

**IN RE SHELL GULF OF MEXICO, INC. &
IN RE SHELL OFFSHORE, INC.
(FRONTIER DISCOVERER DRILLING UNIT)**

OCS Appeal Nos. 10-01 through 10-04

***ORDER DENYING REVIEW IN PART AND REMANDING
PERMITS***

Decided December 30, 2010

Syllabus

This decision addresses petitions for review challenging two Outer Continental Shelf (“OCS”) Prevention of Significant Deterioration (“PSD”) permits the U.S. Environmental Protection Agency (“EPA”) Region 10 (“Region”) issued to Shell Gulf of Mexico Inc., and Shell Offshore Inc. (collectively, “Shell”). The permits, issued pursuant to Clean Air Act (“CAA”) § 328, authorize Shell to “construct and operate the Frontier Discoverer drillship and its air emission units and to conduct other air pollutant emitting activities” for the purpose of oil exploration in the Chukchi (“Chukchi Permit”) and Beaufort (“Beaufort Permit”) Seas. Both permits provide for the use of an associated fleet of support ships, such as icebreakers and a supply ship, in addition to the Frontier Discoverer.

Three groups filed petitions requesting that the Environmental Appeals Board (“Board”) grant review of both the Chukchi and Beaufort Permits: 1) Center for Biological Diversity (“CBD”); 2) Earthjustice, on behalf of several conservation groups (“EJ Petitioners”), and; 3) Alaska Eskimo Whaling Commission and Inupiat Community of the Arctic Slope (“AEWC”). Both the Region and Shell filed responses to the petitions, arguing that the Board should not grant review. Of the several issues on which petitioners seek Board review, the Board addresses in this decision three issues the EJ Petitioners and AEWC raise. These are:

(1) Does the Region’s decision not to apply best available control technology (“BACT”) to control the associated fleet of support vessels’ (“Associated Fleet”) emissions constitute a clearly erroneous application of CAA section 328 and the CAA’s PSD requirements?

(2) Is the Region’s decision to declare the Frontier Discoverer an OCS source between the time that an on-site company representative declares the Frontier Discoverer “to be secure and stable in a position to commence exploratory activity” until the on-site company representative declares that, due to anchor retrieval or disconnection, the Frontier Discoverer is “no longer sufficiently stable to conduct exploratory activity at the drill site,” a clearly erroneous application of 40 C.F.R. § 55.2; CAA § 328, 42 U.S.C. § 7627; and Outer Continental Shelf Lands Act (“OCSLA”) § 4(a)(1), 43 U.S.C. § 1333(a)(1)?

(3) Did the Region clearly err when it relied solely on compliance with the national ambient air quality standard (“NAAQS”) for nitrogen dioxide (“NO₂”) in effect at the time the Permits were issued to demonstrate that Shell’s operations will not have “disproportionately high and adverse human health or environmental effects” on Alaska Natives living in North Slope communities, given that the Administrator published a proposed rule in the Federal Register on July 15, 2009, several months before the Permits were issued, setting forth updated scientific evidence and proposing to supplement the annual NO₂ NAAQS with a 1-hour NO₂ NAAQS, and published a final rule in the Federal Register on February 9, 2010, several weeks before the Permits were issued, concluding that the annual NO₂ NAAQS no longer provided requisite protection of public health and establishing a supplemental 1-hour NO₂ NAAQS?

Held: The Board denies review of EJ Petitioners’ argument regarding application of BACT to the Associated Fleet’s emissions. The Board concludes, however, that the Region clearly erred in determining when the Frontier Discoverer becomes an OCS source. The Region also clearly erred in the limited scope of its analysis of the impact of NO₂ emissions on Alaska Native “environmental justice” communities located in the affected area. Accordingly, the Board remands the Chukchi and Beaufort Permits in their entirety.

(1) The EJ Petitioners’ argument that CAA section 328 establishes an “unambiguous mandate” requiring application of BACT to the Associated Fleet’s emissions overlooks ambiguity in the requirements of section 328 and the CAA’s PSD provisions, which simultaneously direct the control of emissions and distinguish between the OCS source and vessels servicing the OCS source. Section 328, itself, simply does not contain any words expressly, or by implication, explaining why the statute distinguishes between the OCS source and vessels servicing the OCS source when directing that such vessels’ emissions shall be considered direct emissions from the OCS source. In this respect, section 328’s meaning is not clear and the broader statutory context does not provide the clarity Petitioners assert. The Region’s decision in this case is a permissible interpretation of the statute’s ambiguous instruction, and the Region’s decision comports with the Agency’s regulatory text, as well as the rationale provided in the 1992 regulatory preamble.

(2) The Board concludes that the Region did not include in the administrative record a cogent, reasoned explanation of its definition of the OCS source in light of the criteria set forth in 40 C.F.R. § 55.2, CAA § 328, and OCSLA § 4(a)(1). The Region’s explanation for its choice to define the OCS source as “secure and stable in a position to commence exploratory activities” is inconsistent in the record, and does not reflect considered judgment. The Region’s definition of the OCS source results in a de facto “eight-anchors-down” requirement for the Frontier Discoverer to become an OCS source, despite evidence in the administrative record that the Region does not agree with Shell’s position that the Frontier Discoverer must be completely anchored to become an OCS source. Finally, the OCS source definition included in the Permits improperly delegates to Shell the Region’s obligation to determine when the Frontier Discoverer is subject to regulation under CAA § 328.

(3) The Board concludes that the Region clearly erred when it relied solely on demonstrated compliance with the then-existing annual NO₂ NAAQS as sufficient to find that the Alaska Native population would not experience disproportionately high and adverse human health or environmental effects from the permitted activity. The Region’s reliance solely on compliance with the annual NO₂ standard when it issued the Chukchi and Beaufort Permits on March 31 and April 9, 2010, was clearly erroneous given that the Administrator proposed a rule, published in the Federal Register on July 15, 2009, which made available updated scientific evidence supporting the Administrator’s proposal to supplement the annual NO₂ NAAQS with a 1-hour NO₂ NAAQS. The Administrator concluded that the annual NO₂ NAAQS alone did not provide requisite protection of public

health and established a supplemental 1-hour NO₂ NAAQS in a final rule published in the Federal Register on February 9, 2010, several weeks before the Region issued the Chukchi and Beaufort Permits.

Having found clear error in two aspects of the Region's decisions, the Board remands both the Chukchi and Beaufort Permits to the Region. The Board does not reach the merits of issues CBD and AEWC raised concerning application of BACT to control carbon dioxide emissions, and the Board does not reach a number of additional issues AEWC raised concerning PM_{2.5} (particulate matter with a diameter of 2.5 micrometers or less) background ambient air quality data and secondary PM_{2.5} modeling, compliance with the newly issued 1-hour NO₂ NAAQS, and inclusion of spill cleanup and certain other activities in the potential to emit analysis. The administrative record pertaining to each of these issues will likely be significantly altered by the remand of the Permits to the Region to address the clear error discussed in the Board's analysis. These issues and any others raised in the petitions before the Board in this proceeding, therefore, are also remanded to the Region.

Before Environmental Appeals Judges Anna L. Wolgast, Edward E. Reich, and Kathie A. Stein.

Opinion of the Board by Judge Wolgast:

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I. STATEMENT OF THE CASE

On March 31, 2010, pursuant to Clean Air Act (“CAA” or the “Act”) section 328, 42 U.S.C. § 7627, U.S. Environmental Protection Agency (“EPA” or “Agency”) Region 10 (“Region”) issued an Outer Continental Shelf (“OCS”) Prevention of Significant Deterioration (“PSD”) Permit to Construct, Permit Number R10OCS/PSD-AK-09-01 (“Chukchi Permit”), to Shell Gulf of Mexico, Inc. (“SGOMI”). On April 9, 2010, the Region issued another OCS PSD Permit to Construct, Permit Number R10OCS/PSD-AK-2010-01 (“Beaufort Permit”), to Shell Offshore, Inc. (“SOI”).

The Chukchi and Beaufort Permits (“Permits”) authorize SGOMI and SOI (collectively, “Shell”)¹ “to construct and operate the Frontier Discoverer drillship and its air emission units and to conduct other air pollutant emitting activities” for the purpose of oil exploration in the Chukchi and Beaufort Seas off the North Slope of Alaska. Chukchi Permit at 1; Beaufort Permit at 1. Both Permits provide for the use of an associated fleet of support ships, such as icebreakers and a supply ship, in addition to the Frontier Discoverer. OCS PSD permits are governed by 40 C.F.R. part 55 and the procedural rules set forth in 40 C.F.R. part 124. *See* 40 C.F.R. § 55.6(a)(3).

Three groups filed petitions requesting that the Environmental Appeals Board (“Board”) grant review of both the Chukchi and Beaufort Permits: 1) Center

¹ The record demonstrates that the Chukchi and Beaufort Permits were essentially developed in parallel and that the same personnel represented SGOMI’s and SOI’s interests throughout the permitting process. *See, e.g.*, E-mail from Susan Childs, Regulatory Affairs Manager – Alaska Venture, Shell Exploration & Production Company, to Julie Vergeront, U.S. EPA Region 10 (Aug. 12, 2009 2:58 pm) (A.R. A-47) (requesting Region to consider all documentation submitted in support of Chukchi PSD permit application to be from SGOMI rather than SOI, whose name appears on the Chukchi PSD application, because SGOMI owns the Chukchi leases and is the only entity that can conduct operations on them).

for Biological Diversity (“CBD”);² 2) Earthjustice, on behalf of several conservation groups (“EJ Petitioners”),³ and; 3) Alaska Eskimo Whaling Commission and Inupiat Community of the Arctic Slope (“AEWC”).⁴ Both the Region and Shell filed responses to the petitions, arguing that the Board should not grant review.

In this decision, the Board addresses three issues the EJ Petitioners and AEWC raise and concludes that the Permits must be remanded to the Region with respect to two of those issues. Having determined that a remand is necessary, the Board further concludes that the remand will significantly alter the administrative record as it pertains to certain other issues AEWC and CBD raise and that the Region should review those issues as part of its analysis on remand.⁵

II. ISSUES CONSIDERED ON APPEAL

1. Does the Region’s decision not to apply best available control technology (“BACT”) to control the associated fleet of support vessels’ (“Associated Fleet”) emissions constitute a clearly erroneous application of CAA section 328 and the CAA’s PSD requirements?

² CBD requested review of the Chukchi and Beaufort Permits simultaneously in a single Petition for Review designated as OCS Appeal No. 10-01. *See* Petition for Review (Apr. 30, 2010) (“CBD Petition”).

³ EJ Petitioners requested review of the Chukchi and Beaufort Permits simultaneously in a single Petition for Review designated as OCS Appeal No. 10-02. *See* Petition for Review (May 3, 2010) (“EJ Petition”). The EJ Petitioners include Natural Resource Defense Council, Native Village of Point Hope, Resisting Environmental Destruction of Indigenous Lands (“REDOIL”), Alaska Wilderness League, Audubon Alaska, Center for Biological Diversity, Northern Alaska Environmental Center, Ocean Conservancy, Oceana, Pacific Environment, and Sierra Club.

⁴ AEWC filed a Petition for Review of the Chukchi Permit, designated as OCS Appeal No. 10-03. *See* AEWC Chukchi Petition for Review (May 3, 2010) (“AEWC Chukchi Petition”). AEWC subsequently filed a Petition for Review of the Beaufort Permit, designated as OCS Appeal No. 10-12. *See* AEWC Beaufort Petition for Review (May 12, 2010) (“AEWC Beaufort Petition”). In a subsequent letter, the Board advised counsel for all parties that the Board had reassigned AEWC’s Beaufort Petition as OCS Appeal No. 10-04. Letter from Eurika Durr, Clerk, Environmental Appeals Board, U.S. Environmental Protection Agency, to Counsels In the Matter of Shell Gulf of Mexico, Inc. and Shell Offshore Inc. (June 4, 2010).

⁵ Those issues include issues AEWC raised concerning PM_{2.5} (particulate matter with a diameter of 2.5 micrometers or less) background ambient air quality data and secondary PM_{2.5} modeling, as well as inclusion of spill cleanup and certain other activities in the potential to emit analysis. AEWC Chukchi Petition at 32-49, 62-66; AEWC Beaufort Petition at 32-48, 61-67. Further, the issues AEWC raised concerning compliance with the new 1-hour nitrogen dioxide national ambient air quality standard and the issues CBD and AEWC raised concerning application of best available control technology to control carbon dioxide and greenhouse gas emissions ultimately must be determined taking into account the date on which the Region issues its final permit decision after remand. The Permits are required to comply with any applicable standard in effect at the time they are issued on remand.

2. Is the Region's decision to declare the Frontier Discoverer an OCS source between the time that an on-site company representative declares the Frontier Discoverer "to be secure and stable in a position to commence exploratory activity" until the on-site company representative declares that, due to anchor retrieval or disconnection, the Frontier Discoverer is "no longer sufficiently stable to conduct exploratory activity at the drill site," a clearly erroneous application of 40 C.F.R. § 55.2; CAA § 328, 42 U.S.C. § 7627; and Outer Continental Shelf Lands Act ("OCSLA") § 4(a)(1), 43 U.S.C. § 1333(a)(1)?

3. Did the Region clearly err when it relied solely on compliance with the national ambient air quality standard ("NAAQS")⁶ for nitrogen dioxide ("NO₂") in effect at the time the Permits were issued to demonstrate that Shell's operations will not have "disproportionately high and adverse human health or environmental effects" on Alaska Natives living in North Slope communities, given that the Administrator published a proposed rule in the Federal Register on July 15, 2009, several months before the Permits were issued, setting forth updated scientific evidence and proposing to supplement the annual NO₂ NAAQS with a 1-hour NO₂ NAAQS, and published a final rule in the Federal Register on February 9, 2010, several weeks before the Permits were issued, concluding that the annual NO₂ NAAQS no longer provided requisite protection of public health and establishing a supplemental 1-hour NO₂ NAAQS?

III. SUMMARY OF DECISION

First, the Board rejects the EJ Petitioners' arguments that the Region clearly erred when it did not require Shell to use BACT to control emissions from the Associated Fleet. The EJ Petitioners' argument that CAA section 328 establishes an "unambiguous mandate" requiring application of BACT to the Associated Fleet's emissions overlooks ambiguity in the requirements of section 328 and the CAA's PSD provisions, which simultaneously direct the control of emissions and distinguish between the OCS source and vessels servicing the OCS source. Section 328, itself, simply does not contain any words expressly, or by implication, explaining why the statute distinguishes between the OCS source and vessels servicing the OCS source when directing that such vessels' emissions shall be considered direct emissions from the OCS source. In this respect, section 328's meaning is not clear, and the broader statutory context does not provide the clarity

⁶ The NAAQS are air quality standards for particular pollutants "measured in terms of total concentration of a pollutant in the atmosphere." Office of Air Quality Planning & Standards, U.S. EPA, *New Source Review Workshop Manual C.3* (draft Oct. 1990) ("NSR Manual"). The Agency has set NAAQS for six criteria pollutants: sulfur oxides, particulate matter, nitrogen dioxide, carbon monoxide, ozone, and lead. See 40 C.F.R. §§ 50.4 – .13. The Act further directs EPA to designate geographic areas within states, on a pollutant-by-pollutant basis, as being either in attainment or in nonattainment with the NAAQS, or as being unclassifiable. CAA § 107(d), 42 U.S.C. § 7407(d).

Petitioners assert. As explained below, the Region's decision in this case is a permissible interpretation of the statute's ambiguous instruction, and the Region's decision comports with the Agency's regulatory text, as well as the rationale provided in the 1992 regulatory preamble.

The Board, however, also concludes that AEWC has raised two issues requiring remand of the Permits. The Board concludes that the Region clearly erred in determining when the Frontier Discoverer becomes an OCS source. The Region also clearly erred in the limited scope of its analysis of the impact of NO₂ emissions on Alaska Native "environmental justice" communities located in the affected area.

The Board concludes that the Region did not include in the administrative record a cogent, reasoned explanation of its definition of the OCS source in light of the criteria set forth in 40 C.F.R. § 55.2; CAA § 328, 42 U.S.C. § 7627; and OCSLA § 4(a)(1), 43 U.S.C. § 1333(a)(1). The Region's explanation for its choice to define the OCS source as "secure and stable in a position to commence exploratory activities" is inconsistent in the record and does not reflect considered judgment. The Region's definition of the OCS source results in a de facto "eight-anchors-down" requirement for the Frontier Discoverer to become an OCS source, despite evidence in the administrative record that the Region does not agree with Shell's position that the Frontier Discoverer must be completely anchored to become an OCS source. Finally, the OCS source definition included in the Permits improperly delegates to Shell the Region's obligation to determine when the Frontier Discoverer is subject to regulation under CAA § 328.

With respect to the environmental justice analysis, the Board concludes that the Region clearly erred when it relied solely on demonstrated compliance with the then-existing annual NO₂ NAAQS as sufficient to find that the Alaska Native population would not experience disproportionately high and adverse human health or environmental effects from the permitted activity. The Region's reliance solely on compliance with the annual NO₂ standard when it issued the Chukchi and Beaufort Permits on March 31 and April 9, 2010, was clearly erroneous given that the Administrator proposed a rule, published in the Federal Register on July 15, 2009, which made available updated scientific evidence supporting the Administrator's proposal to supplement the annual NO₂ NAAQS with a 1-hour NO₂ NAAQS. The Administrator concluded that the annual NO₂ NAAQS alone did not provide requisite protection of public health and established a supplemental 1-hour NO₂ NAAQS in a final rule published in the Federal Register on February 9, 2010, several weeks prior to the Region issuing the Chukchi and Beaufort Permits.

Having found clear error in these aspects of the Region's decisions, the Board remands the Permits to the Region. The Board does not reach the merits of issues CBD and AEWC raised concerning application of BACT to control CO₂

emissions, and the Board does not reach a number of additional issues AEWG raised concerning PM_{2.5} background ambient air quality data and secondary PM_{2.5} modeling, compliance with the newly issued 1-hour NO₂ NAAQS, and inclusion of spill cleanup and certain other activities in the potential to emit analysis. The administrative record pertaining to each of these issues will likely be significantly altered by the remand of the Permits to the Region to address the clear error discussed in the Board's analysis.

For example, the Region's determination regarding whether the permits must comply with the new 1-hour NO₂ NAAQS or the Agency's requirements for CO₂ or other greenhouse gases depends upon the date on which the Region issues its final permit decisions under 40 C.F.R. § 124.15(a) upon conclusion of the remand proceedings. *See, e.g.,* Office of Air and Radiation, U.S. EPA, *PSD and Title V Permitting Guidance for Greenhouse Gases* at 3 n.6 (Nov. 2010); Memorandum from Stephen D. Page, Director, Office of Air Quality Planning & Standards, *Applicability of the Federal Prevention of Significant Deterioration Permit Requirements to New and Revised National Ambient Air Quality Standards* at 2 (Apr. 1, 2010) (citing *Ziffrin v. United States*, 318 U.S. 73, 78 (1943); *Alabama v. EPA*, 557 F.2d 1101, 1110 (5th Cir. 1977); *In re Dominion Energy Bravton Point, LLC*, 12 E.A.D. 490, 614-16 (EAB 2006); *In re Phelps Dodge Corp.*, 10 E.A.D. 460, 478 n.10 (EAB 2002)); *In re Russell City Energy Ctr., LLC*, 15 E.A.D. 1, 80-85 (EAB 2010). Similarly, the Region should supplement the administrative record and/or reopen the public comment period to take into account availability of additional factual information concerning other issues raised in the petitions, such as any additional PM_{2.5} background ambient air quality data, available modeling techniques for secondary formation of PM_{2.5}, or new information or changes in Shell's plans for spill prevention and response and use of the Associated Fleet. *See, e.g.,* *In re Prairie State Generating Co.*, 13 E.A.D. 1, 64-70 (EAB 2006), *aff'd sub nom. Sierra Club v. U.S. EPA*, 499 F.3d 653 (7th Cir. 2007) (discussing availability of new information during the pendency of a permit proceeding). These issues and any others raised in the petitions before the Board in this proceeding, therefore, are also remanded to the Region.

IV. STANDARD OF REVIEW

The Outer Continental Shelf Air Regulations codified at 40 C.F.R. part 55 state that "the Administrator will follow the procedures in [40 C.F.R.] part 124 used to issue [] PSD permits" when processing OCS PSD permits. 40 C.F.R. § 55.6(a)(3). The Board does not ordinarily review a PSD permit decision unless the decision is based on either a clearly erroneous finding of fact or conclusion of law, or involves an important matter of policy or exercise of discretion that warrants review. 40 C.F.R. § 124.19(a); *accord In re Power Holdings of Ill., LLC*, 14 E.A.D. 723, 725 (EAB 2010); *In re Shell Offshore, Inc.*, 13 E.A.D. 357, 369 (EAB 2007); *In re Cardinal FG Co.*, 12 E.A.D. 153, 160 (EAB 2005). The pre-

amble to the part 124 regulations states that the Board's power of review "should be only sparingly exercised" and that "most permit conditions should be finally determined at the [permit issuer's] level." Consolidated Permit Regulations, 45 Fed. Reg. 33,290, 33,412 (May 19, 1980); *accord Shell*, 13 E.A.D. at 369; *Cardinal FG*, 12 E.A.D. at 160. Petitioners bear the burden of demonstrating that review is warranted, and Petitioners must raise specific objections to the permit and explain why the permit issuer's previous response to those objections is clearly erroneous or otherwise warrants review. *Power Holdings*, 14 E.A.D. at 725-26; *In re BP Cherry Point*, 12 E.A.D. 209, 217 (EAB 2005); *In re Steel Dynamics, Inc.*, 9 E.A.D. 740, 744 (EAB 2001); *In re Kawaihae Cogeneration Project*, 7 E.A.D. 107, 114 (EAB 1997).

