U.S. Environmental Protection Agency
Region 1

Outer Continental Shelf Air Permit: South Fork Wind, LLC
130 MW Windfarm
Offshore Renewable Wind Energy Project

Response to Comments on
EPA Draft Permit Number
OCS-R1-04

Introduction

On June 24, 2021, EPA Region 1 published notices in the Standard Times (New Bedford), the Boston Globe and in the Providence Journal for public review and comment of a proposed Outer Continental Shelf (OCS) Air Permit for the South Fork Wind LLC (SFW) 130 MW windfarm located in Federal waters off the coast of Massachusetts. EPA also provided notification to interested parties of the public comment period, and made all documents available for review on its website. The comment period ran through August 9, 2021. EPA also held a virtual public hearing on August 9, 2021. The EPA only received comments from South Fork Wind, LLC on the initial draft permit. In addition, EPA reopened the public comment period for another 47 days to request comment on a revision to the initial draft permit that removes the requirement to obtain emission offsets for construction emissions. The public comment period of the revised draft permit was held from October 20, 2021 to December 6, 2021, with a virtual public hearing held on December 2, 2021. EPA followed the same public comment and notification procedures for the revised draft permit as for the initial draft permit. Comments received on or before December 6, 2021 on the revised draft permit were considered in the final permit decision. The EPA considered all comments submitted during the public comment period in its final decision-making process, including comments submitted during the initial public comment period. EPA did not receive verbal comments at the August 9 or December 2 virtual public hearings.

After a review of the comments received, the EPA has made a final decision to issue this OCS permit as proposed, with limited changes as described below. As required by 40 C.F.R. § 124 (Procedures for Decision-making), EPA has prepared this document, known as the "response to comments" (RTC), to describe and address any significant issues raised during the comment period, and to describe the provisions of the draft permit that have been changed and the reasons for the changes. Because the Fact Sheet for the initial draft permit and the Supplemental Fact Sheet for the revised draft permit are final documents, no changes were made to them. Instead,

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comments on the Fact Sheet and Supplement Fact Sheet were noted, and responses to them are included in this document.

The final permit is substantially the same as the revised draft permit that was available for public comment, and the requirement to obtain offsets for construction emissions has been removed as explained in the Supplemental Fact Sheet for the revised draft permit that was available for comment on October 20, 2021. Although the EPA's decision-making process has benefitted from the comments and additional information submitted, the information and arguments presented did not raise any substantial new questions concerning the permit. The EPA did, however, make certain clarifications, and revised some permit conditions in response to comments. In addition to the changes made as a result of comments, EPA made a couple of minor revisions to correct errors in the revised draft permit. EPA believes these latter changes are administrative in nature, and do not significantly alter the terms and conditions of the revised draft permit. These improvements and changes are detailed in this document and reflected in the final permit. A summary of the changes made in the final permit is listed below. The analyses underlying these changes are explained in the responses to individual comments that follow.

The final permit, RTC, and a link to the administrative record are available on the EPA's web site at https://www.epa.gov/caa-permitting/epa-issued-caa-permits-region-1. The EPA is notifying all commenters who submitted comments during the public comment period, interested parties, and individuals who requested a copy of the final permit of the issuance of the final permit and is providing them with access to the RTC and the final permit. Copies of the Final Permit may be obtained by writing (email preferred) or calling EPA between the hours of 9:00 a.m. and 5:00 p.m., Monday through Friday, excluding holidays via the contact information provided below:

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The complete text of each comment as submitted, and a complete copy of the transcript from both public hearings, are in the administrative record and available by request. The administrative record can be accessed online at https://www.regulations.gov (Docket # EPA-R01-OAR-2021-0392).

The following is the list of comments the EPA received during the public comment period, our response to those comments, and, if applicable, revisions to the revised draft permit that EPA made in issuing the final permit. Comments received on the draft permit, along with EPA's responses, are organized into two sections: Section I addresses comments submitted during the public comment period on the initial draft permit from June 24 through August 9, 2021, and Section II addresses comments submitted during the public comment period on the revised draft permit from October 20, 2021 through December 6, 2021. EPA maintains that any changes made between drafts and the final permit represent a "logical outgrowth" of the initial and revised draft permits that were available for public comment.

Revisions to the initial and revised draft permits are explained in this RTC document. EPA is also providing a Redline-Strikeout version of the final permit for readers to track changes made between the drafts and final permit.

The following is a list of the persons and organizations that submitted comments on the draft permit:

1. South Fork Wind, LLC (comments received August 9, 2021)
2. South Fork Wind, LLC (comments received December 6, 2021)
3. American Clean Power Association (comments received December 6, 2021)
4. Epsilon Associates, Inc. (comments received October 30, 2021)

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Response to Comments and Revisions to the Draft Permit

I. Comments Received on EPA's Initial Draft Permit Proposed June 24, 2021 through August 9, 2021

A. Comments from South Fork Wind, LLC (SFW) on EPA's Initial Draft Permit

Comment I.A.1: SFW commented that clarifying language should be added to the List of Air Emissions Sources in Section II of the draft permit indicating that this list does not preclude or prevent the use of vessels or equipment with other names so long as the emissions from those units are consistent with the emissions calculations supporting the South Fork Wind permit application and are compliant with applicable emission limits related to vessels and equipment contained within the permit.

EPA's Response to Comment I.A.1: The List of Air Emissions Sources in Section II of the permit (i.e., Table 1) is for informational purposes only and is not intended to encompass all of the vessels that may be used during the construction and operation of the windfarm. Therefore, the EPA has revised Section II of the permit to indicate that other vessels or equipment not listed in Section II of the permit are not prohibited by the permit.

Revision to the Draft Permit based on Comment I.A.1: In Section II of the final permit, the EPA made the following revision by adding a footnote:

"The list of emission sources in this table is provided for informational purposes only. Other vessels or equipment not listed in this table may be used by SFW and are subject to the terms and provisions of this permit."

Comment I.A.2: SFW commented that Section III of the permit broadly defines the term engine, but the permit conditions only refer to marine engines. SFW suggested that the permit be clarified to allow for the use of engines other than those that meet the definition of "marine engine" in 40 C.F.R. § 1042 so long as the engines are compliant with applicable emission limits related to vessels and equipment contained within the permit.

EPA's Response to Comment I.A.2: The EPA partially agrees with this comment. The term marine engine is used in the permit when referencing the engine standards at 40 C.F.R. § 1042 (and formerly 40 C.F.R. § 94), which are applicable to marine engines as defined in §1042. Other permit provisions in the permit, such as those applicable to the engines on the wind turbine generators (WTGs) or offshore substation (OSS), do not refer to marine engines. However, EPA defined the term "engines" in the permit to include gasoline-fired spark ignition internal combustion engines, diesel-fired compression ignition internal combustion engines, marine engines, and diesel-fired generating sets. As such, we agree with the commenter and find it reasonable to replace the term "marine engines" with "engines" in various sections of the permit because the definition of "engines" in the permit incorporates marine engines. By making this change, the permit is now clarified to allow for the use of engines that may or may not meet the

definition of marine engine in part 1042 as long as those engines still meet the applicable engine standards in the relevant permit conditions.

Revision to the Draft Permit based on Comment I.A.2: EPA revised Conditions IV.C.3, 4, 5, and 8 to replace the term "marine engine" with "engine". Please refer to the Redline-Strikeout version of the final permit included in the administrative docket for this action for a detailed description of these revisions to the final permit in Section IV.C.

