Supporting Statement A
Air Quality Control, Reporting, and Compliance
OMB Control Number 1010-0151

Terms of Clearance: In accordance with 5 CFR 1320, OMB is withholding approval at this time. Prior to publication of the final rule, the agency must submit to OMB a summary of all comments related to the information collection contained in the proposed rule and the agency response. The agency should clearly indicate any changes made the information collection as a result of these comments.

General Instructions

A completed Supporting Statement A must accompany each request for approval of a collection of information. The Supporting Statement must be prepared in the format described below, and must contain the information specified below. If an item is not applicable, provide a brief explanation. When the question, "Does this information collection request (ICR) contain surveys, censuses, or employ statistical methods?" is checked "Yes," then a Supporting Statement B must be completed. The Office of Management and Budget (OMB) reserves the right to require the submission of additional information with respect to any request for approval.

Introduction

On April 5, 2016, BOEM published a proposed rule that would amend BOEM regulations related to air quality measurement, evaluation, and control for oil, gas, and sulfur operations on the OCS. This final rule amends BOEM air quality management regulations applicable to activities authorized by BOEM on the OCS.

Because the proposed rule was intended to replace the existing set of regulations in its entirety, and not, like this final rule, simply to update certain provisions, the structure of the proposed rule was quite different from that of the final rule. The final rule makes only a limited number of updates to the existing regulations and does not fundamentally restructure the existing regulations. The overall annual burden hours and non-hour cost burdens for OMB control number 1010-0151 are not impacted by this final rule.

The information collections activities intended in the proposed rule were assigned control number 1010-0192, including those burdens related to forms BOEM-0138 and BOEM-0139. The final rule only updates two forms approved for use under OMB control number 1010-0151. With OMB approval of the new form revisions, BOEM plans to replace forms BOEM-0138 and BOEM-0139 under OMB control number 1010-0151.

BOEM is submitting an information collection revision of OMB control number 1010-0151 with the final rulemaking to address the modification to forms BOEM-0138 and BOEM-0139. The overall annual burden hours and non-hour cost burdens are not impacted by this final rulemaking.

Justification

1. Explain the circumstances that make the collection of information necessary. Identify any legal or administrative requirements that necessitate the collection.

The Outer Continental Shelf (OCS) Lands Act, as amended (43 U.S.C. § 1331 *et seq.* and 43 U.S.C. § 1801 *et seq.),* authorizes the Secretary of the Interior to prescribe rules and regulations to administer leasing of mineral resources on the OCS. Such rules and regulations apply to all operations conducted under a lease, pipeline right-of-way, lease-term pipeline, or a right-of-use and easement.

Sections 11 and 25 of the amended OCS Lands Act require the holders of OCS oil and gas or sulphur leases to submit Exploration plans (EPs) and Development and Production Plans (DPPs) to the Secretary for approval prior to commending these activities. Section 1332(6) states that "operations in the [O]uter Continental Shelf should be conducted in a safe manner by well-trained personnel using technology, precautions, and techniques sufficient to prevent or minimize . . . occurrences which may cause damage to the environment or to property, or endanger life or health." Section 1334(a)(8) requires that regulations prescribed by the Secretary include provisions "for compliance with the national ambient air quality standards [NAAQS] pursuant to the Clean Air Act (42 U.S.C. 7401 *et seq.),* to the extent that activities authorized under this subchapter [Act] significantly affect the air quality of any State."

This authority and responsibility have been delegated to the BOEM, which administers these provisions in accordance with its regulations at 30 CFR Part 550, Subparts A, B, and C. BOEM regulations require the submission of information on projected air emissions with each proposed plan for exploration or development of oil, gas or sulfur on the OCS. As part of the submission, BOEM requires that the submitter evaluate whether the activities conducted under the proposed plan will be above or below a BOEM-defined exemption threshold used to determine whether air quality impacts would be *de minimus* or whether additional review or emission reduction measures are required. In the event that the proposed emissions exceed the exemption threshold, BOEM requires modeling of the non-exempt emissions and their potential impacts to air quality onshore. Depending on the level of emissions described in the proposed plan, BOEM would require the control of emissions from any facility that would otherwise cause an exceedance of national ambient air quality standards onshore.

This information collection request is in conjunction with a final rule that would revise the 2016 proposed rule—30 CFR Part 550, Air Quality Control, Reporting, and Compliance; Proposed Rule (81 FR 19718; April 5, 2016). It is important to point out that BOEM is replacing most of the proposed requirements contained in the 2016 proposed rule with requirements similar to those in force now.

On April 28, 2017, the President issued Executive Order 13795 entitled “Implementing an America-First Offshore Energy Strategy”. In section 2 of this Executive Order, the President directed that: “The Secretary of the Interior shall take all steps necessary to review BOEM's Proposed Rule entitled “Air Quality Control, Reporting, and Compliance,” 81 Fed. Reg. 19718 (April 5, 2016), along with any related rules and guidance, and, if appropriate, shall, as soon as practicable and consistent with law, consider whether the proposed rule, and any related rules

and guidance, should be revised or withdrawn."

On May 1, 2017, in response to this Executive Order, the Secretary issued Secretarial Order 3350, requiring the Director of BOEM to "provide to the ASLM, the Deputy Secretary, and Counselor to the Secretary for Energy Policy, a report explaining the effects, if any, of not issuing a new rule addressing offshore air quality, and providing options for revising or withdrawing the proposed rule consistent with the policy set forth in section 2 of the Executive Order."

In July 2017, BOEM issued a report to the U.S. Department of the Interior (DOI) that summarized various options and that made recommendations in accordance with Secretarial Order 3350. Since that time, BOEM has carefully reviewed the available alternatives in the context of the Executive and Secretarial orders. This final rule is consistent with the policies of those orders.

Instead of adopting the more sweeping changes that were proposed, this final rule retains most of the text of the existing regulations while making only a small number of the proposed changes.

Where the proposed rule would greatly impact the approved OMB information collection burdens, the final rule does not impact the annual burden hours or non-hour costs currently approved by OMB. Therefore, there are no changes to the annual burden hours and non-hour costs currently approved in OMB Control Numbers 1010-0114, 1010-0151, or 1010-0057.

In conjunction with the final rule, BOEM is updating forms BOEM-0138 and BOEM-0139. These are forms (not part of the regulations themselves) that operators use to report the information on air emissions required in the regulations, primarily the emissions associated with their proposed plans. These spreadsheets require the operator to identify the relevant types of equipment that will be used in connection with its OCS operations. The air quality spreadsheets provide emissions factors that correspond to each of the equipment types and that BOEM uses to determine the amount of emissions generated for every relevant criteria air pollutant, TSP, or Volatile Organic Compound (VOC) under the plan. The spreadsheets enable the operator to quantify the total emissions by type of air pollutant for all equipment included in the EP, DPP, or DOCD, and then determine whether such emissions would or would not exceed the relevant EETs. Once the final rulemaking becomes effective, these forms will replace those that are currently approved by OMB under OMB Control Number 1010-0151.

It is also important to point out that with the final rule, BOEM is adopting only some of the changes on the forms submitted with the proposed rule (explained in item 2 below).

2. Indicate how, by whom, and for what purpose the information is to be used. Except for a new collection, indicate the actual use the agency has made of the information received from the current collection. Be specific. If this collection is a form or a questionnaire, every question needs to be justified.

BOEM engineers, geologists, geophysicists, and environmental scientists and other Federal

agencies (e.g., FWS, NOAA Fisheries) analyze and evaluate the information and data collected under Subpart B to ensure that planned operations are safe; will not adversely affect the marine, coastal, or human environment; and will conserve the resources of the OCS. We use the information to: (a) make an informed decision on whether to approve the proposed EPs, DPPs, DOCDs as submitted, or whether modifications are necessary without the analysis and evaluation of the required information. The affected States also review the information collected to determine consistency with approved Coastal Zone Management (CZM) plans and (b) report annually to NOAA Fisheries the effectiveness of mitigation, any adverse effects of the proposed action, and any incidental take, in accordance with 50 CFR 402.14(i)(3).

In general, BOEM uses the information collected to ensure that:

- There is no threat of serious, irreparable, or immediate damage to the marine environment caused by OCS oil and gas exploration, development, and production activities;
- Operations are conducted according to all applicable regulations, permit conditions and requirements, and in a safe and workmanlike manner;
- OCS oil and gas operations are conducted in a manner that minimizes air pollution from the OCS in adjacent onshore areas and do not exceed required emission levels for key pollutants; and
- Air emissions and related information comply with the NAAQS and regional haze regulations.