When evaluating a permit appeal, the Board determines whether the permit issuer's rationale for its conclusions is adequately explained and supported by the administrative record. *E.g.*, *Shell*, 13 E.A.D. at 386; *In re Ash Grove Cement Co.*, 7 E.A.D. 387, 417 (EAB 1997) ("[T]he Region 'must articulate with reasonable clarity the reasons for [its] conclusions and the significance of the crucial facts in reaching those conclusions.'" (quoting *In re Carolina Power & Light Co.*, 1 E.A.D. 448, 451 (Act'g Adm'r 1978))). In other words, the record must demonstrate that the permit issuer "exercised his or her considered judgment" when making permit determinations. *In re San Jacinto River Auth.*, 14 E.A.D. 688, 691 (EAB 2010); *accord In re Knauf Fiber Glass, GmbH*, 8 E.A.D. 121, 175 (EAB 1999) (remanding permit because "there are no details regarding [the region's] determination in the administrative record," that would allow the Board "to judge the adequacy of the Region's analysis"); *In re Austin Powder Co.*, 6 E.A.D. 713, 719-20 (EAB 1997) (remanding permit for region to clarify the differing rationales given for making a permit determination); *In re GSX Servs. of S.C., Inc.*, 4 E.A.D. 451, 454 (EAB 1992) (administrative record must reflect "considered judgment" necessary to support region's permit determination). As this Board has previously observed, "[w]ithout an articulation by the permit writer of his analysis, [the Board] cannot properly perform any review whatsoever of that analysis and, therefore, cannot conclude that it meets the requirements of rationality." *In re Gov't of D.C. Mun. Separate Storm Sewer Sys.*, 10 E.A.D. 323, 342-43 (EAB 2002), *quoted in Shell*, 13 E.A.D. at 386.

V. FACTUAL AND PROCEDURAL HISTORY

A. Factual History of the Permits

As stated above, the Permits authorize Shell, subject to conditions, "to construct and operate the Frontier Discoverer drillship and its air emissions units and to conduct other air pollutant emitting activities" during exploratory drilling activ-

ities undertaken on oil and gas lease blocks⁷ in the Chukchi⁸ and Beaufort Seas off the North Slope of Alaska. Chukchi Permit at 1; Beaufort Permit at 1. The Chukchi Permit authorizes exploratory drilling activities beyond twenty-five miles of the state of Alaska's seaward boundary, whereas the Beaufort Permit authorizes exploratory drilling activities both within and beyond the twenty-five

⁷ The Secretary of the U.S. Department of the Interior ("DOI") regulates and manages the development of mineral resources on the OCS. *See* 43 U.S.C. § 1334 (authorizing Secretary to administer leasing on the OCS). In particular, the Bureau of Ocean Energy Management, Regulation and Enforcement ("BOEMRE") is responsible for overseeing the safe and environmentally responsible development of energy and mineral resources on the OCS. BOEMRE was established as a result of Secretarial Order 3302, signed on June 18, 2010, by the Secretary of the Interior. Secretary of the Interior, U.S. Department of the Interior, Order No. 3302, *Change of the Name of the Minerals Management Service to the Bureau of Ocean Energy Management, Regulation, and Enforcement* (June 18, 2010), available at http://elips.doi.gov/app_so/index.cfm?fuseaction=chroList/. In addition, Secretarial Order 3299A1 separated and reassigned the responsibilities of the former Minerals Management Service ("MMS") into three distinct bureaus, with the intent to, among other things, improve management, oversight, and accountability of activities on the OCS and to provide independent safety and environmental oversight and enforcement of offshore activities. Secretary of the Interior, U.S. Department of the Interior, Order No. 3299A1, *Establishment of the Bureau of Ocean Energy Management, the Bureau of Safety and Environmental Enforcement, and the Office of Natural Resources Revenue* (June 18, 2010) (amending initial Secretarial Order No. 3299 (May 19, 2010)), available at http://elips.doi.gov/app_so/index.cfm?fuseaction=chroList/. BOEMRE has assumed all of MMS' responsibilities in the interim, until the full implementation of BOEMRE's reorganization into the three bureaus is complete. BOEMRE, Frequently Asked Questions, <http://www.boemre.gov/ooc/newweb/frequentlyaskedquestions/frequentlyaskedquestions.htm> (last visited Dec. 2, 2010).

⁸ As of this writing, a federal district court in Alaska has enjoined drilling activity on all lease blocks within Chukchi Sea lease sale 193, including those for which Shell seeks a PSD permit, pending completion of compliance with the court's remand order. *See Native Vill. of Point Hope v. Salazar*, No. 1:08-CV-0004-RRB, 2010 WL 2943120 at *7 (D. Alaska July 21, 2010). The court held that the Environmental Impact Statement ("EIS") DOI prepared in conjunction with Chukchi lease sale 193, as required by the National Environmental Policy Act ("NEPA"), contained certain deficiencies and enjoined any further activity within lease sale 193 until DOI supplements the EIS and, based on that new information, decides how to proceed. *See Native Vill. of Point Hope v. Salazar*, No. 1:08-CV-0004-RRB, 2010 WL 2943120 (D. Alaska July 21, 2010); *see also Native Vill. of Point Hope v. Salazar*, No. 1:08-CV-0004-RRB, 2010 WL 3025163 (D. Alaska Aug. 2, 2010) (clarifying previous remand order to allow SGOMI to conduct scientific studies within lease sale 193 that were planned for summer 2010 and were either already approved or pending approval by BOEMRE). On September 13, 2010, BOEMRE issued a directed suspension of operations for activities in the Chukchi Sea associated with lease sale 193 pending the Bureau's satisfaction of its obligations under the district court's remand order. Letter from Jeff Walker, Reg'l Supervisor, Field Operations, Bureau of Ocean Energy Management, Regulation and Enforcement, to Russell L. O'Brien, President, Shell Gulf of Mexico, Inc. (Sept. 13, 2010), available at http://www.alaska.boemre.gov/lease/hlease/LeasingTables/2010_0913_Shell.pdf. BOEMRE issued a draft Supplemental EIS ("SEIS") on October 15, 2010, announcing a public comment period lasting through November 29, 2010, as well as several public hearings. Notice of Availability of a Draft Supplemental Environmental Impact Statement (SEIS) and Notice of Public Hearings, 75 Fed. Reg. 63,504, 63,504 (Oct. 15, 2010) ("The SEIS will provide the Secretary with sufficient information and analysis to make an informed decision amongst the alternatives. In effect, the Secretary will decide whether to affirm, modify, or cancel [lease] Sale 193."). Lease sales 195 and 202, which encompass the Beaufort Sea lease blocks at issue in this appeal, are unaffected by the injunction.

mile boundary. *See* OCS Pre-Construction Air Permit Application, Frontier Discoverer Chukchi Sea Exploratory Drilling Program at 1 (Dec. 11, 2008) (“Chukchi Application”) (A.R. A-2); OCS Pre-Construction Air Permit Application, Frontier Discoverer Beaufort Sea Exploration Drilling Program at 1-3 (Jan. 18, 2010) (A.R. AA-1). Both Permits provide for the use of an associated fleet of support ships, such as icebreakers and a supply ship, in addition to the Frontier Discoverer.

1. *Chukchi Permitting Process*

Shell submitted, on December 11, 2008, an application for a PSD permit to conduct exploratory drilling activities in the Chukchi Sea. *See* Chukchi Application (Dec. 11, 2008) (A.R. A-2). As a result of continued consultation with the Region, Shell submitted supplemental information in support of the application on February 23, 2009, and May 18, 2009, and the Region considered the application complete as of July 31, 2009. *See* Letter from Susan Childs, Regulatory Affairs Manager – Alaska Venture, Shell Offshore, Inc., to Richard Albright, U.S. EPA Region 10 (Feb. 23, 2009) (A.R. A-5); Letter from Susan Childs, Regulatory Affairs Manager – Alaska Venture, Shell Offshore, Inc., to Janis Hastings, Assoc. Dir., U.S. EPA Region 10 (May 18, 2009) (A.R. A-15); Letter from Richard Albright, Dir., Office of Air, Waste & Toxics, U.S. EPA Region 10, to Susan Childs, Regulatory Affairs Manager – Alaska Venture, Shell Offshore, Inc. (July 31, 2009) (A.R. C-272). The Region issued the initial draft permit and an accompanying statement of basis⁹ for Shell’s proposed operations in the Chukchi Sea on August 20, 2009, and solicited public comments between August 20, 2009, and October 5, 2009; the public comment period was later extended until October 20, 2009. *See* OCS PSD Permit to Construct, Permit No. R10OCS/PSD-AK-09-01 (proposed Aug. 20, 2009) (“Initial Chukchi Draft Permit”) (A.R. H-3); Statement of Basis for Proposed Outer Continental Shelf Prevention of Significant Deterioration Permit No. R10OCS/PSD-AK-09-01 (Aug. 14, 2009) (“Initial Chukchi Statement of Basis”)¹⁰ (A.R. H-4); *Air Quality Permit Proposed for Shell Gulf of Mexico, Inc. To Operate the Frontier Discoverer Drillship in the Chukchi Sea, Alaska, Public Comment Period: Extended to October 20, 2009*, Anchorage Daily News, Oct. 2, 2009, at C12 (A.R. H-30).

⁹ When preparing a draft permit for public review and comment, EPA normally prepares a statement of basis whenever it does not prepare a fact sheet. 40 C.F.R. § 124.7; *see also* 45 Fed. Reg. at 33,408-09 (“[T]he statement of basis is supposed to be a brief summary that meets minimum requirements.”). Part 124 also mandates the creation of a fact sheet for, among other things, every draft permit deemed “the subject of wide-spread public interest or that raises major issues.” 40 C.F.R. § 124.8. The Board notes that the Region, cognizant of the heightened public interest in the Chukchi and Beaufort Permits, prepared a fact sheet as well as a statement of basis for each draft permit issued.

¹⁰ Although the Initial Chukchi Statement of Basis is dated August 14, 2009, it was released to the public, along with the draft permit, on August 20, 2009.

After reviewing public comments on the initial Chukchi draft permit, on January 8, 2010, the Region proposed a modified draft Chukchi permit accompanied by a modified statement of basis, and solicited public comments on the modified draft Chukchi permit between January 8, 2010, and February 17, 2010. See U.S. EPA Region 10, *Air Permit Public Notice and Information Sheet: New Modified Air Quality Permit Proposed for Shell to Operate the Frontier Discoverer Drillship in the Chukchi Sea, Alaska* (Jan. 8, 2010) (A.R. J-3) (noting that the permit and support documents were modified in response to issues raised by commenters, including changes requested by Shell, and that because it was re-proposing the permit in its entirety, the Region would take no further action on the initial August 2009 permit, including responding to public comments submitted on the initial August 2009 proposed permit) (“Modified Chukchi Permit Information Sheet”); Statement of Basis for Proposed Outer Continental Shelf Prevention of Significant Deterioration Permit No. R10OCS/PSD-AK-09-01 (Jan. 8, 2010) (“Modified Chukchi Statement of Basis”) (A.R. J-2). Petitioners submitted comments on the modified draft Chukchi permit during this time.¹¹ The Region issued a final permit along with a response to comments document on March 31, 2010. See Outer Continental Shelf Prevention of Significant Deterioration Permit to Construct, Permit No. R10OCS/PSD-AK-09-01 (Mar. 31, 2010) (“Chukchi Permit”) (A.R. L-1); Response to Comments for Outer Continental Shelf Prevention of Significant Deterioration Permit to Construct, Permit No. R10OCS/PSD-AK-09-01 (Mar. 31, 2010) (“Chukchi RTC”) (A.R. L-2).

2. Beaufort Permitting Process

Shell submitted its application for a PSD permit to conduct exploratory drilling activities in the Beaufort Sea on May 29, 2009. See Outer Continental Shelf Pre-Construction Air Permit Application, Frontier Discoverer Beaufort Sea Exploration Drilling Program (May 29, 2009) (“Initial Beaufort Application”)¹²

¹¹ See Letter from Alaska Wilderness League, Audubon Alaska, CBD, Earthjustice, Natural Res. Def. Council, N. Alaska Envtl. Ctr., Pac. Env’t, Ocean Conservancy, Oceana, Sierra Club, REDOIL, and World Wildlife Fund, to U.S. EPA Region 10 (Feb. 17, 2010) (“EJ Petitioners’ Chukchi Comments”) (A.R. K-12); Letter from Alaska Eskimo Whaling Comm’n, Inupiat Cmty. of the Arctic Slope, and N. Slope Borough to U.S. EPA Region 10 (Feb. 17, 2010) (“AEWC Chukchi Comments”) (A.R. K-16); Letter from Vera Pardee, CBD, to U.S. EPA Region 10 (Feb. 17, 2010) (A.R. K-14); Public Hearing Transcript, Barrow, Alaska (Feb. 16, 2010) (A.R. K-9).

¹² In its application, Shell noted that it “has also applied for a preconstruction permit for the *Discoverer* and its associated fleet for exploration activities in the Chukchi Sea. That permit is following a separate approval path with EPA Region 10. If both Permits are granted, Shell will have the flexibility to explore either sea but not both at the same time.” Initial Beaufort Application at 1. The cover letter accompanying the Initial Beaufort Application further explained that Shell delayed submitting the Beaufort application until the process for determining the Chukchi permit application to be complete was sufficiently mature and also relayed Shell’s hope that the months spent reviewing the Chukchi permit application would facilitate a timely review of the Beaufort permit application. See

Continued

(A.R. CC-9). Again, as a result of continued consultation between the Region and Shell, Shell submitted supplemental information in support of the application on September 30, 2009, and January 18, 2010, and the Region determined there was sufficient information to process the application on February 11, 2010. *See* Outer Continental Shelf Pre-Construction Air Permit Application, Frontier Discoverer Beaufort Sea Exploration Drilling Program (Sept. 30, 2009) (A.R. CC-44); Outer Continental Shelf Pre-Construction Air Permit Application, Frontier Discoverer Beaufort Sea Exploration Drilling Program (Jan. 18, 2010) (A.R. AA-1); Letter from Richard Albright, Dir., Office of Air, Waste & Toxics, U.S. EPA Region 10, to Susan Childs, Regulatory Affairs Manager – Alaska Venture, Shell Offshore, Inc. (Feb. 11, 2010) (A.R. CC-142). The Region proposed a draft OCS PSD permit, which was accompanied by a statement of basis, on February 17, 2010, and solicited public comments from February 17, 2010, through March 22, 2010. *See* Proposed Outer Continental Shelf Prevention of Significant Deterioration Permit to Construct, Permit No. R10OCS/PSD-AK-2010-01 (Feb. 17, 2010) (“Beaufort Draft Permit”) (A.R. NN-9); Statement of Basis for Proposed Outer Continental Shelf Prevention of Significant Deterioration Permit No. R10OCS/PSD-AK-2010-01 (Feb. 17, 2010) (“Beaufort Statement of Basis”) (A.R. NN-10); Beaufort Permit Public Notice, *Air Quality Permit Proposed for Shell to Operate the Frontier Discoverer Drillship in the Beaufort Sea, Alaska* (Feb. 17, 2010) (A.R. NN-6). Petitioners submitted comments on the draft permit during this time.¹³ The Region issued the final permit along with a response to comments document on April 9, 2010. *See* Outer Continental Shelf Prevention of Significant Deterioration Permit to Construct, Permit No. R10OCS/PSD-AK-2010-01 (Apr. 9, 2010) (“Beaufort Permit”) (A.R. PP-2); Response to Comments for Outer Continental Shelf Prevention of Significant Deterioration Permit No. R10OCS/PSD-AK-2010-01 (Apr. 9, 2010) (“Beaufort RTC”) (A.R. PP-1).

B. *Procedural History Before the Board*

On May 10, 2010, the Board issued an order granting Shell’s motion to participate in the proceedings and setting a scheduling conference for May 13, 2010.

(continued)

Letter from Susan Childs, Regulatory Affairs Manager – Alaska Venture, Shell Offshore, Inc., to Janis Hastings, Assoc. Dir., U.S. EPA Region 10 (May 29, 2009) (A.R. CC-10).

¹³ *See* Letter from Alaska Wilderness League, Audubon Alaska, CBD, Earthjustice, Natural Res. Def. Council, N. Alaska Envtl. Ctr., Pac. Env’t, Ocean Conservancy, Oceana, Sierra Club, REDOIL, and World Wildlife Fund, to U.S. EPA Region 10 (Mar. 22, 2010) (“EJ Petitioners’ Beaufort Comments”) (A.R. OO-15); Letter from Vera Pardee, CBD, to U.S. EPA Region 10 (Mar. 22, 2010) (A.R. OO-19); Letter from Alaska Eskimo Whaling Comm’n, Inupiat Cmty. of the Arctic Slope, and N. Slope Borough, to U.S. EPA Region 10 (Mar. 22, 2010) (“AEWC Beaufort Comments”) (A.R. OO-21); Public Hearing/Testimonials, Barrow, Alaska (Mar. 18, 2010) (A.R. OO-12) (comments from Executive Director of Inupiat Community of the Arctic Slope).

See Order Granting Shell Gulf of Mexico Inc. and Shell Offshore Inc. Leave to Participate and Scheduling Conference. Immediately following the scheduling conference, the Board consolidated the petitions for review and scheduled oral argument for June 18, 2010. See Order Consolidating Petitions for Review and Setting Briefing Schedule (May 14, 2010).

Two weeks later, the President and the Department of the Interior (“DOI”) announced the suspension of any plans to drill exploratory wells in the Beaufort and Chukchi Seas until 2011.¹⁴ See *Remarks by the President on the Gulf Oil Spill* (May 27, 2010), available at <http://www.whitehouse.gov/the-press-office/remarks-president-gulf-oil-spill> (last visited Dec. 1, 2010) (“[W]e will suspend the planned exploration of two locations off the coast of Alaska.”); Press Release, DOI, *Salazar Calls for New Safety Measures for Offshore Oil and Gas Operations; Orders Six Month Moratorium on Deepwater Drilling* (May 27, 2010), available at <http://www.doi.gov/news/pressreleases/Salazar-Calls-for-New-Safety-Measures-for-Offshore-Oil-and-Gas-Operations-Orders-Six-Month-Moratorium-on-Deepwater-Drilling.cfm> (last visited Dec. 1, 2010); Fact Sheet on OCS Policy (May 27, 2010) (“DOI Fact Sheet”), available at <http://www.doi.gov/deepwaterhorizon/loader.cfm?csModule=security/getfile&PageID=33566> (last visited Dec. 28, 2010). Specifically, DOI stated that Shell’s Applications for Permits to Drill (“APDs”) in the Chukchi and Beaufort Seas would not be considered until 2011 pending further information-gathering, evaluation of proposed drilling

¹⁴ These announcements were precipitated by a series of events that commenced on April 20, 2010, when the crew aboard the drilling rig *Deepwater Horizon* was preparing to temporarily abandon a discovery well located fifty-two miles from shore in 4,992 feet of water in the Gulf of Mexico. DOI, *Increased Safety Measures for Energy Development on the Outer Continental Shelf 1* (May 27, 2010), available at <http://www.doi.gov/deepwaterhorizon/loader.cfm?csModule=security/getfile&PageID=33598/>. An explosion and subsequent fire on the rig caused eleven fatalities and several injuries; the rig sank two days later, resulting in an uncontrolled release of oil that was declared a “spill of national significance.” *Id.*

On April 30, 2010, the President ordered the Secretary of the Department of the Interior to conduct a thirty-day review “to evaluate what, if any, additional precautions and technologies should be required to improve the safety of oil and gas exploration and production operations on the [OCS].” *Id.*; see also *id.* at 18. During that thirty-day period, Shell responded to a May 6, 2010, letter from the then-Director of MMS (now BOEMRE) regarding Shell’s proposed exploratory drilling activity in the Chukchi and Beaufort Seas. See Petitioners Natural Resources Defense Council, et al., Alaska Eskimo Whaling Commission, et al., and Center for Biological Diversity’s Motion to Vacate and Remand the Air Permits, and Response to the Environmental Protection Agency’s Motion to Hold These Proceedings in Abeyance Ex. 3 (June 2, 2010) (Letter from Marvin E. Odum, President, Shell Oil Co., to S. Leslie Birnbaum, Dir., Minerals Management Service, Department of the Interior (May 14, 2010)) (“Motion to Vacate and Remand”). The Director had requested, in light of the *Deepwater Horizon* incident, information that might be pertinent to the review of Shell’s Applications for Permits to Drill that MMS would carry out as well as additional safety procedures Shell planned to undertake. See *id.* The May 27, 2010, announcements suspending exploratory drilling activities in the Arctic for 2010 coincided with the release of DOI’s report to the President setting forth its findings from the safety review.

technology, and evaluation of oil spill response mechanisms in the Arctic. DOI Fact Sheet at 1. In response to the Administration's announcement, the Region and Petitioners filed motions requesting, respectively, that the Board hold matters in abeyance, or that the Board vacate the Permits and remand them. *See* Motion to Hold Matters in Abeyance (May 28, 2010); Motion to Vacate and Remand (June 2, 2010).

