# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF OCEAN ENERGY MANAGEMENT ALASKA REGIONAL OFFICE

BOEM NTL No. 2020-A01 Effective Date: October 1, 2020

# NOTICE TO LESSEES AND OPERATORS OF FEDERAL OIL, GAS, AND SULPHUR LEASES IN THE ALASKA OUTER CONTINENTAL SHELF

# Reporting of Air Emissions in Exploration Plans and Development and Production Plans

The Bureau of Ocean Energy Management (BOEM) is issuing this Notice to Lessees and Operators (NTL) in compliance with Executive Order (E.O.) 13891 of October 9, 2019, Promoting the Rule of Law Through Improved Agency Guidance Documents, and the Office of Management and Budget (OMB) Memorandum, M-20-02, implementing the E.O.

This document provides new guidance for lessees and operators concerning Alaska Outer Continental Shelf (OCS) Air Quality reporting and will remain in effect revised or rescinded.

# Introduction

The United States Department of the Interior (DOI), Bureau of Ocean Energy Management (BOEM) reviews Exploration Plans (EPs) and Development and Production Plans (DPPs) for compliance with applicable air quality laws and regulations. BOEM has responsibility for these reviews in the Beaufort Sea OCS Planning Area, the Chukchi Sea OCS Planning Area, and a small portion of the Hope Basin OCS Planning Area. In addition to reviewing submitted plans for compliance with regulations, BOEM considers air quality impacts, along with impacts to other resources, in its National Environmental Policy Act (NEPA) (42 U.S.C. §§ 4321 *et seq.*) analyses of EPs and DPPs. The following guidance is intended to facilitate accurate and complete submittal of necessary emissions information to facilitate timely review of EPs and DPPs.

# **Background**

The following laws and regulations are applicable to air quality reviews in the Alaska OCS:

• DOI's authority to regulate OCS air emissions comes from section 5(a)(8) of the Outer Continental Shelf Lands Act (OCSLA) (43 U.S.C. § 1334 (a)(8)), which requires the Secretary of the Interior to promulgate regulations for compliance with the National Ambient Air Quality Standards (NAAQSs) pursuant to the Clean Air Act (CAA; 42 U.S.C. §§ 7401 *et seq.*), to the extent that authorized activities significantly affect the air quality of any state. Section 328 of the Clean Air Act (42 U.S.C. § 7627) determines the geographical extent to which the OCSLA air quality regulations apply.

- BOEM's air quality regulations can be found in 30 CFR Part 550 Subparts B and C. Subpart B of Part 550 describes the information that should be included in an EP or DPP. Subpart C of Part 550 describes BOEM's regulations for pollution prevention and control and its purpose is to ensure that plans and activities BOEM authorizes do not adversely affect a state's compliance with the NAAQS. Before conducting operations on the OCS, leaseholders must (among other requirements) submit and receive approval for EPs and DPPs in accordance with 30 CFR §§ 550.218, 550.249, 550.302, 550.303, and 550.304.
- NEPA (42 U.S.C. §§ 4321 *et seq.*) requires BOEM to evaluate and consider the environmental impact of major Federal actions significantly affecting the human environment, including alternatives to the actions.

# Air Emissions Information (30 CFR Part 550 Subparts A, B, and C)

# 1. Projected Emissions

a. When calculating peak hourly and total annual emissions in an EP or DPP pursuant to §§ 550.218 or 550.249, calculate the maximum projected emissions generated by each source on the facility (including artificial islands) and support vessel(s) (including ice management vessels and hovercraft) within 25 miles of the facility, pursuant to §§ 550.224(b) and 550.257(b). Only the total facility emissions should be used to calculate whether emission exemption thresholds (EETs) are exceeded. Calculate the air emissions using Form BOEM-0138 for EPs and Form BOEM-0139 for DPPs. These forms are on BOEM's website at: https://www.boem.gov/BOEM-OCS-Operation-Forms/.

Submit the forms with the EP and DPP in both PDF and Excel formats. If available, please provide the same on-site identification code used for sources listed in the forms.

- b. The terms "facility" and "temporary facility" are defined in the regulations at §§ 550.105 and 550.302. According to these definitions:
  - 1. Any installation or device permanently or temporarily attached to the seabed which is used for exploration, development, and production activities for oil, gas, and sulphur is a facility.
  - 2. Multiple emission sources on a deck are considered one facility.
  - 3. Construction activities are considered part of a facility, including the installation of lease-term pipelines.
  - 4. Any vessels used to transfer production from a facility is considered part of that facility when physically attached to the facility.