Comment I.A.3: SFW commented that the List of Air Emission Sources in Section II of the draft permit makes a general reference to "cable installation" without describing the various types of cable laying vessels used for laying and burying cables on the seafloor (specifically, vessels using pull-ahead anchors and vessels using a dynamic positioning system). SFW also commented that these vessels are only considered in determining the potential emissions of the OCS source and not themselves OCS sources, and requests that the permit provide greater specificity as to the types of vessels proposed for use for cable installation in the South Fork project. SFW requested that EPA revise the table in Section II to read "Cable installation by vessels using pull-ahead anchors [sic] dynamic positioning systems".

EPA's Response to Comment I.A.3: The EPA disagrees with this comment that a revision to the permit is necessary. As noted in our response to comment #1, the information in Table 1 is for informational purposes only. The air emissions sources listed in Table 1 are possible sources of air emissions associated with the project, which may or may not meet the definition of an OCS source as defined in §55.2. As discussed in EPA's June 24, 2021 Fact Sheet for the initial draft permit, EPA understands that the South Fork project will use cable installation vessels that use a pull-anchor and/or dynamic positioning system. EPA's Fact Sheet also provided a detailed analysis as to whether pull-ahead anchor cable-laying vessels meet the definition of an OCS source when conducting cable-laying activities.

As part of the initial public comment period for the draft permit from June 24 through August 9, 2021, EPA proposed that cable-laying vessels using a pull-ahead anchor system should not be regulated as OCS sources. EPA also sought comment on whether cable-laying vessels using a dynamic positioning system should not be regulated as OCS sources based on the same rationale presented in the Fact Sheet for pull-ahead anchor cable-laying vessels. EPA did not receive any comments during the public comment period regarding the applicability of OCS permitting requirements to pull-ahead anchor or dynamic positioning system cable-laying vessels. Therefore, EPA is finalizing the permit consistent with the discussion in the Fact Sheet that cable-laying vessels using either a pull-ahead anchor system or a dynamic positioning system should not be regulated as OCS sources for the reasons laid out in the Fact Sheet.

However, EPA notes our analysis for not regulating cable-laying vessels that use a pull-ahead anchor or dynamic positioning system as OCS sources was only relevant to the operation of the vessel during cable-laying activities (i.e. the installation of the subsea cable). EPA did not make any determination as to whether cable-laying vessels that use a pull-ahead anchor or dynamic positioning system could meet the definition of an OCS source under other circumstances (e.g. physically attaching to another OCS source). Although SFW is correct that vessels associated with the project within 25 nautical miles are included in potential emissions calculations and may

not be regulated as OCS sources, the permit provides flexibility to regulate such vessels as OCS sources when they are operating as an OCS source. The vessels and activities listed in Table 1 are provided to show various emission sources associated with the project, and may or may not meet the definition of an OCS source depending upon their specific operations. Therefore, a permit revision is not necessary and EPA has not revised the permit based on this comment.

Comment I.A.4: SFW commented that EPA should add the following definition of marine engine to the permit:

"Marine Engine means a nonroad engine produced for any purpose that is installed or intended to be installed on a marine vessel. This includes a portable auxiliary marine engine only if its fueling, cooling, or exhaust system is an integral part of the vessel. A fueling system is considered integral to the vessel only if one or more essential elements are permanently affixed to the vessel.

There are two kinds of marine engines:

(1) Propulsion marine engine means a marine engine that moves a vessel through the water or directs the vessel's movement.

(2) Auxiliary marine engine means a marine engine not used for propulsion."

EPA's Response to Comment I.A.4: The EPA agrees with this comment and has included the definition for "marine engine" as defined in 40 C.F.R. § 1042.901 in Section III of the final permit. Because the term "auxiliary engine" was previously defined in the initial draft permit, the EPA removed a separate definition for "auxiliary engine" from Section III in the final permit because it was redundant to the newly added definition of marine engine. Please refer to the Redline-Strikeout version of the final permit included in the administrative docket for this action for a detailed description of these revisions to the final permit.

Comment I.A.5: SFW commented that Condition IV.B.2 of the initial draft permit is applicable to diesel-fired engines on the WTGs and OSS; however, the regulations cited (1042.101(a) for "new marine compression-ignition engines") are only for marine engines that are 600 kW or larger. SFW stated that the proposed emergency engines for the WTG or OSS are 268 bhp which is equivalent to 200 kW and requested that EPA reference that Tier 3 standards apply for engines < 600 kW.

EPA's Response to Comment I.A.5: The permit requires that engines for the WTGs and the OSS be certified to meet Tier 4 emission standards as Best Available Control Technology (BACT) and Lowest Achievable Emission Rate (LAER). The October 20, 2021 Supplemental Fact Sheet describes a correction made to the revised draft permit for the citation to 40 C.F.R. § 1039, where the citation originally referenced 40 C.F.R. § 1042. The EPA corrected the citation in Condition IV.B.2 of the revised draft permit (on public notice October 20, 2021) to reflect the appropriate reference to the emission limits in 40 C.F.R. §1039. EPA identified the Tier 4 engine requirements in §1039 as BACT/LAER in the June 24, 2021 Fact Sheet for the initial draft permit, but inadvertently referenced the emission limits in 40 C.F.R. § 1042 in Condition IV.B.2

of the initial draft permit in error. See Section V.B.3 and VI.A.1 of the EPA's June 24, 2021 Fact Sheet. In addition, in the revised draft permit, the EPA also clarified the specific emission limits from §1039 that apply to the engines proposed by SFW for installation on the WTGs and OSS in the revised draft permit. Therefore, the EPA did not make any changes to the final permit based on this comment.

Comment I.A.6: SFW commented that Condition IV.B.2 of the initial draft permit indicates an engine's design displacement in kilowatts per liter (kW/l). SFW stated that engine displacement is a measure of cylinder volume swept by all pistons of an engine and is not a function of the engines output. As a result, SFW suggested revising this condition to correct the error in the units for engine displacement.

EPA's Response to Comment I.A.6: The EPA agrees with this comment. The units for displacement are no longer in Condition IV.B.2 in the final permit.

Comment I.A.7: SFW commented that the diesel-fired engines on the WTGs and OSS are limited to 200 hours in Condition IV.B.3 and indicated that actual emergency operation of emergency engines must be unlimited to allow proper health and safety response to emergency situations. SFW stated that this approach also is consistent with 40 C.F.R. § 63.6640(f)(1) with regard to limiting hazardous air pollutants from stationary internal combustion engines. SFW asserted that the only time limits imposed on emergency reciprocating internal combustion engines (RICE) in 40 C.F.R. § 63.6640(f) are for readiness checks, maintenance, and other nonemergency operations. SFW requests that the conditions in the permit applicable to emergency engines are consistent with how emergency engines are treated in these programs, which are part of Condition VI.B.1. SFW requested that EPA add a citation to 40 C.F.R. § 60.4211(f)(1) stating "there is no time limit on the use of emergency stationary ICE in emergency situations."