The Board postponed the oral argument on the merits of the petitions scheduled for June 18, 2010, and instead held oral argument regarding the Region's and Petitioners' respective motions on that same date. The Board subsequently scheduled oral argument on the merits of the petitions to take place on August 17, 2010, and further requested that the parties focus their arguments on the three issues set forth above in Part II, *supra*. Order Scheduling Oral Argument at 4-5 (July 19, 2010). The Board stated that it was particularly interested in hearing argument on the three issues identified "because they are legal in nature, and thus the analyses set forth in the documentation supporting the Permits are unlikely to be affected by any subsequent DOI announcement of new requirements or mandates pertaining to future exploratory drilling on the OCS." *Id.* at 4. At the time, the Board made clear that it had not yet decided whether it would proceed to issue a decision on the merits. *Id.*

After several revisions to the oral argument schedule, and after the Region withdrew its request for abeyance as to the three issues scheduled for oral argument,¹⁵ the Board held argument on October 7, 2010. The case now stands ready for decision.¹⁶

¹⁵ *See* EPA Region 10 Unopposed Motion to Reschedule Oral Argument at 4-5 (July 28, 2010).

¹⁶ On November 12, 2010, Shell notified the Board that in a pleading before the U.S. District Court for the District of Alaska, BOEMRE confirmed that it is now processing Shell's APD in the Beaufort Sea for the 2011 open-water season, under Shell's approved Beaufort Sea Exploration Plan. *See* Shell Gulf of Mexico Inc.'s and Shell Offshore Inc.'s Notice of Related Decision and Request for a Status Conference at 1 (Nov. 12, 2010). Shell also urged the Board to convene a status conference "as soon as practicable," reemphasizing its concerns regarding the timely disposition of the current appeals and suggesting that input from all of the parties involved "on the implications of earlier versus later resolution may assist the Board in prioritizing its consideration of these Petitions." *Id.* at 2. The Board's decision in these appeals renders Shell's request moot.

VI. ANALYSIS

A. *Did the Region Clearly Err By Not Applying BACT to the Associated Fleet?*

The Region imposed conditions in both the Chukchi and Beaufort Permits to ensure that emissions from the Associated Fleet, support vessels associated with, and operating within 25 miles of, the OCS source, along with emissions from the Frontier Discoverer while the Frontier Discoverer is an OCS source, will not cause or contribute to a violation of any applicable NAAQS or PSD increment. Chukchi Permit, Conditions B.6, N, O, P, and Q; Beaufort Permit, Conditions B.5 and N-R. The Region did not impose a Permit condition based on application of best available control technology, or BACT, to control emissions from the Associated Fleet.¹⁷

The EJ Petitioners contend the Region erred by failing to require that the Chukchi and Beaufort Permits apply BACT to control emissions from the Associated Fleet.¹⁸ EJ Petition at 8-29. The EJ Petitioners contend that CAA section 328's "plain language" establishes an "unambiguous mandate" requiring application of BACT to control the Associated Fleet's emissions, EJ Petition at 8-11, and that application of BACT to the Associated Fleet's emissions is consistent with the PSD program's purpose, *id.* at 11-15, and with the statute's legislative history, *id.* at 15-18.¹⁹ The EJ Petitioners contend that "the Region's decision to not apply BACT to the associated vessel emissions represented a clearly erroneous interpretation of its authority under the CAA and implementing regulations." *Id.* at 8.

¹⁷ The Region concluded that "[a]side from the supply vessel, the vessels in the Associated Fleet will not be physically attached to the Discoverer, and therefore will not be part of the OCS source and not subject to the BACT requirement." Modified Chukchi Statement of Basis at 84; Beaufort Statement of Basis at 24-25, 93; *see also* Chukchi RTC at 23-24; Beaufort RTC at 14-15. The Region, however, imposed controls to ensure compliance with ambient air quality standards: "Shell has agreed, and the permit proposes, that Shell use ultra-low sulfur diesel fuel in all vessels in the Associated Fleet, including the supply vessel to assure attainment of the NAAQS and compliance with increment." Chukchi Statement of Basis at 85; Beaufort Statement of Basis at 25.

¹⁸ AEWG frames a related issue: are the OCS support vessels, when operating within twenty-five miles of the OCS source, equipment that must be included as part of the OCS source. *See, e.g.,* AEWG Chukchi Petition at 26-29.

¹⁹ EJ Petitioners also argue that the law the Region cited in support of its decision – i.e., the regulatory definitions of "OCS source" and "potential emissions," the regulatory preamble, and the D.C. Circuit's decision upholding the rulemaking, *Santa Barbara Cnty. Air Pollution Control Dist. v. EPA*, 31 F.3d 1179 (D.C. Cir. 1994) – fail to provide sufficient justification, given section 328's plain meaning, for the Region's decision not to require BACT to control the Associated Fleet's emissions. EJ Petition at 18-29. The EJ Petitioners argue that the Region's reliance on the regulatory definitions of both "OCS source" and "Potential emissions," and language in the preamble to the proposed and final regulations, is misplaced because those authorities are "not clear" and not inconsistent with what Petitioners view as a statutory mandate to apply BACT to OCS support vessels. *Id.* at 20-27.

In determining whether the Region clearly erred in its decision not to include a permit condition applying BACT to control the Associated Fleet's emissions, the Board must first look to the applicable statutory terms and ascertain, through application of "traditional tools of statutory construction," *Wilderness Soc'y v. U.S. Fish & Wildlife Serv.*, 353 F.3d 1051, 1060 (9th Cir. 2003) (quoting *Chevron U.S.A., Inc. v. Natural Res. Def. Council*, 467 U.S. 837, 843 n.9 (1984)), "whether Congress has directly spoken to the precise question at issue." *Id.* (quoting *Chevron*, 467 U.S. at 842). The starting point is the "language of the statute itself." *Id.* (quoting *Gwaltney of Smithfield, Ltd. v. Chesapeake Bay Found., Inc.*, 484 U.S. 49, 56 (1987)).

As part of the 1990 amendments to the CAA, Congress passed section 328 directing EPA, following consultation with the Secretary of the Interior²⁰ and the Commandant of the United States Coast Guard, to promulgate regulations "to control air pollution from Outer Continental Shelf sources located off shore * * * ('OCS sources') to attain and maintain Federal and State ambient air quality standards and to comply with the provisions of part C of subchapter I of [the CAA]."²¹ CAA § 328(a)(1), 42 U.S.C. § 7627(a)(1) (emphasis added).²² By requiring air pollution from OCS sources to comply with Part C of subchapter I, Congress made the CAA's prevention of significant deterioration, or PSD, program applicable to such sources.²³ The PSD program, among other things, requires that new or modified major stationary sources demonstrate compliance with the NAAQS and

²⁰ Prior to 1990, DOI was responsible for regulating air quality on the OCS. *See* Outer Continental Shelf Air Regulations, 56 Fed. Reg. 63,774, 63,775 (proposed Dec. 5, 1991).

²¹ The Outer Continental Shelf Lands Act ("OCSLA"), 43 U.S.C. §§ 1331-1356a, provides that the laws of the United States apply to the subsoil and seabed of the OCS. OCSLA § 4(a)(1), 43 U.S.C. § 1333(a)(1). Section 4(a)(1) of OCSLA states in relevant part:

The Constitution and laws and civil and political jurisdiction of the United States are extended to the subsoil and seabed of the outer Continental Shelf and to all artificial islands, and all installations and other devices permanently or temporarily attached to the seabed, which may be erected thereon for the purpose of exploring for, developing, or producing resources therefrom * * * .

OCSLA § 4(a)(1), 43 U.S.C. § 1333(a)(1).

²² The Agency published the implementing regulations in 1992. *See* Outer Continental Shelf Air Regulations, 57 Fed. Reg. 40,792 (Sept. 4, 1992).

²³ The PSD program is a preconstruction review program applicable to areas of the country that have attained the NAAQS or are unclassifiable. CAA §§ 160-169, 42 U.S.C. §§ 7470-7479.

PSD increments²⁴ and apply BACT to control emissions of regulated pollutants.²⁵ In section 328, Congress also directed that “[f]or purposes of this subsection, emissions from any vessel servicing or associated with an OCS source, including emissions while at the OCS source or en route to or from the OCS source within 25 miles of the OCS source, shall be considered direct emissions from the OCS source.” CAA § 328(a)(4)(C), 42 U.S.C. § 7627(a)(4)(C).²⁶

As noted, the EJ Petitioners challenge the Region’s decision to require the Associated Fleet’s emissions to comply with the NAAQS and PSD increments,

²⁴ Air quality increments represent the maximum allowable increase in a particular pollutant’s concentration that may occur above a baseline ambient air concentration for that pollutant. *See* 40 C.F.R. § 52.21(c) (increments for regulated air pollutants). The performance of an ambient air quality and source impact analysis, pursuant to the regulatory requirements of 40 C.F.R. § 52.21(k), (l) and (m), as part of the PSD permit review process, is the central means for preconstruction determination of whether the source would cause an exceedance of the NAAQS or PSD increments. *See In re Haw. Elec. Light Co.*, 8 E.A.D. 66, 73 (EAB 1998).

²⁵ In broad overview, the PSD program limits the impact of new or modified major stationary sources on ambient air quality by requiring the issuance of a PSD permit before a major stationary source may begin construction or undertake certain modifications. The program includes two central elements: a demonstration that the source will not have an unacceptable impact on air quality measured by compliance with the NAAQS and any applicable PSD ambient air quality “increments,” and a requirement to control emissions of regulated pollutants through application of BACT, or best available control technology. CAA §§ 165(a)(1), 169(1), (3), 42 U.S.C. §§ 7475(a)(1), 7479(1), (3); *see also In re Shell Offshore, Inc.*, 13 E.A.D. 357, 365 (EAB 2007); *In re Gen. Motors, Inc.*, 10 E.A.D. 360, 363 (EAB 2002) (referring to compliance with the NAAQS and PSD increments and application of BACT as the “core” of the PSD regulations); *In re Steel Dynamics, Inc.*, 9 E.A.D. 165, 172 (EAB 2000) (same).

²⁶ Section 328(a)(4)(C) defines OCS source as follows:

The terms “Outer Continental Shelf source” and “OCS source” include any equipment, activity, or facility which –

- (i) emits or has the potential to emit any air pollutant,
- (ii) is regulated or authorized under the Outer Continental Shelf Lands Act * * *, and
- (iii) is located on the Outer Continental Shelf * * *.

Such activities include, but are not limited to, platform and drill ship exploration, construction, development, production, processing, and transportation. For purposes of this subsection, emissions from any vessel servicing or associated with an OCS source, including emissions while at the OCS source or en route to or from the OCS source within 25 miles of the OCS source, *shall be considered direct emissions from the OCS source.*

CAA § 328(a)(4)(C), 42 U.S.C. § 7627(a)(4)(C) (emphasis added).

but not to apply BACT to the Associated Fleet.²⁷ The EJ Petitioners contend that section 328(a)(1) and (4)(C) establish an “unambiguous mandate” requiring application of BACT to the Associated Fleet’s emissions. EJ Petition at 9-10. They contend that, “[r]ead together, these provisions unambiguously direct the Environmental Protection Agency (EPA) to ensure that air pollution emissions from vessels associated with OCS sources comply with the PSD program, including the ‘core’ application of best available control technology (BACT).” EJ Petitioners’ Reply to EPA’s and Shell Oil’s Responses to Petition for Review at 1 (June 15, 2010) (“EJ Petitioners’ Reply”). They thus contend that, although the vessels of the Associated Fleet may not, themselves, be part of the OCS source,²⁸ those vessels’ emissions are, by statutory definition, “direct emissions from the OCS source” and, as air pollution from an OCS source, are subject to not only compliance with the NAAQS and PSD increments but also BACT. EJ Petition at 10-11.

The Board rejects the EJ Petitioners’ argument, however, because it overlooks ambiguity in section 328 and the relevant statutory context of the CAA’s PSD provisions. As explained below, the Region’s decision in this case is a permissible interpretation of the statute’s ambiguous instruction. Also, as explained below, the Region’s decision comports with the Agency’s regulatory text and rationale explained in the 1992 regulatory preamble.

First, although the EJ Petitioners correctly observe that section 328(a)(4)(C) specifically addresses vessel emissions, the same statutory text also maintains a distinction between those vessels and the OCS source. Specifically, without making the support vessels part of the OCS source,²⁹ the statute directs that emissions from those vessels while within twenty-five miles of the OCS source “shall be considered direct emissions from the OCS source.” CAA § 328(a)(4)(C), 42 U.S.C. § 7627(a)(4)(C). The Region correctly observes that this inclusion of

²⁷ No party disputes that a vessel, such as a supply ship, is part of an OCS source when “[p]hysically attached to an OCS facility, in which case only the stationary source[] aspects of the vessel[] will be regulated.” 40 C.F.R. § 55.2 (definition of “OCS source”).

²⁸ The EJ Petitioners do not challenge the Region’s conclusion that the Associated Fleet is not part of the OCS source. *See* EJ Petition at 10 & n. 7.

²⁹ The implementing regulations expressly state that vessels are included within the OCS source definition “only when” the vessels are “permanently or temporarily attached to the seabed and erected thereon and used for the purpose of exploring, developing or producing resources therefrom” or when attached to an OCS source. 40 C.F.R. § 55.2. The D.C. Circuit rejected a challenge to this regulation’s distinction between vessels that are attached to the seabed and those that are not attached. *Santa Barbara Cnty. Air Pollution Control Dist. v. U.S. EPA*, 31 F.3d 1179, 1181 (D.C. Cir. 1994) (holding that the regulation’s distinction between attached and detached vessels is a permissible reading of the statute and that it was reasonable for EPA to conclude that OCS source does not include vessels that were merely traveling over the OCS). The Board has held that a permit issuer is “not free to ignore this regulatory interpretation of the statutory definition, which draws a distinction between vessels attached to the seabed and those that are not.” *Shell*, 13 E.A.D. at 375-76.

only the emissions, but not the vessels themselves, maintains a distinction between the OCS source and the vessels servicing the OCS source. *See* U.S. EPA Region 10's Response to Petitions for Review (June 7, 2010) at 33 ("Region's Resp.").

Notably, this statutory distinction between the OCS source and support vessels is expressed with the same words the EJ Petitioners point to as establishing an "unambiguous mandate" requiring a BACT limit for the Associate Fleet's emissions. The EJ Petitioners, however, have offered no explanation as to why Congress, in addressing vessel emissions, maintained a distinction between the OCS source and the vessels servicing the OCS source. The Region proffers the following explanation: the Region contends that "the distinction in the OCS statute between the OCS source and emissions from associated vessels * * * *can only have been intended* to result in the different treatment of the two categories of emission units." *Id.* at 36 (emphasis added). In other words, the Region contends that, by not including vessels servicing the OCS source as part of the OCS source, CAA section 328(a)(4)(C) distinguishes based on whether the emissions emanate from the servicing vessels or from the OCS source and that this distinction requires different treatment. *Id.*

While the Board concludes that section 328(a)(4)(C) both plainly distinguishes between the OCS source and the Associated Fleet³⁰ and also plainly requires that emissions from the Associated Fleet be considered direct emissions of the OCS source, the Board also concludes that the purpose for this simultaneous exclusion of the Associated Fleet and inclusion of the Associated Fleet's emissions is not plain on section 328's face. Section 328, itself, simply does not contain any words expressly, or by implication, explaining why the statute distinguishes between the OCS source and vessels servicing the OCS source when directing that such vessels' emissions shall be considered direct emissions from the OCS source. In this respect, section 328's meaning is not clear, at least when read in isolation.

It is a "fundamental canon that the words of a statute must be read in their context and with a view to their place in the overall statutory scheme." *Wilderness Soc'y v. U.S. Fish & Wildlife Serv.*, 353 F.3d 1051, 1060 (9th Cir. 2003) (quoting *FDA v. Brown & Williamson Tobacco Corp.*, 529 U.S. 120, 133 (2000)). "The meaning – or ambiguity – of certain words or phrases may only become evident when placed in context." *FDA v. Brown & Williamson Tobacco Corp.*,

³⁰ Even if this conclusion were not clearly required by the statutory text, the Agency's authoritative interpretation set forth in the regulations and 1992 rulemaking is clear. 40 C.F.R. § 55.2 (providing that a vessel qualifies as an OCS source "only when" it is attached to the seabed or attached to an OCS facility); 57 Fed. Reg. at 40,794 ("Section 328 does not provide authority to EPA to regulate the emissions from engines being used for propulsion of vessels.").

529 U.S. at 132-33. Also, “[i]f necessary to discern Congress’s intent, we may read statutory terms in light of the purpose of the statute.” *Wilderness Society*, 353 F.3d at 1060 (citing *K Mart Corp. v. Cartier, Inc.*, 486 U.S. 281, 291 (1988) (“In ascertaining the plain meaning of [a] statute, the court must look to the particular statutory language at issue, as well as the language and design of the statute as a whole.”)); *id.* (citing *United States v. Lewis*, 67 F.3d 225, 228-29 (9th Cir. 1995) (“Particular phrases must be construed in light of the overall purpose and structure of the whole statutory scheme.”)).

Because section 328 specifically requires air pollution from OCS sources to be controlled to comply with the CAA’s PSD provisions, section 328’s meaning must be considered within the context of the statute’s PSD provisions. CAA § 328(a)(1), 42 U.S.C. § 7627(a)(1) (requiring EPA to promulgate regulations to control air pollution from OCS sources “to attain and maintain Federal and State ambient air quality standards and to comply with the provisions of part C of subchapter I of this chapter”).

The PSD permitting requirements apply to “major emitting facilities,” which are defined as “stationary sources” that emit pollutants in excess of certain thresholds identified in the statute. CAA §§ 165(a), 169(1), 42 U.S.C. §§ 7475(a) (requiring a permit before construction of a “major emitting facility”), 7479(1) (defining “major emitting facility” as any of the listed “stationary sources” emitting pollutants above the amounts identified in the statute). The Board, in addressing the relationship between the OCS source and the PSD permitting requirements, has held that after EPA has identified the existence of an OCS source, EPA must next “determin[e] the scope of the ‘stationary source’ for PSD purposes.” *Shell*, 13 E.A.D. at 380. In other words, the “stationary source” continues to be the relevant unit of analysis for determining PSD applicability in the offshore context. *Id.* at 381.

Ordinarily, mobile sources including vessels, such as the Associated Fleet, would not be included as part of the stationary source. Specifically, the CAA defines “stationary source” to exclude “those emissions resulting directly from an internal combustion engine for transportation purposes or from a nonroad engine or nonroad vehicle,” CAA § 302(z), 42 U.S.C. § 7602(z), and the regulations define “marine engine” as “a nonroad engine that is installed or intended to be installed on a marine vessel.” 40 C.F.R. § 89.2.

Section 328’s distinction between the OCS source and vessels servicing the OCS source is consistent with the CAA’s general distinction between stationary and mobile sources. Viewed in this light, the OCS source is a stationary source

that is located on the outer continental shelf,³¹ and the support vessels, including vessels servicing or associated with the OCS source, ordinarily are mobile sources.³² In this respect, the Region's proffered interpretation that section 328's distinction is intended to require "different treatment of the two categories of emission units,"³³ – i.e., different treatment of the OCS source and Associated Fleet – is consistent with the CAA's general distinction that stationary sources are treated under CAA title I and mobile sources are treated separately under CAA title II.³⁴

In order to maintain their argument that section 328 mandates that the Region impose a BACT emissions limit for the Associated Fleet's emissions, the EJ Petitioners contend that "Congress plainly provided for different rules in the OCS context than would otherwise apply under Title I of the Act." EJ Petitioners' Reply at 4. They ground this contention on section 328(a)(4)(C)'s direction that emissions from vessels servicing the OCS source "shall be considered direct emissions from the OCS source." CAA § 328(a)(4)(C), 42 U.S.C. § 7627(a)(4)(C). The EJ Petitioners contend that this language emphasizes the emissions, not the emitting unit, and that the PSD program's BACT provisions similarly emphasize emissions, not the emitting unit. In particular, they observe that BACT, a central PSD requirement,³⁵ is defined as an "emissions limitation" that is based on the "maximum degree of reduction of each pollutant" that is "emitted from or which results

³¹ See, e.g., *Shell*, 13 E.A.D. at 380 (requiring EPA, when issuing permits on the OCS, to look to the rules governing stationary sources to determine what emissions units must be included as part of a single source).

³² EPA has defined by regulation that a vessel is part of the OCS source when "[p]hysically attached to an OCS facility, in which case only the stationary source aspects of the vessels will be regulated." 40 C.F.R. § 55.2 (definition of "OCS source").

³³ Region's Resp. at 36.

