BEFORE THE ENVIRONMENTAL APPEALS BOARD
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C.

In re:	)	
Shell Gulf of Mexico Inc.	)	OCS Appeal Nos. 10-01 through
Shell Offshore Inc.	)	10-03 & 10-12
Frontier Discoverer Drilling Unit	)	
OCS Permit No. R10OCS/PSD-AK-09-01	)	
OCS Permit No. R10OCS/PSD-AK-2010-01	)	

RESPONSE TO PETITIONS FOR REVIEW

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INTRODUCTION

For the third time in four years, the Environmental Appeals Board ("EAB" or the "Board") has been petitioned to review challenges to air permits issued by Region 10 of the U.S. Environmental Protection Agency ("EPA") for exploratory drilling on federal oil and gas leases in the Outer Continental Shelf ("OCS") off the North Slope of Alaska. In this consolidated proceeding, Petitioners, Center for Biological Diversity ("CBD") (OCS Appeal No. 10-01), Earthjustice[1] (OCS Appeal No. 10-02), and Alaska Eskimo Whaling Commission and Inupiat Community of the Artic Slope ("AEWC") (OCS Appeal Nos. 10-03 and 10-12) (Earthjustice, CBD, and AEWC are referred to collectively as "Petitioners"), challenge Region 10's decisions to issue major source Prevention of Significant Deterioration ("PSD") permits to Shell Gulf of Mexico Inc. ("SGOMI") for exploratory operations on leases in the Chukchi Sea issued on March 31, 2010 (R10OCS/PSD-AK-2010-01, "Chukchi Permit"), and to Shell Offshore Inc. ("SOI") for exploratory operations on leases in the Beaufort Sea issued on April 9, 2010 (R10OCS/PSD-AK-09-10, "Beaufort Permit").[2]

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[1] Earthjustice represents Natural Resources Defense Council, Native Village of Point Hope, Resisting Environmental Destruction on Indigenous Lands (REDOIL), Alaska Wilderness League, Audubon Alaska, Center for Biological Diversity, Northern Alaska Environmental Center, Ocean Conservancy, Oceana, Pacific Environment, and Sierra Club.

[2] Both SGOMI and SOI indirectly are wholly-owned subsidiaries of Shell Oil Company. Declaration of Peter E. Slaiby, April 2, 2010 at ¶ 2 ("Slaiby Decl.") (Attachment A). When referring to SGOMI and SOI collectively, this brief will refer to them as "Shell."

For the Board's convenience, Shell is attaching Mr. Slaiby's Declaration, which summarizes Shell's permitting history. Mr. Slaiby's declaration was previously provided to the Board as an attachment to a letter from Shell's counsel, Crowell & Moring LLP, to Ms. Eurika Durr dated April 2, 2010, and as an attachment to Shell's Urgent Request for Leave to Participate and Motion for Expedited and Combined Review, dated May 5, 2010.

Shell is also attaching the Supplemental Declaration of Peter E. Slaiby, April 14, 2010 ("Supp. Slaiby Decl.") (Attachment B) which provides additional information relevant to the permits and was previously submitted to the Board in a letter from Shell's counsel on April 14, 2010, and was also attached to the Shell's Urgent Request for Leave to Participate and Motion for Expedited and Combined Review.

These permits are the first PSD permits issued by EPA authorizing activities in the OCS beyond 25 miles of a state's seaward boundary. As such, these permits have been subjected to especially rigorous scrutiny by Region 10 to ensure Shell's operations are properly permitted and will comply with all applicable Clean Air Act ("CAA" or the "Act") requirements. For example, Region 10 has required highly conservative air quality impact modeling, using assumptions about meteorology and source configuration that are extreme in their stringency. The Region made numerous requests to Shell for more information, provided comments and revisions to Shell's modeling, provided multiple and lengthy public comment periods, and, in the case of the lead Chukchi Permit, issued an entirely re-scrutinized and re-proposed draft permit, addressing issues raised by Petitioners' and others comments on the original draft permit and in many respects tightening permit terms and conditions.[3] Thus, these permits ensure that even under highly conservative "worst case" assumptions, Shell's projects will comply with the applicable National Ambient Air Quality Standards ("NAAQS") and PSD increments. In response to the extensive comments submitted by the public on both permits, Region 10 prepared well-reasoned and thoughtful Responses to Comments, explaining in detail its positions on the issues raised by commenters.

Petitioners now challenge Region 10's decisions to issue these permits, claiming error on issues related to Region 10's identification of the applicable legal requirements, interpretation of

[3] Changes that made the re-proposed Chukchi permit more stringent included "substantial reductions of particulate matter emissions (from 184 tons per year (tpy) to 52 tpy for fine particulate matter) and sulfur dioxide (from 181 tpy to less than 2 tpy) as compared to the August 2009 proposed permit;" a requirement for "the use ultra-low sulfur diesel fuel in all vessels in the associated fleet when such a vessel is within 25 miles of the Discoverer and the Discoverer is operating as an OCS source . . . .[decreasing] emissions of SO2 from 181 tpy to less than 3 tpy;" a requirement for "oxidation catalysts on the compressor diesel engines on the Discoverer (all new Tier 3 engines), which reduces emissions of particulate matter, VOC, and CO;" and "tighter restrictions on the waste throughput limit for the incinerator on the Discoverer, which are tied to the use of the Discoverer's HPU engines, resulting in an overall reduction of emissions from the incinerator and the HPU engines as compared to the August 2009 proposed permit." Chukchi Statement of Basis at 4-5.

applicable law, and technical expertise. All of these arguments either constitute impermissible and untimely collateral challenges to EPA rulemakings or simply reflect Petitioners' disagreement with technical judgments that Region 10 reasonably made and fully explained. Putting aside the significant procedural flaws in several of these arguments, Petitioners' arguments are unpersuasive and fail to show either clear error or an exercise of discretion calling for Board review in the Region's decisions to issue the Beaufort and Chukchi Permits.

As this Response demonstrates, Region 10 carefully considered the issues raised by Petitioners and has provided well-reasoned explanations for its decisions. Region 10's permitting decisions properly apply the applicable law and are supported by a substantial factual record. The Board should therefore deny the Petitions.

FACTUAL AND PROCEDURAL BACKGROUND

The permits at issue in this case represent Shell's third permitting effort for exploration activities in the OCS off of the North Slope of Alaska. SOI and SGOMI successfully bid for OCS leases in the Beaufort and Chukchi Seas in lease sales held between 2005 and 2008 and paid the United States a total of $2.2 billion for the right to explore these leases. Slaiby Decl. at ¶ 10. Shell has conducted preliminary exploratory activities, including seismic exploration, on the leases. The next step in Shell's exploration program is to drill exploratory wells. Over the past four years, Shell has engaged with numerous federal and state agencies, seeking to obtain the requisite approvals to begin an exploratory drilling program. *Id.* at ¶¶ 8-10, 16. Originally, Shell focused on an exploration program in the Beaufort Sea, but in 2009 it redirected its efforts to seek permits for activities in both the Beaufort Sea and the Chukchi Sea. *Id.* at ¶ 8-9.

Prior Permits. SOI began its efforts to obtain an air permit for exploratory operations in the Beaufort Sea in 2006. At that time, Region 10 advised SOI to seek minor source permits for

its proposed operations (at the time including two drill ships which were permitted separately, the *Frontier Discoverer*, the drill ship Shell will use in its current exploration activities, and the *Kulluk*). Those permits were challenged and upheld by this Board on all but one issue – the Region's definition of stationary source for purposes of determining whether the project should be permitted as a major or minor source. *In re Shell Offshore, Inc., Kulluk Drilling Unit and Frontier Discoverer Drilling Unit*, OCS Appeal Nos. 07-01 & 07-02, slip op. at 5, 69 (EAB, Sept. 14, 2007) ("*Kulluk I*"). SOI and EPA addressed that issue on remand, and Region 10 issued a revised permit.[4] Project opponents once again challenged the revised permit, but before proceedings on that permit could be completed, SOI refocused its exploration planning and withdrew the permit. Slaiby Decl. at ¶ 9.

In 2009 SOI and SGOMI began parallel paths to seek permits for exploratory activities on their respective leases (SOI in Camden Bay-Beaufort Sea, and SGOMI in the Chukchi Sea). *See* Slaiby Decl. at ¶ 10-11; Supp. Slaiby Decl. at ¶ 4-5. SOI and SGOMI submitted one-year exploration plans to the Minerals Management Service ("MMS"), identifying a total of seven potential well sites (five sites in the Chukchi Sea and two in the Beaufort Sea).[5] The exploration plans allow SOI and SGOMI to drill on available sites in either sea. MMS approved the exploration plans on October 16, 2009 (Camden Bay in the Beaufort Sea) and December 7, 2009 (Chukchi Sea). The Ninth Circuit granted expedited review to appeals challenging MMS's

[4] On remand Shell chose to move forward with permitting for only one vessel, the *Kulluk*.

[5] MMS maintains an online public reading room with key documents relevant to Shell's exploration plans. Those reading rooms include Shell's Exploration Plans, key amendments, correspondence with the agency, and MMS's Environmental Assessments and Findings of No Significant Impact. *See* http://www.mms.gov/alaska/ref/ProjectHistory/Shell_BF/BF.HTM (Beaufort Sea-Camden Bay); http://www.mms.gov/alaska/ref/ProjectHistory/2009_Chukchi_Shell/Chukchi_2009.HTM (Chukchi Sea).

approvals and issued a decision on May 13, 2010, upholding MMS's approvals.[6] *Native Village of Point Hope v. Salazar*, Nos. 09-73942 *et al*. (9th Cir. May 13, 2010).

Application for Current Permits. In support of the exploration plans in the Beaufort and Chukchi Seas, Shell began a new air permitting effort. This time, Region 10 advised Shell to seek PSD permits for exploratory activities as major sources, which Shell did. Slaiby Decl. at ¶ 9. The PSD requirements for OCS sources are divided into two geographical zones. Sources within 25 miles of a state's seaward boundary are subject to the same requirements as would be imposed on stationary sources in the Corresponding Onshore Area. 42 U.S.C. § 7627; 40 C.F.R. § 55.3(b).[7] Sources beyond 25 miles of a state's seaward boundary are subject to the New Source Performance Standards in 40 C.F.R. Part 60; to the PSD program in 40 C.F.R. § 52.21, if applicable; to standards promulgated under Section 112 of the Clean Air Act, if applicable; and to the operating permit program under Title V, if applicable. *See* 40 C.F.R. §§ 55.13(a), (c), (d), (e), and (f)(2); Statement of Basis For Proposed Outer Continental Shelf Prevention of Deterioration Permit No. R10OCS/PSD-AK-09-01 ("Chukchi Statement of Basis" or "Chukchi SOB") at 16.

SGOMI's leases in the Chukchi Sea are exclusively beyond 25 miles of Alaska's seaward boundary. Chukchi SOB at 3-4. SOI's leases in the Beaufort Sea straddle the boundary – some are beyond 25 miles and some are within 25 miles of Alaska's seaward boundary. Statement of Basis For Proposed Outer Continental Shelf Prevention of Deterioration Permit No.