EPA's Response to Comment I.A.7: EPA used its authority from the Prevention of Significant Deterioration (PSD) permit program to limit the use of the diesel-fired generator engines on the WTGs and OSS to 200 hours. Emergency engines subject to 40 C.F.R. Part 60 Subpart IIII (NSPS IIII) must meet the operational limitations in §60.4211(f) which allows emergency engines to operate for up to 100 hours per calendar year for maintenance checks and readiness testing. Fifty of the 100 hours per calendar year may be used for non-emergency use. If the engine will be operated for more than 50 hours a year for non-emergency purposes during commissioning and construction, the engine would need to meet the non-emergency standards found in § 60.4201. However, for South Fork, air quality impacts from the engines on the WTGs and the OSS were modeled as if they were operating no more than 200 hours out of the year at a given location as stated in the appendices included with SFW's 2020 revised permit application. For PSD permits, emission scenarios included in the modeling compliance demonstration for the 1-hour NO_2 National Ambient Air Quality Standard (NAAQS) are meant for emissions that are continuous enough or frequent enough to contribute significantly to the annual distribution of daily maximum 1-hour concentrations.[1] SFW's screening modeling indicated that impacts for

[1] PSD review for this project is required for NO_x, and for NO_2 and as a precursor to ozone and $PM_{2.5}$. EPA released supplemental guidance related specifically to modeling requirements related to the 1-hour NO_2 standard for PSD

annual NO_2 and annual $PM_{2.5}$ were below the significance threshold and no further analysis was warranted, but a refined analysis was required for 1-hour NO_2 and 24-hour $PM_{2.5}$. Therefore, the anticipated hours of engine use per year of operation and maintenance were factored into the emission estimate for 1-hour average NO_2 modeling for South Fork. The EPA determined it was appropriate to include a permit condition in the draft permit that restricts operation of the emergency generators to mitigate the source's contribution to ambient NO_2 levels based on dispersion conditions to ensure compliance with the NAAQS, per the 2011 NO_2 modeling guidance. *See* Footnote 1. If operation of these engines was not limited to 200 hours per year, the permit could allow a situation that creates adverse air quality impacts that were not already considered as part of the PSD application for the project, especially relative to the 1-hour NO_2 NAAQS. Therefore, the engines are limited to 200 hours per year even though the regulations at NSPS IIII allow unlimited use for emergency purposes. For this reason, the final permit does not include the citation to 40 C.F.R. § 60.4211(f)(1) stating "there is no time limit on the use of emergency stationary ICE in emergency situations."

Additionally, Condition VI.A.1 and VI.A.5 (now VI.A.4) of the initial draft permit required compliance with the provisions for non-emergency engines at 40 C.F.R. § 60.4204(b) for the engines located on the WTGs and OSS. SFW provided clarifying information on January 5, 2022 to support this comment indicating that during the operational phase of the project, only emergency engines may be used at the WTGs. The WTGs will not contain a permanent generator engine and will be equipped with an integrated battery backup system that can provide auxiliary power to the WTGs in the event of a temporary power outage from the onshore power supply. However, non-emergency engines may be used at the WTGs during the construction phase of the project for commissioning. The OSS will contain a permanent non-emergency, diesel-fired generator engine. Based on this comment and clarifying information provided by SFW, the EPA is revising Condition VI.A.1 and VI.A.4 of the final permit to specify that the provisions for non-emergency engines on WTGs and OSS at 40 C.F.R. § 60.4204(b) apply during the construction phase. EPA has added an additional requirement to the final permit in Section VI.A that specifies the engines installed on the WTGs during the operational phase must comply with the provisions for emergency engines at 40 C.F.R. § 60.4205(b). EPA notes, however, that the more stringent Tier 4 engine emission limits from BACT/LAER in Section IV.B of the final permit apply at all times, including the 200 hour per year limit on engine operation.

Revision to the Draft Permit based on Comment I.A.7: The EPA made the following revisions in Section VI.A of the final permit.

1. <u>For non-emergency engines located on WTGs during the construction phase and the non-emergency engine located on the OSS during the construction and operational phase,</u> the Permittee must install, operate, and maintain all engines to achieve the emissions standards at 40 C.F.R. § 60.4204(b) over the entire life of the engine. [40 C.F.R. §60.4206]

2. <u>For emergency engines located on WTGs during the operational phase, the Permittee must install, operate, and maintain all engines to achieve the emissions</u>

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permits. *See* "Additional Clarification Regarding Application of Appendix W Modeling Guidance for the 1-hour NO_2 National Ambient Air Quality Standard" dated March 1, 2011.

standards at 40 C.F.R. § 60.4205(b) over the entire life of the engine. [40 C.F.R. § 60.4206]

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4. The Permittee shall install and operate all engines that are certified by the manufacturer to meet or surpass the emission standards in 40 C.F.R. § 60.4204(b) or § 60.4205(b) as specified in this permit; [40 C.F.R. § 60.4211(c)]

Comment I.A.8: SFW commented that Condition IV.B.3 of the draft permit that limits the use of hours for engines on the WTGs and OSS up to 200 hours a year should be clarified. SFW stated that as written, the condition is unclear regarding the application of the limit to the entire group of diesel-fired engines or each diesel-fired engine. SFW indicated that according to Page 38 of the "Fact Sheet OCS-R1-04", a 200 hour per year operation limitation was selected as Best Available Control Technology (BACT) for engines defined as "emergency" on the WTG and OSS. SFW requested that EPA revise this condition for clarity as follows: "Engine [sic] shall be limited to operating up to 200 hours a year per engine."

EPA's Response to Comment I.A.8: The EPA partially agrees with this comment and has revised Condition IV.B.3 in the final permit. Based on additional clarifying information provided by SFW, EPA is revising the permit to limit the operation of engines to 200 hours per each respective WTG or OSS location.

Revision to the Draft Permit based on Comment I.A.8: Condition IV.B.3 in the final permit has been revised as follows:

> "Engines shall be limited to operating up to 200 hours a year per engine at each WTG or OSS location."

Comment I.A.9: SFW commented that Condition IV.C.3 should be revised to add the word "propulsion" before the word "engines" in the following clause "… ensure that all category 1 and 2 engines…"

EPA's Response to Comment I.A.9: SFW did not provide any explanation or justification for why the requested change should be made. The EPA disagrees with this comment because adding the word "propulsion" before engines in Condition IV.C.3 would limit the applicability of the permit condition to only propulsion engines. If the change were to be made as requested, the permit condition would inappropriately exclude auxiliary engines from the requirements of Condition IV.C.3. Auxiliary engines on vessels operating as an OCS source are regulated as stationary sources under the part 55 permitting program. Propulsion engines are defined as part of the new definition of *Marine Engines* in Section III of the final permit (see response to comment I.A.4). Condition IV.C.3 applies to both auxiliary and propulsion engines on vessels while those vessels are operating as an OCS source. Therefore, the final permit has not been revised because of this comment.

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Comment I.A.10: SFW commented on a grammatical error in Condition IV.C.3 of the draft permit and recommended an editorial change to correct the error.

EPA's Response to Comment I.A.10: The EPA agrees with this comment and has made the requested change.