The final rulemaking updates forms BOEM-0138 and BOEM-0139 approved for use under OMB control number 1010-0151 (expiration June 30, 2021). With OMB approval of the form revisions, BOEM plans replace the forms under OMB control number 1010-0151.

Form Modifications for BOEM-0138 (EP - Air Quality) and BOEM-0139 (DOCD/DPP – Air Quality): These forms are designed to standardize the way potential air emissions are estimated and approved as part of the OCS plan. These forms are intended to be thorough but flexible to meet the needs of different lessees and operators. BOEM uses the data from these forms to determine the effect of air emissions on the environment. These forms consist of:

- title, factors, emissions pages,
- summary page that describes and calculates the estimated emissions from an activity,
- a list of appropriate emissions factors to be used in calculating the proposed air emissions for various types of equipment,
- a list of key operational activities, such as drilling or facility installation,
- location information applicable to all fixed facilities,
- information on fuel consumption,
- a distribution of estimated air pollutant outputs, by type of activity and type of equipment, and
- respondents are asked to categorize emissions into factors (such as natural gas prime movers, diesel-fired prime movers, heaters/boilers/firetubes/NG-fired, gas flares, liquid flares with added smoke level categories, tanks, fugitives, glycol dehydrator vent, and

gas venting).

The final rulemaking is updating the spreadsheets with emissions factors for new types of equipment that are not currently listed (particularly those relevant to operations on the Alaska OCS). BOEM is also modifying the spreadsheet data requirements consistent with the regulations as amended. As part of this rulemaking, the air quality spreadsheets are being updated with newer, more up-to-date emissions factors to more accurately assess the emissions being emitted by equipment used by OCS lessees and operators and to evaluate the emissions for lead, $PM_{2.5}$, PM_{10}, TSP, and ammonia.

BOEM worked with a contractor to revise the forms to provide automated calculations after data entry. The modifications to the forms do not increase the currently approved hour burdens for plan submissions.

The following forms submitted to BOEM under Subpart B are not being modified with the final rulemaking, and will remain as previously approved by OMB:

BOEM-0137—Plan Information Form is submitted to summarize plan information. BOEM uses the information to assist in data entry and review of submitted OCS plans.

The form asks for, in either fill in the blanks or check marks:

-general information relating to the company;
-description of proposed activities;
-tentative schedule of proposed activities;
-description(s) of drilling rig, production platform, lease term pipelines;
-proposed well structure location; and
-anchor locations for drilling rig or construction barge.

BOEM-0141—ROV Survey Report is submitted to report the observations and information recorded from two sets of remotely operated vehicle (ROV) monitoring surveys to identify high-density benthic communities that may occur on the seafloor in deep water. The form asks respondents for general operator/facility information and a transect drawing of the survey pattern made by the ROV; a video tape (VHS) and transcript of what was visualized at the bottom throughout deployment (the form includes a guide to animal groups and a guide to physical features), and any additional imagery that helps depict bottom conditions. We use the information when such areas are found to help design mitigation measures to avoid these areas and to help assess the effectiveness of avoidance criteria.

BOEM-0142—Environmental Impact Analysis Worksheet is a fill-in-the-blank form that is submitted to identify the environmental impact-producing factors (IPFs) for the listed environmental resources. We use the information to help assess impacts and determine compliance with the National Environmental Policy Act. Respondents are asked to fill in the blank by placing an "x" in the space under each IPF category associated with the proposed activity that may impact a particular environmental resource.

3. Describe whether, and to what extent, the collection of information involves the use of automated, electronic, mechanical, or other technological collection techniques or other forms of information technology, e.g., permitting electronic submission of responses, and the basis for the decision for adopting this means of collection. Also describe any consideration of using information technology to reduce burden and specifically how this collection meets GPEA requirements.

Currently, 95 percent of all information is submitted electronically. However, because of the various types of information submitted with the plans (maps, surveys, spreadsheets, etc.), some of the submission may not readily lend itself to electronic commerce. In some instances, paper copies of the non-proprietary information submitted in the plans and accompanying information may continue to be necessary for review by States, local governments, and the public.

4. Describe efforts to identify duplication. Show specifically why any similar information already available cannot be used or modified for use for the purposes described in Item 2 above.

In the area of air quality, authority to regulate OCS air emissions is split between the Department of the Interior (DOI) and the Environmental Protection Agency (EPA). This split in the jurisdiction related to the monitoring of air quality is a result of the 1990 amendments to the Clean Air Act (Pub. L. 10I -549). Specifically, section 328 gives EPA the authority to regulate OCS air emissions for OCS areas except in the Central and Western Gulf of Mexico and in the Arctic OCS.

There is no duplication of effort with respect to reporting or analysis of air emissions because the EPA regulates emissions on some of the OCS and DOI regulates the air emissions for other parts of the OCS. In addition, DOI provides the data it collects to the EPA for their use in populating the national emissions inventory. These regulations are effective in avoiding duplication in Federal regulations and reporting. Similar information is not available because the information is unique for each emission source and data and information cannot be obtained elsewhere.

5. If the collection of information impacts small businesses or other small entities, describe any methods used to minimize burden.

Many of the OCS lessees and operators have less than 500 employees and are considered small businesses, as defined by the Small Business Administration. This collection of information could have a significant economic effect on a substantial number of small entities. However, the activities to which this information collection applies are subject to statutorily mandated controls designed to protect the environment and ensure that the air quality of potentially affected States is not adversely affected by OCS activities. The hour burden on any small entity subject to these regulations cannot be reduced beyond current levels without impairing the ability of the agency to comply with its statutory mandates.

6. Describe the consequence to Federal program or policy activities if the collection is not conducted or is conducted less frequently, as well as any technical or legal obstacles to

reducing burden.

If BOEM did not collect the information, it could not fulfill DOI's mandate from the OCS Lands Act to ensure safe and environmentally sound operations in the OCS. BOEM would not have the ability to determine if OCS operations comply with standards to minimize air pollution and avoid causing a significant adverse effect to adjacent onshore areas. BOEM's failure to collect this information would also adversely affect the States, as the emissions of air pollutants generated on the OCS could adversely affect their ability to comply with the federally mandated State Implementation Plans with respect to maintaining onshore ambient air quality levels in compliance with EPA standards.

The information collected is unique to each facility. With the exception of the information discussed in section A.7, the frequency is generally on the occasion of a proposed plan; thus, a lesser frequency is not possible.

7. Explain any special circumstances that would cause an information collection to be conducted in a manner:

(a) requiring respondents to report information to the agency more often than quarterly;
Vessel crews must report sightings of any injured or dead protected species (marine mammals and sea turtles) immediately to the NOAA Fisheries Stranding Hotline at (877) 433-8299. In addition, if the injury or death was caused by an OCS-related activity, operators must provide notification within 24 hours of the strike by email to protectedspecies@bsee.gov. This immediate response is necessary to comply with the NOAA Fisheries' mandate to report "takes" promptly.

(b) requiring respondents to prepare a written response to a collection of information in fewer than 30 days after receipt of it;
BOEM requires that any marine mammal observation and monitoring reports be submitted on the 1st and 15th of each month via email. This schedule is beneficial for two reasons: (1) data and sightings gathered over a 2-week period should be a manageable quantity that can be recorded and sent quickly and easily, by mail or electronically and (2) the rotation of a crew on typical seismic operations could make less frequent reporting problematic. A bimonthly reporting schedule will normally involve only one crew. However, there is a requirement to report within 24 hours the sighting of a sperm whale in the exclusion zone (that results in a shut down of air guns). This immediate response is necessary for BOEM to comply with the NOAA Fisheries' mandate to report "takes" promptly.

(c) requiring respondents to submit more than an original and two copies of any document;
The number of copies of plans and accompanying information respondents are required to submit varies depending on the location of the proposed activities. BOEM is under a mandated timeframe to review and make decisions on these plans, which can be quite complex, voluminous, and detailed. Several program areas within BOEM must review the information simultaneously to meet the mandated timeframe. If BOEM had to reproduce the necessary copies for its internal reviews, it would be extremely difficult, if not impossible, to meet the

deadlines imposed the by OCS Lands Act, as amended. Therefore, respondents submitting paper copies are required to submit four "proprietary" copies of their plans. In addition, the OCS Lands Act also requires that we make non-proprietary (public information) copies available for simultaneous review by State and local government entities. Depending on the State(s) involved, BOEM needs from 3 to 17 public information copies to distribute to the States and local governments having an interest in the project, as well as a copy to make available for the general public to review. Companies have indicated on occasion that they have no objection to providing the extra copies to expedite the review processes.