[6] Shell has diligently engaged with all agencies from which approvals are required for the 2010 drilling season. On May 27, 2010, the President announced a suspension of further MMS approvals for Shell's planned exploration drilling in both seas, which will preclude further activities in 2010. As a result it is unclear when these additional approvals from MMS and other federal agencies will be issued.

[7] EPA recently updated its OCS regulations at 40 C.F.R. § 55.14, identifying the Corresponding Onshore Area requirements for Alaska by incorporating applicable elements of the Alaska Administrative Code. *See* 75 Fed. Reg. 3387 (Jan. 21, 2010).

R10OCS/PSD-AK-2010-01 ("Beaufort Statement of Basis" or "Beaufort SOB") at 10. However, because Alaska has incorporated by reference EPA's PSD permitting program into the Corresponding Onshore Area requirements, the differences between the two permitting regimes applied in the Beaufort Permit are minor, and the PSD requirements are substantially identical in Alaska and federal regulations. *See* 18 AAC § 50.306(b) (noting that the federal PSD program was incorporated by reference into the Alaska Administrative Code at 18 AAC § 50.040) with certain changes). Thus, regardless of whether the *Discoverer* is permitted as an OCS source for work within 25 miles of the state's seaward boundary (Beaufort) or beyond that distance (Chukchi), the PSD provisions in 40 C.F.R. § 52.21 will generally apply.

Because they are permitted as major sources, Shell's operations are subject to the stationary source requirements in 40 C.F.R. § 52.21, including control technology review, source impacts analysis, ambient air quality analysis, and additional impact analyses.[8] At several key points in its PSD reviews, Region 10 required the use of conservative data and assumptions. First, without background ambient air quality data from offshore locations, EPA used data from onshore monitors, which reflect pollutant sources that do not exist offshore. Second, due to the lack of offshore meteorological data, Region 10 required Shell to use a highly conservative screening model that assumes worst-case conditions. Finally, even though public access to the drill sites is limited at best, Region 10 required Shell to demonstrate compliance with ambient air quality standards and PSD increment immediately adjacent to the *Frontier Discoverer*, *i.e.*, at the vessel rail line. These conservative assumptions and data resulted in extremely stringent permit conditions.

[8] Region 10 has issued permits for the *Discoverer* as a "portable" source under 40 C.F.R. § 52.21(i). Under that provision the *Discoverer* must be permitted initially as if it were a permanent stationary source.

Background Ambient Air Quality Data. The Arctic, marine location of Shell's operations presents special challenges in gathering appropriate data for the required air quality analyses. Most notably Shell cannot obtain meteorological data and background ambient concentration data at its proposed drill sites until a permanent structure is erected (ice conditions make annual data collection by buoy impractical). Response to Comments For Proposed Outer Continental Shelf Prevention of Deterioration Permit No. R10OCS/PSD-AK-09-01 ("Chukchi Response to Comments" or "Chukchi RTC") at 78. Nevertheless, Shell has taken appropriate steps to provide the most accurate possible data for modeling the air impacts of its operations. Through a contractor Shell has undertaken onshore monitoring of ambient air concentrations at stations located on Alaska's North Slope at Wainwright, Deadhorse, and Badami. Region 10 agrees that the data these stations have collected provide conservative measures of the ambient air quality at the drill sites in the Chukchi and Beaufort Seas because the stations pick up local, onshore sources of air pollution that do not exist at the much more remote offshore drill sites. Chukchi RTC at 99. Thus, the background concentrations used in the modeling of ambient air impacts at the drill sites are highly conservative because they would include levels of air pollution that are higher than actually exist at the sites. Shell has also reviewed available data from other onshore monitoring stations and incorporated that information as appropriate into its modeling.

Meteorological Data. In conducting its modeling of air impacts, Shell used the ISC3-PRIME screening model. This was necessary because representative marine meteorological data do not exist and cannot be acquired until a permanent structure is erected in the Arctic Sea. *See* Chukchi RTC at 78, 115-117, 119; Response to Comments For Proposed Outer Continental Shelf Prevention of Deterioration Permit No. R10OCS/PSD-AK-2010-01 at 44-45 ("Beaufort Response to Comments" or "Beaufort RTC"). This model yielded highly conservative results

because its predictions of ambient pollutant concentrations were based on assumed worst-case meteorological conditions and worst-case cumulative impacts of emissions from the *Discoverer* and emissions from its associated vessels. The permitting impact of using the ISC3-PRIME model was to impose more severe constraints on emissions from Shell's operations than would have been necessary with models that Shell could have used had meteorological data been available. Chukchi SOB at 97; Chukchi RTC at 115-116 ("EPA believes the screening model predictions supporting this permit action are conservative and are highly likely to over predict rather than under predict the maximum concentration impact. EPA believes this approach to the modeling is appropriate, where, as in this case, site-specific meteorology and more location-specific monitoring data is not available."); Beaufort RTC at 45 (incorporating same response from Chukchi RTC).

Point of Compliance. Finally, Region 10 required Shell to model air quality impacts immediately adjacent to the *Discoverer* on the theory that "ambient air" begins at the edge of the drill ship, even though the *Discoverer* will operate in remote locations in the Arctic and that, when the drill ship is anchored and ready to drill, its anchor array will extend for a minimum of approximately 1,000 feet in every direction, and possibly much farther, effectively precluding access by the public to the area immediately adjacent to the drill ship. Chukchi SOB at 19.[9] This highly conservative "ambient air" assumption, which precludes consideration of dispersion of emissions from sources on board the *Discoverer* and instead hypothetically concentrates them at a point immediately adjacent to the *Discoverer*, resulted in further severe constraints on Shell's allowable emissions, making both the Chukchi and the Beaufort Permits significantly

[9] Additionally, the Coast Guard has established a temporary safety exclusion zone around the *Discoverer* barring public access while it is on drill sites during the 2010 season. 33 C.F.R. § 147.T001; 75 Fed. Reg. 18404 (Apr. 12, 2010). Shell intends to seek such an exclusion zone for each season it will operate.

more conservative than the typical PSD permit for industrial facilities where air quality impacts are evaluated "at the fence line" some distance from the emissions source.

Chukchi Permit. SGOMI submitted a PSD application for operations in the Chukchi Sea, the lead permit of the two, on December 11, 2008. Region 10 required extensive follow-up information before it determined on July 31, 2009 that SGOMI had submitted a complete application. Region 10 issued its first proposed draft permit and Statement of Basis for public comment on August 20, 2009, with a public comment period originally scheduled to end October 5. At Petitioners' request, Region 10 extended the public comment period through October 20, 2009. Ultimately, Region 10 concluded that the issues raised during the public comment necessitated issuing a re-proposed permit – improving upon the proposed permit and Statement of Basis it had previously issued. Region 10 issued its second proposed draft permit and Statement of Basis for public comment on January 8, 2010, with a public comment period extending through February 17, 2010. During the 40-day public comment period, Region 10 conducted a public information teleconference on February 10 and a public hearing on February 16 in Barrow, Alaska, with teleconference facilities for participants in Wainwright, Point Hope, Point Lay, and Atqasuk. Chukchi RTC at 1. Region 10 collected substantial oral and written public comments, analyzed those comments, and responded in the Chukchi Response to Comments issued concurrently with the final permit, issued some 42 days later, on March 31, 2010.

Beaufort Permit. SOI's permitting effort for activities in the Beaufort Sea followed SGOMI's efforts and, as a result, the Beaufort Permit was closely modeled on the lead Chukchi Permit. As with SGOMI's Chukchi permit application, at Region 10's suggestion, SOI sought a PSD permit. SOI submitted its application on September 20, 2009. SOI engaged in extensive

dialogue with Region 10 regarding the permit, and ultimately submitted a revised application on January 18, 2010, which the Region determined to be complete on February 11, 2010. Region 10 issued a draft permit and Statement of Basis for public comment on February 17, with public comment through March 22. During the 30-day public comment period, Region 10 held three public hearings in Kaktovik, Nuiqsut, and Barrow, and collected oral and written public comments. Beaufort RTC at 6. On April 19, Region 10 issued the final Beaufort Permit and a Response to Comments. In addition to providing separate responses to many comments, for similar comments received on both permits, the Beaufort Response to Comments incorporated by reference Region 10's Response to Comments and Statement of Basis for the Chukchi Permit. *See* Beaufort RTC at 7.[10]

STANDARD OF REVIEW

EAB must deny these Petitions for Review unless the Petitioners can demonstrate that the permitting authority's decision to issue the permit involved (1) a "finding of fact or conclusion of law which is clearly erroneous" or (2) an "exercise of discretion or an important policy consideration which the Environmental Appeals Board should, in its discretion, review." 40 C.F.R. §§ 124.19(a)(1) and (a)(2); *see In re Dominion Energy Brayton Point, LLC.*, PSD Appeal No. 09-01, slip op. at 2 (EAB, May 13, 2009; *In re Prairie State Generating Co.*, PSD Appeal No. 05-05, slip op. at 13 (EAB, Aug. 24, 2006).

The preamble to Part 124 makes clear that the Board should exercise its powers of review "only sparingly" and that "most permit conditions should be finally determined at the Regional level." 45 Fed. Reg. 33,290, 33,412 (May 19, 1980). The Board itself has repeatedly held that

[10] Where the Chukchi Response to Comments provides a more complete explanation of Region 10's position, this Response will cite exclusively to that document.

agency policy favors final adjudication of most permits at the Regional level. *Dominion Energy Brayton Point, LLC*, slip op. at 9; *Prairie State Generating Co*., slip op. at 13; *In re City of Attleboro, MA Wastewater Treatment Plant*, NPDES Appeal No. 08-08, slip op. at 10 (EAB, Sept. 15, 2009).

In addition, a petitioner fails to meet its burden by merely repeating the objections it made during the comment period. Instead, the petitioner must "both state the objections to the permit that are being raised and explain why the permit decision maker's previous response to those objections . . . is clearly erroneous or otherwise warrants review." *Prairie State Generating Co*., slip op. at 13; *In re Core Energy, LLC*, UIC Appeal No. 07-02, slip op. at 6 (EAB, Dec. 19, 2007). The burden of demonstrating that review is warranted rests with the petitioner challenging the permit decision. *Dominion Energy Brayton Point, LLC*, slip op. at 2; *Prairie State Generating Co*., slip op. at 13.

Finally, "a petitioner seeking review of issues that are technical in nature bears a heavy burden because the Board generally gives substantial deference to the permit issuer on questions of technical judgment." *City of Attleboro*, slip op. at 11; *Kulluk I*, slip op. at 57; *In re City of Moscow, Idaho*, 10 E.A.D. 135, 142 (EAB 2001); *In re Town of Ashland Wastewater Treatment Facility*, 9 E.A.D. 661, 667 (EAB 2001). When presented with technical issues in a petition, the EAB determines whether the record demonstrates that "the Region duly considered the issues raised in the comments and if the approach ultimately selected by the Region is rational in light of all the information in the record." *In re Peabody W. Coal Co.*, 12 E.A.D. 22, 34 (EAB 2005). If the EAB determines that the Region gave due consideration to comments received and adopted an approach in the final permit decision that is rational and supportable, the EAB typically gives deference to the Region's position. *Id.*; *City of Moscow*, 10 E.A.D. at 142.