Revision to the Draft Permit based on Comment I.A.10: Condition IV.C.3 was revised in the final permit as follows:

> "…except if one of the conditions in subparagraph 3.a. or 3.b~~.~~, below~~,~~ is met, in which case the Permittee… Similarly, in the event that one of the conditions in subparagraph 3.a or 3.b~~.~~, below, is met regarding the…"

In addition, the EPA made the same correction to Condition IV.C.5 as shown below:

> "…except if one of the conditions in subparagraph 5.a~~.~~ or 5.b~~.~~, below~~,~~ is met, in which case the Permittee… Similarly, in the event that one of the conditions in subparagraph 5.a or 5.b~~.~~, below~~,~~ is met…"

Comment I.A.11: SFW commented that Conditions IV.C.3.a and b, IV.C.4.a and b, and IV.C.5.a and b should be clarified to indicate that the term "engine" refers to the "main" engine on the vessel. SFW also commented that time period in Conditions IV.C.3.a, IV.C.4.a, and IV.C.5.a should be revised to indicate a lower tiered vessel is allowed if a higher tier engine is not available within two hours of when the vessel *commences operation as an OCS source.*

EPA's Response to Comment I.A.11: SFW did not provide any explanation or justification for why the requested changes should be made. The EPA does not have enough information concerning the proposed changes and has not revised the final permit because of this comment. However, EPA provides responses to the comment below based on what SFW appears to mean by its comment.

Regarding SFW's request to indicate that the term "engine" refers to the "main" engine on the vessel, EPA is clarifying in this Response to Comments document that the intent of the referenced permit condition is to apply to the primary engine regulated under the permit that will be subject to the permit terms and conditions while the vessel is operating as an OCS source. The EPA understands the primary engine will typically be the engine regulated by the permit with the highest maximum power rating.

Regarding SFW's request to revise permit Conditions IV.C.3.a, IV.C.4.a, and IV.C.5.a to indicate when a lower tiered vessel is allowed if a higher tier engine is not available, the EPA does not agree that it is appropriate to allow a higher tier engine if a lower tier is not available within two hours of when the vessel *commences operation as an OCS source.* As discussed in Section V.B.4 of EPA's June 24, 2021 Fact Sheet for the draft permit, the EPA determined that the use of the cleanest engines available at the "time of deployment" was BACT for the engines on vessels operating as an OCS source. Furthermore, the EPA does not believe it is reasonable to allow the use of a lowered tiered engine based on when the vessel commences operation as an

OCS source if a higher tiered engine is available at the time of deployment. The comment provided by SFW does not sufficiently explain why the BACT for the engines should be revised. EPA has not revised the conditions in the final permit because of this comment.

Comment I.A.12: In draft permit Condition IV.C.4, SFW commented that the word "propulsion" should be added before the word "engines" for clarification purposes.

EPA's Response to Comment I.A.12: SFW did not provide any explanation or justification for why the requested change should be made. As explained in response to comment I.A.9, the EPA disagrees with this comment because adding the word "propulsion" before engines in Condition IV.C.4 would limit the applicability of the permit condition to only propulsion engines. If the change was made as requested, the permit condition would inappropriately exclude auxiliary engines from the requirements of Condition IV.C.4. Auxiliary engines on vessels operating as an OCS source are regulated as stationary sources under the part 55 permitting program. Propulsion engines are defined as part of the new definition of *Marine Engines* in Section III of the final permit (see response to comment I.A.4). Condition IV.C.4 applies to both auxiliary and propulsion engines on vessels while those vessels are operating as an OCS source. Therefore, the final permit has not been revised because of this comment.

Comment I.A.13: SFW commented that the permit should allow for other possible regulatory mechanisms that could be used to generate discrete emission reduction credits (DERCs) that satisfy the requirements of the Clean Air Act. SFW requested that Condition V.A.1 in the initial draft permit, include the following provision: "d. Any other regulatory mechanism that the permitting authority determines meets that [the] requirements of the Clean Air Act for generating creditable emission reductions that can be used for meeting the reasonable further progress goals under the State Implementation Plan."

EPA's Response to Comment I.A.13: On October 20, 2021, EPA reopened the comment period on the draft permit to remove the requirement to obtain DERCs for construction emissions. EPA did not receive any adverse comments during the public comment period from October 20 through December 6, 2021 on this revision to the draft permit. Therefore, the final permit does not contain a provision requiring SFW to obtain DERCs for construction emissions and no changes have been made to the final permit as a result of this comment. The final permit maintains the requirement to obtain emission offsets for operating emissions (See response to comment I.A.15).

Comment I.A.14: Regarding Condition V.A.2 of the initial draft permit, SFW commented that recording usage of engines is needed on a daily basis, and NOx emissions can be calculated on a weekly basis because DERCs only have to be purchased on a quarterly basis. SFW requested that EPA revise the following clause: "… the Permittee shall start recording on a daily basis for each and every day, the total amount (in tons) of NOx emissions emitted from …) to read "…the Permittee shall start recording on a daily basis for each and every day, the hours of use for each engine as follows:…"

EPA's Response to Comment I.A.14: As explained in our response to comment I.A.13, EPA reopened the comment period on the draft permit on October 20, 2021 to remove the requirement

to obtain DERCs for construction emissions. The final permit maintains the requirement to obtain offsets for operating emissions. Therefore, the final permit does not contain a provision requiring SFW to calculate NO_X emissions for construction emissions. However, the requirement to calculate NO_X emissions was moved to the recordkeeping requirements in Section VIII of the revised draft permit that was proposed for public comment on October 20, 2021. Specifically, the recordkeeping requirement at Condition VIII.8 of the revised draft permit requires SFW to calculate NO_X emissions on a daily basis for operating emissions to ensure compliance with the offset requirements for operating emissions in the permit. Condition V.III.7 in the draft permit already requires daily recording of the hours of engine operation during the operational phase and it would be redundant to revise Condition VIII.8 to also require daily recordkeeping of engine usage. Furthermore, Condition IX.10.b of the permit requires quarterly reporting of daily NOx emissions. Therefore, the EPA believes it is appropriate to require the daily calculation and recordkeeping of NOx emissions during the operational phase of the project to ensure compliance with the Nonattainment New Source Review (NNSR) offset provisions in Section V of the permit and has not revised the permit based on this comment.

Comment I.A.15: SFW commented that Condition V.B.2 of the initial draft permit proposed on June 24, 2021 be revised to allow for the use of alternative regulatory mechanisms to generate continuous emission reduction credits (CERCs) that satisfy the requirements of the Clean Air Act. SFW requested that Condition V.B.2 include the following provision: "d. Any other regulatory mechanism that the permitting authority determines meets that [the] requirements of the Clean Air Act for generating creditable emission reductions that can be used for meeting the reasonable further progress goals under the State Implementation Plan."

EPA's Response to Comment I.A.15: EPA notes that the requirement to obtain CERCs in Condition V.B.2 of the initial draft permit was reformatted to Condition V.1 in the revised draft permit proposed on October 20, 2021. Section V of the final permit contains the requirements for obtaining CERCs for the operational phase of the project. The EPA does not agree that the permit should allow for the broad approval of an alternate mechanism for generating creditable emission reductions. The proposed language is also not enforceable because it does not specify the method by which CERCs would be obtained. In addition, the proposed condition would not provide the opportunity for public comment on the alternate mechanism for generating CERCs. Furthermore, the creditable emission reductions used for complying with applicable nonattainment new source review permit program requirements cannot be claimed to the extent a permitting authority has relied on the reduction as part of a reasonable further progress demonstration.[2] *See* 40 C.F.R § 51.165(a)(3)(ii)(G) and Massachusetts regulation 310 CMR 7.00 Appendix A (6)(h). Therefore, the EPA has not revised the final permit as a result of this comment.

Comment I.A.16: In Condition VII.1 of the draft permit, SFW commented that the opacity testing frequency of once per operating day to monitor for opacity for 30 minutes is excessive and requested that the opacity testing frequency be lowered to once per 10 operating days.