(d) requiring respondents to retain records, other than health, medical, government contract, grant-in-aid, or tax records, for more than 3 years;
It is also necessary that respondents retain data and information longer than 3 years. Much of the supporting information is to be retained for the duration of the project. However, this type of information is such that respondents would be very unlikely to dispose of it sooner. It contains valuable background data and analyses that they would not want to duplicate should it be needed during the life of the exploration or development and production project. We consider the burden only to make the information available to BOEM if necessary.

(e) in connection with a statistical survey, that is not designed to produce valid and reliable results that can be generalized to the universe of study;
Not applicable in this collection.

(f) requiring the use of statistical data classification that has been reviewed and approved by OMB;
Not applicable in this collection.

(g) that includes a pledge of confidentiality that is not supported by authority established in statute or regulation, that is not supported by disclosure and data security policies that are consistent with the pledge, or which unnecessarily impedes sharing of data with other agencies for compatible confidential use; or
This collection does not include a pledge of confidentiality not supported by statute or regulation.

(h) requiring respondents to submit proprietary trade secrets, or other confidential information, unless the agency can demonstrate that it has instituted procedures to protect the information's confidentiality to the extent permitted by law.
BOEM will protect information considered proprietary under the Freedom of Information Act (5 U.S.C. 552), under regulations at 30 CFR 550.197, "Data and information to be made available to the public or for limited inspection," and 30 CFR part 552, "Outer Continental Shelf (OCS) Oil and Gas Information Program."

8. If applicable, provide a copy and identify the note and page number of publication in the Federal Register of the agency's notice, required by 5 CFR 1320.8(d), soliciting comments on the information collection prior to submission to OMB. Summarize public comments received in response to that notice and in response to the PRA statement associated with the

collection over the past 3 years and describe actions taken by the agency in response to these comments. Specifically address comments received on cost and hour burden.

Describe efforts to consult with persons outside the agency to obtain their views on the availability of data, frequency of collection, the clarity of instructions and recordkeeping, disclosure, or reporting format (if any),and on the data elements to be recorded, disclosed, or reported.

Consultation with representatives of those from whom information is to be obtained or those who must compile records should occur at least once every 3 years - even if the collection of information activity is the same as in prior periods. There may be circumstances that may preclude consultation in a specific situation. These circumstances should be explained.

As required in 5 CFR 1320.11, BOEM provided for the 60-day review and comment process in the preamble of the proposed rule published in the Federal Register on April 5, 2016 (81 FR 19718).

Proposed Rule Comments:

BOEM received 81 sets of comments on the proposed rulemaking. Ten commenters submitted comments specifically in response to the information collections. Commenters mainly raised a number of issues specific to individual collections of information and cost outlined in the proposed rulemaking.

In general, industry and industry trade groups took the position that emissions generated from OCS sources do not represent a significant source of air pollution to the States and that BOEM's current regulatory approach is adequate. Environmental NGOs generally took the opposite view, arguing that BOEM's regulations are badly outdated and inadequate to ensure that OCS facilities do not adversely impact the air quality of the States.

The final rule retains most of the text of the existing regulations while making only a small number of the changes originally proposed. The proposed rule changes were far greater than those implemented in this final rule. The changes related to collection of information include:

- Updating the table of SLs in the existing regulations, dating from 1980, with current SLs at 40 CFR 51.165(b)(2). Annual burden hours will not be significantly impacted.

- Updating the data collection requirements from the existing regulations, dating from 1980, with a statement requiring operators to provide TSP data in Subpart B in §§ 550.218 and 550.249. This requirement was implied by the necessity to apply TSP estimates to the EET formulas in Subpart C §§ 550.303 and 550.304; however, the requirement to actually collect the data analyzed in Subpart C was not previously mentioned as a requirement in Subpart B. Annual burden hours will not be significantly impacted.

- Although BOEM has not replaced the EET formula for TSP with an identical formula for PM_{10}, as suggested in the proposed rule, BOEM has replaced TSP with two categories of criteria air pollutants, PM_{10} and $PM_{2.5}$ in the table of SLs as part of this final rule. This change will provide more clarity to OCS lessees and operators, but will not impact annual burden hours.

- BOEM updated the paragraph that refers to the EETs to clarify that the formulas apply to both DPPs and DOCDs. This update will not change current practice because the air quality regulations have always applied to DPPs and DOCDs, and the spreadsheets are already set up for both DPPs and DOCDs. BOEM's spreadsheets automatically calculate the formulas. This clarification will not increase annual burden hours.

- BOEM is updating the spreadsheets so that emissions from transiting support vessels will no longer be considered as part of the EET evaluation. The rule is not, however, changing the requirement that emissions from vessels temporarily attached either to the seabed or to another facility must be accounted for as part of the EET evaluation process. This means that some sources may fall under the definition of "facility" depending on their function (i.e. a vessel transiting to and from a facility would need to report the associated emissions, but those emissions would not be added in with the facility emissions for the purpose of the EET analysis; however, emissions generated from the same vessel during workover operations would be added in with the facility emissions). In some cases, therefore, emissions from the same source may need to be separately reported to account for the different functions (e.g., transiting versus well operations) that they intend to perform.

As mentioned above, BOEM is seeking OMB approval for revising forms BOEM-0138 and BOEM-0139.

Since the final rulemaking is modifying the air quality spreadsheets (BOEM-0138 and BOEM-0139), there were four commenters who had comments on the changes proposed in the proposed rulemaking. The commenters discussed the need for improved functionality of the spreadsheets related to the proposed rule provisions. BOEM is not implementing the impacting provisions. Therefore, the comments made do not apply to the form modifications deployed with the final rulemaking, but the comments are shared below for reference.

Joint Trades commented:

The air quality emissions reporting spreadsheets are incomplete.
Section 550.205 of the proposed rule identifies what air emissions information must be submitted with offshore plans, including the acceptable methods for determining the appropriate emissions factors to be used and how to report facility emissions, attributed emissions and projected emissions for offshore plans. In conjunction with the proposed rule, BOEM released draft revised air emissions calculations workbooks that will be used to estimate air emissions for EPs (EP_AQ.xls) and DOCDs (DOCD_AQ.xls) in order to meet the requirements of § 550.205.

The following list outlines discrepancies noted between the proposed rule and the AQR workbooks, and includes recommendations to correct and streamline the IC burden costs for offshore operators. In offering suggested improvements, we are not conceding that we agree with the proposed rule requirements nor that the information addressed is necessary for BOEM to perform its functions or useful in determining whether OCS activities significantly affect the air quality of a state. Furthermore, as discussed in Section 2.7, a minimum of 180 days was needed to conduct a thorough review of the proposed rule and supporting information. The list below reflects as complete a review of the spreadsheets as time allowed.

- The workbooks as released for review and comment use EPA AP-42 references as the primary source of emission factors and only reference industry studies or BOEM's 2005/2011 Gulfwide emissions inventory if no AP-42 factor is available. In contrast, the proposed rule lists emission factor references in a prioritized order, stating that a method may only be used if all other higher priority methods are not available. According to § 550.205(b), AP-42 factors should only be used when factors that are based on source test results or that are vendor-guaranteed or provided by the manufacturer are not available.

- The draft workbooks do not report estimated emissions for each of the emissions categories required under the proposed rule. For example, the SUMMARY page only presents a single maximum 12-month rolling total emissions value for each pollutant, which would represent the "projected emissions" for that pollutant. However, per § 550.205(c)(2), the maximum 12-month rolling sum of emissions needs to be calculated from each facility and from each individual emissions source on or physically connected to each facility. The proposed rule also requires that the lessee report maximum rolling-12 month "attributed emissions" (during the same 12-month period as the facility maximum), which are not calculated by the workbooks.