BOEM generally considers any facilities that are bridge-connected to each other to be a single facility.

#### 2. Maximum Emissions.

- a. Sections 550.218(a) and 550.249(a) require that you base projected emissions on the maximum rated capacity of the equipment associated with your activities, but you may use modified emissions factors if you propose using emission reduction measures. If you base your emissions calculations on the use of emission reduction measures or modified emission factors, you will need to submit the worksheets and the documentation described in Sections 3 and 4, Emission Reduction Measures and Verification of Nondefault Emission Factors.
- b. You must base the projected emissions on the maximum rated capacity of the equipment and throughput of the facility. Run time on production equipment must be operating at 24 hours a day, 365 days per year. If there is equipment with matching back-ups and the equipment and back-ups will not operate simultaneously, then demonstrate in the forms that the combined equipment operates for a total of 24 hours a day, 365 days a year.
- c. You must base emissions calculations on the duration of the proposed exploration, development, and production activities.
- d. If you have not determined the specific drilling equipment unit(s) you will use but you know the type of unit, you must use the maximum emission estimates for the type of drilling unit(s) that you will use according to § 550.218(a)(4) or § 550.249(a)(5). BOEM recommends that you use the maximum horsepower values from your fleet or inventory.
- e. The rated horsepower reported in the forms should match the horsepower on the appropriate nameplate attached to the actual equipment.

#### 3. Emission Reduction Measures

a. If your calculation of the maximum projected emissions includes emissions reduction measures, you must follow §§ 550.218(b) and 550.249(b). BOEM recommends that you use the format below to describe the emission reduction measure(s).

| Emission    | Reduction             | Amount of                     | <b>Monitoring System</b> |
|-------------|-----------------------|-------------------------------|--------------------------|
| Source      | <b>Control Method</b> | Reduction                     |                          |
| Compressor  | Clean burn            | 100 tons                      | Periodic stack test      |
|             | technology            | NO <sub>x</sub> /year         |                          |
| Prime Mover | Low sulphur fuel      | 10 tons SO <sub>2</sub> /year | Visual check of fuel     |
|             |                       |                               | color and fuel           |
|             |                       |                               | receipts                 |
| Prime Mover | Actual fuel           | 300 tons                      | Fuel log                 |
|             | consumption           | NO <sub>x</sub> /year         |                          |
| Generator   | Actual run time       | 100 tons                      | Run time log             |
|             |                       | NO <sub>x</sub> /year         |                          |

- b. You may use actual fuel usage information (e.g., run times, fuel consumption). If you do, provide 6 to 12 months of data for determining the average fuel usage.
- c. The actual fuel usage you use in the emissions calculations on the forms cannot be less than the average fuel usage.
- d. Please note that if you use reduced run times or reduced fuel, BOEM will apply mitigations that require annual filing. BSEE may take enforcement action if the reduction is exceeded or there is no annual submittal.

#### 4. Verification of Nondefault Emission Factors

If you use any emission factors less than the values in the forms (BOEM-0138 for EPs and BOEM-0139 for DPPs) in your calculation of the projected emissions, provide documentation supporting the use of the smaller emission factors in accordance with 30 CFR §§ 550.218(a)(2) and 550.249(a)(3). However, if the actual emission factor is known to be greater than the default emission factor, use the actual emission factor. Please note that if you use a nondefault emission factor that is lower than the default, BOEM might apply mitigations that require stack testing, resulting in potential BSEE enforcement action if the reduction is exceeded or no stack testing results are presented when applicable.

## 5. Distance to shore for Emission Exemption Threshold (EET)

Map your distance in statute miles to shore using the same coordinate system as used in the lease sale documents for your lease.

#### 6. Non-Exempt Facilities

If the calculated maximum projected emissions of the facility, with emissions reduction measures (if included), is greater than the respective EET calculated at § 550.303(d), provide a description of how you will comply with 30 CFR § 550.303 paragraphs (e) through (i), as applicable.

# 7. Modeling Report

If you are required by 30 CFR § 550.303 to model projected air emissions, use a model approved by BOEM's Director and consult any applicable modeling guidelines in conducting the modeling and preparing the report, as described in BOEM NTL 2020-N02 (available at https://www.boem.gov/guidance). Provide two copies of the modeling report and the modeling results, along with a digital copy of the input and output files (including the meteorological data you used in the modeling), or a reference to the report, files, and results if they have already been submitted to the BOEM AK regional office.