[2] Additionally, RFP plans to reduce ozone precursor emissions are only required for states classified as moderate nonattainment or above. Massachusetts' current classifications under the 2015 ozone NAAQS and 2008 ozone NAAQS have not required the Commonwealth to develop such plans.

EPA's Response to Comment I.A.16: The EPA disagrees with this comment and believes the visible emissions testing frequency of once per operating day with EPA Method 22 is necessary and reasonable for SFW to demonstrate compliance with the permit provisions in Section IV.A for each engine on the Main WTG Installation Vessel when the vessel is operating as an OCS source. In developing the permit provisions in Section IV.A, EPA considered that installing and operating a Continuous Opacity Monitoring System (COMS) or Continuous Emissions Monitoring System (CEMS) on these vessels may present technical challenges, and daily or hourly Method 9 testing with a trained observer may not be practical under some operational conditions. The required EPA Method 22 visible emissions observations can be conducted without a certified observer and requires recording the presence or absence of visible emissions. Note that a Method 9 observation by a certified observer would also be required if Method 22 indicates visible emissions. Furthermore, EPA takes into account that in its comment, SFW provides no justification as to why the frequency of once per operating day with EPA Method 22 is overly burdensome. Therefore, the final permit has not been revised because of this comment.

Comment I.A.17: SFW commented that the definition for "primary crew transfer vessels" was out of alphabetical order in the definitions section and recommended moving the term to Section III of the permit to follow in alphabetical order.

EPA's Response to Comment I.A.17: The EPA agrees with this comment and the definitions in Section III of the final permit are in alphabetical order.

Comment I.A.18: SFW identified a typographical error in Condition IV.C.7 of the draft permit and requested that EPA correct the reference to Condition IV.D.6 to reflect the correct reference of Condition IV.C.6.

EPA's Response to Comment I.A.18: The EPA agrees with this comment and Condition IV.C.7 in the final permit references Condition IV.C.6 accordingly.

Comment I.A.19: SFW commented that "SFW agrees with EPA's determination that pull-ahead anchor CLVs are not OCS sources, we continue to believe that these vessels are also not OCS sources because they do not attach to the seabed for the reasons explained in Orsted's September 30, 2020 memorandum."

EPA's Response to Comment I.A.19: The EPA acknowledges the supportive comment from SFW. However, EPA notes that as stated in EPA's June 24, 2021 Fact Sheet for the initial draft permit, EPA reviewed Orsted's arguments in the September 30, 2020 memorandum and is not persuaded that pull-ahead anchor CLVs are not "attached to the seabed." Nevertheless, EPA agrees that pull-ahead anchor CLVs are not "erected" thereon and used "for the purpose of exploring, developing, or producing resources" as explained in the fact sheet for the initial draft permit. Therefore, the final permit does not regulate pull-ahead anchor CLVs as OCS sources for the reasons set forth in the June 24, 2021 Fact Sheet.

II. Comments Received on EPA's Revised Draft Permit Proposed October 20, 2021 through December 6, 2021

A. Comments from South Fork Wind, LLC (SFW) on EPA's Revised Draft Permit

SFW Comments – Attachment A: On December 6, 2021, SFW provided comments on the revised draft OCS air permit that was reproposed on October 20, 2021. Attachment A of SFW's comments contained a twelve-page narrative in support of EPA's proposal to remove the requirement to obtain emissions offsets for the construction phase of the project.

EPA Response to SFW Comments – Attachment A: EPA appreciates SFW comments and acknowledges the supportive nature of those comments. EPA did not receive comments objecting to its proposal to remove the requirement to obtain offsets for construction emissions during the public comment period from October 20 through December 6, 2021. Since comments submitted to EPA during the public comment period have not demonstrated that offsets for construction emissions are required, EPA is finalizing the permit as proposed: that is, the final permit does not require SFW to obtain emission offsets for air emissions from construction activities. The final permit does maintain the requirement to obtain offsets in the form of CERCs for air emissions during the operational phase of the project. In addition, the final permit will protect air quality in the affected area by maintaining emission control requirements for construction activities that are regulated as OCS sources, consistent with the requirements of 40 C.F.R part 55 and Section 328 of the CAA.

Further, this final action is justified by the rationale for removing the requirement to obtain offsets for construction emissions as explained in EPA's October 20, 2021 Supplemental Fact Sheet for the revised draft permit. Because the comments received on the draft permit action during the public comment period were generally supportive of EPA's proposal not to require offsets for construction emissions, it is not necessary for EPA to respond in detail to those comments or to amend its rationale. Thus, EPA is not relying upon the additional points provided by SFW in Attachment A of SFW's comments on the revised draft permit. Please refer to EPA's October 20, 2021 Supplemental Fact Sheet for our analysis and rationale on the NNSR offset requirements reflected in the final permit.

Finally, the final permit contains emissions limitations and conditions for construction activities that protect air quality in the affected area. Additionally, EPA has previously clarified that it was not the intent of EPA's federal NNSR program, the Emissions Offsets Interpretive Ruling at Part 51, Appendix S, to cover emissions from projects "that occur for only a relatively short period of time and are associated with the construction of a new project."[3] Therefore, EPA is not making any changes in the final permit on this issue.

[3] See EPA Letter to Dr. Robert L. Davies, Federal Energy Administration dated May 6, 1977. Available online at https://www.epa.gov/sites/default/files/2015-07/documents/emsnofst.pdf.

SFW Comments – Attachment B

Attachment B of SFW's comments contained ten specific comments seeking changes or clarifications to the revised draft permit. EPA has summarized those comments below and provided a response to each of SFW's comments as found in Attachment B of their December 6, 2021 comment letter.

Comment II.A.1: Regarding Condition IV.C.3 of the revised draft permit, SFW commented that 40 C.F.R. § 94.8, which is listed twice in the paragraph, no longer exists in the C.F.R. According to eCFR, this section was removed on June 29, 2021. SFW requested that EPA replace the referenced section with a valid section and stated that it appears that most of the referenced regulations have been moved from 40 C.F.R. § 94.8 to 40 C.F.R. § 1042, Appendix I.

EPA's Response to Comment II.A.1: The EPA agrees with this comment and has revised the final permit accordingly. On June 29, 2021, EPA completed a final rulemaking that migrated "legacy" non-road engine regulations from Subchapter C to Subchapter U of Chapter 1 of Title 40 in the C.F.R. As a result, the Tier 2 engine standards from 40 C.F.R. § 94 have been incorporated into Appendix I of 40 C.F.R. § 1042. *See* 86 FR 34308 (June 29, 2021). EPA has revised the final permit to replace all references to the emission standards in 40 C.F.R. § 94 with 40 C.F.R. § 1042 – Appendix I.

Revision to the Draft Permit based on Comment II.A.1: The following revisions were made to the final permit.

Section III – Definition of Category 1 and 2 Engines

Category 1 Engine means

a. For engines regulated under 40 C.F.R. Part 1042 (Tiers 3 and 4), a marine engine with specific engine displacement below 7.0 liters per cylinder; or

b. For engines regulated under 40 C.F.R. Part ~~94~~1042 – Appendix I (Tiers 1 and 2), a marine engine with a rated power greater than or equal to 37 kilowatts and a specific engine displacement less than 5.0 liters per cylinder.