- Similar to the 12-month sum of emissions discussed above, § 550.205(c)(3), (d), and (e) require the estimation of the maximum projected peak hourly emissions. The draft workbooks calculate hourly emissions for individual sources based on estimated annual emissions. Therefore, those hourly emissions essentially represent average hourly emissions and not maximum projected peak hourly emissions as required by the rule. Furthermore, the draft workbooks overestimate the total hourly emissions for each operating year (each EMISSIONS sheet), because they assume all sources will be operating at the same time rather than accounting for the temporal distribution of source operations. For example, if a support vessel operates from 1/1/16-5/31/16 with 40.8 lb/hr of PM10 emissions and another source operates from 6/1/16-12/31/16 with 40.8 lb/hr of PM10 emissions, the workbooks sum these values together yielding a maximum value of 81.6 lb/hr of PM10 emissions instead of estimating 40.8 lb/hr of PM10. Similarly, a facility may have multiple power generating turbines with one turbine off-line acting as a spare. The AQR spreadsheet would currently estimate emissions as if all turbines were operating. BOEM should update the workbooks to calculate all of the emissions categories or revise the regulation to clarify that only the emissions categories calculated by the workbooks are necessary. BOEM should also ensure that the AQR workbooks do not overestimate maximum hourly emissions.

- The ability to allocate "attributed emissions" to multiple facilities is not currently functional in the AQR spreadsheet as described under § 550.205(d)(5). It is evident that the inclusion of this functionality was started but not completed.

- The draft workbooks currently do not account for all activities regulated under the proposed new regulations. Specifically, the workbooks do not account for decommissioning activities.

- The draft workbooks currently do not account for including aircraft and onshore facility when predicted concentrations attributable to offshore sources are within 95 percent of a SIL.
- It is unclear how the workbooks could be modified to account for consolidation of multiple facilities, especially in regard to calculating maximum rolling 12-month values of complex total emissions.
- Based on a review of the workbook instructions, BOEM must revise the instructions to more clearly follow the regulatory requirements and include additional instructions for proper use of the workbook. This would minimize the burden on the offshore operators as well as BOEM staff when reviewing completed workbooks. The revisions should be completed prior to publication of the final rule and include an opportunity for additional comment.
- Section 550.205(a) of the proposed regulation requires a substantial amount of information for emission sources that could be captured in the AQR spreadsheets. It would reduce the IC burden on offshore operators if the AQR spreadsheets were revised to include all relevant data requested by § 550.205(a)(1-5) rather than having to provide some of the data in the spreadsheet and the remaining data in separate tables as part of a plan submittal.
- The draft AQR spreadsheets as released for comment have no mechanisms to include ERMs (operational controls, equipment replacement, BACT, or emission credits) that will be employed or acquired as part of a proposed OCS operation. Updating the AQR spreadsheets to standardize and account for ERMs would reduce the IC burden on offshore operators as well as minimize BOEM review time.

The proposed rule includes a new requirement for ROW, RUE and lease-term pipeline applications to include air emissions data with the application. However, BOEM has not provided a draft air emissions calculations workbook or similar tool for submitting this information.

Notwithstanding the comments above, we request that BOEM update the draft AQR workbooks in order to align with the proposed redline/strikeout rule requirements provided in Appendix A. BOEM must update the workbooks and allow for additional comment prior to publication of the final rule.

The Offshore Operators Committee commented:

§550.205(a) of the proposed regulation requires a substantial amount of information for emission sources that could be captured in the AQR spreadsheets. It would reduce the IC burden on offshore operators if the AQR spreadsheets were revised to include all relevant data requested by §550.205(a)(1-5) rather than having to provide some of the data in the spreadsheet and the remaining data in separate tables as part of a plan submittal.

The draft AQR spreadsheets as released for comment have no mechanisms to include ERMs (operational controls, equipment replacement, best available control technology (BACT), or emission credits) that will be employed or acquired as part of a proposed OCS operation. Updating the AQR spreadsheets to standardize and account for ERMs would reduce the IC burden on offshore operators as well as minimize BOEM review time.

The current draft versions of the AQR spreadsheets do not include a Q/D analysis for determination on whether or not Class I modeling analyses are required as part of a plan submittal. Incorporation of the Q/D analysis into the spreadsheets would reduce the IC burden on offshore operators as well as minimize BOEM review time.

Additionally, §550.205(b) of the proposed rule requires the regulated community to utilize a scripted and prioritized emissions estimation basis in estimating emissions for sources covered in each plan. In an effort to streamline the OCS emissions inventory estimating methodology and to ensure a more accurate OCS emission inventory, BOEM should utilize the emissions estimation basis provided in the AQR spreadsheets to estimate actual emissions for OCS emission sources.

Shell Exploration and Production Company commented:

Additionally, proposed § 550.205(l) requires the electronic submission of required data and information "using forms, as specified by BOEM". While the discussion of modifications to forms BOEM-0l38 and BOEM-0l39 provided in Supporting Statement A does acknowledge BOEM's work (via contractor) to update the forms, it should be noted that the forms included in the docket for review do not allow for application of all the emission estimation options included in the proposed rule, do not provide a means to consolidate emissions applying the proposed methodologies, and do not support estimation of emissions after applying mitigations as described in the proposal. BOEM's estimates for increased burden associated with the submission of these forms cannot be adequately assessed until the final form revisions (including all of the activities/data/information required by the proposed regulation) have been issued for review and testing.

Chevron North American Exploration and Production Company commented:

Finally, as discussed in the Joint Industry Trades' comments the proposed draft "AQR" spreadsheets contain material deficiencies to estimate emissions as defined in BOEM's proposed definition. As such, Chevron requests additional time to review the proposed revisions to the AQR sheets to enable well-reasoned and complete comments. At a minimum, BOEM should updated the draft AQR sheets to align with the redline/strikeout proposed rule changes as part of the re-proposed rule.

In addition, the AQR spreadsheets that accompany the proposed rule are not constructed such that this information can be collected.

Referring to proposed 550.205(a)(1):

For each emissions source, you must identify, to the extent practicable:
(i) Equipment type and number, manufacturer, make and model, location, purpose (i.e., the intended function of the equipment and how it would be used in connection with the proposed activities covered by the plan), and physical characteristics;
(ii) The type and sulphur content of fuel stored and/or used to power the emissions source; and
(iii) The frequency and duration of the proposed use.

As discussed in the comments to § 550.205(b)(2)(i), we request the removal of the overly prescriptive emission factor selection process. As such, it is requested that this subsection be eliminated. If BOEM elects not to remove this section, we offer the following comments:

- The USEPA TANKS program is a useful tool for regularly (i.e., cylindrical) shaped storage containers. Storage containers on OCS facilities may come in various sizes that will not easily be represented in the TANKS program. Given the minimal nature of most OCS storage containers, we request the use of default emission factor similar to that employed in the current AQR emission spreadsheet. Note that many storage containers may fit within the proposed comments to 550.205(a)) and therefore, emissions estimation may not be warranted.

Final Rule Comments:

With the publication of the Final Rule on June 5, 2020, BOEM received additional comments from BTGap, L.L.C. (23 comments) and OOC (7 comments) on the spreadsheet forms. The following discussion shares each comment and BOEM's responses.

BTGap, L.L.C commented:

Comments for Form BOEM-0138 Spreadsheets for EPs

1. FACTORS tab column: Reference Links to EPA website may become obsolete if/when links are broken on the USEPA site.

BOEM Response: BOEM finds it useful for regulated entities to have access to both the citations and the links, and thus is retaining the links. If needed, BOEM can inform the public about different webpage locations as they change, with or without making changes to the links in the future.

2. FACTORS Tab, Diesel Recip. <600, SOX factor, Cell D11:

- The amount of SO2 from diesel fuel burning is a function of the concentration of sulfur in the fuel and the amount of diesel fuel burned.
- The SOx emission factors referenced in AP-42, Table 3.3-1 are from a document from October 1996. The SOx factors in the Oct 1996 document were before ULSD fuel was mandated.

- The document cited in AP-42 Table 3.3-1, cites "*Standards Support And Environmental Impact Statement, Volume 1: Stationary Internal Combustion Engines, EPA-450/2-78-125a, U. S. Environmental Protection Agency, Research Triangle Park, NC, July 1979.*" In Section 4.1.6 Sulfur Dioxide (SO2), the document indicates the sulfur content of fuel used ranges from 0.5 to 1%.

- Diesel engines in Gulf of Mexico use ultralow sulfur diesel (ULSD) that has maximum concentration of 0.0015% sulfur.