SUMMARY OF ARGUMENT

Region 10 conducted a rigorous and exhaustive permitting review of Shell's projects prior to issuing the Chukchi and Beaufort Permits. Region 10 carefully analyzed Shell's proposed operations using conservative assumptions and reasonably applied the applicable law and the Region's technical expertise to ensure that Shell's permitted operations would comply with all applicable requirements.

Petitioners now challenge Region 10's decisions to issue these permits, claiming error on seven general issues, all of which either constitute impermissible and untimely collateral challenges to EPA rulemakings or simply reflect the Petitioners' disagreement with technical judgments that Region 10 reasonably made and fully explained.

First, CBD and AEWC argue that Region 10 should have applied Best Available Control Technology ("BACT") to the *Discoverer* to control its carbon dioxide ("CO_2") emissions. In so doing, they directly challenge the Agency's final "Reconsideration of Interpretation of Regulations that Determine Pollutants Covered by Clean Air Act Permitting Programs," 75 Fed. Reg. 17004 (April 2, 2010) ("Reconsideration Rulemaking").[11] That Region 10 acted in compliance with the Reconsideration Rulemaking decision is undisputed. CBD and AEWC challenge the underlying nationally-applicable Agency decision. The Clean Air Act, longstanding Board precedent, and the appeal procedures in Part 124 make clear that such

[11] Shell will refer to EPA's reconsideration of the interpretive Johnson Memorandum, which was conducted pursuant to notice and comment, as the "Reconsideration Rulemaking." EPA takes the position that the "reconsideration process" was an interpretive rulemaking, under the Administrative Procedure Act, rather than a substantive rulemaking subject to notice and comment rulemaking requirements under the Administrative Procedure Act (APA) or the Clean Air Act. *See* Response to Comments on Reconsideration at 9 ("the Memo qualifies as an interpretive rule under the APA."); *see also* U.S. EPA, "Prevention of Significant Deterioration (PSD): Reconsideration of Interpretation of Regulations that Determine Pollutants Covered by the Federal PSD Permit Program, 74 Fed. Reg. 51535, 51548 (Oct. 7, 2009). ("In the case of this reconsideration process, public notice and comment was not required under the APA or CAA, but rather was voluntarily conducted in accordance with the February 17, 2009 letter granting reconsideration.").

challenges are not justiciable before the Board. Even if the Board had jurisdiction, Petitioners have not demonstrated that the Region erred in concluding that CO_2 is not currently "subject to regulation" under the Clean Air Act.

Second, AEWC argues that Region 10's determinations that (i) the *Discoverer* is an OCS source only when it is stabilized and ready to drill at a drill site, and thus that its propulsion engine is not part of the OCS source and that (ii) the associated vessels (project-related vessels that operate within 25 miles of the OCS source) are not part of the OCS source, are inconsistent with the regulatory and statutory definitions of the "OCS source." AEWC's arguments regarding the alleged misapplication of the regulatory definition of OCS source rely on an interpretation of the regulation that renders two of the three elements of the regulatory definition meaningless and should therefore be rejected. Its arguments regarding the regulatory interpretation of the statutory definition are improperly venued because the Clean Air Act requires such challenges to be brought in the D.C. Circuit and are also precluded by a D.C. Circuit decision upholding the OCS regulations, specifically as related to their treatment of emissions from vessels associated with an OCS source.

Third, Earthjustice argues that, even though the associated vessels are not part of the OCS source, because their emissions are considered "direct emissions" from the OCS source the *emissions* are subject to BACT, thus rendering the associated vessels subject to BACT. This novel theory would turn PSD permitting on its head, for the first time subjecting sources to PSD review that do not by their nature qualify as stationary sources (or, in the offshore context, "OCS sources"). There is no indication that either Congress or EPA intended such a result in amending the Clean Air Act to address OCS activities and promulgating the OCS regulations. Region 10 correctly interpreted the OCS regulatory regime, which takes associated vessel emissions into

account in determining the OCS source's "potential to emit" (and thus whether the *OCS source* has emissions of sufficient quantity to be subject to PSD review) and its air quality impacts, but does not actually subject non-OCS source vessels, like the associated vessels in Shell's projects, to BACT or any other substantive PSD requirement.

Fourth, AEWC argues that Region 10 erred in making three technical determinations regarding particulate matter emissions. It argues that the Region should have (i) required four months of "collocated" sampling data, (ii) analyzed secondary $PM_{2.5}$ impacts, and (iii) separately analyzed $PM_{2.5}$ and PM_{10} for purposes of the BACT analysis. For none of these arguments does AEWC establish that Region 10's technical judgments were clearly erroneous. The Region provided well-reasoned explanations for its decisions on each issue, based upon its technical expertise. The Board should accordingly defer to the Region 10's technical determinations.

Fifth, AEWC argues that Region 10 erred in determining that it is sufficient for the permits to comply with the standards in effect at the time of issuance, arguing that Region 10 should have required Shell to demonstrate compliance with standards that would be effective at some future date (including the short-term nitrogen dioxide ("NO_2") NAAQS and PSD review of CO_2 impacts). Region 10 properly limited its permitting effort to standards in effect when the permit was issued, rather than opening the door to anticipatory permitting.

Sixth, AEWC argues that Region 10 should have included air emissions from hypothetical emergency situations, such as response to an oil spill, in the OCS source's potential to emit. The tragic events in the Gulf of Mexico notwithstanding, oil spills remain rare events and certainly are not a "routine" part of Shell's anticipated operations. Petitioners' argument would open the PSD permitting process up to an endless list of contingencies. Region 10

properly excluded such hypothetical emergency emissions from the potential-to-emit calculation, reserving its enforcement discretion to address such emissions, should they occur.

Finally, AEWC claims that Region 10 erred by not requiring an environmental justice analysis. However, Region 10 properly concluded that the Chukchi and Beaufort Permits would meet applicable air quality standards and would not pose a "high and adverse human health or environmental effect." Therefore, Region 10 properly satisfied its environmental justice obligation.

Petitioners have not shown that Region 10's decisions to issue the Chukchi and Beaufort Permits were clearly erroneous or involved an exercise of discretion calling for EAB review. Instead, the record demonstrates that Region 10 rigorously scrutinized Shell's projects and reasonably applied the governing law to issue properly protective air permits.

ARGUMENT

I. CBD'S AND AEWC'S GHG CHALLENGES ARE NOT PROPERLY BEFORE THE BOARD.

CBD and AEWC maintain that Region 10 committed clear error by failing to require the application of BACT to sources of CO_2 emissions. They contend that Region 10 improperly concluded that greenhouse gases ("GHGs") are not currently "subject to regulation" within the meaning of section 165 of the Clean Air Act. In so doing, they seek to resuscitate issues on which the Board has already ruled in *In Re Deseret Power Electric Cooperative*, PSD Appeal No. 07-03 (EAB, Nov. 13, 2008), 14 E.A.D. ___ ("*Deseret*"), while squarely attacking the outcome of the interpretive "reconsideration" decision that the Agency made, largely in response to *Deseret.* See Reconsideration Rulemaking. Attacking the Reconsideration Rulemaking in a petition for EAB review of a permit runs contrary to the regulations governing permit challenges and is barred by longstanding EAB precedent and the Clean Air Act. The Region did no more

than apply the Agency's official regulatory policy to determine that CO_2 is not yet "subject to regulation" and that sources of CO_2 therefore could not be subject to BACT in these PSD permits. The Board has no jurisdiction to consider Petitioners' challenge to that final Agency determination.

A. In Accordance With the EAB's Recommendation, EPA Has Addressed This Issue in the Reconsideration Rulemaking, and EAB Is Not Authorized to Review That Decision.

In *Deseret*, Sierra Club contended that, following the Supreme Court's April 2007 holding that CO_2 is an air pollutant, CO_2 must be considered a "pollutant subject to regulation" under the Clean Air Act and, as such, subject to BACT under section 165 of the Act. As CBD and AEWC argue here, Sierra Club maintained that CO_2 was subject to pre-existing monitoring and reporting requirements pursuant to section 821 of the Clean Air Act Amendments of 1990, P.L. 101-549, 104 Stat. 2399, 2699 (implemented by 40 C.F.R. Part 75), and that these monitoring and reporting requirements rendered CO_2 "subject to regulation" for purposes of PSD requirements, including BACT. *Deseret*, slip op. at 28. The Board squarely rejected that claim. It concluded that EPA has discretion to interpret "subject to regulation under [the] Act" and suggested that this was "an issue of national scope and that all parties would be better served by addressing it in the context of an action of nationwide scope rather than in the context of a specific permit proceeding." *Id*. at 9-10; 63-64. Notably, the Board also stated that Region 8 was correct in its "appellate contention" that its interpretation of "subject to regulation" as requiring "actual control" of emission of a pollutant was "'reasonable' or 'permissible' in light of the ambiguity identified" in the statutory terms. *Id.* at 29.

EPA followed the Board's suggestion that the Agency should address the issue of the meaning of "subject to regulation," at a nationwide level. First, in 2008, EPA issued the Johnson

Memorandum[12] setting forth an official interpretation that pollutants would become subject to regulation only when they are made subject to actual control requirements. Then, in 2009, EPA granted a petition for reconsideration of the Johnson Memorandum, implemented a public notice and comment process, and ultimately issued a final broadly applicable decision on that reconsideration. Ultimately, based on a very substantial administrative record, EPA re-affirmed the "actual control" standard in the Johnson Memorandum and set forth EPA's view that CO_2 would be subject to such actual control on January 2, 2011.

In the Reconsideration Rulemaking, EPA considered and rejected commenters' contentions, now advanced by CBD and AEWC, that CO_2 became "subject to regulation" (1) when EPA adopted rules for monitoring and reporting CO_2 emissions in 1993 or (2) when EPA approved the Delaware State Implementation Plan on April 29, 2008 or other SIP provisions concerning GHGs or (3) when EPA found on December 15, 2009, that CO_2 and other GHGs may endanger public health or welfare or (4) when in 2009 EPA issued waivers under Section 209 of the Clean Air Act to some states to regulate CO_2 for motor vehicles. EPA determined that CO_2 would first be "subject to regulation" on January 2, 2011, when EPA had concluded that its Light Duty Vehicle Rule,[13] which establishes standards for greenhouse emissions from motor vehicles pursuant to Section 202 of the Clean Air Act, would "take effect."