Category 2 Engine means

a. For engines regulated under 40 C.F.R. Part 1042 (Tiers 3 and 4), a marine engine with a specific engine displacement at or above 7.0 liters per cylinder but less than 30.0 liters per cylinder; or

b. For engines regulated under 40 C.F.R. Part ~~94~~1042 – Appendix I (Tiers 1 and 2), a marine engine with a specific engine displacement greater than or equal to 5.0 liters per cylinder but less than 30 liters per cylinder.

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Condition IV.C.3:

> "…meeting the Tier 2 emission limits in 40 C.F.R. § ~~94.8~~ 1042 – Appendix I in lieu…engine in 40 C.F.R. §1042.101 or 40 C.F.R. § ~~94.8~~ 1042 – Appendix I for a Tier 2…"

Condition IV.C.4:

> "…engine in 40 C.F.R. § 1042.101 or Tier 1 or 2, and 40 C.F.R. part ~~94~~1042 – Appendix I, depending upon whichever Tier…"

Condition VIII.6

> "…The different Tier standards are found in 40 C.F.R. Parts 89, 1042 – Appendix I (formerly part 94), 1039, or 1042…"

Condition VIII.9.b

> "…The emission rates are contained in 40 C.F.R. §§ ~~94.8 or~~ 1042.101 or 1042 – Appendix I and vary depending on the engine's Tier classification…"

Comment II.A.2: Regarding Table 2 in Condition IV.C.5 of the revised draft permit, SFW requested that EPA make the following corrections to agree with the associated Table 1 in 40 C.F.R. 1043.60(a):

• Change "n = 130-1999" to "n=130-2000"

• Change "n>2000" to "n>2000"

• Change under IMO/EPA Tier I, "1 January 2000" to "1 January 2004"

EPA's Response to Comment II.A.2: The NOx emission limits set out in Table 2 are intended to reflect the combination of the international consensus standards contained in Annex VI to the International Convention for the Prevention of Pollution from Ships (MARPOL Annex VI) and EPA's Clean Air Act (CAA) emission standards for Category 3 marine diesel engines installed on U.S. vessels contained in 40 C.F.R. §§ 1042 and 1043. The Annex VI NOx limits apply to all engines above 130 kW installed on a vessel.[4] EPA's CAA standards for Category 3 engines are consistent with the MARPOL Annex VI NOx limits (40 C.F.R. § 1043.60), but also apply HC and CO limits to Tier 2 and 3 Category 3 engines (40 C.F.R. § 1042.104(a)(3) and (4)).

The commenter is correct that the power bins in Table 2 appear to be inconsistent with how the standards are defined in 40 C.F.R. §§ 1042 and 1043. Specifically, EPA's program defines the central category as 130 to 2000 rpm, and the small category as over 2000 rpm. Annex VI, on the other hand, defines the central category as "130 or more but less than 2,000 rpm" and the small category as "2,000 rpm or more." For simplicity, because the ships that will be operating under this permit are expected to be foreign flagged, the table reflects the Annex VI category

[4] There is an exemption for engines installed on ships that operate only domestically, provided they are covered by an alternative program.

definitions. However, the approaches yield the same NOx values at the boundary. The calculated values of the NOx limits using the EPA boundary for n=2000 rpm, rounded to the first decimal place, are the same as the fixed values specified in Annex VI for n=2000 rpm. Since both §1043.60 and Annex VI refer to rounding to the first decimal place, this discrepancy does not lead to a difference in the applicable standards.

With regard to the dates, the EPA's CAA Tier 1 standards for Category 3 marine diesel engines began to be enforceable in 2004. However, the equivalent Annex VI Tier I standards are applicable to engines on U.S. vessels that operate internationally beginning 1 January 2000, as specified in Annex VI. This means that engines installed on a U.S. vessel built between 2000 and 2003 are required to be compliant with MARPOL Annex VI NOx limits when operating in ports and waters under the jurisdiction of another country. The EPA has clarified Table 2 in Condition IV.C.5 of the permit based on this comment. EPA also revised the language in Condition IV.C.5 to clarify that foreign flagged vessels should meet the NOx limits in Annex VI, and domestic flagged vessels are subject to EPA's standards. EPA also replaced the references to "IMO" with "Annex VI" to clarify the applicable regulation.

Revision to the Draft Permit based on Comment II.A.2: The following revisions were made to Condition IV.C.5 in the final permit. Note that the revisions shown below also show the changes made as a result of Comments I.A.2 and I.A.10 in Condition IV.C.5.

5. The Permittee shall ensure that all engines on all foreign flagged vessels not regulated by permit Condition IV.C.3, and all C~~c~~ategory 3 engines on domestic flagged vessels, while those vessels are operating as an OCS source, are certified to meet either the MARPOL Annex VI (Annex VI) Tier III NOx limits, in the case of a foreign flagged vessel,~~International Maritime Organization (IMO)~~ or EPA's Tier 3 ~~marine~~ engine standards, in the case of a US flagged vessel, in Table 2 of this permit, except if one of the conditions in subparagraph 5.a~~.~~ or 5.b~~.,~~ below~~,~~ is met, in which case the Permittee may use the next lower Tier ~~marine~~ engine (i.e., ~~IMO~~Annex VI Tier II or EPA Tier 2). Similarly, in the event that one of the conditions in subparagraph 5.a or 5.b~~.,~~ below~~,~~ is met regarding the use of an ~~IMO~~Annex VI Tier II or EPA Tier 2 ~~marine~~ engine, the Permittee may use an ~~IMO~~Annex VI Tier I or EPA Tier 1 ~~marine~~ engine in lieu of an ~~IMO~~Annex VI Tier II or EPA Tier 2 ~~marine~~ engine. All ~~marine~~ engines operating on a foreign vessel while that vessel meets the definition of an OCS source, shall be certified as meeting the relevant NOx emission limits for ~~IMO~~Annex VI ~~or EPA Tier 1, 2, or 3 marine engines~~ in Table 2, depending upon whichever ~~IMO~~Annex VI ~~or EPA~~ Tier the ~~marine~~ engine is certified to meet. In order to use a lesser ~~IMO~~Annex VI or EPA Tier ~~marine~~ engine, as described above, one of the following conditions must be met:

   a. A vessel with a higher ~~IMO~~Annex VI or EPA Tier engine is not available within two hours of when the vessel must be deployed;

   b. The total emissions associated with the use of a vessel with the higher ~~IMO~~Annex VI or EPA Tier engine(s) would be greater than the total emissions associated with the use of the vessel with the next lower ~~IMO~~Annex VI or EPA

Tier engine(s). For purposes of this subparagraph, when determining the total emissions associated with the use of a vessel with a particular engine, the Permittee may include the emissions of the vessel that would occur when the vessel would be going to the WA from the vessel's starting location;

c. For category 3 engines on domestically flagged vessels, with a model year of 2011 or later, those engines must comply with an HC emission limit of 2 g/kW-hr and a CO emission limit of 5 g/kW-hr. [40 C.F.R. § 1042.104(a)]

Table 2 – NOx Emission Limits

~~IMO~~Annex VI/EPA Tier	**Ship ~~construction date~~ constructed on or after**	**Total weighted cycle NOx emission limit (g/kWh) n = engine's rated speed (rpm)**		
		n is less than ~~<~~ 130	~~n = 130 – 1999~~ n is 130 or more but less than 2,000 rpm	~~n ≥ 2000~~n is 2,000 rpm or more
I[a] / 1	1 January 2000[a]	17.0	$45 \cdot n^{(-0.2)}$ e.g., 720 rpm – =12.1	9.8
II / 2	1 January 2011	14.4	$44 \cdot n^{(-0.23)}$ e.g., 720 rpm – =9.7	7.7
III / 3	1 January 2016	3.4	$9 \cdot n^{(-0.2)}$ e.g., 720 rpm – =2.4	2.0[b]

a: The EPA Tier 1 NOx emission limits for Category 3 engines on U.S.~~domestically flagged~~ vessels ~~with category 3 engines only~~ apply beginning ~~to ships constructed on or after 1 January~~ model year 2004; however, the Annex VI Tier I standards apply to engines installed on U.S. vessels beginning 1 January 2000 if that U.S. vessel operates internationally.

b: The total weighted cycle NOx emission limit for engines meeting the Tier III ~~IMO~~Annex VI standard is 1.96 when the engine speed equals or exceeds 2,000 rpm.

