diesel sulfur content factors be added to the AQR that address all of these possibilities so the regulated community can select the most accurate emission factor for the operation.
12. Vessels – Diesel Boiler: Typically, the MMBtu/hr rating of Boilers is readily available to the regulated community. We recommend that MMBtu/hr units be used to determine capacity and fuel used. By doing so, the user of the AQR does not have to covert MMBtu/hr to horsepower. The appropriate equations can be shown in the EMISSIONS Tabs. By including this conversion in the AQR, potential unit conversion errors will be reduced.

C. “Emissions” Worksheet Comments

The following comments are provided to the worksheet titled “Emissions” in the draft AQR.

1. We request that BOEM provide instructions on how the EQUIPMENT ID column is to be used in the AQR. It is our understanding from the June 25 workshop, that equipment identifications listed in this column will be expected to match the equipment identifications in the BOEM’s Air Quality System

used for emission inventories. This may result in some additional, unaccounted for burdens to the regulated community. For example, if a piece of equipment is replaced on an OCS facility with an identical unit (replacement-in-kind) there will be no associated emissions increase. However, the equipment identification will likely change. Would operators be expected to submit a revised AQR without any increase in emissions to change an equipment identification indicator? In addition, this is a new column that is not included in the current AQR. It would be inappropriate to expect the regulated community to update AQRs with equipment identifications if there is no other technical or operational reason to submit an updated plan, especially if there is no associated increase in emissions.

2. Vessels – Ice Management Diesel: What is the reasoning for including Ice Management Vessels in the EET calculations when all other Alaska-Specific Sources are not?
3. Vessels: Certain select vessels are included in EET sum totals such as: Pipe Laying Vessels, Pipeline Burying vessels, Heavy Lift Vessel/Derrick Barge, Shuttle Tankers and Well Stimulation vessels. As discussed previously, we are requesting that BOEM provide additional clarification on which vessel emissions are required to be included in the AQR sheet in accordance with the authority granted under OCSLA. BOEM should include notes on the AQR that describe how each of the vessels included in the EET totals meet the definition of “facility.” By doing this, BOEM will also aid the regulated community in assessing other types of vessels that may not be included in the AQR to determine whether those “unlisted” activities should also be included in the EET calculations.
4. Drilling Rigs/MODUs: We recommend that BOEM develop a resource that lists the hp ratings for all drilling rigs potentially operating in the Gulf of Mexico (GOM). There are a limited number of offshore rigs working in the GOM (currently 11 total). By developing an agency resource consistency among plan submittals would improve. Information such as this could be included on BOEM’s website or integrated into a Notice to Lessee’s.
5. Vessels – Drilling Prime Engine, Auxiliary: This cell uses a factor from cell \$C\$17 of the FACTORS tab. It should reference cell \$C\$18 on the FACTOR tab. In addition, “Auxiliary” is misspelled.
6. Vessels - Drilling - Propulsion Engine – Diesel: We recommend BOEM explain the reason the “0.85” adjustment factor is used to calculate lbs/hr for this category. (Reference: Cells I7, J7, K7, L7, M7, N7, O7). There is no explanation of this in the Air Emissions Calculations Instructions for EPs and DOCDs. A note in the instructions document should explain reason for the adjustment factor. Using unexplained emission factors adjustments may cause more errors since users often copy and paste cells to calculate emission for multiple similar emission source types. The 0.85 factor is also used for lbs/hr calculations for other “Vessels” as well.
7. Liquid Flaring: Specify the units for the rating data input for Cell D16 in barrels per day of liquid flared - based on the maximum lbs/hr calculations used in the spreadsheet. The units listed for the FACTORS page for Liquid Flaring is lbs/barrel. This would correspond to lbs of pollutant per barrel of liquids (crude oil, condensate). It appears that the factors used in the FACTORS page for distillate oil fired fuel are used adjusting the emission factor to lbs/bbl of oil burned.
8. Cold Vent: BOEM should define the equipment included under “Cold Vent” that would be included in the calculations. We recommend this be included in the instructions. We also recommend that BOEM give the basis for an emission factor of tons VOC/yr-vent. The regulated community is limited to 50 MSCF/day of venting flash gas. Regulated entities may have an estimate of the volume of natural gas vented by a “Cold Vent.” Perhaps the calculation could be based on the volume of natural gas vented and the chemical makeup similar to the flaring calculations.
9. Vessels – Drilling Prime Engine, Auxiliary: This cell uses a factor from cell \$C\$17 of the FACTORS tab. It should reference cell \$C\$18 on the FACTORS tab.