## 8. Best Available Control Technology (BACT)

The term "BACT" is defined in §§ 550.105 and 550.302, and, in the context of air quality management, generally refers to the use of control technology that minimizes air pollution emissions by changing a process to prevent air pollution or installing air pollution control equipment. According to § 550.303 paragraphs (g) and (h), BACT is to be applied when projected emissions significantly affect the air quality of any state. The most common form of BACT offshore is the vapor recovery unit.

#### 9. Review of Facilities with Emissions below the EET

As stated in 30 CFR § 550.303(j), if the Regional Supervisor determines or an affected state submits information to the Regional Supervisor that demonstrates in the judgement of the Regional Supervisor that projected emissions from an otherwise exempt facility will either individually or in combination with other facilities in the area significantly affect the air quality of an onshore area, then the Regional Supervisor will require the lessee to submit additional information to determine whether emission control measures are necessary. The lessee must be given the opportunity to present information which demonstrates that the exempt facility is not significantly affecting the air quality of an onshore area of the state to the Regional Supervisor.

# 10. Hydrogen Sulfide

You must submit hydrogen sulfide concentration information as directed in 30 CFR §§ 550.215 and 550.245.

## 11. Environmental Impact Analysis

Information provided in your Environmental Impact Analysis (30 CFR §§ 550.227 and 550.261) is used in BOEM's NEPA analysis. For example, if BOEM needs to prepare an environmental assessment (EA) on the submitted plan then the information in the EIA is used to prepare the EA.

## 12. USEPA's Air Quality Jurisdiction

For activities that fall within the U.S. Environmental Protection Agency (USEPA) air quality jurisdiction, please submit the appropriate USEPA air permit number and all the BOEM-required air emission information accompanying an EP or DPP, 30 CFR §§ 550.212(f), (l), (m), and (o), 550.218, 550.224(b), 550.225(b), 550.227, 550.242(g), (o), (p), and (s), 550.249, 550.257(b), 550.258(b), and 550.261.

## Plans as Revised and Supplemented (30 CFR § 550.283(a)(4) and (b))

#### 1. Revised OCS Plans.

If you propose to change your activities in a way that would increase their emissions to exceed the amount previously specified for a facility, you must submit a revision of the approved plan according to 30 CFR § 550.283(a)(4). All current and proposed air emissions must be included in the calculated emission amounts for the facility. For determining compliance, the most recent submittal reporting air emissions for the facility will supersede those previously reported for approved initial, revised, and supplemental plans. Revisions must be approved before any emission increases are allowed exceeding currently approved amounts.

## 2. Supplemental OCS Plans.

You must supplement your approved EP or DPP when you propose to conduct activities on your leases or units that require approval of a license or permit which is not described in your approved EP or DPP according to 30 CFR § 550.283(b). All current and proposed air emissions must be included in the calculated emission amounts for the facility. For determining compliance, the most recent submittal reporting air emissions for the facility will supersede those previously reported for approved initial, revised, and supplemental plans. Revisions must be approved before any emission increases are allowed exceeding currently approved amounts.

## **Guidance Document Statement**

BOEM issues NTLs as guidance documents in accordance with 30 CFR § 550.103 to clarify and provide more detail about certain BOEM regulatory requirements and to outline the recommended information to be provided in various submittals. Under that authority, this NTL sets forth policy on and interpretation of statutory, regulatory, lease, contractual, or plan approval provisions to provide a clear and consistent approach for complying with those provisions. If you wish to use an alternate method for compliance, you are encouraged to get feedback from BOEM staff on the adequacy of your proposal to comply with the regulation.

Except to the extent that provisions of this NTL derive from requirements established by statute, regulation or by a provision in the lease, they do not have the force and effect of law and are not meant to bind the public in any way. This NTL is intended only to provide clarity to the public regarding existing requirements under the law.

While the provisions of this NTL are non-binding recommendations and guidance, the provisions may be made mandatory in whole or part through stipulations or conditions of approval from BOEM or BSEE in leases, plan stipulations, permits, or other authorizations. In that case, you must comply with those provisions.

## **Paperwork Reduction Act of 1995 Statement**

This NTL provides clarification, description, and interpretation of requirements contained in 30 CFR Part 550, Subpart A, B, and C. An agency may not conduct or sponsor a collection of information unless it displays a currently valid OMB Control Number. OMB has approved the information collection requirement in these regulations under OMB control numbers 1010-0057, 1010-0114, and 1010-0151. This NTL does not impose additional information collection requirements subject to the Paperwork Reduction Act of 1995.

## **Contacts**

If you have questions regarding this NTL, please contact Jack Newell in the Alaska Regional Office by email at jack.newell@boem.gov or by telephone at 907-334-5257.

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