B. CBD and AEWC Challenge EPA's Reconsideration Rulemaking Decision.

In accordance with the Agency's determination in the Reconsideration Rulemaking, Region 10 properly concluded that CO_2-emitting units on Shell's OCS source are not subject to

[12] *See* Memorandum from Stephen Johnson, EPA Administrator, to EPA Regional Administrators, *RE: EPA's Interpretation of Regulations that Determine Pollutants Covered by Federal Prevention of Significant Deterioration (PSD) Permit Program* (Dec. 18, 2008) ("Johnson Memorandum"); *see also* 73 Fed. Reg. 80300 (December 31, 2008) (public notice of interpretive memorandum).

[13] Light-Duty Vehicle Greenhouse Gas Emission Standards and Corporate Average Fuel Economy Standards; Final Rule, 75 Fed. Reg. 25323-25728 (May 7, 2010).

PSD review or its BACT requirement. Neither Petitioner contends that Region 10 misinterpreted the Reconsideration Rulemaking or erred in any way by adhering to the final Agency determination that, when the permits were issued, CO_2 emissions had not yet become subject to the "actual control" that the Agency requires before imposing BACT on CO_2 sources.[14] Rather, they seek to challenge the Reconsideration Rulemaking itself.

The Agency's decision on when CO_2 sources will potentially be subject to BACT is now final agency action subject to review only by the D.C. Circuit. 42 U.S.C. § 7607(b). CBD's and AEWC's direct assaults on the Reconsideration Rulemaking are clearly outside the scope of the Board's authority. EAB exercises the authority delegated to it by the Administrator, 40 C.F.R. § 124.2(a), and "answers only to the Administrator of the Agency." *In re Marine Shale Processors, Inc.*, 5 E.A.D. 751, 795 (EAB 1995), *aff'd*, 81 F.3d 1371 (5th Cir. 1996), *cert. denied*, 519 U.S. 1055 (1997). The EAB does not review such final actions of the Administrator.

There can be no doubt that CBD and AEWC directly challenge EPA's Reconsideration Rulemaking, primarily raising contentions that EPA has already considered and rejected in the Reconsideration Rulemaking. CBD repeatedly acknowledges its intent to address EPA's Reconsideration Rulemaking, explaining that EPA's decision not to require BACT for Shell's CO_2 emissions was based "on its current interpretation of the phrase 'subject to regulation' in section 165(a)(4)" and that "EPA's current interpretation of this phrase was developed in the course of a recent reconsideration proceeding." *See* CBD Pet. at 2. Indeed, the entirety of CBD's Petition focuses on the purported error of that Agency decision. CBD recites and attacks

[14] In addition to challenging the Reconsideration, AEWC also contends that EPA should have provided a detailed explanation for why it was not applying BACT to CO_2 in its Statement of Basis for the Beaufort Permit. *See* AEWC Beaufort Pet. at 53. AEWC does not allege that the Reconsideration does not dictate the outcome of Region 10's decision, only that the Region did not explain that result in the Statement of Basis for the permits. As discussed *infra*, this argument is without merit.

EPA's process from the initial 2008 issuance of the Johnson Memorandum interpretation through the Agency's reconsideration and affirmation of the legal interpretation underlying that memorandum in the April 2010 Reconsideration Rulemaking. *See generally* CBD Pet. at 15-36; *see also, e.g.*, CBD Pet. at 3-4 (reciting history of EPA's issuance of the Johnson Memorandum, the granting of the Petition for Reconsideration, and the Final Rule, which concludes that CO_2 becomes subject to regulation as of January 2, 2011, and arguing that "[t]he Reconsideration thus adopts and then exacerbates an earlier misreading of the statute, marking the latest in a series of shifting interpretations that run directly counter to the unambiguous language of the Clean Air Act."); CBD Pet. at 14-15 (summarizing its argument as a challenge to EPA's "interpretation of CAA sections 165(a)(4) and 169(3)"); CBD Pet. at 32 ("At the end of EPA's tortuous path in redefining section 165 so that CO_2 stationary source regulation could be postponed until January 2011, EPA added yet another precondition to that regulatory duty.").

AEWC similarly recognizes that its challenge is also to the Reconsideration Rulemaking Rule. *See* AEWC Beaufort Pet. at 53-58[15] (characterizing Region 10's basis for not imposing BACT for CO_2 and citing to the Reconsideration Rulemaking, then proceeding to attack the elements of EPA's argument in that decision). Nothing in CBD's or AEWC's legal arguments specifically addresses any decision made by the Region in the context of Shell's permit or claims that the Region improperly applied the Agency's policy on this issue; indeed the Region's actions with respect to Shell's permit are barely mentioned. *See generally* CBD Pet.; AEWC Beaufort Pet. at 48-58.

[15] Because AEWC's Beaufort and Chukchi Petitions provide virtually identical argumentation on this point, this section will refer exclusively to the Beaufort Petition.

C. Challenges to the Reconsideration Rulemaking May Not Be Brought in this Proceeding.

This individual permit proceeding before the Board is an inappropriate forum for the challenges to the Reconsideration Rulemaking that CBD and AEWC put forward. Because, by their own admission, CBD and AEWC challenge the underlying regulatory decision-making in EPA's Reconsideration Rulemaking, rather than any specific decision unique to Shell's permit, those actions challenge a final agency action subject to review in the Court of Appeals for the District of Columbia Circuit.

1. CBD's and AEWC's challenges are inconsistent with the judicial review provisions of the statute and the rule.

Challenges to the Reconsideration Rulemaking in this proceeding are inconsistent with the judicial review provision in the Clean Air Act and the final rule itself. Section 307(b) of the Act specifies:

> A petition for review of action of the Administrator in promulgating . . . any other nationally applicable regulations promulgated, or final action taken by the Administrator under this chapter may be filed only in the United States Court of Appeals for the District of Columbia. . . . . Any petition for review under this subsection shall be filed within sixty days from the date notice of such promulgation, approval, or action appears in the Federal Register.

42 U.S.C. § 7607(b)(1). EPA's Reconsideration Rulemaking expressly confirms this. *See* Reconsideration Rulemaking, 75 Fed. Reg. at 17004, 17023 (Section entitled "Judicial Review," which recites "This action is a nationally applicable final action under section 307(b) of the Act. As a result, any legal challenges to this action must be brought to the United States Court of Appeals for the District of Columbia Circuit by June 1, 2010."). Petitioners are in the wrong forum, seeking Board review of a final agency action by the Administrator that is reviewable only by the D.C. Circuit. Indeed, a number of petitions have already been filed in the D.C. Circuit challenging both EPA's interpretation in the Johnson Memorandum and the

Reconsideration Rulemaking. *See, e.g., Sierra Club v. EPA*, No. 09-1018 (D.C. Cir.) (challenging the Johnson Memorandum and stayed pending completion of the Reconsideration Rulemaking) and *Coalition for Responsible Regulation v. EPA*, No. 10-1073 (D.C. Cir.) (challenging Reconsideration Rulemaking).

2. EAB precedent bars Petitioners' collateral attacks on the Reconsideration Rulemaking.

EAB precedent makes clear that actions challenging final agency decisions in the guise of permit challenges are impermissible. The Board has repeatedly refused to hear issues raised in permit appeals that were *de facto* challenges to a previously-issued agency rule, including cases where the challenges at issue were far less direct attacks on a particular rulemaking process than CBD and AEWC are mounting here. *See In Re Tondu Energy Company*, 9 E.A.D. 710, 715 (EAB 2001) (rejecting challenge to a permit appeal that effectively attacked the NAAQS for particulate matter; "In essence, what Ms. Schindler is contesting is the adequacy of the current NAAQS for particulate matter – PM_{10} – to protect human health. [¶] As we have repeatedly stated, permit appeals are not appropriate fora for challenging Agency regulations."); *In re City of Port St. Joe and Florida Coast Paper Co.*, 7, E.A.D. 275, 286-87 (EAB 1997) ("[T]o the extent that Petitioners argue [in their challenge to NPDES permit for municipal sewage treatment plant] that it is 'inappropriate' for the [plant] to be classified as a POTW, they are challenging the validity of the regulations and the policy considerations on which the regulations are based. A permit appeal proceeding is not the appropriate forum in which to challenge either the validity of Agency regulations or the policy judgments that underlie them."); *In the Matter of Suckla Farms, Inc. and City of Fort Lupton, Colorado*, 4 E.A.D. 686, 698 (EAB 1993) ("[W]e will not allow this permit appeal to be used as a vehicle for collaterally challenging the distinction drawn by the UIC program regulations between 'hazardous' and 'nonhazardous' injection wells. The

time for any such challenge has long since passed."); s*ee also In re Woodkiln, Inc*., 7 E.A.D. 254, 269 (EAB 1997) ("[T]he Board has refused to review final Agency regulations that are attacked because of their substantive content or alleged invalidity, both in the exercise of the Board's permit review authority and in the enforcement context."); *In re B.J. Carney Industries, Inc.*, 7 E.A.D. 171, 194 (EAB 1997) (noting strong presumption against entertaining constitutional challenges and challenges to validity of regulations in the context of a regulatory enforcement action); *In re Norma J. Echevarria and Frank J. Echevarria d/b/a/ Echeco Environmental Services*, 5 E.A.D. 626, 634-36 (EAB 1994) (upholding presiding officer's decision not to hear constitutional challenge to regulation in the context of enforcement proceeding).

D. Region 10 Clearly Explained Why It Followed the Reconsideration Rulemaking.

AEWC contends that Region 10 did not adequately explain in the Statements of Basis for these permits why it decided not to impose BACT on CO_2 emissions sources. However, no party commented that the Statements of Basis were inadequate for the reason that EPA had failed to explain in them the legal basis for its conclusion that BACT did not apply to CO_2. That claim is therefore barred. 40 C.F.R. § 124.13. Second, to the extent that AEWC argues that EPA provided no support in general for its decision, that claim is facially incorrect. EPA clearly and thoughtfully addressed comments that BACT should be applied to CO_2 in its Response to Comments by explaining that it was applying the policy reaffirmed in the Reconsideration Rulemaking that the phrase "subject to regulation" requires actual control of emissions of the pollutant. Chukchi RTC at 132-133. Third, EPA was not required in the Statement of Basis to analyze in detail the legal support for all the myriad regulatory actions it would *not* be taking in the Beaufort permit. *See, e.g.*, 40 C.F.R. § 124.7 ("EPA shall prepare a statement of basis for

every draft permit for which a fact sheet under C.F.R. § 124.8 is not prepared. The statement of basis *shall briefly describe the derivation of the conditions of the draft permit* and the reasons for them or, in the case of notices of intent to deny or terminate, reasons supporting the tentative decision. The statement of basis shall be sent to the applicant and, on request, to any other person.") (emphasis added); *Kulluk I*, slip op. at 6 n.3 ("[T]he statement of basis is supposed to be a brief summary that meets minimum requirements."; "The statement of basis presents the Agency's *technical basis for the terms and conditions* of the proposed permit and also provides the basic information needed to judge the adequacy of the draft permit and allow informed public comment.") (emphasis added).