³⁴ The EJ Petitioners present conflicting arguments in their Petition and Reply briefs concerning whether section 328's language is consistent with the broader context of the CAA's PSD provisions. They first argue that their reading of section 328 is consistent with the PSD provisions. EJ Pet. at 11-15. Both section 328 and the PSD BACT provisions, they contend, focus on controlling emissions. EJ Pet. at 12. However, in their Reply, the EJ Petitioners contend that, in enacting section 328, Congress required a significant change to the PSD program as applied on the Outer Continental Shelf. The EJ Petitioners state that "[b]y including the obligation to regulate emissions from associated vessels in Section 328, Congress plainly provided for different rules in the OCS context than would otherwise apply under Title I of the Act." EJ Petitioners' Reply at 4. The EJ Petitioners' seemingly inconsistent arguments arise out of their struggle with this fundamental distinction Congress imposed in the Clean Air Act, namely the distinction between "stationary sources" and mobile sources.

³⁵ They also argue that "while the PSD program identifies the major emitting facility as the entity responsible for demonstrating compliance with the air quality standards, the statute establishes that the standards and the BACT requirement apply to 'emissions from [the] facility.'" EJ Petition at 13 (quoting CAA § 165, 42 U.S.C. § 7475 (alteration by EJ Petitioners)).

from any major emitting facility.” EJ Petition at 12 (quoting CAA § 169(3), 42 U.S.C. § 7479(3)).³⁶

Here, again, the EJ Petitioners’ argument ignores critical features of the statute’s text. As already noted, by grounding their argument on section 328(a)(4)(C)’s treatment of the associated vessels’ emissions, Petitioners fail to acknowledge that section 328(a)(4)(C) also maintains a distinction between the OCS source and vessels servicing the OCS source. CAA § 328(a)(4)(C), 42 U.S.C. § 7627(a)(4)(C). Petitioners similarly fail to acknowledge that the statutory BACT definition does not address emissions disconnected from the emissions’ source, but instead directs that the emissions limitation is established, on a “case-by-case basis,” by determining what is “achievable for the facility” through “application” of various control methods. CAA § 169(3), 42 U.S.C. § 7479(3). More specifically, “[t]he term ‘best available control technology’ means an emission limitation based on the maximum degree of reduction of each pollutant * * * emitted from or which results from any major emitting facility, which the permitting authority, on a case-by-case basis, * * * determines is achievable for such facility through application of production processes and available methods, systems, and techniques, including fuel cleaning, clean fuels, or treatment or innovative fuel combustion techniques for control of each such pollutant.” *Id.* (emphasis added). By requiring a case-by-case determination focused on what the particular facility can achieve, Congress placed the facility at the center of the BACT definition. Thus, although the EJ Petitioners are correct that BACT serves to limit emissions, the emissions limitation is determined by specific consideration of the particular “major emitting facility” – the “stationary source” – and what controls appropriately may be applied to that facility.

³⁶ The statute defines BACT as follows:

The term “best available control technology” means an emission limitation based on the maximum degree of reduction of each pollutant subject to regulation under this chapter emitted from or which results from any major emitting facility, which the permitting authority, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such facility through application of production processes and available methods, systems, and techniques, including fuel cleaning, clean fuels, or treatment or innovative fuel combustion techniques for control of each such pollutant. In no event shall application of “best available control technology” result in emissions of any pollutants which will exceed the emissions allowed by any applicable standard established pursuant to section 7411 or 7412 of this title. Emissions from any source utilizing clean fuels, or any other means, to comply with this paragraph shall not be allowed to increase above levels that would have been required under this paragraph as it existed prior to November 15, 1990.

CAA § 169(3), 42 U.S.C. § 7479(3).

Indeed, the EJ Petitioners have not explained how the permit issuer is to apply the BACT definition in the OCS context to control vessel “emissions,” as “direct emissions from the OCS source,” without effectively treating the vessels as part of the “stationary source.” In other words, the EJ Petitioners have not explained how the permit issuer should determine an “emissions limitation” “through application of production processes and available methods, systems, and techniques” by considering “application” of those controls only to emissions and not by application to the emitting unit, i.e., the vessels’ propulsion engines. The statutory terms of section 328 read together with Title I of the CAA do not make plain that Congress intended such a result. Thus, the plain meaning the EJ Petitioners conjure by only tracing the statutory references to “emissions” evaporates upon a closer inspection.

The EJ Petitioners argue that Congress’ intent can be discerned from the legislative history. For example, the EJ Petitioners point to the 1989 report from the Senate Committee on Environment and Public Works accompanying Senate Bill 1630 as referring to the need to control emissions from associated marine vessels. EJ Petition at 15.³⁷ The EJ Petitioners also argue that Senator Baucus’ 1990 analysis of the OCS provisions “underscores the intent of the bill’s sponsors to apply air pollution controls to the associated vessel emissions.” *Id.* at 16.³⁸ The EJ Petitioners also argue similar statements appear in the House’s legislative history. *Id.* at 17 (citing 136 Cong. Rec. H2511, H2916, H2917, H2920 (1990));

³⁷ The EJ Petitioners quote the report as follows:

The construction and operation of OCS facilities emit a significant amount of air pollution which adversely impacts coastal air quality in the United States. Operational emissions from an OCS platform and associated marine vessels can routinely exceed 500 tons of oxides of nitrogen (NO_x) and one hundred tons of reactive hydrocarbons annually * * * . Yet under current Federal law, emissions from these major sources of air pollution are not required to be mitigated or controlled.

EJ Petition at 15 (quoting S. Rep. No. 101-228 at 76 (1989)) (emphases added by EJ Petitioners).

³⁸ Senator Baucus stated as follows:

Marine vessels emissions, including those from crew and supply boats, construction barges, tugboats, and tankers, which are associated with an OCS activity, will be included as part of the OCS facility emissions for the purposes of regulation. Air emissions associated with stationary and in-transit activities of the vessels will be included as part of the facility’s emissions for vessel activities within a radius of 25 miles of the exploration, construction, development or production location. This will ensure that the cruising emissions from marine vessels are controlled and offset as if they were part of the OCS facility’s emissions.

136 Cong. Rec. S17,118, S16,983 (1990), quoted in EJ Petition at 16 (emphases added by EJ Petitioners).

see also 136 Cong. Rec. H12,845, H12,889-90 (1990). These references, however, are less clear than the statutory text and certainly do not indicate that Congress considered the specific question of requiring BACT to control the vessel emissions. The term BACT does not appear in these legislative history statements. Instead, the legislative history shows that Congress intended vessel emissions to be “controlled,” “offset,” “mitigated,” or subject to “regulation,” all of which are accomplished to some degree by the Region’s decision to include the Associated Fleet’s emissions in the ambient air quality analysis and controls to ensure compliance with the NAAQS and PSD increments.

The EJ Petitioners also argue that the Region does not have “the authority to apply half the PSD program – NAAQS and increments – and not apply BACT.” EJ Petition at 28. They argue that the Region’s decision to limit the Associated Fleet’s emissions to comply with the NAAQS and PSD increments is an “acknowledgment” that the PSD program applies to these emissions and that, therefore, the Region’s failure to apply BACT to these emissions is clearly erroneous. *Id.* at 28-29. In their Reply, the EJ Petitioners state that a “focus on ‘facility’ fails to distinguish BACT requirements from air quality or increment limits which [the Region] admits must apply to associated vessels.” EJ Petitioners’ Reply at 5. As the Board’s analysis above demonstrates, the EJ Petitioners are mistaken. As explained above, section 328, itself, distinguishes between the emitting facilities by not including support vessels within the definition of the OCS source,³⁹ and the statutory BACT definition places the source of the emissions – the emitting facility – at the center of the permit issuer’s case-by-case analysis of the application of controls.

In addition, the obligation to control air pollution from OCS sources to comply with the NAAQS and PSD increments does not only arise derivatively through application of the PSD program;⁴⁰ this obligation also arises as a direct requirement of section 328, which specifically requires the Agency to control air pollution from OCS sources “to attain and maintain Federal and State ambient air quality standards.”⁴¹ CAA § 328(a)(1), 42 U.S.C. § 7627(a)(1). These statutory textual differences between compliance with the NAAQS and PSD increments

³⁹ *See supra* note 30.

⁴⁰ CAA section 165(a), which identifies each requirement of the PSD program that a “major emitting facility” must meet before beginning construction, directs that the owner or operator demonstrate compliance with the NAAQS and PSD increments. Specifically, section 165(a)(3) requires that “the owner or operator of such facility demonstrate[] * * * that emissions from construction or operation of such facility” will not violate the NAAQS or PSD increments. CAA § 165(a)(3), 42 U.S.C. § 7475(a)(3).

⁴¹ In the statements of basis, the Region explained that, through the regulatory definition of potential to emit, the Agency interpreted section 328 to authorize regulation through the potential to emit analysis of emissions that otherwise would be excluded mobile source emissions. Modified
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and the application of BACT are more than sufficient to grant the Region the latitude to require the Associated Fleet’s emissions to comply with the NAAQS and PSD increments and to conclude that no BACT “emissions limitation” may be imposed on the Associated Fleet’s emissions.

The Region’s decision gives expression to the statute’s general distinction between stationary and mobile sources, to the distinction between the OCS source and support vessels that is maintained by section 328(a)(4)(C)’s text, and to the central role that the statute requires for the facility when the permit issuer determines BACT. The Region’s approach also gives expression to the Agency’s decision in promulgating the regulations implementing section 328 to provide both that a vessel qualifies as an OCS source “*only when*” it is attached to the seabed or attached to an OCS source⁴² and to address vessel emissions in the definition of

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Chukchi Statement of Basis at 23; Beaufort Statement of Basis at 25. The Region explained as follows:

In describing how emissions from vessels that are not themselves an OCS source are to be considered, both the statute and EPA’s regulation refer broadly to “vessel” emissions, again without exclusion. In explaining that only the stationary aspects (i.e., excluding engines when being used for propulsion in the situation described above) of a vessel would be regulated as part of the “OCS source,” EPA stated in contrast that “*All vessel emissions related to OCS source activity will be accounted for by including vessel emissions in the “potential to emit” of an OCS source.*” 57 Fed. Reg. at 40794 (emphasis added). Simply put, the exclusion of nonroad engines from the general definition of “stationary source” in Section 302(z) of the CAA is overridden by the more specific provisions in Section 328 of the CAA and 40 C.F.R. § 55.2.

Modified Chukchi Statement of Basis at 23; *see also* Beaufort Statement of Basis at 25-26.

⁴² The regulation provides as follows:

OCS source means any equipment, activity, or facility which:

- (1) Emits or has the potential to emit any air pollutant;
- (2) Is regulated or authorized under the Outer Continental Shelf Lands Act (“OCSLA”) (43 U.S.C. § 1331 et seq.); and
- (3) Is located on the OCS or in or on waters above the OCS.

This definition shall include vessels *only when* they are:

- (1) Permanently or temporarily attached to the seabed and erected thereon and used for the purpose of exploring, developing or producing resources therefrom, within the meaning of section 4(a)(1) of OCSLA (43 U.S.C. § 1331 et seq.); or

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potential to emit.⁴³ Notably, in proposing these regulations, EPA invited comment on an interpretation of the statutory language that is nearly identical to the theory the EJ Petitioners advocate in this case. The Agency explained:

This interpretation is based on the theory that section 328 provides for the direct regulation of pollution on the OCS, rather than the regulation of OCS sources. Specifically, section 328(a)(1) states that EPA “* * * shall establish requirements to *control air pollution* from Outer Continental Shelf sources * * * ” (emphasis added). Section 328(a)(4)(C) then states that emissions from vessels “servicing or associated with an OCS source shall be considered *direct emissions from the OCS source*” (emphasis added). Hence, it can be argued that EPA has authority pursuant to section 328 to regulate vessels.

Outer Continental Shelf Air Regulations, 56 Fed. Reg. 63,774, 63,777 (proposed Dec. 5, 1991). In issuing the final regulations in 1992, the Agency rejected this interpretation, stating instead that “Section 328 does not provide authority to EPA to regulate the emissions from engines being used for propulsion of vessels.”

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(2) Physically attached to an OCS facility, in which case only the stationary sources aspects of the vessels will be regulated.

40 C.F.R. § 55.2 (emphases added).

⁴³ The regulation provides as follows:

Potential emissions means the maximum emissions of a pollutant from an OCS source operating at its design capacity. Any physical or operational limitation on the capacity of a source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as a limit on the design capacity of the source if the limitation is federally enforceable. *Pursuant to section 328 of the Act, emissions from vessels servicing or associated with an OCS source shall be considered direct emissions from such a source while at the source, and while enroute to or from the source when within 25 miles of the source, and shall be included in the “potential to emit” for an OCS source.* This definition does not alter or affect the use of this term for any other purposes under §§ 55.13 or 55.14 of this part, except that vessel emissions must be included in the “potential to emit” as used in §§ 55.13 and 55.14 of this part.

40 C.F.R. § 55.2 (emphasis added).

57 Fed. Reg. at 40,794.⁴⁴ Subsequently, the D.C. Circuit rejected a challenge to this regulation's definition of OCS source. *Santa Barbara Cnty. Air Pollution Control Dist. v. U.S. EPA*, 31 F.3d 1179, 1181 (D.C. Cir. 1994) (holding that the regulation's distinction between attached and detached vessels is a permissible reading of the statute and that it was reasonable for EPA to conclude that OCS source does not include "vessels that were merely traveling over the OCS").

It may be possible, as the EJ Petitioners contend, to read the regulatory definitions of "OCS source" and "Potential to Emit" and the D.C. Circuit's *Santa Barbara* decision as not strictly prohibiting the interpretation the EJ Petitioners advance in the present case.⁴⁵ Nevertheless, the EPA is tasked with interpreting ambiguous statutory instruction in a manner consistent with the Agency's regulations. *Coeur Alaska, Inc. v. Se. Alaska Conservation Council*, – U.S. –, 129 S. Ct. 2458, 2469-70 (2009).⁴⁶ The Region's decision in this case is consistent with the interpretation the Agency articulated in the preamble to the final regulation and with *Natural Res. Def. Council v. U.S. EPA*, 725 F.2d 761, 771 (D.C. Cir. 1984). See *Chukchi RTC* at 28. The EJ Petitioners have not shown how their proposed application of BACT in the present case would be consistent with the Agency's authoritative interpretation published in the regulatory preamble.⁴⁷

⁴⁴ In the preamble, the Agency stated that only stationary source activities of vessels will be regulated at docksides, "since EPA is prohibited from directly regulating mobile sources under this title." 57 Fed. Reg. at 40,793-94 (citing *Natural Res. Def. Council v. U.S. EPA*, 725 F.2d 761 (D.C. Cir. 1984)).

⁴⁵ EJ Petitioners contend that the OCS regulations are consistent with the statutory language in excluding unattached vessels from the definition of "OCS source" and by including vessel emissions within the OCS source's "potential emissions," and, therefore, "[a]t the very least, the regulation does not prohibit the Region from applying BACT to all direct emissions from the OCS source * * * ." EJ Petition at 22. The EJ Petitioners also argue that the regulations do not make clear that emissions from associated vessels will only be considered in the ambient air quality and impact analysis. *Id.* The EJ Petitioners also argue that "[t]he preamble language is not clear and does not demand an interpretation of the regulations as barring the application of BACT to emissions from associated vessels." *Id.* at 23. The EJ Petitioners argue that because the regulations and the preambles do not clearly demand the Region's interpretation, the "Petitioners do not challenge the regulation and instead challenge the application of this regulation in these permits." *Id.* at 27 n.12.

⁴⁶ Federal courts reviewing administrative decisions are guided by the doctrine of administrative deference announced by the Supreme Court of the United States in *Chevron U.S.A., Inc. v. Natural Res. Def. Council*, 467 U.S. 837 (1984). Here, the Board serves as the final decision maker for the Agency. See *In re Lazarus, Inc.*, 7 E.A.D. 318, 351 n. 55 (EAB 1997); *In re Ocean State Asbestos Removal, Inc.*, 7 E.A.D. 522, 543 n.22 (EAB 1998).

⁴⁷ For these reasons, the Board also rejects AEWC's argument that, in interpreting the regulation, the Region failed to consider Congress's intent, section 328's goals, and the definition of stationary source. AEWC *Chukchi* Petition at 20-22; AEWC *Beaufort* Petition at 19-22. As explained in the text, the Region's decision gives expression to the statute's general distinction between stationary and mobile sources, to the distinction between the OCS source and support vessels maintained by section 328(a)(4)(C)'s text, and to the central role that the statute requires for the facility when the permit issuer determines BACT.

Thus, for the reasons discussed above, the Board rejects the EJ Petitioners' contention that section 328's plain language establishes an unambiguous mandate requiring application of BACT to control the Associated Fleet's emissions. As explained, the Region's decision in this case is a permissible interpretation of the statute's ambiguous instruction, and it comports with the Agency's regulatory text and rationale explained in the 1992 regulatory preamble. The Board concludes that the Region's decision to impose Permit conditions to control the Associated Fleet's emissions to comply with the NAAQS and PSD increment, but not to apply BACT to the Associated Fleet, is not a clearly erroneous application of section 328 and the CAA's PSD requirements, and the Board therefore denies review of the Chukchi and Beaufort Permits on this issue.

B. Did the Region Clearly Err in Determining When the Frontier Discoverer Becomes, and Ceases to Be, an OCS Source?

As explained previously, section 328 of the CAA, 42 U.S.C. § 7627,⁴⁸ establishes requirements to control air pollution from OCS sources. Thus, defining when the Frontier Discoverer becomes an OCS source determines when CAA section 328 applies to, and thus regulates air pollution from, the Frontier Discoverer. This question is not academic; on the contrary it is of primary importance. The later in time the Frontier Discoverer becomes an OCS source, and the sooner it ceases to be an OCS source, the longer air pollution from the Frontier Discoverer is unaddressed by BACT controls, and the more limited the inclusion of potential emissions from both the Frontier Discoverer and the Associated Fleet in air quality analyses. This issue is one of first impression, calling for a careful examination of when the Frontier Discoverer becomes a stationary source. The parties to these appeals disagree about when the Frontier Discoverer may be considered

⁴⁸ As noted above, the statute defines an OCS source as follows:

The terms "Outer Continental Shelf source" and "OCS source" include any equipment, activity, or facility which –

- (i) emits or has the potential to emit any air pollutant,
- (ii) is regulated or authorized under the Outer Continental Shelf Lands Act [43 U.S.C. § 1331 et seq.], and
- (iii) is located on the Outer Continental Shelf or in or on waters above the Outer Continental Shelf.

Such activities include, but are not limited to, platform and drill ship exploration, construction, development, production, processing, and transportation. For purposes of this subsection, emissions from any vessel servicing or associated with an OCS source, including emissions while at the OCS source or en route to or from the OCS source within 25 miles of the OCS source, shall be considered direct emissions from the OCS source.

CAA § 328(a)(4)(C), 42 U.S.C. § 7627(a)(4)(C).

an OCS source as defined by 40 C.F.R. § 55.2, contained in the regulations that implement CAA section 328. Section 55.2 defines an OCS source by first incorporating the language from sections (i), (ii), and (iii) of CAA § 328, *see supra* note 48, and then adding:

This definition shall include vessels only when they are:

(1) Permanently or temporarily attached to the seabed *and* erected thereon *and* used for the purposes of exploring, developing or producing resources therefrom, within the meaning of section 4(a)(1) of OCSLA * * * ; or

(2) Physically attached to an OCS facility, in which case only the stationary source aspects of the vessel will be regulated.

40 C.F.R. § 55.2 (emphases added). The three requirements in subsection (1) of section 55.2, above, are central to the parties' disagreement, which turns on when the Frontier Discoverer satisfies all three requirements and becomes an OCS source subject to regulation under CAA § 328, 42 U.S.C. § 7627. The Board must determine if the Region's decision to declare the Frontier Discoverer an OCS source between the time that an on-site Shell representative declares the Frontier Discoverer "to be secure and stable in a position to commence exploratory activity" until the on-site Shell representative declares that due to anchor retrieval or disconnection the Frontier Discoverer is "no longer sufficiently stable to conduct exploratory activity at the drill site" is a clearly erroneous application of 40 C.F.R. § 55.2.⁴⁹ *See* Chukchi Permit at 5 (quoting Region's OCS source definition); Beaufort Permit at 14 (same). In evaluating this question, the Board looks at the administrative record to determine whether the Region exercised its "considered judgment," making its permit determinations in light of the record and the relevant statutory and regulatory criteria, and whether the Region articulated with reasonable clarity the reasons for its conclusions and the significance of the principal

⁴⁹ Section 55.2 incorporates by reference OCSLA section 4(a)(1), 43 U.S.C. § 1333(a)(1), which, as noted previously, states in relevant part:

The Constitution and laws and civil and political jurisdiction of the United States are extended to the subsoil and seabed of the outer Continental Shelf and to all artificial islands, and *all installations and other devices permanently or temporarily attached to the seabed, which may be erected thereon for the purpose of exploring for, developing, or producing resources therefrom* * * * .

43 U.S.C. § 1333(a)(1) (emphasis added). The Board examines section 4(a)(1) of OCSLA in more detail below because it provides useful guidance with respect to the criteria expressed in subsection (1) of 40 C.F.R. § 55.2.

facts it relied upon in reaching those conclusions. *See In re Desert Rock Energy Co., LLC*, 14 E.A.D. 484, 520, 538-39 (EAB 2009); *In re Shell Offshore, Inc.*, 13 E.A.D. 357, 386 (EAB 2007). In order to best analyze the Region's rationale, the Board examines first the proposed alternatives to define when the Frontier Discoverer becomes an OCS source.