- The SO2 factor for "Diesel Recip. >600 hp" (Cell D12) seems to be a suitable emission factor since it is based a mass balance calculation to derive the emission factor. The SO2 factor for Diesel Recip. >600 hp is adjusted based on ULSD fuel used – as specified in AP-42, Table 3.4-

BOEM Response: BOEM has adjusted the SOx emission factor for Diesel Recip. <600 hp to reflect the current sulfur content of 15 ppm.

3. FACTORS Tab, Diesel Recip. <600, SOX factor, Cell D17: The amount of SO2 from diesel fuel burning is a function of the concentration of sulfur in the fuel and the amount of fuel burned. Diesel engines in Gulf of Mexico use ultralow sulfur diesel (ULSD) that has maximum concentration of 0.0015% sulfur. Should adjust to same factor as Diesel Recip. >600 hp since would have a similar mass balance calculation to derive the emission factor.

BOEM Response: BOEM has adjusted the SOx emission factor for Diesel Recip. <600 hp to reflect the current sulfur content of 15 ppm.

4. FACTORS Tab, Vessels – Propulsion, SOX factor, Cell D17: Based on ULSD used as fuel and the amount of SO2 from diesel fuel burning is a function of the concentration of sulfur in the fuel and the amount of fuel burned, should have same SO2 emission factor as other diesel engines using ULSD.

BOEM Response: These emission factors have been revised based on the USEPA's 2017 National Emission Inventory (NEI)[1] and represent engine category C1/C2 factors that account for the 15 ppm requirement.

5. FACTORS Tab, Vessels, Drilling Prime Engine, Auxiliary: Correct spelling of word "Auxilliary" to **Auxiliary**.

BOEM Response: Typographical error corrected.

6. FACTORS Tab, Vessels, Drilling Prime Engine, Auxiliary, SOX factor, Cell D18: Based on ULSD used as fuel and the amount of SO2 from diesel fuel burning is a function of the concentration of sulfur in the fuel and the amount of fuel burned, should have same SO2 emission factor as other diesel engines using ULSD.

BOEM Response: These emission factors have been revised based on the USEPA's 2017 National Emission Inventory (NEI)[1] and represent engine category C1/C2 factors that account for the 15 ppm requirement.

7. FACTORS Tab, Vessels – Well Stimulation, SOx factor, Cell D20: Based on ULSD used as fuel and the amount of SO2 from diesel fuel burning is a function of the concentration of sulfur in the fuel and the amount of fuel burned, should have same SO2 emission factor as other diesel engines using ULSD.

BOEM Response: These emission factors have been revised based on the USEPA's 2017

[1] USEPA. 2019. 2017 National emissions inventory, technical support document. Research Triangle Park (NC): U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards. https://www.epa.gov/air-emissions-inventories/2017-national-emissions-inventory-nei-data

National Emission Inventory (NEI)[1] and represent engine category C1/C2 factors that account for the 15 ppm requirement.

8. FACTORS Tab, VESSELS – Diesel Boiler:

- Cell B19. Most often, the MMBTU/HR rating of Boilers is readily available to operators. Suggest that MMBTU/HR units be used to determine capacity and fuel used. Then the user of the spreadsheet does not have to covert to MMBTU/HR to horsepower. The appropriate equations can be made to the EMISSIONS Tabs.
- Factors in AP-42, Section 1.3, Fuel Oil Combustion, Table 1.3-1, 1.3-2, 1.3-3 could be used with MMBTU/HR rating. NOTE: AP-42 Tables 1.4-1 and 1.4-2 factors are used for natural fueled heater/boiler/burner calculations for the draft Form BOEM-1038 and BOEM-1039.
- For the FACTORS Tab, a "Fuel Usage Conversion Factor" can be calculated for diesel boilers based the Density (7.05 lbs/gal) and Heat Value of Diesel Fuel (19,300 BTU/lb) – similar to calculation in FACTORS Tab, Cell G2. The fuel usage factor can be input to calculate emissions based on emission factors in AP-42, Tables 1.3-1, 1.3-2 and 1.3-3.
- SOx emission factor in Table 1.3-1 could be used for No.2 oil fired units. No. 2 diesel (ULSD) typically used as fuel in the Gulf of Mexico. For example:
  - SOx = SO2+ SO3 = 144*S lbs/1000 gallons; where S = weight percent of sulfur in fuel.
  - SO2 = 142*S where S = 0.0015; SO2 = 0.213 lbs/1000 gallons
  - SO3 = 2*S where S = 0.0015; SO3 = 0.003 lbs/1000 gallons
    1. Total SOx = 0.216 lbs/1000 gallons

BOEM Response: BOEM appreciates the suggestions of alternative methods for performing the calculations embedded in the spreadsheet, but BOEM notes that the suggested methods do not substantially affect the outcome of the calculations. BOEM believes that the suggested changes would have little to no effect on the burden to operators. At this time, BOEM is retaining the current calculation methodologies. However, operators can calculate and enter their own emissions estimates directly into the spreadsheet if they prefer using another method.

9. EMISSIONS1 Tab – Cell I12 for "Vessels – Drilling Prime Engine, Auxilliary". This cell uses a factor from cell C17 of the FACTORS tab. It should reference cell C18 on the FACTOR tab.

BOEM Response: This error has been corrected.

10. EMISSIONS Tab. Can BOEM explain the reason the "0.85" adjustment factor is used to calculate lbs/hr for "VESSELS- Drilling - Propulsion Engine – Diesel" emissions? 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 documents. 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"

BOEM Response: Based on the comment, BOEM has removed the 0.85 adjustment factor for the source categories mentioned in this comment. As reflected in the draft form, BOEM had believed that the 0.85 adjustment factors should be applied to reflect engine operating load. However, in the final spreadsheet, BOEM is removing this embedded adjustment factor to reflect the fact that typically engine loads should be assumed to be 100%. Operators can choose to use a different operating load as long as documentation is provided for the maximum fuel usage rate (column E) and the actual fuel usage (Column F), as noted in the instructions for the EP form.

11. EMISSIONS1 Tab - Liquid Flaring (cell B16). Specify the units for the RATING units data input for Cell D16 is barrels per day of liquid flared - based on the maximum lbs/hr calculations used in the spreadsheet.

- The unit 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 is [*sic*] for Distillate oil fired fuel are used adjusting the emission factor to lbs/bbl of oil burned.

BOEM Response: The barrels per day (BPD) unit has been added in the EP Spreadsheet in the D15 field. The explanation and location of the units for liquid flaring will be added to the EP instructions for clarity for the operators.

12. SUMMARY Tab: The default Print Range for this tab does not include NH3.

BOEM Response: BOEM has corrected the default Print Range.

Comments for Form BOEM-0139 Spreadsheets for DOCD and DPPs.

1. Comments for Form BOEM-0139 are the same as those made above for Form BOEM-0138.

2. EMISSIONS Tab. Cold Vent.

- Define what is a Cold Vent that would be included in the calculations. This should be included in the instructions.
- Can BOEM give the basis for an emission factor of tons VOC/yr-vent other than GOADS data?
- Operators are limited to 50 MSCF/day of venting flash gas. Operators may have an estimate of the volume of natural gas vented by a "Cold Vent."
- Could the calculation be based on the volume of natural gas vented and the chemical makeup – like data used for flares?

BOEM Response: A Cold Vent is the discharge of natural gas to the atmosphere without

combustion. Vents receive exhaust streams from miscellaneous sources, as well as manifold exhaust streams from other equipment on the same platform, such as amine units, glycol dehydrators, loading operations, and storage tanks. Average emission values were estimated from the BOEM 2014 Gulfwide Emission Inventory Study as indicated in the Ref. column. The emission factor is the upper bound of the 95% confidence interval of emissions per vent in the BOEM 2014 Gulfwide Emission Inventory Study. Total emissions from cold vents are estimated according to the counts provided on the EMISSIONS sheet. If the operator knows the volume of gas vented (e.g., 50 MSCF/day), the concentration of VOC in the gas vented (e.g., 12,700 ppmv), and the molecular weight of VOC in the gas vented in lb/lb-mol, the operator may use the BOEM 2014 Gulfwide Emission Inventory Study methodology to estimate VOC emissions and over-write the emission factor provided on the FACTORS tab. If the operator chooses to over-write the emission factor with their own calculated emission factor, then the emission factor must use the same units of measure (tons/yr/vent) that is currently used to estimate emissions. This definition of a Cold Vent and these instructions have been added to the DOCD/DPP instructions.