Furthermore, the public, and AEWC in particular, had ample opportunity to comment on the issue of whether BACT should be applied for CO_2 both with respect to Shell's permits, including both the Chukchi and Beaufort permits, and (consistent with the breadth of AEWC's challenge) generally in the context of the Reconsideration Rulemaking proceeding. Here, it was clear in the Statements of Basis that Region 10 would be following Agency policy by not applying BACT for CO_2. AEWC had full opportunity to comment on that decision during the permit review process. This is precisely the way the comment process is intended to work. Moreover, AEWC had full opportunity to comment on EPA's underlying interpretive decision in the actual Reconsideration Rulemaking proceeding. Finally, AEWC's contention that EPA's position is "new" ignores the fact that EPA's position has, in fact, been quite consistent dating back not only to the December 2008 issuance of the Johnson Memorandum, but, according to

EPA, for some time before. *See* Johnson Memorandum, 73 Fed. Reg. 80300.[16] Thus, AEWC's attacks on the adequacy of the Statements of Basis with respect to CO_2 are meritless.

II. CBD'S AND AEWC'S CHALLENGES TO THE RECONSIDERATION RULEMAKING ARE WITHOUT MERIT.

Even if CBD's and AEWC's CO_2 claims could properly be brought before the Board, they would fail. In *Deseret*, the Board flatly rejected the notion that the Clean Air Act's "subject to regulation" language compels the imposition of BACT to CO_2 based on monitoring and reporting alone, in the absence of actual control of emissions, which does not yet exist. Petitioners do not adduce any basis for the Board to reverse its decision in *Deseret*.

Similarly, CBD and AEWC reprise their arguments, refuted in the Reconsideration Rulemaking, that a series of other events constitute the "real" trigger for applying BACT to CO_2. The Administrator has carefully considered, and properly rejected each of these contentions, and CBD and AEWC offer nothing new to resuscitate these claims. CBD also adds a new potential triggering event to their list – the adoption of renewable fuel standards. Congress, however, expressly provided that those standards would not render greenhouse gases "subject to regulation." Finally, CBD and AEWC attack the Reconsideration Rulemaking's determination that the Light Duty Vehicle Rule, which EPA concluded did trigger PSD requirements for greenhouse gases, did not "take effect" and therefore did not trigger those requirements until January 2, 2011. Again, the Reconsideration Rulemaking evaluated in detail and specifically rejected the notion that the Light Duty Vehicle Rule triggered PSD requirements for greenhouse gases on an earlier date.

[16] To the extent that AEWC argues that EPA's decision in the Reconsideration Rulemaking to identify an "effective date" of January 2011 came as a surprise, that contention directly challenges the Reconsideration decision, which is not properly before the Board.

A. There Is No Reason for the Board to Reverse its Decision that the Clean Air Act Does Not Compel EPA to Apply BACT to CO_2 Now.

The Clean Air Act provides that no major emitting facility on which construction is commenced after August 7, 1977 may be constructed unless the proposed facility is subject to BACT for each pollutant "subject to regulation" under the statute. 42 U.S.C. § 7475(a)(4). CBD and AEWC argue that the plain language of this provision compels EPA to apply BACT to CO_2 now, and, indeed, would compel the imposition of BACT for CO_2 going back as far as 1993, based on the existence of monitoring and reporting requirements for CO_2. *See, e.g.*, AEWC Beaufort Pet. at 54; CBD Pet. at 17-19.

As CBD acknowledges, however, *see* CBD Pet. at 18, the Board has already squarely dismissed this contention:

> [W]e reject Sierra Club's contentions that either the plain meaning of the statutory phrase 'subject to regulation' as used in sections 165 and 169 or the meaning of the term 'regulations' as used in section 821 negates the Agency's authority to interpret 'subject to regulation' for purposes of the PSD program and compels an interpretation of the statute that necessarily requires that the Permit contain a CO_2 BACT limit.

Deseret slip op. at 26. *See also id*. at 35. The Board held that EPA had discretion to interpret the term, that the interpretation EPA offered (*i.e.*, actual control) was "reasonable or permissible," and that EPA should consider addressing the interpretation in the context of an action of nationwide scope – which EPA then did. Slip op. at 29-64.

To the extent that CBD seeks to have the Board overturn its earlier decision, *see* CBD Pet. at 18 ("Petitioner respectfully suggests that this finding is erroneous"), CBD cannot justify such a reversal. CBD offers no meaningful distinction between the Agency's action here and that in *Deseret*, nor any changed circumstances between the time of the two cases, nor even any variation on the legal argument advanced there and here that "subject to regulation" means precisely the same thing as "mentioned anywhere in the Code of Federal Regulations." *Compare*

Deseret, slip. op. at 27-28 with CBD Pet. at 18-19.[17] Because neither CBD nor AEWC offers any basis for overturning the Board's prior decision, that holding controls, and CBD's Petition and AEWC's BACT for CO_2 claims should be dismissed. The Board's prior confirmation that the "actual control" test is within EPA's discretion and that monitoring and reporting requirements did not compel a conclusion that CO_2 was "subject to regulation" should not be disturbed.[18]

B. EPA Reasonably Found that CO_2 Is Not Currently Subject to Regulation Under Any Other Provision of the Clean Air Act.

Neither the Clean Air Act nor any other authority supports CBD's or AEWC's arguments that the various other regulatory provisions they identify rendered CO_2 "subject to regulation" when Region 10 issued these permits. As discussed above most of the supposed triggering events cited by Petitioners were considered and rejected in the Reconsideration Rulemaking. *See supra* at I.A. Shell adopts by reference the legal analysis rejecting each of these supposed

[17] CBD filed an amicus brief in *Deseret* in support of Sierra Club, the entirety of which was devoted to a discussion of the causes and effects of global warming. *See generally* Brief of *Amicus Curiae* The Center for Biological Diversity In Support of the Sierra Club's Petition for Review of P[SD] Permit Number PSD-OU-0002-04.00 Issued By Region VIII to Desert Power Electric Cooperative, (filed in *In re Deseret*, PSD Appeal No. 07-03) (January 31, 2008).

[18] CBD's and AEWC's petitions argue that because monitoring and reporting requirements for CO_2 exist within "regulations" under the Clean Air Act, CO_2 is "subject to regulation." CBD's textual argument mistakes "subject to regulation" for "named in a regulation." AEWC's textual argument similarly misses the mark. AEWC maintains that because Congress used the word "regulation," rather than the word "control," Congress could not have meant regulation to mean "control." AEWC Beaufort Pet. at 54. AEWC's argument, however, ignores the fact that the word "regulation" *means* "control." *See Deseret*, slip op. at 28 (setting forth Permittee Deseret's explanation that "regulation" means "control"). The Board heard and rejected this plain language argument in *Deseret*. EPA likewise rejected it in the Reconsideration Rulemaking. *See, e.g.*, EPA Response to Comments on Reconsideration at 40 (explaining that Congress uses the plural word "regulations" when it means "regulations"). The argument remains unpersuasive. Had Congress intended to require BACT for any substance included in any individual section of the C.F.R., it could said "mentioned in ***a*** regulation," or "subject to ***a*** regulation," or even "subject to regulation***s***," or other similar language to denote that it meant "any particular codified regulatory provision," as opposed to the act of control denoted by the word "regulation."

triggering events set forth in the Reconsideration Rulemaking and in the Response to Comments in that rulemaking proceeding.

In addition, CBD now advances various arguments in an effort to establish that EPA's adoption of the Renewable Fuels Standard in 2009 "undoubtedly" rendered CO_2 "subject to regulation." CBD Pet. at 26-28.[19] Congress plainly did not intend that the renewable fuel program established by 42 U.S.C. § 7545(o), or regulations issued by EPA to implement that program – *e.g.*, EPA's March 26, 2010 Final Rule on Regulation of Fuels and Fuel Additives: Changes to Renewable Fuel Standard Program, 75 Fed. Reg. 14670 ("RFS Regulation") – would render CO_2 "subject to regulation." Indeed, Congress expressly foreclosed any such possibility. The Board need look no further than the statutory language to reject Petitioner CBD's arguments on this point. Specifically, 42 U.S.C. § 7545(o)(12) states, in pertinent part:

> Nothing in this subsection,[20] or regulations issued pursuant to this subsection, shall affect or be construed to affect the regulatory status of carbon dioxide or any other greenhouse gas, or to expand or limit regulatory authority regarding carbon dioxide or any other greenhouse gas, for purposes of other provisions (including section 7475) of this chapter.

42 U.S.C. § 7545(o)(12). Given this provision, EPA's recent promulgation of the RFS Regulation could not have had any effect on the regulatory status of CO_2 for purposes of the remaining provisions in the Clean Air Act.[21]

[19] Of course, to the extent that these arguments were not raised in the context of the Reconsideration Rulemaking notice and comment, they should not be heard as the basis for a collateral attack on the Reconsideration Rulemaking decision in this proceeding.

[20] Subsection 7545(o) established the renewable fuel program. *See* Energy Policy Act of 2005, Pub. L. 109-58, 119 Stat. 594, 1067, § 1501 (codified as amended at 42 U.S.C. § 7545(o)).

[21] Even if Congress had not so directly spoken to this issue, the RFS Regulation manifestly does not impose the type of "actual control of emissions" contemplated by EPA as triggering PSD requirements in the Reconsideration Rulemaking. It is, of course, a fuels standard, not an emissions standard, and thus does not impose direct limitations on the emissions of a pollutant.

Thus, none of the sundry Agency actions cited by CBD and AEWC imposed the actual control of emissions required to bring a substance within the "subject to regulation" language of section 165 of the Clean Air Act.

C. EPA's Determination of When the GHG Vehicle Rule "Takes Effect" For Purposes of Rendering GHGs "Subject to Regulation" Is Irrelevant to This Appeal.

CBD and AEWC also seek to challenge EPA's determinations in the Reconsideration Rulemaking Rule that: (i) GHGs will not become "subject to regulation" under the Clean Air Act until the Light Duty Vehicle Rule actually "takes effect," which is no earlier than January 2, 2011; and (ii) the "take effect" date of a regulation may differ from the stated "effective date" of the regulation because a rule can be published in final form but not require immediate compliance obligations. *See* CBD Pet. at 32-35; AEWC Beaufort Pet. at 53-56. Petitioner CBD further argues that EPA's determination contradicted "earlier pronouncements" that GHGs would become "subject to regulation" under the Act as soon as the Light Duty Vehicle Rule was promulgated. *See* CBD Pet. at 32-33.

The Board need not consider any of Petitioners' arguments on these points because EPA's issuance of both the Chukchi and Beaufort permits pre-dated its promulgation of the Light Duty Vehicle Rule. EPA Region 10 issued major source air permits for exploratory drilling in the Chukchi and Beaufort Seas on March 31, 2010 and April 9, 2010, respectively. And, despite CBD's arguments to the contrary,[22] EPA did not promulgate the Light Duty Vehicle Rule until May 7, 2010. *See* 75 Fed. Reg. 25323-25728 (May 7, 2010).