1. *Proposed Alternatives for Defining the OCS Source Considered
By the Region*

In the initial draft permit for Shell's Chukchi operations, the Region proposed that the Frontier Discoverer would be an OCS source "during all times between placement of the first anchor on the seabed to removal of the last anchor from the seabed." Initial Chukchi Draft Permit at 5; Initial Chukchi Statement of Basis at 21 (stating Region's proposed OCS source definition without any further elaboration). The re-proposed draft permit for Shell's Chukchi operations contained, instead, two proposed alternatives for defining when the Frontier Discoverer is an OCS source:

Option 1: For the purpose of this Permit, the Discoverer is an "OCS Source" during all times between placement of the first anchor on the seabed to removal of the last anchor from the seabed at a drill site.⁵⁰

Option 2: For the purpose of this Permit, the Discoverer is an "OCS Source" between the time the Discoverer is declared by the Discoverer's on-site company representative to be secure and stable in a position to commence exploratory activity at the drill site until the Discoverer's on-site company representative declares that, due to retrieval of anchors or disconnection of its anchors, it is not [sic] longer sufficiently stable to conduct exploratory activity at the drill site, as documented by the records maintained pursuant to Condition B.2.2.

Proposed Outer Continental Shelf Prevention of Significant Deterioration Permit to Construct, Permit No. R10OCS/PSD-AK-09-01 (Jan. 8, 2010) at 5 ("Modified Chukchi Draft Permit"). The Beaufort draft permit contained the same two proposed alternatives for defining an OCS source. Beaufort Draft Permit at 12.

The Region specifically sought comment on the alternative definitions of the OCS source, explaining with respect to each:

⁵⁰ Option 1 is identical to the definition of an OCS source put forth in the initial Chukchi draft permit. *Compare* Initial Chukchi Draft Permit at 5 *with* Modified Chukchi Draft Permit at 5.

Option 1:

* * *

Once the Discoverer is attached by an anchor to the seabed at a drill site, the Discoverer is at the location for the purpose of exploring, developing, or producing resources from the seabed and its activities are more closely aligned with the activities of a stationary source than of a vessel transiting the sea. Under this approach, connection of the Discoverer to the seabed by an anchor at the drill site would be considered both attachment to and erection on the seabed.

Option 2:

* * *

Discoverer is considered to be an "OCS source" * * * from the time the Discoverer is declared by the Discoverer's on-site company representative to be "secure and stable in a position to commence exploratory activity at the drill site * * * . At this point, the Discoverer is clearly both attached to and erected on the seabed "for the purpose of exploring, developing, or producing resources therefrom" within the meaning of EPA's OCS implementing regulations. EPA does not agree with Shell that the Discoverer is not an OCS source until all eight anchors are attached, since available information shows that the Discoverer is at the location for the purpose of exploring, developing, or producing resources and that there are some circumstances in which the Discoverer can safely drill when secured by fewer than eight anchors. Accordingly, this option for defining when the Discoverer is an OCS source does not turn on the number of anchors in place.

Modified Chukchi Statement of Basis at 21; Beaufort Statement of Basis at 24.

After receiving comments on the definition of OCS source, the Region chose Option 2 to define the OCS source in both final Permits.⁵¹ Chukchi Permit at 5; Beaufort Permit at 14. The Board next examines the Region's rationale for choosing Option 2 to define the OCS source to determine if it is adequately explained and supported by the administrative record.

2. *The Region's Justification for Its Method of Defining the OCS Source*

The Region relies on the regulatory definition of OCS source in 40 C.F.R. § 55.2, implementing CAA § 328, 42 U.S.C. § 7627, and incorporating OCSLA § 4(a)(1), 43 U.S.C. § 1333(a)(1), to justify its determination that the Frontier Discoverer does not become an OCS source until it is sufficiently secure and stable in a position to commence exploratory activities. The Region does not go on to analyze how its interpretation of 40 C.F.R. § 55.2 is informed by the terms of CAA § 328 or OCSLA § 4(a)(1).

In interpreting 40 C.F.R. § 55.2, the Region concedes that Option 1 satisfies the first criterion of the regulation, that the Frontier Discoverer be "attached to the seabed" with one anchor down. The record is less clear, however, regarding how the Region gives meaning to the "erected thereon" criterion or the "used for the purpose of" criterion of section 55.2, and why, as Option 2 states, the Frontier Discoverer will be "considered to be an 'OCS source' * * * from the time the

⁵¹ AEWG argues that the Region failed to adequately explain its inconsistent positions, namely, choosing Option 1 to define the OCS source in the initial Chukchi draft permit, and later choosing Option 2 to define the OCS source in the Chukchi and Beaufort Permits. AEWG Chukchi Petition at 15-16; AEWG Beaufort Petition at 15; AEWG and ICAS's Reply Brief in Support of Their Petitions for Review (June 15, 2010) at 8 ("AEWG Reply"). Although the initial Chukchi draft permit utilized Option 1 to define the OCS source, after the close of the public comment period, the Region made several changes to the permit as a result of comments received and repropose a draft of the Chukchi permit in January 2010. *See* Modified Chukchi Permit Information Sheet at 1 (noting that the Region was repropose the permit in its entirety and would take no further action on the initial August 2009 permit, and that commenters could resubmit comments originally submitted for the initial proposed permit that were not addressed in the modified proposed permit and statement of basis). The modified Chukchi draft permit and the Beaufort draft permit contained both Options 1 and 2, and the Region ultimately chose Option 2 over Option 1. The Region appropriately observes that contrary to AEWG's argument, the Region's evolving view over the course of the permitting process and in response to public comments regarding when the Frontier Discoverer becomes an OCS source is a clear goal of the public comment process. Region's Resp. at 14 (citations omitted); *see also In re Russell City Energy Ctr., LLC*, 15 E.A.D. 1, 24 (EAB 2010) ("Although [the permit issuer] clarified and refined its analysis over time, * * * the Board does not find this to be error as this is a normal part of the dynamic of the notice and comment process associated with permit proceedings."); *In re Chukchansi Gold Resort*, 14 E.A.D. 260, 263-64 (EAB 2009) (describing reproposal of draft permit and opening a new comment period after modifying the initially proposed permit based on input received during the first public comment period). Whether the Region nonetheless clearly erred by selecting Option 2 is an issue the Board examines at length in the text.

Discoverer is declared by the Discoverer's on-site company representative to be secure and stable in a position to commence exploratory activity at the drill site."⁵² See Modified Chukchi Statement of Basis at 20-21 ("The Discoverer could be considered to be 'attached to the seabed' when it is connected to the seabed by a single anchor."); Beaufort Statement of Basis at 23-24 (same); see also Oral Arg. Tr. at 24 (AEWC arguing that upon looking through the statements of basis and response to comments, "at times EPA says that they are construing what 'use for the purpose of exploring for resources' means. At times they are construing what 'erected thereon' means.").⁵³ The Statements of Basis and the Chukchi Response to Comments each contain brief analyses that leave the Board without a cohesive explanation for the Region's decisionmaking process with respect to the OCS source definition contained in the Chukchi and Beaufort Permits.

⁵² It is clear that the Region's aim was to delineate when the Frontier Discoverer ceases being a vessel and becomes an OCS source subject to regulation under section 328, 42 U.S.C. § 7627. See Modified Chukchi Statement of Basis at 20-21; Beaufort Statement of Basis at 23-24; Chukchi RTC at 17; Oral Arg. Tr. at 58, 61, 68-69 (discussing the Frontier Discoverer's operation as an OCS source and explaining the Region's position that the OCS source is the stationary source in this instance). It is the Region's rationale regarding how it came to interpret 40 C.F.R. § 55.2 to mean "secure and stable in a position to commence exploratory activity" that is indistinct in the record.

⁵³ The Board notes that in comments on both the Chukchi and Beaufort Permits, AEWC relied on the statutory definition of an OCS source found in section 328 of the CAA, 42 U.S.C. § 7627, as support for its statement that the Frontier Discoverer is an OCS source when it enters the twenty-five mile radius of the drill site, prior to its first anchor attaching to the seabed. See AEWC Chukchi Comments at 9-13; AEWC Beaufort Comments at 16-20. AEWC contends that the Region failed to adequately respond to this comment. AEWC Chukchi Petition at 13; Beaufort Petition at 13. However, this Board has observed that the permitting regulations do not require a permit issuer "to respond to each comment in an individualized manner." *E.g.*, *In re Russell City Energy Center*, 15 E.A.D. at 101; *In re Kendall New Century Dev.*, 11 E.A.D. 40, 50 (EAB 2003)); *In re NE Hub Partners, L.P.*, 7 E.A.D. 561, 583 (EAB 1998), *review denied sub nom. Penn Fuel Gas, Inc. v. U.S. EPA*, 185 F.3d 862 (3d Cir. 1999).

In addition, the Board previously addressed this precise issue in *Shell*, 13 E.A.D. at 371-79. In *Shell*, one of the issues on appeal was whether drillship emissions should be aggregated across multiple drill sites. The *Shell* petitioners argued that because the statutory definition of OCS source requires emissions from vessels servicing or associated with the OCS source be treated as direct emissions from the OCS source, drillships operating at drill sites within twenty five miles of another drill site must be treated as a single OCS source. *Id.* at 371-72. This Board rejected the Petitioners' arguments because they failed to take into account the regulatory definition of an OCS source, specifically the requirement that a vessel qualifies as an OCS source "only when" it is attached to the seabed. *Id.* at 372. The Board confirmed that "[t]he Region was not free to ignore this regulatory interpretation of the statutory definition, which draws a distinction between vessels attached to the seabed and those that are not." *Id.* at 375-76; *id.* at 376 n.19 (noting that D.C. Circuit upheld 40 C.F.R. § 55.2 as a permissible interpretation of the language in CAA § 328, 42 U.S.C. § 7627, in *Santa Barbara Cnty. Air Pollution Control Dist. v. U.S. EPA*, 31 F.3d 1179, 1181 (D.C. Cir. 1994)).

In the Statements of Basis for both the Chukchi and Beaufort Permits,⁵⁴ the Region explains that, based on its analysis of the regulatory definition of OCS source and the specific configuration of the Frontier Discoverer, “it is not clear that the ship is ‘erected’ on the seabed for the purposes of exploring, developing, or producing resources at that time. The question is whether the Discoverer is an OCS source during this anchoring and tensioning process.” Modified Chukchi Statement of Basis at 20; Beaufort Statement of Basis at 23. The Region describes the two Options with a focus on when the Frontier Discoverer’s activities would render it more akin to a stationary source than a vessel transiting the OCS. Elaborating on Option 1, the Region states that, once Frontier Discoverer’s first anchor is placed on the seabed, it is “at the location for the purpose of exploring, developing or producing resources from the seabed and its activities are more aligned with the activities of a stationary source than of a vessel transiting the sea,” and thus a single anchor down would necessarily mean that the Frontier Discoverer is both attached to and erected on the seabed.⁵⁵ Modified Chukchi Statement of Basis at 21; Beaufort Statement of Basis at 24. After defining Option 2 in the Statements of Basis, the Region asserts that under Option 2 “Discoverer is clearly both attached to and erected on the seabed ‘for the purpose of exploring, developing or producing resources therefrom.’” Modified Chukchi Statement of Basis at 21; Beaufort Statement of Basis at 24. The Statements of Basis highlight the “erected thereon” criterion of section 55.2 and address the transformation of the Frontier Discoverer from a vessel to an OCS source in terms of when the Frontier Discoverer becomes “erected thereon” the OCS.

⁵⁴ The Statements of Basis for both permits are almost identical. However, the Chukchi Statement of Basis includes three paragraphs that discuss comments made on the initial Chukchi draft permit, which had defined the Frontier Discoverer as an OCS source between the time the first anchor is placed and the last anchor is removed from the seabed. *See* Modified Chukchi Statement of Basis at 20 (discussing August 2009 proposed permit and comments made by both Shell and MMS stating that each entity, respectively, does not believe that Frontier Discoverer is an OCS source until all anchors are set).

⁵⁵ AEWG argues that the Frontier Discoverer is an OCS source as soon as the first anchor is placed on the seabed because once the first anchor is placed, Frontier Discoverer meets all three requirements of 40 C.F.R. § 55.2. Specifically, AEWG contends that the Frontier Discoverer is an OCS source after the first anchor is down because it is already “erected thereon” as soon as it leaves harbor, and that save for a contingency, such as transporting the Frontier Discoverer through the OCS for repair, the majority of time the Frontier Discoverer is on the OCS it is “used for the purposes of exploring, developing, or producing resources.” *See* AEWG Reply at 9 (contrasting drill ships, which are fully constructed before leaving port, and jack-up rigs, which must be “constructed or ‘erected’ at the drill site”); Oral Arg. Tr. at 20-29; AEWG Chukchi Petition at 15, 18 (discussing “used for purpose of exploring” for hydrocarbons); AEWG Beaufort Petition at 15, 18 (same).

In the Response to Comments,⁵⁶ the Region states that it chose Option 2 to define when the Frontier Discoverer becomes an OCS source, and citing the terms of the regulation, interprets 40 C.F.R. § 55.2 to require that vessels be “[p]ermanently or temporarily attached to the seabed and erected thereon *and* used for the purpose of exploring.” Chukchi RTC at 16 (citing 40 C.F.R. § 55.2) (emphasis added by Region). Citing the preamble to the final rule promulgating the part 55 regulations for support of its interpretation, the Region states, in part, that “[v]essels therefore will be included in the definition of ‘OCS source’ when they are ‘permanently or temporarily attached to the seabed’ and are being used ‘for the purpose of exploring, developing or producing resources therefrom.’ This would include, for example, drill ships on the OCS.” *Id.* at 16-17 (quoting 57 Fed. Reg. at 40,793) (emphasis added by Region). The Region further states that “EPA believes that, until the Discoverer is sufficiently attached by its anchors to begin exploratory operations, the Discoverer is not an OCS source within 40 C.F.R. § 55.2.” *Id.* at 17. The Region’s explanation in the Response to Comments⁵⁷ appears to rely more heavily on the third criterion within section 55.2 to explain its rationale for choosing Option 2 to define the OCS source, namely, when the Frontier Discoverer is capable of being “used for the purpose of exploration, development or production.”⁵⁸ In the Response to Comments there is scarcely a mention of the “erected thereon” criterion or how it relates to a vessel being secure and

⁵⁶ The Beaufort Response to Comments states that, while the Region received a number of comments on its proposed alternative definitions for determining when the Frontier Discoverer becomes an OCS source, they were not unique; readers are referred to the Chukchi Response to Comments for a more detailed summary of the comments on the OCS source issue and the Region’s full response. Beaufort RTC at 12.

⁵⁷ The Response to Comments highlights the Region’s disagreement with certain public comments that advocated Frontier Discoverer becoming an OCS source only when it is actively engaged in exploratory operations such as actual drilling because otherwise it is not being “used for the purpose of exploring, developing or producing resources therefrom’ until that time.” Chukchi RTC at 17. Citing the need for practicality in enforcing federal air permits, the Region rejected this suggestion because the Frontier Discoverer would alternate between OCS source status and vessel status as exploratory activities started and stopped. *Id.* Rather, the Region states that “tying the OCS source determination to the time the vessel is attached *and* ready to begin exploratory activities is sufficient” because in the Region’s experience, this time will “generally be defined by a particular event.” *Id.* (emphasis in original). That event, while never explicitly identified in the record, appears to be when the on-site Shell representative declares Frontier Discoverer “secure and stable in a position to commence exploratory activities.” *Id.* In essence, the Region appears to contrast its position from the comments that lobbied for a more narrow definition of OCS source to illustrate that the Region considers the Frontier Discoverer to be “used for the purpose of exploration, development or production” under the third criterion of section 55.2 when it is secure and stable in a position to commence exploratory activity, but that this “particular event” does not require Frontier Discoverer to be actually engaged in exploratory activity.

⁵⁸ Further, when the Region states that since “the Discoverer is a drill ship used for the purpose of resource exploration, development and production and the vessel becomes an OCS source once it is secure and stable at a drill site and the Shell representative has made the required determination,” it appears that the on-site Shell representative makes the decision as to when the third “use” criterion of section 55.2 is met. Chukchi RTC at 17; *see infra* Part VI.B.4 for a further discussion of this issue.

stable.⁵⁹ The Region's explanations in the Statements of Basis and the Chukchi Response to Comments vacillate, rationalizing the proposed OCS source definition alternately with a focus on "erected thereon" and "used for the purpose of exploration, development or production." In neither document does the Region set forth an explanation of how the Region interprets the two criteria of section 55.2 at issue. In short, the Region never plainly states a concise, coherent explanation for its reasoning.

At oral argument, the Region struggled to demonstrate the logic behind its choice to define the OCS source as "secure and stable in a position to commence exploratory activity."⁶⁰ See Oral Arg. Tr. at 42-62. When asked at the outset where the Board might find the "clearest expression of what the word erected was intended to mean," the Region conceded that it did not "have anything to point to other than it is used in OCSLA section 4(a)(1)." *Id.* at 42. The Board expressed concern at oral argument that the record does not contain an analysis of what "erected thereon" means in the context of the Frontier Discoverer's activities. *Id.* at 51-52. The Board also expressed concern that, given that the "sufficiently secure and stable" standard of when the Frontier Discoverer becomes an OCS source does not appear in the statutes or the regulation, the Board is left with no ability to deduce how the Region arrived at its decision. *Id.* In addition, the Board observed that in both the Board's *Shell* decision and the initial Chukchi draft permit, "EPA had no focus whatsoever * * * on the words erected thereon and now they've driven us to a place where not only are they the centerpiece, but they are so important that EPA itself cannot even decide what erected thereon" means. *Id.* at 60. The Region replied, "[w]e did look at the statute in interpreting the regulations here but *we gave meaning to the word erected as being sufficiently secure and stable to commence operations*" out of concern over the distinction made in the preamble to the part 55 regulations between when a drill ship operates as a vessel and when it operates as a stationary source. *Id.* at 61 (emphasis added); see also *id.* at 50, 58, 61 (discussing the part 55 regulations and EPA's intention to

⁵⁹ The term "erected thereon" appears twice in the Chukchi Response to Comments, in the definition of section 55.2 and in the quotation from the preamble to the part 55 regulations. See Chukchi RTC at 16.

⁶⁰ The Board notes that, although the discussion focused prominently on the "erected thereon" criterion, at certain points in the oral argument, the Region's statements defending its choice of Option 2 encompassed the "erected thereon" and "used for the purpose of exploration, production, or development" criteria jointly. See Oral Arg. Tr. at 51 (Region noting that, in response to comments that Option 1 did not give meaning to the other criteria in section 55.2, namely "erected and used for the purpose of drilling operations," the Region concluded that because the Frontier Discoverer is a vessel during transport and during positioning at a drill site that "[i]t's only when it is sufficiently secure and stable that it is used for the purpose of drilling"), 53 (reiterating that the Region believes its definition of the OCS source is "appropriate because to do otherwise would ignore the two other criteria in the regulation"). Here again, the Region talks about giving effect to the second and third criteria of section 55.2, but never actually sets forth an explanation for how it determined these criteria to mean "secure and stable in a position to commence exploratory activity."

distinguish between drill ships operating as vessels versus stationary sources). Nowhere in the administrative record before the Board is there a clear statement of how the Region interpreted “erected thereon” to mean “sufficiently secure and stable to commence operations.” The changing explanations – from the modified proposal of the Chukchi permit and the proposal of the Beaufort permit, to the response to comments, to oral argument – regarding which criteria of section 55.2 the Region relied on are troubling and emblematic of the lack of precision and clarity in the Region’s rationale for its selection of Option 2 to define the OCS source. The Board expects the Region to have settled upon a cogent and reasoned legal analysis, fully responsive to the comments raised, by the time the Region issues a final permit, and not be in search of its legal analysis at the time of oral argument. The Board nonetheless further examines whether either the legislative history of OCSLA or the preamble of part 55 supports the Region’s explanations.

3. Relevant Legislative and Regulatory History Does Not Support the Region’s Decision

Although the Region attempted to translate the criteria of section 55.2 into enforceable permit conditions, *see* Oral Arg. Tr. at 54, the record does not provide any legal or factual basis for the Region’s interpretation of “erected thereon” as “secure and stable in a position to commence exploratory activity,” leaving the Board to guess why the Region settled on this definition of the OCS source. At oral argument, the Region noted that section 4(a)(1) of OCSLA, 43 U.S.C. § 1333(a)(1), contains the terms from which the section 55.2 regulatory definition of OCS source is derived.⁶¹ The Region maintains that the part 55 regulations express EPA’s clear intent regarding the distinction between ships alternately operating as vessels and as stationary sources, which in turn supports its choice of “secure and stable in a position to commence exploratory activity” to effectuate section 55.2.