3. FACTORS Tab, Production Equipment – Diesel Boiler

- Cells B13. Most often, the MMBTU/HR rating of Boilers is readily available to operators. Suggest that MMBTU/HR units be used to determine capacity and fuel used. Then the user of the spreadsheet does not have to covert to MMBTU/HR to barrels fuel used. The appropriate equations can be made to the EMISSIONS Tabs.
- Factors in AP-42, Section 1.3, Fuel Oil Combustion, Table 1.3-1, 1.3-2, 1.3-3 could be used with MMBTU/HR rating. NOTE: AP-42 Tables 1.4-1 and 1.4-2 factors are used for natural fueled heater/boiler/burner calculations for the draft Form BOEM-1038 and BOEM-1039.
- For the FACTORS Tab, a "Fuel Usage Conversion Factor" can be calculated for diesel boilers based the Density (7.05 lbs/gal) and Heat Value of Diesel Fuel (19,300 BTU/lb) – similar to calculation in FACTORS Tab, Cell G2. The fuel usage factor can be input to calculate emissions based on emission factors in AP-42, Tables 1.3-1, 1.3-2 and 1.3-3.
- SOx emission factor in Table 1.3-1 could be used for No.2 oil fired units. No. 2 diesel (ULSD) typically used as fuel in the Gulf of Mexico. For example:

  SOx = SO2+ SO3 = 144*S lbs/1000 gallons; where S = weight percent of sulfur in fuel.

  SO2 = 142*S where S = 0.0015; SO2 = 0.213 lbs/1000 gallons

  SO3 = 2*S where S = 0.0015; SO3 = 0.003 lbs/1000 gallons

  Total SOx = 0.216 lbs/1000 gallons

BOEM Response: BOEM appreciates the suggestions of alternative methods for performing the calculations embedded in the spreadsheet, but BOEM notes that the suggested methods do not substantially affect the outcome of the calculations. BOEM believes that the suggested changes would have little to no effect on the burden to operators. At this time, BOEM is retaining the current calculation methodologies. However, operators can calculate

and enter their own emissions estimates directly into the spreadsheet if they prefer.

4. EMISSIONS1 Tab – Cell I12 for "Vessels – Drilling Prime Engine, Auxilliary". This cell uses a factor from cell C17 of the FACTORS tab. It should reference cell C18 on the FACTOR tab.

BOEM Response: This error has been corrected.

5. EMISSIONS1 Tab, Vessels, Drilling Prime Engine, Auxiliary. Correct spelling of word "Auxilliary" to **Auxiliary**.

BOEM Response: Typographical error corrected.

6. EMISSIONS1 Tab – Cell B21. Are "VESSELS - Shuttle Tankers" included in "Vessels – Propulsion" as listed on the FACTORS tab, Cell B17? Can you include/specify that in the FACTORS Tab description?

BOEM Response: The shuttle tanker row allows the user to estimate the propulsion emissions from shuttle tanker movements. This is now noted in the DOCD/DPP instructions.

7. EMISSIONS Tab. Can BOEM explain the reason the "0.85" adjustment factor is used to calculate lbs/hr for "VESSELS- Drilling - Propulsion Engine – Diesel" emissions? 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" documents. 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."

BOEM Response: Based on the comment, BOEM has removed the 0.85 adjustment factor for the source categories mentioned in this comment. As reflected in the draft form, BOEM had believed that the 0.85 adjustment factors should be applied to reflect engine operating load. However, in the final spreadsheet, BOEM is removing this embedded adjustment factor to reflect the fact that typically engine loads should be assumed to be 100%. Operators can choose to use a different operating load as long as documentation is provided for the maximum fuel usage rate (column E) and the actual fuel usage (Column F), as noted in the instructions for the DOCD/DPP form.

8. EMISSIONS1 Tab - VESSELS - Well Stimulation, a factor of "0.3863" is used for lbs/hr calculations. As stated in comment 7 above, an explanation of why this factor is used should be included in the instructions.

BOEM Response: Based on the comment, BOEM has removed the 0.85 and 0.3863 adjustment factors for the source categories mentioned in this comment and comment 7. As reflected in the draft form, BOEM had believed that the 0.85 adjustment factors should be applied to reflect engine operating load. In the final spreadsheet, BOEM is removing this embedded adjustment factor to reflect the fact that typically engine loads should be assumed to be 100%. However, operators can choose to use a different operating load as long as documentation is provided for the maximum fuel usage rate (column E) and the actual fuel usage (Column F), as noted in the instructions for the DOCD/DPP form.

9. SUMMARY Tab: The default Print range for this tab does not include NH3.

BOEM Response: BOEM has corrected the default Print Range.

10. AIR EMISSIONS CALCULATIONS INSTRUCTIONS FOR DOCDs and PRA Statement. The instructions should state how an operator inputs emissions data for a storage tank that has a vapor recovery unit or where the vent gas is routed to a flare. Suggest that there be a way to account for a percent destruction and removal efficiency (DRE) for the emission control device used.

BOEM Response: An equation has been added in the DOCD/DPP instructions that shows how to make the necessary formula adjustments as needed.

11. AIR EMISSIONS CALCULATIONS INSTRUCTIONS FOR DOCDs and PRA Statement. The instructions should state how an operator shows emissions data for a glycol dehydration unit that uses a condenser, vapor recovery unit or where the vent gas is routed to a flare. Suggest that there be a way to account for a percent destruction and removal efficiency (DRE) for the emission control device used.

BOEM Response: An equation has been added in the DOCD/DPP instructions that shows how to make the necessary formula adjustments as needed.

The Offshore Operators Committee commented[2]:

1. Can the Equipment ID column be left blank for temporary equipment?

   BOEM Response: BOEM strongly encourages operators to list the Equipment ID from the nameplate on site on the spreadsheets, even for temporary equipment.

2. 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?

   BOEM Response: BOEM inadvertently removed the PM10 and PM2.5 columns in the draft version that was released for comment on June 5, 2020. These pollutants will be included in the final version, and the PM emission factors differ based on the flare

[2] Air Quality Rule Implementation Workshop hosted virtually between BOEM and Operators on June 25, 2020.

smoking condition selected.

3. 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?

   BOEM Response: In order to allow operator flexibility in entering information on the form, BOEM has opted to retain the separate rows for natural gas turbines, diesel turbines, and dual fuel turbines, and operators can either enter the natural gas and diesel separately, or they could choose to use the dual fuel row.

4. Has BOEM provided definitions for the different combustion levels (for smoke)?

   BOEM Response: Definitions for the different combustion levels (for smoke) from the USEPA's AP-42 Table 13.5-1 have been added to the instructions.

5. In the previous version of the AQR, we used a 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?

   BOEM Response: The vessel emission factors have been updated based on the USEPA 2017 National Emission Inventory (NEI) emission factors[1], which have been converted to grams per horsepower hours. To use these emission factors, the maximum power rating of the vessel engines needs to be provided (column D of the emissions tab) in terms of horsepower and the total hours of operation need to be provided (columns G and H of the emissions tab) to approximate horsepower-hours. While the emission factors associated with each of these operations are the same, the power and hours associated with these operations will vary.

6. 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 much fewer hours than natural gas fuel usage.

   BOEM Response: BOEM has opted to retain the separate rows for natural gas turbines, diesel turbines, and dual fuel turbines, and operators can either enter the natural gas and diesel separately, or they could choose to use the dual fuel row.

7. 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?

BOEM Response: Based on the comment, BOEM has removed the 0.85 and the 0.3863 adjustment factors for the source categories mentioned in this comment. As reflected in the draft spreadsheet, BOEM had believed that the 0.85 adjustment factors should be applied to reflect engine operating load. However, with the final spreadsheet, BOEM is removing this embedded adjustment factor to reflect the fact that typically engine loads should be assumed to be 100%. Operators can choose to use a different operating load as long as documentation is provided for the maximum fuel usage rate (column E) and the actual fuel usage (Column F), as noted in the instructions for the DOCD/DPP form.

9. Explain any decision to provide any payment or gift to respondents, other than remuneration of contractors or grantees.

We will not provide payment or gifts to respondents in this collection.

10. Describe any assurance of confidentiality provided to respondents and the basis for the assurance in statute, regulation, or agency policy.

BOEM will protect proprietary information according to 30 CFR 550.197, "Data and information to be made available to the public or for limited inspection," and the Freedom of Information Act (5 U.S.C. 552) and its implementing regulations (43 CFR 2).