[22] CBD suggests that the GHG Light Vehicle Rule took effect on April 1, 2010, and it includes a blank Federal Register citation from that date, as well as a citation to EPA's web site. But, the April 1, 2010 Federal Register contained no such rule. Moreover, the EPA web site cited by CBD contains a link to the final rule, **which confirms that the rule was not published in the Federal Register until May 7, 2010.**

As explained in more detail below, *see infra* Section V, there is no requirement for a PSD permit to ensure compliance with requirements that are not in effect on the date of the permit's issuance. *See, e.g., In re Phelps Dodge Corp.*, 10 E.A.D. 460, 478 n. 10 (EAB 2002) ("[T]he Region's obligation, as the permit issuer, is to apply the CWA statute and implementing regulations in effect at the time the final permit decision is made[.]");*Prairie State Generating Company*, slip op. at 85 ("[L]ong-standing EPA policy states that the BACT determination is made on the date that the permit is issued."); *see also State of Alabama v. EPA*, 557 F.2d 1101, 1110 (5th Cir. 1977) ("We affirm EPA's conclusion that the appropriate BPT limitations to be applied in a permit are those in effect at the time of initial permit issuance[.]"). Accordingly, it is of no consequence to this appeal whether GHGs became "subject to regulation" on the date that the Light Duty Vehicle Rule was promulgated (*i.e.*, May 7, 2010) or whether they will become "subject to regulation" at some later date such as when EPA says that rule actually takes effect (*e.g.*, January 2, 2011).[23] Both of those trigger dates that could arguably render CO_2 "subject to regulation" under the Clean Air Act occurred after EPA's issuance of the permits at issue in this appeal.

Moreover, like the other aspects of the Agency's Reconsideration Rulemaking decision, the question of when the Light Duty Vehicle Rule "takes effect" is not justiciable before the Board. *See supra* at I.C. The Board should therefore decline to consider Petitioners' irrelevant arguments that, in the Reconsideration Rulemaking, EPA arbitrarily and capriciously chose an inappropriate effective date for when CO_2 becomes "subject to regulation."[24]

[23] While there are sound arguments that this date should be later than January 2, 2011, such arguments are beyond the scope of this appeal.

[24] Petitioners' arguments regarding the "local" impacts of greenhouse gas emissions in the Artic are not relevant to this proceeding because any impacts to the Arctic region (or anywhere in the world) are caused by an accumulation over time of global GHG emissions and are not directly traceable to local

III. REGION 10 PROPERLY DEFINED THE OCS SOURCE AND DETERMINED THAT THE *FRONTIER DISCOVERER*'S PROPULSION ENGINE AND THE ASSOCIATED VESSELS ARE NOT PART OF THE OCS SOURCE AND THEREFORE NOT SUBJECT TO BACT.

Region 10 properly concluded that it lacked the authority to impose BACT on sources that are not part of the OCS source, notably, the *Frontier Discoverer*'s propulsion engine and the associated vessels that will not attach to the *Discoverer*. *See* Chukchi RTC at 7, 23. Region 10 correctly applied the governing law in determining that the *Frontier Discoverer* is an OCS source when it is "sufficiently secure and stable to commence exploratory activity at the drill site." Chukchi RTC at 16. The Region consequently determined that the *Discoverer*'s propulsion engine – operation of which is prohibited by Condition D.1 in both permits while the *Discoverer* is an OCS source – is not part of the OCS source. Region 10 further determined that, while the supply vessel that will occasionally attach to the *Discoverer* is also part of the OCS source, Chukchi SOB at 21, the associated vessels that will not attach to the *Discoverer* while it is an OCS source are neither OCS sources in their own right nor part of a larger OCS source. *See* Chukchi RTC at 7, 23, 25-27.[25]

AEWC argues that under both the statutory and regulatory definitions of OCS source, Region 10 should have concluded that the associated vessels and the *Frontier Discover*'s propulsion engine are part of the OCS source and therefore subject to BACT. AEWC Beaufort Pet. at 10.[26] As discussed below, Earthjustice concedes that the unattached associated vessels are not part of the OCS source, but offers the novel theory that, although EPA lacks the authority to

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emissions. Moreover, black carbon is not a regulated New Source Review pollutant. *See* Chukchi RTC at 135.

[25] The Beaufort RTC refers to the Chukchi RTC in responding to comments on this issue of when the *Discoverer* becomes an OCS source and whether the associated vessels should be included in that determination. *See* Beaufort RTC at 12-15.

[26] Because AEWC's Beaufort Petition includes some additions to this argument not found in the Chukchi Petition, this section refers exclusively to the Beaufort Petition.

apply BACT to the associated vessels themselves because they do not qualify as OCS sources, Region 10 is required to apply BACT to the *emissions* from those vessels. *See generally* Earthjustice Pet. Neither of these seemingly conflicting theories is consistent with the statutory and regulatory regime of the Clean Air Act as applied to the OCS. Region 10's legal interpretation of EPA's OCS air permitting rules, as applied to Shell's projects, is in no sense clearly erroneous or contrary to the statutory scheme created by Congress and implemented by EPA. Petitioners have failed to demonstrate that Region 10's decisions on these issues represent clear error; thus, Region 10's determinations should be upheld.

A. The Laws Governing OCS Source Definition Are Well-Established.

Although the Chukchi and Beaufort Permits are the first PSD permits to be issued for exploration beyond 25 miles of a state's seaward boundary, Region 10 made its determinations as to when the *Discoverer* is an OCS source and when BACT applies within a well-established statutory and regulatory structure.

1. CAA Section 328

In 1990 Congress established a new regime for air permitting in the OCS when it passed CAA Section 328. Pub. L. No. 101-549, Title VIII, § 801, 104 Stat. 2685, codified at 42 U.S.C. § 7627. The requirements that this section imposes differ based on where the OCS source is located. Sources within 25 miles of a state's seaward boundary are subject to the same requirements as stationary sources in the Corresponding Onshore Area. Sources beyond 25 miles of a state's seaward boundary are subject to regulations to "control air pollution . . . 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 program]." 42 U.S.C. § 7627(a)(1).

Central to the regulatory scheme Congress directed EPA to assemble is the statutory definition of an "Outer Continental Shelf source" ("OCS source"):

> [A]ny equipment, activities, or facility which—
> (i) emits or which has the potential to emit any air pollutant,
> (ii) is regulated or authorized under the Outer Continental Shelf Lands Act [43 U.S.C.A. § 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.**

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

2. Part 55 Regulations

In 1992, EPA implemented Congress's instruction by promulgating 40 C.F.R. Part 55, which governs air permitting for OCS sources within EPA's jurisdiction. As this Board noted in *Kulluk I*, slip op. at 9, the regulations "further define 'OCS source'" by incorporating the three elements of the statutory definition (i), (ii), and (iii), and providing that:

> 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 (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. EPA specifically addressed Congress's instruction regarding the treatment of associated vessel emissions by including them in the OCS source's "potential to emit" for specific purposes under the regulations, even though these vessels are not part of the OCS source. The Part 55 definition of "potential emissions" states:

> 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, 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 purpose 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. The term "potential to emit" does not appear in sections 55.13 or 55.14, but it is a critical part of the PSD regulations in 40 C.F.R. § 52.21, which are incorporated by reference in section 55.13(d). Under section 52.21, a stationary source's potential to emit determines, *inter alia*, whether that source is subject to various portions of the program, including major source PSD review and BACT. For example, generally a source must have the potential to emit more than 250 tons per year to be considered a "major source" subject to the PSD program. 40 C.F.R. § 52.21(b)(1)(i). *See also* 40 C.F.R. § 52.21(b)(23)(i) (stating that the "significance" of a source's emissions is judged based on its potential to emit). Similarly the regulations instruct that a BACT review is required only for each pollutant that a major stationary source "would have the potential to emit in significant amounts." 40 C.F.R. § 52.21(j)(2). Thus, a source's potential to emit determines the applicability of various PSD requirements under section 52.21; it is part of a threshold determination but creates no independent substantive obligation. Nothing in the definition of potential to emit or in its usage throughout the PSD regulations indicates that inclusion of associated vessels' emissions in an OCS source's "potential to emit" somehow expands the regulatory definition of "OCS source." Clearly, those vessels are separate and apart from the OCS source or it would not be necessary for Congress to have directed the inclusion of their emissions in the OCS source's potential to emit.

In adopting Part 55, EPA reasonably interpreted Congress's instruction that associated vessel emissions be considered "direct emissions" of the OCS source to mean that those emissions should be included in the OCS source's potential to emit. As part of the OCS source's potential to emit, those emissions could potentially trigger major source permitting and BACT, ***but only for the OCS source*** – not for the associated vessels. As Region 10 noted,

> the OCS regulations make clear that, although the emissions from a vessel servicing an OCS source and within 25 miles of the OCS source are not regulated as part of the OCS Source [and not subject to BACT], emissions from such vessels are considered to be emissions from the OCS source and thus are considered in the ambient air quality impact analysis and offset calculations.

Chukchi RTC at 23. To the extent AEWC now challenges EPA's Part 55 regulations, as discussed in section III.B.2.b, that challenge may not be raised in this forum. To the extent it challenges Region 10's interpretation of the regulations, that interpretation was in no sense clearly erroneous.

B. Region 10 Properly Applied the Applicable Law When Determining What Constitutes the OCS Source.

The record demonstrates that Region 10 carefully applied the applicable regulatory and statutory requirements to determine when the *Frontier Discoverer* becomes and remains an OCS source.

1. Region 10 properly determined that the *Discoverer*'s propulsion engine and the non-attaching associated vessels are not part of the OCS source.

In the Chukchi Response to Comments, Region 10 provides a thorough and well-reasoned explanation of its determination that the *Frontier Discoverer* becomes an OCS source "from the time the Discoverer is sufficiently secure and stable to commence exploratory activity at the drill site, which in the case of the Discoverer, is a determination made for operational purposes by the Shell on-site representative and is an event that is recorded in the Discoverer's logs." Chukchi RTC at 16. This determination excludes the *Discoverer*'s propulsion engine, which is not operated after the *Discoverer* is stabilized and ready to drill. Region 10 also determined that the associated vessels which will not attach to the *Discoverer* when it is an OCS source are neither part of the OCS source nor themselves OCS sources. *See* Chukchi RTC at 23.

Based upon the comments it received on the permit issued in August 2009, Region 10 identified the issue of when the *Discoverer* would become an OCS source as one that needed more attention and Agency explanation and specifically requested comment on the issue in the Statements of Basis for both permits. Chukchi SOB at 20-21; Beaufort SOB at 23-24. After reviewing and evaluating these arguments, Region 10 made its fact-specific determination based upon EPA's properly promulgated regulations. Those regulations define vessels as OCS sources when they are "[p]ermanently 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.*)[.]" 40 C.F.R. § 55.2. Region 10 explained that it interpreted this definition to require that a vessel "be permanently or temporarily attached to the seabed and in a position to begin exploring, developing or producing resources from the OCS." Chukchi RTC at 16.