Neither the statutes nor the regulation expands upon what “erected thereon” was intended to mean in section 55.2. The preamble to the part 55 regulations

⁶¹ At oral argument, the Board queried the Region about whether the Region had looked at the statutory language of OCSLA § 4(a)(1), 43 U.S.C. § 1333(a)(1), when construing the regulatory terms in section 55.2. Oral Arg. Tr. at 59. The Board effectively noted that § 4(a)(1) extends the laws and civil and political jurisdiction of the United States to the subsoil and seabed of the OCS, as well as to “all installations and other devices permanently or temporarily attached to the seabed, *which may be* erected thereon for the purpose of exploring for, developing, or producing resources therefrom.” OCSLA § 4(a)(1), 43 U.S.C. § 1333(a)(1) (emphasis added); *see also* Oral Arg. Tr. at 59. The Board asked the Region whether, since OCSLA § 4(a)(1) seems to refer to two criteria for OCS sources whereas section 55.2 refers to three, the Region had looked to section 4(a)(1) of OCSLA at all when interpreting section 55.2. Oral Arg. Tr. at 59. The Region responded that because the regulation clearly contains an “and” between each criteria, and because all three criteria must be met for a vessel to become an OCS source, the Region did not think that the “statute in that instance informs that.” *Id.* at 59-60.

refers specifically to OCSLA section 4(a)(1), 43 U.S.C. § 1333(a)(1), when discussing the definition EPA chose for the OCS source. 57 Fed. Reg. at 40,793 (“Part 55 Final Rule”). Although the Region admits it did not look to OCSLA section 4(a)(1) when interpreting the term “erected thereon,” *see* Oral Arg. Tr. at 59-60, in identical comments provided on both the modified Chukchi and Beaufort draft permits, Shell refers to the legislative history of section 4(a)(1) to illustrate “Congress’ intent that an OCS source be functionally equivalent to a ‘fixed structure’” and to contest the argument that Option 1 could be an appropriate definition of the Frontier Discoverer as an OCS source.⁶² Letter from Susan Childs, Shell Gulf of Mexico, Inc., to U.S. EPA Region 10, at 11 & n.5 (A.R. K-4) (Feb. 1, 2010); Letter from Susan Childs, Shell Offshore Inc., to U.S. EPA Region 10, at 3 n.3 (Mar. 22, 2010) (A.R. OO-20).

The legislative history of OCSLA section 4(a)(1) does not assist in resolving these permit proceedings because it provides no further insight into what “which may be erected thereon for the purpose of exploring for, developing, or producing resources therefrom” means, the language the Region relies on to justify its choice of “secure and stable in a position to commence exploratory activity” to define the OCS source under Option 2.⁶³

⁶² As noted previously, section 4(a)(1) of OCSLA states in relevant part:

The Constitution and laws and civil and political jurisdiction of the United States are extended to the subsoil and seabed of the outer Continental Shelf and to all artificial islands, *and all installations and other devices permanently or temporarily attached to the seabed*, which may be erected thereon for the purpose of exploring for, developing, or producing resources therefrom * * * .

43 U.S.C. § 1333(a)(1) (emphasis added). In 1978, Congress amended section 4(a)(1) of the original Outer Continental Shelf Act of 1953, eliminating the reference to “fixed structures” and substituting a reference to the italicized language above. The 1978 conference committee report Shell relies on to refute the notion that Option 1 should be used to define the OCS source states that “[t]he intent of the managers in amending section 4(a) of the 1953 OCS Act is technical and perfecting and is meant to restate and clarify and not change existing law.” H.R. Rep. No. 95-1474, at 80 (1978) (Conf. Rep), *reprinted in* 1978 U.S.C.C.A.N. 1674, 1679. The very next sentence in the conference committee report, which Shell does not quote in its respective comment letters, states that “[u]nder the conference report language, federal law is to be applicable to all activities on all devices in contact with the seabed for exploration, development, and production.” H.R. Rep. No. 95-1474, at 80, *reprinted in* 1978 U.S.C.C.A.N. at 1679. The conference report explains that, in large part, the reason for amending section 4(a)(1) was to ensure that foreign-built production platforms could not escape U.S. customs duties once they were brought into OCS waters. H.R. Rep. No. 95-1474, at 80-81, *reprinted in* 1978 U.S.C.C.A.N. at 1679-80.

⁶³ The legislative history appears to shed the most light on the first criterion of section 4(a)(1). A 1978 Office of Legal Counsel advisory opinion regarding the applicability of the Immigration and Nationality Act, 8 U.S.C. §§ 1101 *et seq.*, to persons working on drilling rigs on the OCS discusses the 1978 amendment of OCSLA section 4(a)(1), 43 U.S.C. § 1333(a)(1), states in relevant part:

Continued

The preamble to the part 55 regulations is also ambiguous with respect to how the EPA intended to interpret “erected thereon,” despite the Region’s argument to the contrary. It states in relevant part:

The definition of ‘OCS source’ has been modified to clarify when EPA will consider vessels to be OCS sources. Section 328(a)(4)(C)(ii) defines an OCS source as a source that is, among other things, regulated or authorized under the OCSLA. The OCSLA in turn provides that [DOI] may regulate ‘all installations and other devices permanently or temporarily attached to the seabed, which may be erected thereon for the purpose of exploring, developing, or producing resources therefrom, or any such installation or other device (other than a ship or vessel) for the purpose of transporting such resources.’ 43 U.S.C. § 1333(a)(1). Vessels therefore will be included in the definition of ‘OCS source’ when they are ‘permanently or temporarily attached to the seabed’ and are being ‘used for the purpose of exploring, developing or producing resources therefrom.’ This would include, for example, drill ships on the OCS.

* * *

Only the vessel’s stationary source activities may be regulated, since when vessels are in transit, they are specifi-

(continued)

You note that the courts have concluded that a drilling rig is a vessel rather than a ‘fixed structure’ within the meaning of [43 U.S.C.] § 1333(a)(1). *E.g., Boatel, Inc. v. Delamore*, 379 F.2d 850 (5th Cir. 1967), and cases collected therein. This was because a rig was designed to float to the place where it will be used and to be attached to the seabed in a relatively impermanent manner, permitting its later removal.

In 1978 Congress amended the [OCSLA]. * * * [I]t eliminated the reference to ‘fixed structures’ in § 1333(a)(1) and substituted a reference to ‘all installations and outer [sic] devices permanently or temporarily attached to the seabed.’ [OCSLA] Amendments of 1978, 92 Stat. 635, § 203(a). It is unquestioned therefore that drilling rigs are now within the language of § 1333(a)(1).

Outer Continental Shelf – Drilling Rigs – Alien Workers, 3 Op. O.L.C. 362, 363 (1979). While the Frontier Discoverer may be a drill ship as opposed to a drilling rig, the Office of Legal Counsel’s opinion is instructive. It makes evident that the 1978 amendments clarify that vessels which can move about on the OCS and attach and detach to the seabed temporarily can become OCS sources.

cally excluded from the definition of OCS source by statute.

Part 55 Final Rule, 57 Fed. Reg. at 40,793. Notably absent from this portion of the preamble is any explanation of the term “erected thereon.” Nonetheless, the Region points to the language quoted above to support its choice to define the Frontier Discoverer as an OCS source when it is “secure and stable in a position to commence exploratory activities.” The part 55 preamble conveys EPA’s intent to give effect to CAA section 328’s mandate to control air pollution on the OCS, specifically by regulating emissions from OCS sources conducting stationary source-like activities. However, the preamble language cited above does not, by itself, provide a roadmap that helps explain why the Region required the Frontier Discoverer to be “secure and stable in a position to commence exploratory activity.” No such terminology is included in the part 55 preamble or the final rule. The Region never explains the basis upon which it relied, or the underlying principles it used, in demarcating the transition of Frontier Discoverer from a vessel to a stationary source under the facts before the Board in this case.

4. *The Region’s Determination of When the Frontier Discoverer Becomes an OCS Source Inappropriately Delegates its Authority To Regulate*

In the record, the Region states that it disagrees with Shell’s position regarding when the Frontier Discoverer becomes an OCS source, yet the practical effect of its choice of Option 2 to define the OCS source is that, in the end, Shell’s preference for all-anchors-down will prevail. It is well established that a permit issuer must articulate with reasonable clarity the rationale for its conclusions and provide adequate support for those conclusions in the administrative record. *E.g.*, *In re ConocoPhillips Co.*, 13 E.A.D. 768, 780 (EAB 2008); *Shell*, 13 E.A.D. at 386; *In re Ash Grove Cement Co.*, 7 E.A.D. 387, 417, 423-25 (EAB 1997). As this Board has stated in prior decisions, when a permitting authority does not articulate its analysis in the record, the Board “cannot conclude that [the analysis] meets the requirements of rationality.” *Shell*, 13 E.A.D. at 386 (citing *In re Gov’t of D.C. Mun. Separate Storm Sewer Sys.*, 10 E.A.D. 323, 342 (2002)); *accord Chukchansi Gold Resort*, 14 E.A.D. at 280; *In re Teck Cominco Alaska Inc.*, 11 E.A.D. 457, 473 (EAB 2004). Further, when there are conflicting or differing explanations for a permit issuer’s actions, the Board “frequently concludes that the [permit issuer’s] rationale is unclear and remands for further clarity.” *Chukchansi Gold Resort*, 14 E.A.D. at 280; *see also In re Austin Powder Co.*, 6 E.A.D. 713, 719-20 (EAB 1997) (remanding where a permit issuer gave differing explanations for its determination, making its rationale unclear). In this case, the Region’s choice of Option 2 to define the OCS source means that the Region has chosen a definition that, in practical terms, only the on-site Shell representative can apply to the Frontier Discoverer. Shell has consistently stated that it does not consider

the Frontier Discoverer an OCS source unless the anchoring process is complete,⁶⁴ while the Region has stated throughout these permit proceedings that it disagrees with Shell's position. Because the Region's stated position in the record is at odds with the practical application of the Region's definition of the Frontier Discoverer as an OCS source, the Region's rationale conflicts with the practical effects of its decision.

The Region defends its decision by arguing that "the point in time at which a particular vessel or drilling rig becomes an OCS source" is a fact-specific determination depending on the various configurations of equipment that may be used for oil exploration and production, including drill rigs, drill ships, and drilling platforms. *See* Chukchi RTC at 16; Region's Resp. at 17-18, Modified Chukchi Statement of Basis at 20. In doing so, the Region implies that with all of the different potential configurations that may appear in a permit application, there is no way to escape a fact-specific determination with respect to when that particular configuration becomes an OCS source, thus validating its decisions to reject Option 1 and to rely on Shell's on-site company representative to determine when the Frontier Discoverer becomes an OCS source. *See* Region's Resp. at 17-18 ("The drill rigs and other vessels subject to the OCS regulations have many different configurations. Jack-up rigs, for example, do not have anchors, but instead are supported by legs on a seabed. It would therefore make no sense to conclude that a jack-up rig is not an OCS source until attached by an anchor to the seabed, as Region 10 had initially proposed to do with respect to the Discoverer.") (citation omitted).

The Board finds this line of reasoning unavailing. With respect to the different equipment options a permittee may choose from when seeking an OCS PSD permit, the permit applicant must specify which equipment it will use on the OCS in order for the Region to adequately assess the application and the impacts that particular equipment will have on air quality. Thus, once the Region receives an OCS PSD permit application, barring subsequent revision or amendment to the application, the Region has notice of a permit applicant's proposed equipment configuration and proposed activities. The Region offers no explanation as to why it cannot make a reasoned determination of when the Frontier Discoverer becomes an OCS source based on this information.

The Region states in the Response to Comments that it is "referencing the determination made by the on-site company representative, not as an additional

⁶⁴ *See* Letter from Susan Childs, Shell Gulf of Mexico Inc., to U.S. EPA Region 10 Attach. A at A-2 (Oct. 20, 2009) (A.R. A-55) ("Shell *cannot and will not* begin the drilling process until the Discoverer is completely moored and its central turret system * * * has been stabilized with 8 anchors. * * * To begin or continue drilling when the Discoverer is not fully stabilized would risk severe damage to the drill stem and the Discoverer, and jeopardize the safety of the crew.") (emphasis added).

requirement,⁶⁵ but rather, as evidence that the Discoverer is sufficiently secure and stable so as to be considered to be attached and ready to be used for the purpose of exploring, developing or producing resources.” Chukchi RTC at 18. The determination of when the Frontier Discoverer is “secure and stable to commence exploratory activity,” the Region explains, is made for “other operational purposes” by the on-site Shell representative and documented in a log. *Id.* at 16; Oral Arg. Tr. at 44-45 (“This is not something that we created to implement this permit. This is something they make under, that’s made, it’s my understanding, by drill ships worldwide, the [I]nternational [A]ssociation of [D]rilling [C]ontractors.”). The Region states that “tying the OCS source determination to the time the vessel is attached *and* ready to begin exploratory operations is sufficient because, based on our experience with OCS sources, that time will generally be defined by a particular event.” Chukchi RTC at 17. Acknowledging that the Frontier Discoverer is used for the purpose of resource explanation, development and production, the Region concluded that the “vessel becomes an OCS source once it is secure and stable at a drill site and the Shell representative has made the required determination.” *Id.*

The Region’s explanation is insufficient to justify its decision to allow the on-site Shell representative to decide when the Frontier Discoverer becomes an OCS source. As the Board pointed out at oral argument, Shell’s business decisions regarding the operation of the Frontier Discoverer are made for purposes other than deciding when the Frontier Discoverer becomes an OCS source and subject to regulation under CAA § 328. Oral Arg. Tr. at 44-48. Deciding when the Frontier Discoverer becomes an OCS source “is a completely separate parallel analysis” that the Region, not Shell, must undertake. *Id.* at 48. Further, reading the Response to Comments, there is seemingly no way for the Region, or anyone else besides Shell’s on-site representative, to determine when the Frontier Discoverer becomes an OCS source. *See* Oral Arg. Tr. at 43-44 (Region admitting it would be “very difficult” to challenge the on-site Shell representative’s determination of when the Frontier Discoverer becomes an OCS source).

Moreover, the Region’s decision to abdicate to Shell the decision of when the Frontier Discoverer becomes an OCS source is perplexing given that the record indicates that Shell and the Region disagree on what constitutes “secure and stable.” The record indicates that Shell equates “secure and stable” with the Frontier Discoverer being completely anchored, that is, all eight anchors attached to the seabed. *See* Modified Chukchi Statement of Basis at 20. Shell’s comments

⁶⁵ AEWG argues that by requiring the Frontier Discoverer to be “secure and stable to commence exploratory activity at the drill site,” the Region “made up” a legal requirement that “vessels must be ‘in a position to begin exploring’ [in order] to be ‘erected thereon and used for the purposes of exploring’ within the meaning of the regulatory definition.” AEWG Chukchi Petition at 17 (quoting Chukchi RTC at 16); AEWG Beaufort Petition at 17 (same); *see also* Chukchi RTC at 18.

submitted to the Region throughout the Chukchi and Beaufort permitting processes echo its position that the anchoring of Frontier Discoverer must be complete for it to become an OCS source.⁶⁶ *See* Modified Chukchi Statement of Basis at 20 (“Shell commented that it believed the Discoverer was not an OCS source within the meaning of Section 328 of the CAA and 40 C.F.R. § 55.2 until the Discoverer stabilized and the anchoring process is complete.”); Letter from Susan Childs, Shell Gulf of Mexico Inc., to U.S. EPA Region 10, at 10 (Feb. 1, 2010) (A.R. K-4); Letter from Susan Childs, Shell Offshore Inc., to U.S. EPA Region 10, at 2 (Mar. 22, 2010) (A.R. OO-20).

The administrative record contains several statements made over the course of the respective permitting processes wherein the Region plainly states that it disagrees with Shell’s position⁶⁷ that the Frontier Discoverer is not an OCS source until all eight anchors are down. Modified Chukchi Statement of Basis at 19 (citing the patent for the turret-moored drill ship and stating that “[d]rilling can occur when the Discoverer is secured with fewer than eight anchors”); Beaufort Statement of Basis at 23 (same); Chukchi RTC at 17 (“[A]vailable information shows that there are some circumstances in which the Discoverer is sufficiently secure and stable to begin exploratory activities when secured by fewer than eight anchors.”).

⁶⁶ In supplemental comments Shell submitted on the initial draft Chukchi permit proposed in August 2009, Shell made the following statement:

The definition should have stated that the vessel is an OCS Source only after the anchoring process is complete, i.e., all anchors are emplaced and tensioned and the Discoverer is stabilized and ready to proceed with drilling activities. Similarly, the Discoverer should cease to be an OCS Source when the anchor removal process is commenced in preparation for moving the vessel, i.e., when the first anchor is removed. * * * Shell will at an appropriate time request that the definition be modified to make it clear that the Discoverer can be an “OCS Source” only when it is completely anchored to the seabed at a drill site, i.e., between (a) attachment to, placement, and tensioning of the final anchor on the seabed and (b) disconnection from or removal of the first anchor from the seabed at a drill site.

Letter from Susan Childs, Shell Gulf of Mexico Inc., to U.S. EPA Region 10, at 3 (Oct. 20, 2009) (A.R. A-55). The Region thus had notice from the early stages of these permit proceedings that Shell’s position was that the Frontier Discoverer is an OCS source only when the anchoring process is complete.

⁶⁷ AEWG contends that despite the Region’s disagreement with Shell regarding Shell’s acknowledged position that it does not consider the Frontier Discoverer an OCS source until all eight anchors are down, the Region chose Option 2 to define when Frontier Discoverer becomes an OCS source and failed to adequately justify the inconsistencies between Shell’s position and its own. *See* AEWG Reply at 8-9; Oral Arg. Tr. at 30.

The Region's assumption that Shell might declare the Frontier Discoverer to be secure and stable in a position to commence exploratory drilling with less than eight anchors down,⁶⁸ rendering it an OCS source, is contravened by Shell's statements in the administrative record, and in particular at oral argument, that the Frontier Discoverer is not an OCS source until all eight anchors are down. *See* Oral Arg. Tr. at 57-58; *see also id.* at 87-88 ("Shell's position is that the ship needs to be fully anchored to be secured and ready to drill."), 90 ("[T]here's a reason for the eight anchor pattern. That is what renders the vessel ready to drill."). As the Board observed at oral argument, rightly or wrongly, the Region has agreed to a definition of OCS source that is going to lead to the Frontier Discoverer having eight anchors down before it is declared an OCS source by Shell's on-site company representative, which is inconsistent with the Region's statements in the administrative record disagreeing with an eight-anchor-down criterion. *See* Oral Arg. Tr. at 58.

In this instance, EPA has the responsibility under CAA § 328 to require OCS sources to attain and maintain federal and state ambient air quality standards and to comply with the PSD program. However, as it is currently written, the Region's definition of OCS source is a subjective decision⁶⁹ that the Region has already conceded it would essentially be unable to override. Thus, the Region has improperly delegated its statutory authority to an outside entity, which is prohibited absent specific authorization from Congress.⁷⁰ *See, e.g., The Fund for Animals v. Kempthorne*, 538 F.3d 124, 132 (2d Cir. 2008) ("Delegation of statutory responsibility by federal agencies and officers to outside parties is problematic

⁶⁸ At oral argument, the Region attempted to explain why eight anchors may not always be necessary for the Frontier Discoverer to be an OCS source. The Region referenced the patent for the turret-moored drill ship, which demonstrates the ship may drill with fewer than eight anchors down, and also, for the first time in these proceedings, asserted that financial incentives favor Shell declaring the Frontier Discoverer an OCS source as soon as possible so that Shell can "commence what brings them money." Oral Arg. Tr. at 55-56.

⁶⁹ It appears the only way the Region's OCS source definition may be objectively applied in practice is to utilize the very eight-anchors-down approach that the Region explicitly rejected.

⁷⁰ The Board rejects the Region's assertion at oral argument that the determination of when the Frontier Discoverer becomes an OCS source in the instant appeals is no different than other kinds of self-monitoring in the regulatory context. Oral Arg. Tr. at 48. Under EPA's self-monitoring requirements, the regulated facility merely provides data by which EPA can determine whether the facility's emissions are within a previously promulgated and objective emission limitation. *See, e.g., Compliance Assurance Monitoring*, 62 Fed. Reg. 54,900, 54,902 (Oct. 22, 1997) (codified at pts. 64, 70, and 71) (establishing monitoring requirements as authorized in titles V and VII of the 1990 CAA Amendments and stating that "[f]or significant [emission] units that use control devices to achieve compliance, the owner or operator will have to develop and propose, through the part 70 permit process, monitoring that meets *specified criteria* for selecting appropriate indicators or control performance * * *. *The final rule also includes performance and operating criteria that must be achieved*, as well as documentation requirements for the monitoring proposed by the owner or operator.") (emphases added).

because ‘lines of accountability may blur, undermining an important democratic check on government decision-making,’ and because outside parties, whether private or sovereign, might not ‘share the agency’s national vision and perspective.’”) (citations omitted); *U.S. Telecom Ass’n v. FCC*, 359 F.3d 554, 565 (D.C. Cir. 2004) (explaining that federal agency officials may subdelegate their decision-making authority to subordinates absent evidence of contrary congressional intent but may not subdelegate to outside entities, whether private or sovereign, absent affirmative evidence of authority to do so); *Sierra Club v. Sigler*, 695 F.2d 957, 962 n.3 (5th Cir. 1983) (dictum) (stating that “an agency may not delegate its public duties to private entities, particularly private entities whose objectivity may be questioned on grounds of conflict of interest”) (citations omitted). While an agency may seek advice or policy recommendations, it cannot “rubber stamp” decisions made by other entities in the guise of seeking their advice or abdicate its final reviewing authority. *Kemphorne*, 538 F.3d at 133. By allowing Shell alone to determine when the Frontier Discoverer becomes an OCS source, the Region essentially allows Shell to inform EPA when EPA’s authority to regulate emissions from the Frontier Discoverer pursuant to CAA § 328 commences.