11. Provide additional justification for any questions of a se11sitive nature, such as sexual behavior and attitudes, religious beliefs, and other matters that are commonly considered private. This justification should include the reasons why the agency considers the questions necessary, the specific uses to be made of the information, the explanation to be given to persons from whom the information is requested, and any steps to be taken to obtain their consent.

The collection does not include sensitive or private questions.

12. Provide estimates of the hour burden of the collection of information. The statement should:

(a) Indicate the number of respondents, frequency of response, annual hour burden, and an explanation of how the burden was estimated. Unless directed to do so, agencies should not conduct special surveys to obtain information on which to base hour burden estimates. Consultation with a sample (fewer than 10) of potential respondents is desirable. If the hour burden on respondents is expected to vary widely because of differences in activity, size, or complexity, show the range of estimated hour burden, and explain the reasons for the variance. Generally, estimates should not include burden hours for customary and usual business practices.

(b) If this request for approval covers more than one form, provide separate hour burden estimates for each form and aggregate the hour burdens.

Potential respondents include Federal oil, gas, and sulphur lessees and/or operators and States. It should be noted that not all of the potential respondents submit information in any given year and some may submit multiple times. The burden estimates in the approved OMB Control Numbers 1010-0114, 1010-0151, and 1010-0057 include the time for reviewing the instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Responses are mandatory and are submitted on occasion.

We estimate the total reporting and recordkeeping annual burden related to this rulemaking will not change from the existing approved annual burden hours related to OMB control numbers 30 CFR part 550, Subpart A, are approved under OMB Control Number 1010-0114 (30, 635 annual burden hours, $165,492 non-hour costs; expires January 31, 2020). Information Collection burdens associated with 30 CFR Part 550, Subpart B, are approved under OMB Control No. 1010-0151, Plans and Information (436,438 annual burden hours; $3,939,435 non-hour costs; expires June 30, 2021). Information Collection burdens associated with 30 CFR 550, Subpart C, are approved under OMB Control No. 1010-0057 (35,200 annual burden hours; $0 non-hour costs; expires May 31, 2021).

BURDEN BREAKDOWN FOR OMB CONTROL NUMBER 1010-0151

Citation 30 CFR 550 Subpart B and NTLs	Reporting &Recordkeeping Requirement	Hour Burden	Average No. of Annual Responses	Burden Hours
		Non-Hour Costs		
200 thru 206	General requirements for plans and information; fees/refunds, etc.	Burden included with specific requirements below.		0
201 thru 206; 211 thru 228: 241 thru 262	BOEM posts EPs/DPPs/DOCDs on FDMS, and receives public comments in preparation of EAs.	Not considered IC as defined in 5 CFR 1320.3(h)(4).		0
204	For new Arctic OCS Exploration activities: submit IOP, including all required information	2,880	1	2,880
		Subtotal	**1**	**2,880**
Ancillary Activities				
208; NTL 2009-G34*	Notify BOEM in writing, and if required by the Regional Supervisor notify other users of the OCS before conducting ancillary activities.	11	61 notices	671
208; 210(a)	Submit report summarizing & analyzing data/ information obtained or derived from ancillary activities.	2	61 reports	122
208; 210(b)	Retain ancillary activities data/information; upon request, submit to BOEM.	2	61 records	122
		Subtotal	**183 responses**	**915 hours**
Contents of Exploration Plans (EP)				
209; 231(b); 232(d); 234; 235; 281; 283; 284;	Submit new, amended, modified, revised, or supplemental EP, or resubmit disapproved EP, including required information; withdraw an EP.	150	345 changed plans[3]	51,750

Citation 30 CFR 550 Subpart B	Reporting &Recordkeeping Requirement	Hour Burden	Average No. of Annual Responses	Burden Hours
		Non-Hour Costs		
285; NTL 2015-N01				
209; 211 thru 228; NTL 2015-N01	Submit EP and all required information (including, but not limited to, submissions required by BOEM Forms 0137, 0138, 0142; lease stipulations; reports, including shallow hazards surveys, H2S, G&G, archaeological surveys & reports (550.194)***), in specified formats. Provide notifications.	600	163[3]	97,800
		$3,673 x 163 EP surface locations = $598,699		
220	Alaska-specific requirements.	Burden included with EP requirements (30 CFR 550.211-228).		0
220	For new Arctic OCS exploration activities: submit required Arctic-specific information with EP.	350	1	350
220	For existing Arctic OCS exploration activities: revise and resubmit Arctic-specific information, as required.	700	1	700
	Subtotal		**510 responses**	**150,600 hours**
			$598,699 Non-Hour Costs	
Review and Decision Process for the EP				
235(b); 272(b); 281(d)(3)(ii)	Appeal State's objection.	Burden exempt as defined in 5 CFR 1320.4(a)(2), (c).		0
Contents of Development and Production Plans (DPP) and Development Operations Coordination Documents (DOCD)				
209; 266(b); 267(d); 272(a); 273; 281; 283; 284; 285; NTL 2015-N01	Submit amended, modified, revised, or supplemental DPP or DOCD, including required information, or resubmit disapproved DPP or DOCD.	235	353 changed plans[3]	82,955
241 thru 262; 209; NTL 2015-N01	Submit DPP/DOCD and required/supporting information (including, but not limited to, submissions required by BOEM Forms 0137, 0139, 0142; lease stipulations; reports, including shallow hazards surveys, archaeological surveys & reports (CFR 550.194)), in specified formats. Provide notification.	700	268[3]	187,600
		$4,238 x 268 DPP/DOCD wells = $1,135,784.		
	Subtotal		**621 responses**	**270,555 hours**
			$1,135,784 Non-hour costs	
Review and Decision Process for the DPP or DOCD				
267(a)	Once BOEM deemed DPP/DOCD submitted; Governor of each affected State, local government official; etc., submit comments/recommendations.	Not considered IC as defined in 5 CFR 1320.3(h)(4)		0
267(b)	General public comments/recommendations submitted to BOEM regarding DPPs or DOCDs.	Not considered IC as defined in 5 CFR 1320.3(h)(4).		0
269(b)	For leases or units in vicinity of proposed development and production activities RD may require those lessees and operators to submit	3	1 response	3

Citation 30 CFR 550 Subpart B	Reporting &Recordkeeping Requirement	Hour Burden	Average No. of Annual Responses	Burden Hours
			Non-Hour Costs	
	information on preliminary plans for their leases and units.			
		Subtotal	**1 response**	**3 hours**
Post-Approval Requirements for the EP, DPP, and DOCD				
280(b)	In an emergency, request departure from your approved EP, DPP, or DOCD.	Burden included under 1010-0114.		0
281(a)	Submit various BSEE applications for approval and submit permits.	Burdens included under appro-priate subpart or form (1014-0003; 1014-0011; 1014-0016; 1014-0018).		0
282	Retain monitoring data/information; upon request, make available to BOEM.	4	150 records	600
	Prepare and submit monitoring plan for approval.	2	6 plans	12
282(b)	Prepare and submit monitoring reports and data (including BOEM Form 0141 used in GOMR).	3	12 reports	36
284(a)	Submit updated info on activities conducted under approved EP/DPP/DOCD.	4	56 updates	224
		Subtotal	**224 responses**	**872 hours**
Submit CIDs				
296(a); 297	Submit CID and required/supporting information; submit CID for supplemental DOCD or DPP.	375	14 documents	5,250
		$27,348 x 14 = $382,872		
296(b); 297	Submit a revised CID for approval.	100	13 revisions	1,300
		Subtotal	**27 responses**	**6,550 hours**
			$382,872 non-hour costs	
Seismic Survey Mitigation Measures and Protected Species Observer Program NTL				
NTL 2016-G02; 211 thru 228; 241 thru 262	Submit to BOEM observer training requirement materials and information.	1.5 hours	2 sets of material	3
	Training certification and recordkeeping.	1 hour	1 new trainee	1
	During seismic acquisition operations, submit daily observer reports semi-monthly.	1.5 hours	344 reports	516
	If used, submit to BOEM information on any passive acoustic monitoring system prior to placing it in service.	2 hours	6 submittals	12
	During seismic acquisition operations, submit to BOEM marine mammal observation report(s) semi-monthly or within 24 hours if air gun operations were shut down.	1.5 hours	1,976 reports	2,964
	During seismic acquisition operations, when air guns are being discharged, submit daily observer reports semi-monthly.	1.5 hours	344 reports	516
	Observation Duty (3 observers fulfilling an 8 hour shift ea for 365 calendar days x 4 vessels = 35,040 man-hours). This requirement is contracted out; hence the non-hour cost burden.	3 observers x 8 hrs x 365 days = 8,760 hours x 4 vessels observing = 35,040 man-hours x $52/hr = $1,822,080.		
		Subtotal	**2,673 responses**	**4,012 hours**
			$1,822,080 Non-Hour Costs	
Vessel Strike Avoidance and Injured/Protected Species Reporting NTL				