Comment II.A.3: Regarding Condition 3, 4, and 5 in Section VIII of the revised draft permit, SFW commented that these recordkeeping requirements do not completely align with the list of records contained on page 14 of the Supplemental Fact Sheet regarding "number of cylinders" and "overall engine displacement" versus "cylinder size" in Requirements Nos. 3, 4 and 5 in Section VIII. The EPA engine regulations are based on engine displacement expressed as "liters per cylinder," as such the recordkeeping requirements should require records with that terminology.

EPA's Response to Comment II.A.3: The EPA agrees with this comment and has revised the final permit accordingly.

Revision to the Draft Permit based on Comment II.A.3: The following revisions were made to Condition 3, 4, and 5in Section VIII of the final permit:

3. The make, model, maximum rated power output, engine displacement~~cylinder size~~, and manufacturing date of each engine on each vessel operating as an OCS source during the construction phase, including if the vessel is a domestic or foreign-flagged vessel.

4. The make, model, maximum rated power output, engine displacement~~cylinder size~~, and manufacturing date of each engine on each vessel included in the PTE during the operational phase, including if the vessel is a domestic or foreign-flagged vessel.

5. The make, model, maximum rated power output, engine displacement~~cylinder size~~, and manufacturing date of each engine on each and every WTG and OSS.

Comment II.A.4: In Condition 4 and 7 of Section VIII of the revised draft permit, SFW requested that EPA delete "included in the PTE" and replace that language with "operating as an OCS source" to reflect the same terminology used in #3 (i.e., "operating as an OCS source"), avoiding confusion created by the use of different terminologies.

EPA's Response to Comment II.A.4: The recordkeeping requirements in Condition VIII.4 and VIII.7 of the final permit apply to different engines than Condition VIII.3, and therefore require the use of different terminology. Condition VIII.3 requires the Permittee to maintain engine records for vessels operating as an OCS source during the construction phase. These records are required to determine compliance with the engine requirements for vessels operating as an OCS source in Sections IV and VI of the permit. Condition VIII.4 requires the Permittee to maintain engine records for each engine included in the PTE during the operational phase. By requiring engine records for each engine included in the PTE, this provision ensures that engine records are maintain for engines located on vessels that operate as an OCS source to determine compliance with Section IV and VI of the permit, as well as engine records for vessels that do not operate as an OCS source but are operating within 25 nautical miles of the OCS source. Similarly, Condition VIII.7 also applies to engines located on vessels that operate as an OCS source during the operational phase, as well as engine records for vessels that do not operate as an OCS source but are operating within 25 nautical miles of the OCS source. The records required by Condition VIII.4 and VIII.7 ensure that engine records necessary to calculate emissions and determine compliance with the offset requirements in Section V of the permit are met. The EPA has revised Condition VIII.7 of the permit based on this comment to clarify recordkeeping requirements for engines operating within 25 nautical miles of the OCS source.

Revision to the Draft Permit based on Comment II.A.3: The following revisions were made to Condition VIII.7 of the final permit:

7. For each engine on each vessel that is included in the PTE during the operational phase of the project, record daily, for each and every day, the:

   a. Total hours of operation when operating within 25 nautical miles of the OCS source;

Comment II.A.5: SFW commented that in Condition VIII.9.b of the revised draft permit, the citation for 40 C.F.R. § 94.8 no longer exists in the C.F.R. According to eCFR, this section was removed on July 29, 2021. SFW requested that EPA replace the referenced section with a valid section and stated that it appears that most of these regulations have been moved from 40 C.F.R. § 94.8 to 40 C.F.R. § 1042, Appendix I.

EPA's Response to Comment II.A.5: EPA agrees with this comment and has revised the permit accordingly. Please refer to EPA's Response to Comment #II.A.1 for a detailed explanation of the changes to the final permit as a result of this comment.

Comment II.A.6: SFW commented that in Condition VIII.9.b of the revised draft permit, EPA should include the regulatory citation for the source of the NOx emission factors listed in subsections b.i, ii and iii. SFW stated that these factors are not listed in 40 C.F.R. § 1042.101 or the former section 40 C.F.R. § 94.8 and are higher than even Tier 1 emission standards.

EPA's Response to Comment II.A.6: As stated in the Section VI.B of the June 24, 2021 Fact Sheet for the initial draft permit, almost all NOx emissions for purposes of determining the required NNSR offset totals are generated from third-party vessels. At the time of permit issuance, SFW and the EPA are not aware of the exact engines that are installed and will be operating on these third-party vessels. The BACT/LAER requirements in Section IV of the permit allow for the use of lower-tiered engines when certain conditions are met, and EPA recognizes that specific emission factors for those engines may not be available. Without specific engine information, the methodology for determining daily NOx emissions is challenging – emissions tracking is needed to capture the total emissions from any of the vessels that may be used at any time. Therefore, EPA has determined that daily NOx emissions tracking is necessary for demonstrating compliance with the requirement for SFW to obtain sufficient NNSR offsets. For engines that are not certified to EPA or Annex VI tier standards, further assumptions must be made when determining daily NOx emissions. In this case, the EPA is relying on emission data from EPA's Draft Regulatory Impact Analysis (RIA): Control of Emissions from Compression-Ignition Marine Engines[5], dated November 1998, for determining NOx emission factors. The emission factors listed in Conditions VIII.9.b.i, ii, and iii originate from Tables 3-3, 3-4, and 3-5, respectively, in the November 1998 Draft RIA. EPA chose the highest measured emission rate from each of the respective tables in order to conservatively estimate the potential emissions associated with the project. EPA has not made any changes to the final permit based on this comment.

[5] *See* https://nepis.epa.gov/Exe/ZyPDF.cgi/P1004N1J.PDF?Dockey=P1004N1J.PDF, last visited on December 22, 2021 and included in the docket.

Comment II.A.7: SFW commented that in Condition VIII.9.c of the revised draft permit, EPA should include the regulatory citation for the source of the emission factor 19.5 g/kW-hr for NOx.

EPA's Response to Comment II.A.7: Please refer to EPA's Response to Comment II.A.6 above for a detailed explanation of the basis for the emission factor of 19.5 g/kW/-hr in Condition VIII.9.c of the permit. EPA also notes that although Section IV.C.5 requires all foreign flagged vessels that meet the definition of an OCS source to have an IMO certification, the EPA recognizes that the permittee may operate a foreign flagged vessel within or traveling to and from the work area that does not have an IMO certification. Therefore, EPA included a conservative emission factor of 19.5 g/kW-hr for NOx for category 3 engines without an IMO certification. EPA also notes that SFW did not provide any explanation or justification for why the requested change should be made. EPA has not made any change to the permit based on this comment.