Upon consideration, the Permits’ OCS source definition provision is remanded. The Region has not adequately explained in the administrative record its reasoning for choosing Option 2 in light of the criteria expressed in 40 C.F.R. § 55.2, CAA § 328, and OCSLA § 4(a)(1). The Region’s explanation is unclear, inconsistent, and fails to explain how the approach selected is consistent with the legislative history and purpose of the statutes. Further, the Region’s choice of Option 2 to define the OCS source results in a de facto “eight-anchors-down” requirement for the Frontier Discoverer to become an OCS source, despite the Region’s repeated statements in the administrative record that it does not agree with Shell’s eight-anchor-down preference because record evidence makes clear that the Frontier Discoverer can safely drill when secured by fewer than eight anchors. Finally, as it is currently written, Option 2 represents an improper delegation to Shell of the Region’s authority to determine when the Frontier Discoverer is subject to regulation under CAA § 328.

C. Did the Region Clearly Err By Limiting the Scope of Its Environmental Justice Analysis Based on the Area’s Attainment of the NAAQS for NO₂ In Effect On the Date of Permit Issuance?

The Executive Order entitled “Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations” states in relevant part that “each Federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations.” Exec. Order 12,898, 59 Fed. Reg. 7629, 7629 (Feb. 11, 1994) (“Executive Order”) (A.R. F-1). Federal agencies are required to implement this order “consistent with, and to the

extent permitted by, existing law.” *Id.* at 7632. The Board has held that environmental justice issues must be considered in connection with the issuance of PSD permits.⁷¹ *In re Prairie State Generating Co.*, 13 E.A.D. 1, 123 (EAB 2006), *aff’d sub nom. Sierra Club v. U.S. EPA*, 499 F.3d 653 (7th Cir. 2007); *In re AES Puerto Rico, L.P.*, 8 E.A.D. 324, 351 (EAB 1999), *aff’d sub nom. Sur Contra La Contaminación v. EPA*, 202 F.3d 443 (1st Cir. 2000); *In re Knauf Fiber Glass GmbH*, 8 E.A.D. 121, 174-75 (EAB 1999) (“*Knauf I*”); *In re EcoEléctrica, L.P.*, 7 E.A.D. 56, 67-69 (EAB 1997).

In the present case, AEWG and the Region agree that the North Slope communities potentially impacted by Shell’s proposed operations include a “significantly high percentage of Alaskan Natives, who are considered a minority under [Executive Order] 12898.” Modified Chukchi Statement of Basis at 119; Beaufort Statement of Basis at 133; *see also* AEWG Chukchi Petition at 6-7; AEWG Beaufort Petition at 5-7. AEWG contends that the Region clearly erred when it concluded that compliance with the existing annual NO₂ NAAQS⁷² demonstrates compliance with the Executive Order.

1. AEWG’s Assertions and Region’s Response

Petitioner AEWG asserts that the Region failed to provide a rational response to concerns that AEWG raised in its comments and subsequent petitions, and that the Region also failed to provide a response to EPA’s own findings regarding the health impacts of NO₂ exposure that were published in the Federal Register in support of the Administrator’s decision to supplement the existing an-

⁷¹ The Board has, in several permitting contexts, previously encouraged permit issuers to examine any “superficially plausible” claim that a minority or low-income population may be disproportionately affected by a particular facility. *In re EcoEléctrica, L.P.*, 7 E.A.D. 56, 69 n.17 (EAB 1997) (PSD appeal) (citing *In re Chem. Waste Mgmt.*, 6 E.A.D. 66, 75 (EAB 1995) (RCRA § 3005 appeal)); *In re Envotech, L.P.*, 6 E.A.D. 260, 280 (EAB 1996) (UIC appeal).

⁷² NAAQS are health based standards, designed to protect public health with an adequate margin of safety, including sensitive populations such as children, the elderly, and asthmatics. *AES Puerto Rico*, 8 E.A.D. at 351. Under section 109 of the Clean Air Act, NAAQS are “ambient air quality standards the attainment and maintenance of which in the judgment of the Administrator, based on such criteria and allowing an adequate margin of safety, are requisite to protect the public health.” 42 U.S.C. § 7409.

nual NO₂ NAAQS⁷³ with a new 1-hour NO₂ NAAQS.⁷⁴ See AEWChukchi Petition at 6-7, 67-71; AEWChaufort Petition at 6-7, 67-71; AEWReply at 37-41; see also Primary National Ambient Air Quality Standards for Nitrogen Dioxide, 75 Fed. Reg. 6474 (Feb. 9, 2010) (codified at 40 C.F.R. pts. 50, 58) (“Final Rule”). Specifically, AEW argues that the Region neglected to conduct an environmental justice analysis notwithstanding evidence of existing health disparities between Inupiat Eskimos and other U.S. populations, and despite AEW’s requests for such an analysis in its comments on both permits. AEWChukchi Petition at 69-71; AEWChaufort Petition at 69-71; see also AEWReply at 37-38 (stating that to “simply equate NAAQS compliance with an environmental justice analysis vitiates the intent and effectiveness of the Executive Order”), 41 (stating that Region 10 did not respond to earlier stated concerns in the context of its environmental justice analysis).⁷⁵ AEW argues that relying on compliance with the applicable NAAQS as evidence of fulfilling the Executive Order means that no PSD permit will ever trigger the requirements of the Executive Order because no permit can be issued if there is a predicted violation, and further, that because EPA recently updated the NO₂ NAAQS, there is evidence that the NO₂ NAAQS applicable at the time the Region issued the Permits is not sufficient to protect public health.⁷⁶ AEWChukchi Petition at 70-71; AEWChaufort Peti-

⁷³ In 1971, EPA promulgated identical primary and secondary NO₂ NAAQS at 53 parts per billion (“ppb”) annual average. EPA completed reviews of the air quality criteria and NO₂ standards in 1985 and 1996, both resulting in a decision to retain the 53 ppb annual average standard. Primary National Ambient Air Quality Standards for Nitrogen Dioxide, 75 Fed. Reg. 6474, 6476 (Feb. 9, 2010) (codified at 40 C.F.R. pts. 50, 58) (“Final Rule”).

⁷⁴ On July 15, 2009, EPA published a proposed rule to revise the NAAQS for oxides of nitrogen as measured by NO₂. Primary National Ambient Air Quality Standards for Nitrogen Dioxide, 74 Fed. Reg. 34404, 34404 (proposed July 15, 2009) (“Proposed Rule”). The Proposed Rule envisioned supplementing the existing annual standard, set at 53 ppb, with a new short-term NO₂ standard based on the 3-year average of the 99th percentile (or 4th highest) of 1-hour daily maximum concentrations; EPA proposed to set the new standard between 80 and 100 ppb but solicited comments on standard levels ranging from 65 to 150 ppb. *Id.* The Proposed Rule also made clear that consistent with the terms of a consent decree, the Administrator “will sign a notice of final rulemaking by January 22, 2010.” *Id.* On February 9, 2010, EPA published in the Federal Register a final rule revising the primary NO₂ NAAQS “in order to provide requisite protection of public health as appropriate under section 109 of the Clean Air Act.” Final Rule, 75 Fed. Reg. at 6475. The Final Rule set the new 1-hour NO₂ NAAQS standard at 100 ppb to supplement the existing annual standard and became effective on April 12, 2010. *Id.* at 6474.

⁷⁵ In its respective petitions for review, AEW argues that the Region erred by not preparing an environmental justice analysis, yet in AEW’s reply brief, AEW seems to refer instead to the inadequacy of the Region’s environmental justice analysis. Finding no document in the record entitled Environmental Justice Analysis, the Board evaluates the Region’s compliance with the Executive Order based on the Region’s brief discussion of environmental justice in the Statements of Basis and the Chukchi Response to Comments.

⁷⁶ In its Petitions for Review, AEW asserts that the Region erred by not requiring Shell to comply with the “emerging” 1-hour NO₂ NAAQS. AEWChukchi Petition at 59-61; AEWChaufort

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tion at 70-72; AEWG Reply at 38-40 (stating that “the record unequivocally demonstrates that the NAAQS as applied to these permits do not ensure that no adverse effects will result to local impacted communities” and discussing findings released in 1-hour NO₂ NAAQS Final Rule).

The Region responds that its environmental justice analysis was adequate, arguing that it “engaged in extensive outreach” with affected communities to evaluate possible effects on minority or low-income communities, aided by the recently developed North Slope Communication Protocol (“NSCP”). Region’s Resp. at 96. Pointing to the record, the Region highlights the fact that it “reviewed and documented the environmental effects of its permitting decisions” and “analyzed expected air emissions from operation of the Discoverer and the Associated Fleet under the terms and conditions of the final permits to determine whether they would cause or contribute to a NAAQS violation.” *Id.* at 97. In summarizing the analyses of the potential effects the Permits will have on air quality, the Region states that because operation of the Frontier Discoverer and the Associated Fleet will not cause or contribute to a NAAQS violation, it “means that it will not have a significant adverse impact, much less a disproportionately high and adverse human health or environmental effect, on minority or low-income populations.”⁷⁷ *Id.* at 98. The Region also cites the Response to Comments document to illustrate that the NAAQS are set at levels intended to protect the public health, Region’s

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Petition at 58-61. As to particulate matter (“PM”), AEWG argues that the Clean Air Science Advisory Committee (“CASAC”), convened by the Administrator to recommend revisions to the PM_{2.5} NAAQS eventually adopted in 2006, advised lowering the annual PM_{2.5} NAAQS in addition to lowering the 24-hour PM_{2.5} NAAQS, and that despite CASAC’s recommendations, the annual PM_{2.5} standard remained unchanged and the 24-hour PM_{2.5} standard was set at the high end of CASAC’s recommended range. AEWG Chukchi Petition at 68-69; AEWG Beaufort Petition at 68-69. Taken together, AEWG argues that relying solely on compliance with the NAAQS risks amplifying the pre-existing health disparities between Inupiat on the North Slope and populations elsewhere in the U.S. because neither the PM_{2.5} standard adopted in 2006, nor the NO₂ NAAQS applicable to the Permits at issue, are protective of the public health. AEWG Chukchi Petition at 67-69, 71; AEWG Beaufort Petition at 67-69, 72. In the subsequent discussion, the Board will address only the NO₂ NAAQS and its intersection with the Region’s environmental justice obligations. While the Board disagrees that, apart from the environmental justice analysis, the Region was required to apply the new 1-hour NO₂ standard in its PSD analysis, that issue is mooted by this Order. As a consequence of the Board’s decision to remand the Permits on other grounds, the permits the Region issues after reconsidering them in light of this Order must demonstrate compliance with all applicable standards, including both the annual and the 1-hour NO₂ NAAQS.

⁷⁷ In defending the adequacy of its environmental justice analysis, the Region’s response cites to predicted NAAQS impacts contained in the respective air quality impact analyses in the Statements of Basis for the Chukchi and Beaufort Permits. *See* Modified Chukchi Statement of Basis at 109-10; Beaufort Statement of Basis at 115-25; Region’s Resp. at 98. This information is referred to only generally in the environmental justice sections of the Statements of Basis. *See* Modified Chukchi Statement of Basis at 120 (“EPA has carefully considered and documented the environmental effects of its proposed permitting decision by analyzing potential air emissions associated with the exploratory drilling activity to be conducted under the permit.”); Beaufort Statement of Basis at 133 (same).

Resp. at 99 (citing Chukchi RTC at 138), and further argues that because the Region has “determined that no such adverse effects will result from the issuance of the permits in this case, the EAB need not address the AEWG Petitioners’ argument regarding the sufficiency of Region 10’s environmental justice analysis.” *Id.* (citing *Shell*, 13 E.A.D. at 405, and related cases *In re Knauf Fiber Glass GmbH*, 9 E.A.D. 1, 16-17 (EAB 2000) (“*Knauf II*”) and *In re Ash Grove Cement Co.*, 7 E.A.D. 387, 414 (EAB 1997)).

2. Analysis

At the outset, the Board notes that the Region engaged in significant outreach to residents of communities on the North Slope in these OCS PSD permitting processes. The record demonstrates that several public hearings were held in communities across the North Slope for both the Chukchi and Beaufort Permits. *See* Initial Chukchi Draft Permit Information Sheet at 1 (Aug. 20, 2009) (A.R. H-8) (listing locations and times for informational meetings and public hearings); Modified Chukchi Permit Information Sheet at 1 (listing location and time for public hearing); Beaufort Draft Permit Information Sheet at 1 (Feb. 17, 2010) (A.R. NN-4) (listing locations and times for informational meetings and public hearings). While the Region’s actions in this regard are laudable, the instant appeals do not contest the Region’s public participation procedures for soliciting input on environmental justice issues. *See* Oral Arg. Tr. at 79 (distinguishing between procedure and analysis of the public health threat); *see also Knauf II*, 9 E.A.D. at 16-17 (discussing substance of the environmental justice analysis prior to addressing Petitioners’ procedural objections to the quantity and quality of public participation in the permitting process). As such, the Board turns its attention to the substance of the Region’s environmental justice analysis.

A brief synopsis of the juxtaposed time lines for the issuance of both the 1-hour NO₂ NAAQS rule and the Chukchi and Beaufort Permits aids in providing context to the environmental justice claims in these appeals. On July 15, 2009, the Administrator published in the Federal Register a proposed rule to revise the primary NAAQS for oxides of nitrogen as measured by NO₂ to provide requisite protection to public health. Proposed Rule, 74 Fed. Reg. at 34404.⁷⁸ The Region proposed the modified Chukchi draft permit and accompanying statement of basis

⁷⁸ The Administrator included in the proposed rule, among other things, a review of the “substantial amount of new research * * * conducted since the last review of the NO₂ NAAQS,” Proposed Rule, 74 Fed. Reg. at 34,407, including new information from epidemiologic studies regarding the health effects of exposure to NO₂ in support of the Administrator’s proposed conclusion that the current annual NO₂ NAAQS was no longer sufficient by itself to protect the public health within an adequate margin of safety. *Id.* at 34,407-39; *see also id.* at 34,427 (“[T]he Administrator concludes that the current NO₂ standard does not provide the requisite degree of protection for public health against adverse effects associated with short-term exposures.”), 34,439 (“[T]he Administrator proposes that the current annual standard is not requisite to protect public health with an adequate margin of safety.”).

on January 8, 2010. *See* Modified Chukchi Draft Permit (Jan. 8, 2010); Modified Chukchi Statement of Basis (Jan. 8, 2010). One month later, on February 9, 2010, the Administrator published the final 1-hour NO₂ NAAQS rule in the Federal Register, setting the new 1-hour NO₂ NAAQS at 100 ppb. *See* Final Rule, 75 Fed. Reg. at 6475. Eight days later, on February 17, 2010, the public comment period on the modified Chukchi draft permit ended, and the Region proposed the Beaufort draft permit and accompanying statement of basis. *See* Modified Chukchi Permit Information Sheet at 1; Beaufort Draft Permit (Feb. 17, 2010); Beaufort Statement of Basis (Feb. 17, 2010). The public comment period for the Beaufort draft permit ended on March 22, 2010. *See* Beaufort Draft Permit Information Sheet at 1. The Region issued the Chukchi and Beaufort Permits on March 31, 2010, and April 9, 2010, respectively. The Final Rule became effective on April 12, 2010. *See* Final Rule, 75 Fed. Reg. at 6474.

The respective Statements of Basis, the Response to Comments, the Region's response, and the Region's counsel at oral argument all refer to the Chukchi and Beaufort Permits' compliance with the NAAQS effective at the time they were issued as evidence that there will be no disproportionately high and adverse human health or environmental effects on the Alaska Native population. *See* Modified Chukchi Statement of Basis at 120; Beaufort Statement of Basis at 133; Chukchi RTC at 138; Region's Resp. at 98-100;⁷⁹ Oral Arg. Tr. at 72-73, 78. Further, the Region argues in essence that because the Permits state that there will be

⁷⁹ The Region responds to AEWC's argument that the NO₂ NAAQS in effect at the time of the Chukchi and Beaufort Permits' issuance was not protective of public health by stating that the Permits ensure compliance with all NAAQS in effect at the time of issuance, and that Shell will need to demonstrate compliance with any newly promulgated NAAQS, including the new 1-hour NO₂ NAAQS, at the time Shell submits an application for an operating permit under Title V of the CAA, 42 U.S.C. §§ 7661 – 7661f. Region's Resp. at 99 n.36; *see also* Oral Arg. Tr. at 78 (explaining that the Region thought it was appropriate to look at the NAAQS in effect at time of issuance and that the Region is "very aware" that "the Title V permit for this source will require compliance with the NO₂ standards"), 81. This response seems to imply that the Region believes it can rely on compliance with the NAAQS in effect on the date the Permits were issued to demonstrate the adequacy of its environmental justice analysis because the Title V permitting process will eventually require Shell to comply with the 1-hour NO₂ NAAQS. However, the Title V permitting process is not a stop-gap measure for addressing environmental justice concerns. As the Agency pointed out in a memorandum addressing environmental justice in the permitting context:

Unlike PSD/[New Source Review] permitting, Title V generally does not impose substantive emission control requirements, but rather requires all applicable requirements to be included in a Title V operating permit. * * * Because Title V does not directly impose substantive emissions control requirements, *it is not clear whether or how EPA could take environmental justice issues into account in Title V permitting* – other than to allow public participation to serve as a motivating factor for applying closer scrutiny to a Title V permit's compliance with applicable CAA requirements.

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no adverse human health or environmental effects based on compliance with the previous NO₂ standard, the Board's inquiry must essentially end there because to look to the new 1-hour NO₂ NAAQS would inappropriately require the Region to comply with the new 1-hour NO₂ NAAQS even though it did not become effective until April 12, 2010, subsequent to the issue dates of both Permits. *See* Region's Resp. at 99.

The Region's adherence to prior Board precedent stating that compliance with the NAAQS is sufficient to demonstrate compliance with the Executive Order is misplaced. In the context of PSD permit challenges, the Region correctly states that the Board has accepted compliance with the NAAQS as sufficient to demonstrate that emissions from a proposed facility will not have disproportionately high and adverse human health or environmental effects on a minority or low-income population. *See, e.g., Knauf II*, 9 E.A.D. at 15-17; *In re Sutter Power Plant*, 8 E.A.D. 680, 692 (EAB 1999) (describing the NAAQS as the "bellwether of health protection"). However, the Region ignores the unusual context of this case, as well as the reasons that underlie the Board's precedent of looking in part to NAAQS compliance to satisfy the Executive Order.

The cases the Region cites as support for its decisions in the Chukchi and Beaufort Permits, in which the Board upheld a permit issuer's environmental justice analysis based on demonstrated compliance with the NAAQS, do not support the Region's position in this case. *See Shell*, 13 E.A.D. at 405; *Knauf II*, 9 E.A.D. at 16-17; *Ash Grove Cement*, 7 E.A.D. at 414; *see also* Region's Resp. at 99. First and foremost, in each of the cases the Region cites, no party argued that a later-in-time standard had been proposed or finalized prior to the permit issuer's decision, and thus application of the then-effective standard was not an issue raised in any of the petitions. In addition, in each of the cases cited, the permit issuer provided some analysis or record evidence to demonstrate compliance with the Executive Order that the Board could look to in evaluating Petitioners' claims regarding environmental justice. *See Shell*, 13 E.A.D. at 404-05 (citing statement in the response to comments document that compliance with the NAAQS and additional permit requirements were expected to provide verifiable means of ensuring Shell's drilling project would comply with the CAA and operate in a manner to protect the health and welfare of Native Villages); *Knauf II*, 9 E.A.D.

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Memorandum from Gary Guzy, General Counsel, U.S. EPA, to Assistant Administrators, U.S. EPA, *EPA Statutory and Regulatory Authorities Under Which Environmental Justice Issues May Be Addressed in Permitting* at 13 (Dec. 1, 2000) (emphasis added) (A.R. F-7). Thus, EPA has previously stated that aside from potential benefits accrued via public participation, the Title V permitting process is not a readily effective means of addressing substantive environmental justice concerns. The Region's reliance on Shell's eventual need to obtain a Title V operating permit and comply with the 1-hour NO₂ NAAQS in the future is inadequate to address AEWC's concern that the NO₂ NAAQS in effect at the time of the Chukchi and Beaufort Permits' issuance is not protective of the public health.

at 16-17 (upholding Region's environmental justice analysis based on inclusion in the record of two memoranda, made available for public comment when the revised permit was issued pursuant to a remand, analyzing demographics of the areas surrounding the proposed facility and assessing whether emissions from the proposed facility would have a disproportionately high and adverse impact on human health or the environment); *Ash Grove Cement*, 7 E.A.D. at 413-14 (upholding Region's finding of no disproportionately high and adverse human health or environmental effects based on the Region's documented analysis of demographic data for the areas surrounding the proposed facility, as well as the Region's decision not to conduct a quantitative risk assessment based on its conclusions that minority and/or low-income populations identified were outside the area principally impacted by Ash Grove emissions).⁸⁰ Thus, the cases the Region cites to support its argument that compliance with the then-applicable NAAQS also indicates de facto compliance with the Executive Order are all distinguishable from the Petitions at issue here. Further, the Region's arguments belie the basis upon which the Board relies on the Agency's NAAQS decisions.