10. Vessels - Shuttle Tankers: It is unclear whether Shuttle Tankers are included in "Vessels – Propulsion" as listed on the FACTORS tab (Cell B17). We recommend that BOEM specify the source of emission factors for Shuttle Tankers on the FACTORS worksheet of the AQR.
11. Vessels - Well Stimulation: A factor of "0.3863" is used for lbs/hr calculations. Similar to Comment #6 above, we recommend that an explanation of why this factor is used should be included in the instructions.

D. Air Emissions Calculations Instructions for DOCDs

The following comments are applicable to the instructions for completing the AQR.

1. The instructions should state how a regulated entity accounts for emissions from storage tanks that are controlled through the use of a vapor recovery unit or where the vent gas is routed to a flare. We recommend that there be a way to account for a percent destruction and removal efficiency (DRE) for the emission control device used. For flares with a volume meter, these emissions will be accounted for in the flare emissions.
2. The instructions should state how a regulated entity accounts for emissions from a glycol dehydration unit that is controlled through the use of a condenser, vapor recovery unit or where the vent gas is routed to a flare. We recommend that there be a way to account for a percent destruction and removal efficiency (DRE) for the emission control device used. For flares with a volume meter, these emissions will be accounted for in the flare emissions.

E. Questions from the June 25 BOEM Air Quality Workshop

On June 25, 2020 BOEM staff held a virtual workshop to provide an overview of the Final Air Rule, the revised Air Quality Report spreadsheet, and how BOEM guidance is being updated in response to the changes in the new rule. During the workshop, BOEM staff requested that the questions raised during the workshop be submitted to this comment docket so that a record of the questions could be developed and BOEM could respond. The workshop questions are included below. Please note, not all questions included here directly relate to the Air Quality Report (AQR).

1. How is BOEM handling the new vessel provisions during the interim period before new AQR is final?
2. Can operators modify the Emission Exemption Threshold (EET) sum formula to omit transiting vessel emissions during this interim period?
3. Is there a comparative document to highlight the changes in the standard (new rule compared to existing rule)?
4. For Deepwater Port applications submitted to the Maritime Administration, what criteria would be used to review the air emissions for these projects?
5. Is BOEM anticipating using what EPA considers interim SILs in the future?
6. BOEM stated they do not have jurisdiction over certain vessel emissions. Can BOEM elaborate on why these emissions within 25 miles still need to be included in plans and AQRs? [See Section A "General Comments," Item 1 in these comments for more detail].
7. BOEM stated they perform air quality monitoring to determine the impacts of emissions onshore. Is this new? How is it done and is it coordinated with the state agencies? Please provide clarification on how this onshore air monitoring program is executed, including details on coordination with state agencies.