Comment II.A.8: SFW commented that in Condition 12 and 14 of Section IX of the revised draft permit, EPA should consider combining requirements to streamline the conditions and that they are stating the same requirement.

EPA's Response to Comment II.A.8: The EPA agrees with the comment and has revised the permit to combine the permitting requirements for a Certification of Truth, Accuracy and Completeness from a Responsible Official.

Revision to the Draft Permit based on Comment II.A.8:

~~12. Any document required to be submitted under this permit, or any other document requested by the EPA which is not specified in this permit shall be certified by a responsible official as to the truth, accuracy and completeness. Such certifications shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.~~

* * * * *

1~~3~~4. ~~All documents submitted to the EPA shall contain certification by the responsible official of truth, accuracy, and completeness.~~ Any document required to be submitted under this permit, or any other document requested by the EPA which is not specified in this permit shall be certified by a responsible official as to the truth, accuracy and completeness. Such certification shall be in compliance with 310 CMR 7.01(2) and contain the following language:

"I certify that I have personally examined the foregoing and am familiar with the information contained in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including possible fines and imprisonment."

Comment II.A.9: SFW commented that the third paragraph in Section III of EPA's October 20, 2021 Supplemental Fact Sheet states the following: "In April 2012, EPA designated Dukes County as nonattainment (marginal classification) for the 2008 ozone standards and designated the remainder of Massachusetts as unclassifiable/attainment. Based on the most recent monitoring data, Dukes County attained the 2008 ozone standard by the 2015 attainment deadline (MassDEP, 2016)." SFW stated that this paragraph still indicates that Dukes County is designated as marginal non-attainment for the 2008 ozone standard.

EPA's Response to Comment II.A.9: Dukes County, Massachusetts was designated as a marginal nonattainment area for the 2008 ozone NAAQs on July 20, 2012 (See 77 FR 30088, May 21, 2012). On June 3, 2016, the EPA determined that Dukes County attained the 2008 ozone standard by the July 20, 2015 attainment date (See 81 FR 26697, May 4, 2016). However, the Commonwealth of Massachusetts has not submitted a request to redesignate Dukes County as attainment for the 2008 ozone NAAQS. Therefore, Dukes County is currently designated as a marginal nonattainment area for the 2008 ozone NAAQS. *See* 40 C.F.R. § 81.322.

Since the October 20, 2021 Supplemental Fact Sheet is a final document, no changes were made to it. Instead, EPA is responding to this comment in this document.

Comment II.A.10: SFW commented that on page 14 of EPA's October 20, 2021 Supplemental Fact Sheet, EPA states in #3 that the permittee shall "Record whether the engines are on a foreign or domestically flagged vessel". SFW commented that this recordkeeping requirement is not included in the recordkeeping requirements in Section VIII of the draft permit.

EPA's Response to Comment II.A.10: The EPA agrees with this comment and has revised Condition 3 and 4 in Section VIII of the final permit to require the Permittee to maintain records of whether the engines are on a foreign or domestically flagged vessel. Please refer to EPA's Response to Comment II.A.3 above for specific changes made to the final permit as a result of Comment II.A.3 and this comment.

B. Comments from American Clean Power Association (ACP) on EPA's Revised Draft Permit

Comments from ACP: The American Clean Power Association submitted comments that were supportive of EPA's proposal to remove the requirement to obtain emission offsets for construction emissions associated with the project. ACP asserted that EPA's interpretation and conclusions are supported by the Clean Air Act framework, statutory provisions, and agency practice and precedent.

EPA Response to ACP Comments: EPA appreciates ACP's comments and acknowledges the supportive nature of those comments. As indicated in the response to comment II.A above, EPA did not receive comments objecting to its proposal to remove the requirement to obtain offsets for construction emissions during the public comment period from October 20 through December 6, 2021. Since comments submitted to EPA during the public comment period have not demonstrated that offsets for construction emissions are required, EPA is finalizing the

permit as proposed: that is, the final permit does not require SFW to obtain emission offsets for air emissions from construction activities. The final permit does maintain the requirement to obtain offsets in the form of CERCs for air emissions during the operational phase of the project. In addition, the final permit will protect air quality in the affected area by maintaining emission control requirements for construction activities that are regulated as OCS sources, consistent with the requirements of 40 C.F.R part 55 and Section 328 of the CAA.

Further, this final action is justified by the rationale for removing the requirement to obtain offsets for construction emissions as explained in EPA's October 20, 2021 Supplemental Fact Sheet for the revised draft permit. Because the comments received on the draft permit action during the public comment period were generally supportive of EPA's proposal not to require offsets for construction emissions, it is not necessary for EPA to respond in detail to those comments or to amend its rationale. Thus, EPA is not relying upon the additional points provided by ACP in their comments on the revised draft permit. Please refer to EPA's October 20, 2021 Supplemental Fact Sheet for our analysis and rationale on the NNSR offset requirements reflected in the final permit.

Finally, the final permit contains emissions limitations and conditions for construction activities that protect air quality in the affected area. Additionally, EPA has previously clarified that it was not the intent of EPA's federal NNSR program, the Emissions Offsets Interpretive Ruling at Part 51, Appendix S, to cover emissions from projects "that occur for only a relatively short period of time and are associated with the construction of a new project."[6] Therefore, EPA is not making any changes in the final permit on this issue.

C. Comments from Epsilon Associates, Inc. on EPA's Revised Draft Permit

Comments from Epsilon Associates: A.J. Jablonowski from Epsilon Associates, Inc. commented "I am writing to support the approval of the OCS air permit for South Fork Wind, LLC. I've reviewed the supplemental draft fact sheet and agree with its reasoning. Specifically regarding construction offsets, I agree that there is no regulatory requirement, and that the intent of the Clean Air Act at Section 173 (a)(1)(A) is to apply offset requirements to operation of a source (only). I further note that EPA's proposed action is one step towards leveling the playing field with onshore emission sources. I recommend that EPA approve the South Fork Wind OCS air permit as-proposed, and that for future OCS air permits I recommend that EPA look for other opportunities to streamline review and avoid permitting uncertainty."

EPA Response to Epsilon Associates, Inc. Comments: EPA appreciates Mr. Jablonowski's support for the permit. The final permit does not contain a requirement to obtain offsets for construction emissions consistent with the revised draft permit. The final permit maintains the requirement to obtain offsets in the form of CERCs for air emissions during the operational phase of the project. In addition, the final permit will protect air quality in the affected area by maintaining emission control requirements for construction activities that are regulated as OCS

[6] See EPA Letter to Dr. Robert L. Davies, Federal Energy Administration dated May 6, 1977. Available online at https://www.epa.gov/sites/default/files/2015-07/documents/emsnofst.pdf.

sources, consistent with the requirements of 40 C.F.R part 55 and Section 328 of the CAA. See also response to comments II.A and II.B.

III. Other Changes to the Permit

1. EPA revised "section IV.A" to read "Condition IV.A.1" in Condition IV.A.2 of the final permit to clarify the appropriate reference.

2. EPA identified a typographical error in the format numbering in Section VI.A. of the revised draft permit and has corrected the permit conditions in Section VI.A to reflect chronological order.

3. EPA replaced "IMO" with "Annex VI" in Condition VIII.9.c of the final permit for consistency with the clarifications made in response to Comment II.A.2.

4. EPA revised "section III." to read "Section III" in Condition VIII.8 of the final permit to correct a grammatical error.

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