⁸⁰ In its response, the Region seems to cite *Ash Grove Cement*, at least in part, to argue that because the minority or low-income populations are outside the area principally impacted by emissions, the Region could abstain from conducting additional analyses. Region's Resp. at 99-100; see also Shell's Response at 80 n.52 ("Shell's projects will be temporary and located far from any local communities, thus minimizing the impact of any short-term onshore impacts from NO_x"). In these appeals, the Statements of Basis note that the significant impact area radius for annual NO₂ was set at fifty kilometers from the stationary source because model predictions had not fallen below the significant impact level at this distance. Modified Chukchi Statement of Basis at 90 (describing determination of significant impact area radii and citing EPA guidance at 40 C.F.R. part 51, Appendix W, for fifty kilometer radius limit); Beaufort Statement of Basis at 98 (same). In its reply to the Region, AEWC points out that the Inupiat use Camden Bay and other areas of the Beaufort and Chukchi Seas for subsistence activities, including fishing and hunting. AEWC Reply at 40 n.17. AEWC further notes that these activities take the Inupiat far from their local villages and that community members spend "extended periods of time closer to the emissions sources than [sic] suggested by EPA and Shell." *Id.* This example highlights a potential environmental justice consideration that may be unique to the OCS PSD permitting context that, as evidenced by the Board's decision in *Ash Grove Cement*, would otherwise not likely be of concern in a traditional PSD permit proceeding.

The Board also rejects the Region's argument that the Board should uphold the application of the then-effective annual NO₂ standard to the environmental justice analysis in the interest of finality. See, e.g., *In re Russell City Energy Ctr., LLC*, 15 E.A.D. 1, 82 (EAB 2010) (citing *U.S. Pipe & Foundry Co.*, NPDES Appeal No. 75-4 (Adm'r 1975), *aff'd in relevant part, rev'd in part sub nom. Alabama ex rel Baxley v. EPA*, 557 F.2d 1101, 1108 (5th Cir. 1977), for proposition that the appropriate point for determining what standards and guidelines apply is the issuance date of a permit); see also Oral Arg. Tr. at 72-75 (discussing the need for finality in, and timely completion of, the permitting process). While the Board has upheld permit decisions based on the standards in effect at the time of permit issuance, it has also determined that it has the discretion to remand permit conditions for reconsideration in light of legal requirements that change before the permit becomes final agency action. See *Russell City*, 15 E.A.D. at 83-84 (citing *In re Dominion Energy Brayton Point, LLC*, 12 E.A.D. 490, 618 (EAB 2006); *In re J & L Specialty Products Corp.*, 5 E.A.D. 31, 66 (EAB 1994)); accord *In re GSX Servs. of S. C., Inc.*, 4 E.A.D. 451, 465 & n.17 (EAB 1992).

The Agency sets the NAAQS⁸¹ using technical and scientific expertise, ensuring that the primary NAAQS protects the public health with an adequate margin of safety. *See, e.g.*, Final Rule, 75 Fed. Reg. at 6478 (“The studies assessed in the ISA and REA, and the integration of the scientific evidence presented in them, have undergone extensive critical review by EPA, CASAC, and the public. The rigor of the review makes these studies, and their integrative assessment, the most reliable source of scientific information on which to base decisions on the NAAQS, decisions that all parties recognize as of great import.”); *id.* at 6483 (“The Administrator’s final decisions draw upon scientific information and analyses related to health effects, population exposures, and risks; judgments about the appropriate response to the range of uncertainties that are inherent in scientific evidence and analyses; and comments received from CASAC and the public.”).

The Board relies on and defers to the Agency’s cumulative expertise when upholding a permit issuer’s environmental justice analysis based on a proposed facility’s compliance with the relevant NAAQS in a PSD appeal. In the context of an environmental justice analysis, compliance with the NAAQS is emblematic of achieving a level of public health protection that, based on the level of protection afforded by a primary NAAQS, demonstrates that minority or low-income populations will not experience disproportionately high and adverse human health or environmental effects due to exposure to relevant criteria pollutants.

The Board’s concerns in this case lie with the Region’s stated reliance on its demonstration of compliance with the NAAQS in effect at the time of the Permits’ issuance despite the fact that the Administrator had finalized the new 1-hour NO₂ NAAQS prior to the issuance of the Permits, and thus the Administrator had already concluded, prior to the issuance of the Permits, that the annual NO₂ NAAQS alone did not provide requisite protection of the public health. *See* Oral Arg. Tr. at 72; Final Rule, 75 Fed. Reg. at 6475 (“EPA is making revisions to the primary NO₂ NAAQS in order to provide requisite protection of public health as appropriate under section 109 of the Clean Air Act[.]”); *see also id.* at 6484 (“[T]he Administrator concluded in the proposal that the current NO₂ primary NAAQS is not requisite to protect public health with an adequate margin of safety against adverse respiratory effects associated with short-term exposures.”). Despite the Administrator’s unequivocal determination, made prior to the issuance of either final Permit, that the annual NO₂ NAAQS alone was not requisite to protect

⁸¹ Section 109(d)(1) of the CAA, 42 U.S.C. § 7409(d)(1), requires the Administrator to periodically review the air quality criteria published under section 108, 42 U.S.C. § 7408, as well as the NAAQS, and to revise the criteria and standards as appropriate. Section 109(d)(2) of the CAA, 42 U.S.C. § 7409(d)(2), requires the Administrator to appoint an independent scientific review committee to conduct such reviews. The CASAC fulfills this role, overseeing and independently reviewing drafts of the various components of the NAAQS review process, including the integrated science assessment (“ISA”) and the risk and exposure assessment (“REA”). *See, e.g.*, Final Rule, 75 Fed. Reg. at 6476-77 (describing the most recent NO₂ NAAQS review process).

the public health with an adequate margin of safety, the Region nonetheless solely relies on compliance with the then-applicable annual NO₂ NAAQS to demonstrate that Alaska Natives living in North Slope communities will not experience disproportionately high and adverse human health or environmental effects.

For the reasons set forth below, the Board remands the Chukchi and Beaufort Permits for the Region to reconsider the adequacy of its environmental justice analysis. The record reflects the Region's singular focus on demonstrating compliance with a NAAQS standard that the Administrator had deemed no longer protective of public health, and the Region offers no other information or evidence in the record that it considered anything beyond compliance with the NAAQS in preparing the environmental justice analysis that appears in the Chukchi Response to Comments. Compliance with a NAAQS standard that the Agency has already deemed inadequate to protect the public health cannot by itself satisfy a permit issuer's responsibility to comply with the Executive Order.

The Region does not address the 1-hour NO₂ NAAQS Final Rule, which was published in the Federal Register on February 9, 2010, in the Chukchi Response to Comments.⁸² The Region's environmental justice analysis states in relevant part:

EPA has determined that this permitting action will not have disproportionately high and adverse human health or environmental effects on minority or low-income populations because it does not affect the level of protection to human health or the environment. * * * [T]he final permit is designed to meet the requirements of the CAA. The emission limits in the permit are expected to curb air pollution sufficiently so that air quality in the region continues to attain the applicable NAAQS. *The level of the NAAQS is set low enough to protect public health, including sensitive individuals, with an adequate margin of safety. Numerous health studies and comments from experts and the public are used in determining the NAAQS*

⁸² In the Beaufort Response to Comments, the Region refers readers to the Chukchi Response to Comments for responses pertaining to environmental justice matters. Beaufort RTC at 63. This exemplifies the Region's decision not to address the Administrator's findings set forth in the Final Rule published on February 9, 2010, which precedes both the February 17, 2010, end of the public comment period on the modified Chukchi draft permit, and the February 17, 2010, issuance of the Beaufort draft permit and subsequent public comment period, which ended on March 22, 2010. See Modified Chukchi Permit Information Sheet at 1 (setting forth relevant dates for draft permit issuance and public comment period); Beaufort Draft Permit Information Sheet at 1 (same). No new information or analysis based on the Final Rule was added to the Region's Chukchi Response to Comments document, issued on March 31, 2010.

level that will be protective of public health. After the level of a NAAQS is set, compliance with the NAAQS is used to assess health impacts. A modeled impact less than the NAAQS indicates that public health is protected, at least for the particular pollutant addressed by the NAAQS. Objections to the NAAQS themselves must be addressed during the NAAQS review process, which occurs every few years.

Chukchi RTC at 138 (citation omitted) (emphases added).⁸³ The italicized portions of the Region's analysis are apparently intended to support the Region's decision to rely on attainment of the "applicable NAAQS," in other words the then-current annual NO₂ standard, and to demonstrate that the population of the North Slope will not experience disproportionately high and adverse human health or environmental effects due to exposure to unhealthy levels of NO₂. However, these statements in support of the Region's reliance on the NO₂ NAAQS effective prior to April 12, 2010, are directly contravened by the preamble to the final rule supplementing the annual NO₂ standard with the 1-hour NO₂ standard.

In multiple parts of the preamble, the Administrator makes clear that since the last review of the NO₂ NAAQS in 1996, substantial new evidence and insight into the relationship between NO₂ exposure and health effects has developed. For example, the Final Rule states that "epidemiologic evidence has grown substantially" with the addition of several different types of studies and that, as a result, "[t]his body of evidence focuses the current review on NO₂-related respiratory effects at lower ambient and exposure concentrations than considered in the previous review." Final Rule, 75 Fed.Reg. at 6480; *see also id.* at 6488-89 (discussing new epidemiologic evidence). With respect to the adequacy of the current standard, presented as part of the rationale for the final decision to revise the primary NO₂ NAAQS, the Administrator concludes that "[g]iven the * * * consideration of the evidence, particularly the epidemiologic studies reporting NO₂-associated health effects in locations that meet the current standard, * * * the scientific evidence calls into question the adequacy of the current standard to protect public health." *Id.* at 6489 (noting that annual average NO₂ concentrations were below the level of the then-current annual NO₂ NAAQS in many of the locations where positive, often statistically significant associations with respiratory morbidity endpoints were reported). In summarizing the final decisions with respect to revis-

⁸³ Of the scant one-and-one-half pages the Region devotes to environmental justice in the Chukchi Response to Comments, a single paragraph, consisting of the language quoted above, represents the Region's entire substantive analysis of environmental justice. The remaining paragraphs devoted to environmental justice briefly summarize the comments received and the Executive Order, and discuss the Region's efforts to satisfy its regulatory obligations with respect to public participation. Chukchi RTC at 138-39.

ing the NO₂ primary NAAQS and explaining the Administrator's rationale, the preamble to the Final Rule states:

In addition to setting a new 1-hour standard, the Administrator retains the current annual standard with a level of 53 ppb. The new 1-hour standard, in combination with the annual standard, will provide protection for susceptible groups against adverse respiratory health effects associated with short-term exposures to NO₂ and effects potentially associated with long-term exposures to NO₂.

Id. at 6502.⁸⁴

Nowhere in the record before the Board does the Region acknowledge or provide a rationale for why it reached a determination about NO₂ health effects that is inconsistent with the Administrator's findings. The scientific evidence informing the development of the supplemental 1-hour NO₂ standard was available to the public at the time the 1-hour NO₂ standard was proposed on July 15, 2009, more than eight months prior to the issuance of either permit.⁸⁵ See Proposed Rule, 74 Fed. Reg. at 34,405 (noting that “[a] number of the documents that are

⁸⁴ In its response to the petitions for review, Shell supports the Region's demonstration that it complied with the NAAQS applicable when the Permits were issued as sufficient evidence of compliance with the Executive Order. Response to Petitions for Review at 80 n.52 (June 7, 2010) (“Shell's Response”). Specifically, Shell argues that the new 1-hour NO₂ NAAQS was “specifically designed to protect communities near highways, where repeated exposures to short-term high concentrations of NO₂ could raise concerns.” *Id.* While the concern over short-term exposures played no small role in the Administrator's decision to revise the NO₂ NAAQS, Shell's argument is unsupported in the record given the ample evidence cited in the Final Rule that the Administrator, in making a public health policy judgment, determined that NO₂ exposures, both short-term and long-term, represent a threat to the public health that the annual and 1-hour NO₂ standards are intended to mitigate. See, e.g., Final Rule, 75 Fed. Reg. at 6489-90 (citing need to revise the current standard “to provide increased public health protection, especially for at-risk groups, from NO₂-related health effects associated with short-term, and potential long-term, exposures”), 6502 (same).

⁸⁵ See *In re St. Lawrence Cnty. Solid Waste Disposal Auth.*, PSD Appeal No. 90-9, at 2-3 (Adm'r July 27, 1990). In *St. Lawrence*, the New York State Department of Environmental Compliance (“DEC”) issued a final PSD permit authorizing construction of a resource recovery facility that contained emission levels for NO_x, SO₂, and CO that were less stringent than those prescribed for those same pollutants the previous year in proposed new source performance standards (“NSPS”) for municipal waste incinerators. *Id.* at 1-2. Based on the fact that the proposed NSPS standards were considered “currently achievable by municipal waste combustors with existing, available technology,” the Administrator concluded that those limitations “should serve as the starting point” for making BACT determinations. *Id.* at 2. More importantly, the Administrator went on to state that the DEC “did not give appropriate or adequate consideration to the determinations made in the proposed NSPS,” since DEC had more than six months after the NSPS were published in the Federal Register to consider them, a time frame the Administrator deemed “sufficient [] to assess the significance of the NSPS in relation to the facility's BACT determination.” *Id.* at 3.

relevant to this rulemaking are available through EPA's Office of Air Quality Planning and Standards (OAQPS) Technology Transfer Network (TTN) Web site at http://www.epa.gov/ttn/naaqs/standards/nox/s_nox_index.html," including the ISA and the REA);⁸⁶ *see also id.* at 34,404-05 (stating that the ISA, REA, and other related documents are available for inspection and copying in the EPA electronic docket, available at www.regulations.gov, Docket ID No. EPA-HQ-OAR-2006-0922). Yet the Region relied on compliance with the outdated science, embodied in the then-current NO₂ NAAQS, at the time the Permits were finalized to support its determination that the Alaska Native population would not experience disproportionately high and adverse human health or environmental effects and conducted no further environmental justice analysis.⁸⁷ The

⁸⁶ The final ISA and REA were released in July and November of 2008, respectively. *See* Review of the Primary National Ambient Air Quality Standard for Nitrogen Dioxide: Status February 12, 2009 (Feb. 2009) ("February 2009 Status Report"), available at <http://www.epa.gov/ttn/naaqs/standards/nox/data/20090210NO2NAAQSstatus.pdf>. The February 2009 Status Report elaborated that "EPA has issued" the ISA, which evaluates the scientific literature on the potential adverse human health effects resulting from exposures to oxides of nitrogen, specifically NO₂, and the REA, which outlines alternatives for the primary standard based on the latest science, which together would "provide the Administrator scientific information and options to consider" in making decisions about the NO₂ NAAQS proposal. *Id.* The February 2009 Status Report also noted that consistent with the terms of a judicial consent decree "EPA must propose whether to revise the primary standard by June 26, 2009, and issue a final rule by January 22, 2010." *Id.*; *see also* Proposed Rule, 74 Fed. Reg. at 34,404 (stating that the Administrator "will sign a notice of final rulemaking by January 22, 2010").

⁸⁷ The Board has previously stated that "[a] permit issuer must 'apply the [] statute and implementing regulations in effect at the time the final permit decision is made.'" *Russell City*, 15 E.A.D. at 81 n.98 (quoting *In re Phelps Dodge Corp.*, 10 E.A.D. 460, 478 n.10 (EAB 2002), and noting that the petitioner in *Russell City* appropriately refrained from asserting that the permit issuer clearly erred by issuing a final permit on February 3, 2010, under the pre-2010 NO₂ NAAQS standard). In contrast, and as explained *supra*, note 71, the Board has encouraged permit issuers to examine any "superficially plausible" claim raised during the public comment period that a minority or low-income population may be disproportionately affected by a particular facility. *See, e.g., EcoEléctrica*, 7 E.A.D. at 67-69 & n.17 (conducting environmental justice analysis in response to comment that towns close to facility were "poor," which included synthesis of per capita income data from the U.S. Census, source location data from both the Toxics Release Inventory and from the region's own Permit Compliance System database, and the plotting of that data onto maps along with maximum emission impact data, meteorological data, and the location of the proposed facility); *see also In re Beeland Grp., LLC*, 14 E.A.D. 189, 208-09 (EAB 2008) (noting region's response to petitioner's comment that proposed underground well was in a "poor rural community," which included an Environmental Justice Screening Evaluation, appended to the Response to Comments document, that relied on sociodemographic data collected for the well area and considered populations within .5-mile, 1-mile, and 2-mile radii of the well, and concluded that the economic status of the population surrounding the proposed well was comparable to that of the county and state populations); *In re Knauf Fiber Glass, GmbH*, 8 E.A.D. 121, 174-75 (EAB 1999) ("*Knauf I*") (remanding permit after region failed to place any details of the environmental justice analysis in the record despite a public hearing participant's assertion that proposed facility location was in a low-income area). The Board's precedent makes clear that when a commenter raises the issue of environmental justice impacts, the permit issuer should undertake a distinct environmental justice analysis. While that analysis may, in part, rely on demonstrated compliance with applicable statutes and regulations, including compliance with the NAAQS standards in

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Board cannot condone the Region's failure to account for the updated scientific and technical reviews that accompanied the publication of the proposed and final 1-hour NO₂ NAAQS when the Region considered environmental justice issues pursuant to the Executive Order. Given these facts, the Board concludes that the Region clearly erred in relying on compliance with the NO₂ NAAQS effective when the Chukchi and Beaufort Permits were issued to demonstrate that its environmental justice analysis is adequate. The Region's sole reliance on attainment of the NO₂ NAAQS in effect prior to April 12, 2010, to demonstrate that the Permits sufficiently complied with the Executive Order is clearly erroneous in light of the fact that the Administrator had already both proposed, and later finalized, a new, more stringent standard prior to the issuance of the Chukchi and Beaufort Permits in which the Administrator determined that the body of evidence supporting the existing annual NO₂ NAAQS was outdated and that the newer data indicated that the standard was no longer adequate to protect public health.

VII. ORDER

In summary, the Board concludes that the Region clearly erred in determining when the Frontier Discoverer becomes an OCS source. The Region also clearly erred in the limited scope of its analysis of the impact of NO₂ emissions on Alaska Native "environmental justice" communities located in the affected area. The Board concludes that the Region did not include in the administrative record an adequate explanation of its determination of when Frontier Discoverer becomes and ceases to be an OCS source in light of the statutory terms and the criteria set forth in 40 C.F.R. § 55.2 and remands the Chukchi and Beaufort Permits to the Region.

With respect to the environmental justice analysis, the Board concludes that the Region clearly erred when it relied solely on demonstrated compliance with the then-existing annual NO₂ NAAQS as sufficient to find that the Alaska Native population would not experience disproportionately high and adverse human health or environmental effects from the permitted activity. The Region's reliance solely on compliance with the annual NO₂ standard when it issued the Chukchi and Beaufort Permits on March 31 and April 9, 2010, was clearly erroneous given that the Administrator proposed a rule, published in the Federal Register on July 15, 2009, which made available updated scientific evidence supporting the Administrator's proposal to supplement the annual NO₂ NAAQS with a 1-hour NO₂ NAAQS. The Administrator concluded that the annual NO₂ NAAQS alone

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effect at the time of permit issuance that are indicative of adequate protection of public health, the permit issuer must endeavor to include and analyze in its environmental justice analysis available data that is germane to the environmental justice issue raised during the comment period.

did not provide requisite protection of public health and established a supplemental 1-hour NO₂ NAAQS in a final rule published in the Federal Register on February 9, 2010, several weeks prior to the Region issuing the Chukchi and Beaufort Permits. Having found clear error in these aspects of the Region's decisions, the Board remands both the Chukchi and Beaufort Permits to the Region.

The Board does not reach the merits of issues CBD and AEWG raised concerning application of BACT to control CO₂ emissions, and the Board does not reach a number of additional issues AEWG raised concerning PM_{2.5} background ambient air quality data and secondary PM_{2.5} modeling, compliance with the newly issued 1-hour NO₂ NAAQS, and inclusion of spill cleanup and certain other activities in the potential to emit analysis. The administrative record pertaining to each of these issues will likely be significantly altered by the remand of the Permits to the Region to address the clear error discussed in the Board's analysis. Therefore, the Chukchi and Beaufort Permits are remanded in their entirety. The Region shall apply all applicable standards in effect at the time of issuance of the new permits on remand.

After the Region completes its analysis on remand and issues its final permit decisions pursuant to 40 C.F.R. § 124.15(a), anyone dissatisfied with the Region's decisions must file a petition seeking the Board's review in order to exhaust administrative remedies pursuant to 40 C.F.R. § 124.19(f)(1)(iii). Any such petitions shall be limited to issues addressed by the Region on remand and to issues otherwise raised in the petitions before the Board in this proceeding but not addressed by the Region on remand. No new issues may be raised that could have been raised, but were not raised, in the present appeals.

So ordered.