8. Excluding support vessels from the emission estimates: will the support vessel emissions be continued to be included in the air dispersion modeling if triggered? For example, will emissions from support vessel within 25 miles of the facility be counted when assessing the impacts on Class I areas.
9. If the point of NAAQS compliance is determined at the shoreline, can you explain the previous comment about needing vessel emissions to determine background concentration at any given point in GOM?
10. In the final rule, BOEM refers to a permanent or temporary facility “attached” to the seabed. BOEM previously used the term “connected” in guidance, which is not currently referenced in BOEM’s language or definition of facility. How does BOEM define “connected” compared to “attached”?
11. The AQR includes emissions for certain vessels that can be temporarily connected either to the seabed or to a facility (such as well reworking vessels). Will emissions from those vessels continue to be treated as facility emissions? Please elaborate on “connection”? Is a crew boat temporarily “connected” to the facility when transferring personnel or goods?
12. The final rule retains the existing 303(j) where the Regional Supervisor can require the consolidation of multiple facilities’ emissions if, in his or her determination, the emissions will cause a significant effect to a State. How would the Regional Supervisor make this determination?
13. Why are we still calculating vessel emissions in the AQR? One presenter and the new rule state that vessel emissions are not required to be calculated. *[See Section A “General Comments,” Item 1 in these comments for more detail].*
14. Can the Equipment ID column be left blank for temporary equipment?
15. Why does the AQR differentiate smoking levels for flares if the emission factors are the same for all flares on the Emission Factor page of the AQR?
16. BOEM included emission factors for “Dual Fuel Turbines” that appear to use the highest emission rate factors from diesel and natural gas turbines. Most dual fuel turbines fire diesel and natural gas separately and are not co-fired. Can BOEM elaborate on why the separate factors are included in a single Dual Fuel emission factor now?
17. When will the correct version of the AQR spreadsheets be available on BOEM’s website?
18. Like in the past, will BOEM continue to allow modifications to the AQR spreadsheets to include project/platform specific air emission sources that are not part of the default list and using equipment specific emission factors wherever applicable?
19. Do the equipment IDs [on the AQR] have to match the IDs used in GOADS/AQS?
20. Will actual fuel usage be acceptable for rig emissions when near shore?
21. Has BOEM provided definitions for the different combustion levels (for smoke)?
22. It was stated “Pipeline Installation” emissions should be included. To clarify, is this infield flowlines and not BSEE-permitted pipelines?
23. For air quality modeling, two questions: 1. How confident is BOEM with the current regulatory modeling to determine impacts onshore? 2. Is there any progress on having a protocol in place for the operators to design a modeling scenario for emission sources in their plans?
24. In the previous version of the AQR, we used one set of factors for diesel fuel >600 hp. The new AQR has EFs for propulsion, drilling well stimulation. How should operators use these new Emission Factors?
25. COMMENT: In the past for dual fuel turbines we calculate emissions separately (separate line items) for hours using diesel fuel and for hours using natural gas. Diesel fuel use typically involves much fewer hours than natural gas fuel usage.

26. For Vessel Maximum pound per hour column calculations, there is a new calculation to multiply by 0.85 or specifically 0.3863 for Well Stimulation Vessels for all pollutants. Can BOEM please clarify what those multipliers are and why they were added to the AQRs?
27. Will current submissions of DOCD and EP have to be pulled and resubmitted?
28. Will the operators have an opportunity to review and engage with BOEM on the draft NTLs?
29. COMMENT: EPA latest CALPUFF is 5.8.5 not 5.8. That might be a typo on the slide.
30. For the “Tips to Avoid Common Emissions Spreadsheet Errors (BOEM Tips for FORM 0138 & 0139)” on BOEM’s Air Quality webpage, which guided operators in preparing AQRs, was this considered “guidance” by BOEM? Were all of these “tips” incorporated into the new NTLs and/or the AQR instructions?
31. How is this new rule and timing thereof going to affect EP / DOCDs already in review?
32. The new rule leaves open the interpretation the definition of “facility,” considering the rule has multiple definitions. How does BOEM intend to clarify the differences in the definitions? Will the pending NTLs address this?
33. Are there efforts on-going to submit Plan air emissions electronically? Can BOEM provide an update or outlook?
34. To clarify: while performing air dispersion modeling the use of CALPUFF and AERMOD will not require filing “Alternative Modeling Request” but use of OCD will. Correct?