Citation 30 CFR 550 Subpart B	Reporting &Recordkeeping Requirement	Hour Burden	Average No. of Annual Responses	Burden Hours
		Non-Hour Costs		
NTL 2016-G01; 211 thru 228; 241 thru 262	Notify BOEM within 24 hours of strike, when your vessel injures/kills a protected species (marine mammal/sea turtle).	1 hour	1 notice	1
		Subtotal	**1 response**	**1 hour**
General Departure				
200 thru 299	General departure and alternative compliance requests not specifically covered elsewhere in Subpart B regulations.	2	25 requests	50
Subtotal			**25 responses**	**50 hours**
TOTAL BURDEN			**4,266 Responses**	**436,438 Hours**
			$3,939,435 Non-Hour Costs	

* The identification number of NTLs may change when NTLs are reissued periodically to update information.
**Requirements from the Oil and Gas and Sulfur Operations on the Outer Continental Shelf—Requirements for Exploratory Drilling on the Arctic Outer Continental Shelf final rule.
***Archaeological surveys and reports required under 30 CFR 550, Subpart A in 550.194(a) are generally part of the geohazard survey report required under 30 CFR 550, Subpart B. On average it takes an archaeologist 35 hours to prepare the archaeological survey and report. This hour burden is included in the overall hour burden estimate for submission of EPs and all required information.

(c) Provide estimates of annualized cost to respondents for the hour burdens for collections of information, identifying and using appropriate wage rate categories. The cost of contracting out or paying outside parties for information collection activities should not be included here. Instead, this cost should be included under "annual Cost to the Federal Government."

The annualized costs to respondents will remain current as approved by OMB in OMB Control Numbers 1010-0114, 1010-0151, and 1010-0057.

This supporting statement updates the respondent cost for OMB control number 1010-0151 using the most current Bureau of Labor Statistics (BLS) data.

The average respondent cost is $110*/hour (rounded). This cost is broken out in the below table using the Bureau of Labor Statistics data for the Houston, TX area. See BLS website: **https://www.bls.gov/oes/current/oes_26420.htm**.

Position	Hourly Pay rate ($/hour estimate)	Hourly rate including benefits (1.4** x $/hour)	Percent of time spent on collection	Weighted Average ($/hour)
Secretaries and Administrative assistants (43-6011)	$31	$43	15%	$6
Petroleum Engineers, Geologists (17-2171)	$88	$123	70%	$86
Supv. Engineer (17-2171)	$88	$123	15%	$18

Weighted Average ($/hour)	**$110**

* Note that this BLS source reflects their last update from May 2019.
** A multiplier of 1.4 (as implied by BLS news release USDL-20-0451, March 19, 2020 (see http://www.bls.gov/news.release/ecec.nr0.htm)) was added for benefits.

Based on a cost factor of $110 per hour, we estimate the total annual cost to industry as a dollar equivalent is $48,008,180 ($110 x 436,438 hours = $48,008,180).

13. Provide an estimate of the total annual non-hour cost burden to respondents or recordkeepers resulting from the collection of information. (Do not include the cost of any hour burden already reflected in Item 12).

(a) The cost estimate should be split into two components: (1) a total capital and start-up cost component (annualized over its expected useful life) and (2) a total operation and maintenance and purchase of services component. The estimates should take into account costs associated with generating, maintaining, and disclosing or providing the information (including filing fees paid for form processing). Include descriptions of methods used to estimate major cost factors including system and technology acquisition, expected useful life of capital equipment, the discount rate(s), and the time period over which costs will be incurred. Capital and start-up costs include, among other items, preparations for collecting information such as purchasing computers and software; monitoring, sampling, drilling and testing equipment; and record storage facilities.

(b) If cost estimates are expected to vary widely, agencies should present ranges of cost burden and explain the reasons for the variance. The cost of purchasing or contracting out information collection services should be a part of this cost burden estimate. In developing cost burden estimates, agencies may consult with a sample of respondents (fewer than 10), utilize the 60-day pre-OMB submission public comment process and use existing economic or regulatory impact analysis associated with the rulemaking containing the information collection, as appropriate.

(c) Generally, estimates should not include purchases of equipment or services, or portions thereof, made: (1) prior to October 1, 1995, (2) to achieve regulatory compliance with requirements not associated with the information collection, (3) for reasons other than to provide information or keep records for the government, or (4) as part of customary and usual business or private practices.

The non-hour burden costs will remain current as approved by OMB. There are three non-hour costs associated with this information collection that are cost recovery fees. They consist of fees being submitted with EP's ($3,673), DPP's or DOCD's ($4,238), and CID's ($27,348).

There is also one non-hour cost burden associated with the Protected Species Observer Program. The cost associated with this program is due to observation activities that are usually subcontracted to other service companies with expertise in these areas. Since all of the observation duty and reporting would be done while on the vessel and by contractors, these requirements were calculated as non-hour cost burdens. See the hours, fees, and costs in the

burden table in A.12.

We estimate that the annual total non-hour cost burden is $3,939,435.

14. Provide estimates of annualized cost to the Federal Government. Also, provide a description of the method used to estimate cost, which should include quantification of hours, operational expenses (such as equipment, overhead, printing, and support staff), and any other expense that would not have been incurred without this collection of information.

The annualized costs to the Federal Government will remain current as approved by OMB in OMB Control Numbers 1010-0114 and 1010-0057.

The following are updated numbers using the 2020 OPM Salary Tables for OMB Control Number 1010-0151:

The average Federal cost is $66/hour. This cost is broken out in the below table using the 2019 Office of Personnel Management salary data for the REST OF THE UNITED STATES.

Position	Grade	Hourly Pay rate ($/hour estimate)	Hourly rate including benefits (1.6 x $/hour)	Percent of time spent on collection	Weighted Average ($/hour)
Clerical	GS-7/5	$23	$37	5%	$2
Regulatory	GS-11/5	$35	$56	40%	$22
Engineers/Geologists	GS-13/5	$50	$80	25%	$20
Biologist/Physical Scientist	GS-12/5	$42	$67	25%	$17
Supv. Physical Scientist	GS-14/5	$59	$94	5%	$5
Weighted Average ($/hour)					**$66**

* A multiplier of 1.6 (as implied by BLS news release USDL-20-0451, March 19, 2020 (see **http://www.bls.gov/news.release/ecec.nr0.htm**)) was added for benefits.

To analyze and review the information required by Subpart B and related NTLs, we estimate the Government will spend an average of approximately 1/4 hour for each hour spent by respondents for a total of 109,110 hours (436,438 divided by 4 = 109,110). Based on a cost factor of $66 per hour, the total gross annualized cost to the Government is $7,201,260.

15. Explain the reasons for any program changes or adjustments in hour or cost burden.

There are no program changes related to the existing hour or cost burden.

Note: There is a change in hour and cost burdens as it relates to the proposed rule versus the final rule. Because the proposed rule was intended to replace the existing set of regulations in its entirety, and not, like this final rule, simply to update certain provisions, the structure of the proposed rule was quite different from that of the final rule. The final rule makes only a limited number of updates to the existing regulations and does not fundamentally restructure the existing regulations. Therefore, the changes from the proposed rule to the final rule are a reduction of 146,490 annual burden hours and a reduction of $3,455,000 non-hour cost

burdens.

16. For collections of information whose results will be published, outline plans for tabulation and publication. Address any complex analytical techniques that will be used. Provide the time schedule for the entire project, including beginning and ending dates of the collection of information, completion of report, publication dates, and other actions.

We will not tabulate and publish the individual responses.

17. If seeking approval to not display the expiration date for OMB approval of the information collection, explain the reasons that display would be inappropriate.

BOEM will display the OMB control number and approved expiration date.

18. Explain each exception to the topics of the certification statement identified in, "Certification for Paperwork Reduction Act Submission."

There are no exceptions to the certification statement.