In making its determination, Region 10 rejected arguments from AEWC and Earthjustice that the *Frontier Discoverer* should be considered an OCS source when it has only one anchor attached to the seabed (Earthjustice Chukchi Cmts at 9-10, EPA Certified Index, Ex. K-16) or as soon as it is within 25 miles of a drill site (AEWC Chukchi Cmts at 10-11, EPA Certified Index, K-12). Region 10 also rejected all arguments that were based on the theory that EPA's regulatory definition of "OCS source" in 40 C.F.R. § 55.2 is inconsistent with Section 328 of the Clean Air Act and therefore invalid. Chukchi RTC at 11-12 (rejecting arguments proffered by Earthjustice and AEWC). Region 10 concluded that such arguments challenging Agency regulations adopted in 1992 were untimely and, under Section 307 of the Clean Air Act, could only be brought in the U.S. Court of Appeals for the District of Columbia. *Id*.

2. AEWC's Arguments That Region 10 Improperly Identified the OCS Source in Shell's Projects Have No Merit.

AEWC challenges Region 10's determination of when the *Discoverer* becomes an OCS source. *See generally* AEWC Beaufort Pet. at 10-31. AEWC argues first that this determination is inconsistent with the regulatory definition of "OCS source," and second, that the regulatory definition is itself inconsistent with the statutory definition. Neither argument is persuasive.

a. Region 10 properly applied EPA's regulations governing OCS sources to Shell's project.

Expanding on a comment on the Beaufort Permit,[27] AEWC now challenges Region 10's application of the OCS regulations to Shell's projects. AEWC's internally inconsistent arguments fail to demonstrate clear error in Region 10's decision-making.

1) Region 10's determination of when the *Discoverer* becomes an OCS source is consistent with EPA's regulations.

In its Petition for Review, AEWC argues that Region 10, in its application of the regulatory definition of "OCS source," impermissibly narrowed the definition by "ma[king] up a legal requirement that does not exist in the regulation." AEWC Beaufort Pet. at 17. The allegedly "new legal requirement" is the agency's determination that, as applied to the operational design of the *Frontier Discoverer*, the vessel is "erected" on the seabed and "used for the purpose of exploring, developing or producing resources therefrom" when it is "sufficiently secure and stable to commence exploratory activity at the drill site" as documented by the on-board Shell representative in the vessel's logs. Chukchi RTC at 16. AEWC maintains that there is "no support in the regulatory definition of OCS source for Region 10's effort to draw a

[27] *See* AEWC Beaufort Cmts at 21 (noting without further elaboration that Option 2, in which the *Discoverer* becomes an OCS source when it is secure and stable "is even more restrictive" than the regulatory definition of OCS source because it requires both attachment to the seabed and a declaration of position).

distinction between when the drill ship is a 'ship' and when it is drilling." AEWC Beaufort Pet. at 18.

AEWC advocates an interpretation of the regulatory definition of OCS source that would reduce it to a meaningless truism. AEWC asserts that "the entire purpose for bringing the drill ship to the OCS is to explore for hydrocarbons," (AEWC Beaufort Pet. at 15) and that "[a]side from transporting the drill ship through the OCS for purposes of repair, a majority of the time the drill ship is in the OCS it is there for the purpose of exploring for or producing hydrocarbons as authorized under OCSLA." *Id.* at 18.[28] In essence, AEWC argues that a drill ship, by its nature, is used to explore for and produce hydrocarbons. Thus, if a drill ship is in the OCS, it automatically meets the third prong of EPA's regulatory definition. Accordingly, AEWC argues that as soon as the *Frontier Discoverer* is connected in any way to the seabed, by virtue of being a drill ship, it meets the regulatory definition of OCS source.

Leaving aside the fact that AEWC's interpretation completely ignores the term "erected" in the regulatory definition (which on its own compels the rejection of AEWC's theory), its

[28] AEWC's selective quotes from the Chukchi Statement of Basis, are misleading in implying that Region 10 agrees with this position. *See* AEWC Beaufort Pet. at 15 (citing "EPA RTC" at 24 for the proposition that "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 that location for the purpose of exploring, developing, or producing resources"). Upon review of both Responses to Comments and both Statements of Basis, it appears that AEWC intended to cite the Chukchi Statement of Basis in which Region 10 explained why its proposed option 2 for when the *Discoverer* would be an OCS source was not "eight anchors down" but instead would be when the drill ship is determined to be "secure and stable in a position to commence exploratory activity at the drill site." Chukchi SOB at 21. In fact, the full sentence, including the language omitted by AEWC, confirms Region 10's position that it takes more than a general intent to explore for hydrocarbons plus some connection of an anchor to the seabed to be "used" for exploring, developing, and producing resources:

> EPA does not agree with Shell that the Discoverer is not an OCS until all eight anchors are attached, since available information shows that the Discoverer is at that 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.*

Chukchi SOB at 21 (omitted language in italics).

claim that a drill ship in the OCS automatically meets the third prong of the regulatory definition of OCS source essentially reads the phrase "*used* for the purpose of exploring, developing or producing resources" out of the regulation. This approach violates the basic canon of interpretation that a decision-making body should not adopt an interpretation that renders a portion of the statute or regulation null. *See Duncan v. Walker*, 533 U.S. 167, 174 (2001) ("'a statute ought, upon the whole, to be so construed that, if it can be prevented, no clause, sentence, or word shall be superfluous, void, or insignificant'") (quoting *Market Co. v. Hoffman*, 101 U.S. 112, 115 (1879)); *Babbitt v. Sweet Home Chapter of Cmtys. for a Great Oregon*, 515 U.S. 687 (1995) (noting "reluctance to treat statutory terms as surplusage"). As Region 10 recognized, the regulatory definition of OCS source identifies three specific events: a vessel must be (1) attached to the seabed, (2) erected on the seabed, (3) and used for exploration, development, or production of OCS resources. *See* Chukchi RTC at 16. AEWC's interpretation gives no meaning to the second two requirements of the regulation.

Moreover, as AEWC admits, there are circumstances when a drill ship may be in the OCS when it is not exploring for, developing, or producing OCS resources. *See* AEWC Beaufort Pet. at 18. AEWC's proposed interpretation of the regulatory definition would capture, for instance, a drill ship traveling across the OCS (perhaps for repairs or en route to a drill site outside of U.S. jurisdiction) that was forced to drop an anchor for safety purposes in adverse weather. *See* Chukchi RTC at 15. This would be a far more expansive interpretation of the concept "OCS source" than that envisioned by Congress and would result in capricious and unpredictable regulation of emissions control technology on vessels making short, emergency stops. Region 10's determination that the *Frontier Discoverer* becomes an OCS source when it

is declared secure and stable is a reasonable application of the regulatory definition to the operational design of the vessel.

2) Region 10's determination that the associated vessels are not part of the OCS source is consistent with applicable law.

Similarly, Region 10's determination that associated vessels that do not physically attach to the *Discoverer* are neither part of the OCS source nor OCS sources in their own right is a proper application of governing law. AEWC makes two arguments regarding the inclusion of associated vessels in the OCS source, only one of which makes any reference to the applicable regulation. First, it argues that the ice breaker/anchor handler should be considered part of the OCS source because, via the anchor line, it will be connected to the *Discoverer* and the seabed. AEWC Beaufort Pet. at 18-19. Second, it argues that associated vessels that have no attachment to the *Discoverer* should nevertheless be considered part of the OCS source to be consistent with alleged policy goals of Congress. *Id.* at 19-22. Neither of these arguments demonstrates clear error in the Region's application of the relevant law to determine that the associated vessels are not part of the OCS source.

EPA's regulatory definition of OCS source includes vessels "only" when they are "physically attached to an OCS facility," here, the *Discoverer*. 40 C.F.R. § 55.2 (definition of "OCS source"). Applying this regulation to the operational design of Shell's projects, Region 10 reasonably determined that neither the anchor handler nor any other associated vessels that will not attach to the *Discoverer* are part of the OCS source. First, the anchor handler cannot be considered to be attached to an OCS source when it is handling the *Discoverer*'s anchor lines during the anchoring process. Chukchi SOB at 21 n.7.[29] With regard to the anchor handling

[29] As Region 10 explains:

after the *Discoverer* becomes an OCS source, Region 10 also observed that little, if any, anchor handling will occur after the *Discoverer* is secure and stable. Chukchi RTC at 24. It then analyzed the purpose of the regulatory term "attachment" and noted that the preamble to the regulation analogized vessels "attaching" to the OCS source to vessels "at dockside." *Id.* at 25, citing 57 Fed. Reg. 40,792, 40,793-94. Contrary to AEWC's dismissive claim that only the "plain language" of the regulation is relevant, EPA's reference to vessels "at dockside" provides significant insight into the agency's intent regarding the application of the regulation, and Region 10 properly considered that information.

By the time EPA promulgated the OCS regulations in 1992, it had promulgated, rescinded, and litigated regulations regarding the regulation of vessels "at dockside." *See NRDC v. EPA*, 725 F.2d 761 (D.C. Cir. 1984). Ultimately, the D.C. Circuit instructed EPA that the Agency has the statutory authority to regulate emissions of vessels "at dockside" only to the extent the emissions are "'stationary source' emissions of the [] terminal" that can be properly attributed to the terminal. *Id.* at 771. Thus, EPA's use of the phrase "in which case *only the stationary sources aspects of the vessels will be regulated*" in the OCS regulations strongly indicates that EPA intended its regulation of vessels in Part 55 to be consistent with the D.C. Circuit's instruction regarding the limits of the Agency's statutory authority in *NRDC v. EPA* . Region 10 thus reasonably analyzed whether the connection between the anchor handler and the

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> Even if the Discoverer is considered to be an OCS source when it is connected to the seabed at a drill site by a single anchor, EPA does not consider Icebreaker # 2 to be "physically attached" to the Discoverer (and thus not an "OCS source") during the time it is assisting the Discoverer in the anchor setting and retrieval process at a drill site. . . . The activities during anchor handling are not designed to "to fasten, secure or join" Icebreaker # 2 to the Discoverer or "to connect as an adjunct or associated condition or part" Icebreaker # 2 to the Discoverer, the common meaning of "attached" in this context. *The American Heritage Dictionary of the English Language*, 4th ed., (2006). Rather, Icebreaker # 2 is enabling the attachment of the Discoverer to the seabed.

Chukchi SOB at 21 n.7.

Discoverer (when the Discoverer is an OCS source) is sufficiently similar to that between a vessel and a dock to determine whether regulation of that vessel would be within the Agency's statutory authority. Region 10 determined that a connection between the anchor handler and the *Discoverer* via the *Discoverer*'s anchor lines does not meet the regulatory definition of "attachment" because the anchor handler will not be connected to the *Discoverer* with a purpose to "prevent or minimize relative movement between two vessels." Chukchi RTC at 25. Region 10's conclusion is a reasonable application of the regulation, as properly informed by the Agency's history regulating marine vessel emissions.

AEWC also claims that Region 10 erred in further concluding that even if the anchor line connection causes the anchor handler to be "attached" to the *Discoverer*, the anchor handler is not properly subject to regulation because it will not be engaged in stationary source activities. This claim is similarly flawed. Consistent with the instruction received from the D.C. Circuit in *NRDC v. EPA*, the Agency's definition of OCS source in 40 C.F.R. § 55.2 specifically limits regulation of vessels attached to an OCS source to the "stationary source[] aspects of the vessels." Region 10 interpreted this to mean that emissions from the anchor handler during the "anchor setting and retrieval process" should not be regulated because they are not "stationary source activities." Chukchi RTC at 25. AEWC questions this conclusion, implying that non-stationary source activities could somehow implicate the stationary source aspects of the vessel. AEWC does not offer any example of how this might happen, instead simply criticizing Region 10 for making the reasonable determination that anchor setting and retrieval – intrinsically a *mobile* process – is not a stationary source activity. The regulation does not define any "stationary sources aspects of the vessels," and, in fact, the D.C. Circuit instructed that this should be a fact-specific determination. *NRDC v. EPA*, 725 F.2d at 772. Because anchor setting

and retrieval requires the anchor handler to be mobile, Region 10 made a reasonable determination that such activity does not implicate the "stationary source aspects" of the anchor handler and is not properly subject to regulation as part of the OCS source.

With regard to the associated vessels that will have no physical connection to the *Discoverer*, AEWC argues that Region 10 erred in excluding them from the OCS source because the Region "should have considered: 1) Congress's intent to regulate associated vessels; 2) section 328's goals, all of which require Region 10 to conduct a BACT determination for the associated fleet; and 3) EPA's definition of "stationary source" under the PSD program."[30] AEWC Beaufort Pet. at 19-20. What is conspicuously missing from this list and from AEWC's argument on this point generally is any reference to the language of the regulation – which explicitly requires attachment – or any attempt to reconcile the plain language of the regulation with the policy arguments AEWC proffers.[31] AEWC simply makes no argument that Region 10 incorrectly applied the regulation to Shell's operation. Although this argument is placed in AEWC's "regulatory" section, it amounts to nothing more than a tardy, improperly venued challenge to EPA's OCS regulations and should be rejected as such.

[30] AEWC argues in this section that EPA's recent rules governing emissions from marine vessels demonstrate that the Agency has the authority to regulate marine vessels. *See* AEWC Beaufort Pet. at 21-22. Here, AEWC fundamentally misses the point. Region 10 has explained that it lacks the authority *under the OCS regulations and Section 328* to govern non-stationary marine vessels as part of an OCS source for purposes of the PSD program. Chukchi RTC at 25-27. The Agency's authority under Title II to promulgate regulations governing marine vessels' mobile source emissions does nothing to expand the reach of the PSD program with respect to OCS sources.

[31] AEWC's enthusiasm for a broad "interpretive" authority on the Region's part to regulate non-attaching associated vessels as part of the OCS source in contravention of the plain language of the regulation is, of course, logically inconsistent with its strong critique of Region 10's reasonable use of the preamble to the OCS regulations to gain insight on the proper application of the term "attached" to the unique facts of Shell's projects.

b. AEWC's challenges to EPA's regulatory definition of OCS source are barred.

As Region 10 explained in its Response to Comments, challenges to nationally applicable regulations implementing the Clean Air Act must be made in the United States Court of Appeals for the District of Columbia within 60 days of promulgation of the regulation. Chukchi RTC at 11, citing 42 U.S.C. § 7607(b). Because EPA promulgated the regulatory definition of "OCS source" on September 2, 1992, AEWC's claim that the rule is inconsistent with the regulation[32] is untimely as well as being raised in the improper forum. *See supra* section I.C. As discussed above with respect to the Agency's rule regarding the date upon which CO_2 will become a "regulated" pollutant, Petitioners may not bring a rulemaking challenge in this forum. *Id.* The Board therefore lacks the authority to hear this challenge.

c. Excluding unattached vessels from the regulatory definition of OCS source is consistent with CAA Section 328.

Even assuming the Board were authorized to consider AEWC's argument that the EPA's regulatory definition of "OCS source" is inconsistent with CAA Section 328, it is incorrect on the merits and has been rejected as such by the D.C. Circuit in *Santa Barbara County Air Pollution Control District v. EPA*, 31 F.3d 1179, 1181 (D.C. Cir. 1994). In that case Santa Barbara timely challenged EPA's OCS regulations, arguing, *inter alia*, that the Agency's treatment of marine vessels was improper under CAA Section 328. *Id.* at 1181. Contrary to AEWC's assertion (AEWC Beaufort Pet. at 28), the case did involve the treatment of marine vessels associated with an OCS source. *See* Brief of Petitioner, Santa Barbara County Air

[32] AEWC makes a token effort to characterize this argument as one challenging Region 10's application as inconsistent with the statute. *See* AEWC Chukchi Pet. at 22-31 ("Region 10 Committed Clear Legal Error By Failing To Apply The Statutory Definition of OCS Source *Or Even Rectify [sic] Its New Definition Of The OCS Source With The Statutory Definition*"). However, the substance of its argument is merely a repetition of the arguments it made in its comments to Region 10 that the regulation itself is invalid and is an attempted rebuttal of Region 10's procedural and substantive arguments rejecting those comments.

Pollution Control District, 1993 WL 13650745 (C.A.D.C.) at 4 (describing the impacts to the coastal communities from air pollution associated with OCS development including from "*support marine vessels associated with oil and gas development*") (Attachment C).[33] In its decision, the D.C. Circuit upheld EPA's OCS regulations that exclude non-attached vessels from the OCS source.

Making many of the same textual and legislative history arguments that AEWC now raises, Santa Barbara argued that EPA's regulatory definition of "OCS source" – which excludes marine vessels associated with the source while they are in transit – "narrowly" read Section 328. Santa Barbara maintained that EPA had created a restrictive regulatory definition for a statutory term that is "nonrestrictive," and that the legislative history suggested Congress's intent to regulate vessels in transit. *Id.* at 10. EPA responded that its interpretation was clearly reasonable, citing the statute's specific instruction regarding treatment of emissions from vessels in transit, and claiming that "the most reasonable construction of the statute's definition of 'OCS source' is one which excludes marine vessels in transit" because OCSLA does not provide for regulation of marine vessels in transit. Brief of Respondent EPA, 1994 WL 16777199 (C.A.D.C.) (Attachment D).

In *Santa Barbara*, the D.C. Circuit found that Section 328's treatment of marine vessels is ambiguous. The court then analyzed the agency's interpretation that vessels are part of an OCS source only when they meet the requirements of 40 C.F.R. § 55.2. Applying *Chevron* deference, the court concluded that EPA's interpretation was "a permissible reading of the

[33] AEWC appears to base its argument that *Santa Barbara* is not on point on the phrases "in transit" and "traveling over the OCS" in the decision. However, as the briefs make apparent, the parties used those phrases to distinguish ships attached to the OCS source (and therefore considered part of it) from marine vessels associated with the OCS source, but not connected to it. The case clearly did not involve, contrary to AEWC's contention, marine vessels traveling over the OCS that are completely unrelated to OCS development.

statute." 31 F. 3d at 1181. Thus, in addition to being untimely, Petitioners' challenge to EPA's definition of "OCS source" is foreclosed by the judicial principle of *stare decisis*, which binds the only judicial body with authority to hear this claim, the D.C. Circuit.

The Board's recent decision in *Kulluk I* also supports Region 10's approach. In *Kulluk I* the Board held that "treat[ing] the vessels' attachment to the seabed as a necessary element in establishing that a vessel has become an OCS source, and . . . treat[ing] the subsequent detachment as returning the drill ship to its status as a vessel . . . would not only appear to be permissible, but indeed would appear to be required by the plain language of the regulatory text." *Kulluk I*, slip op. at 26. AEWC attempts to evade this controlling authority by noting that the key issue in *Kulluk I* was whether the drill ships' emissions at various drill sites should be aggregated such that the project's emissions would be considered "major." AEWC Beaufort Pet. at 28-29. This argument is unpersuasive because determining when the *Kulluk* would become an OCS source subject to the OCS regulations was a preliminary step in the Board's analysis. That is, before the Board could consider whether the emissions should be aggregated, it had to determine when the source emitting the emissions was subject to the OCS regulations. Thus, the Board's holding that the "plain language" of the OCS regulations "require[s]" the Region to treat the drill ship as an OCS source only when it is attached to the seabed is controlling authority. Region 10 properly followed this authority when it determined that the *Discoverer* is an OCS source only when it is attached to the seabed and that the unattached associated vessels, which will never attach to the OCS source or the seabed, are neither part of the OCS source nor OCS sources in their own right. *See* Chukchi RTC at 19-22.

AEWC also argues that Region 10's interpretation "impermissibly restricts the inclusive statutory definition" of OCS source as "any [emitting] equipment, activity or facility" on the

OCS by not including all associated vessels, citing *Massachusetts v. EPA*, 549 U.S. 497 (2007). AEWC argues that, under *Massachusetts v. EPA*, any statute including the words "includes any" is unambiguous. AEWC Beaufort Pet. at 27. However, in *Massachusetts v. EPA*, the Supreme Court was reviewing specific language.[34] That the Court found the words "any" and "includes" to be unambiguous in that context does not mean that all phrases using those words are also unambiguous or that the Supreme Court abandoned the long-standing canon of statutory interpretation that a statute must be interpreted in context. *See FDA v. Brown & Williamson Tobacco Corp.*, 529 U.S. 120, 132 (2000) ("The meaning—or ambiguity—of certain words or phrases may only become evident when placed in context."); *Brown v. Gardner*, 513 U.S. 115, 118 (1994) ("Ambiguity is a creature not of definitional possibilities but of statutory context.")

Congress's use of the "expansive" words "any" and "include" must be evaluated in context. Here, that includes Congress's specific statutory instruction regarding the treatment of associated vessel emissions, *i.e.*, that they be "considered direct emissions from the OCS source." Because Congress limited its definition of "OCS source" with the specific instruction that emissions for associated vessels should be considered direct emissions of the "OCS source," it is at least ambiguous whether Congress intended those vessels to be included in the "expansive" definition of the OCS source. Indeed, the more logical reading of section 328 is that, if the vessels were included in the OCS source, there would be no need to separately

[34] Specifically, the Court was construing this language:

> The term "air pollutant" means any air pollution agent or combination of such agents, including any physical, chemical, biological, radioactive (including source material, special nuclear material, and byproduct material) substance or matter which is emitted into or otherwise enters the ambient air. Such term includes any precursors to the formation of any air pollutant, to the extent the Administrator has identified such precursor or precursors for the particular purpose for which the term "air pollutant" is used.

42 U.S.C. § 7602(g) (quoted by *Massachusetts v. EPA*, 549 U.S. at 558-60).

instruct that, for some purposes, their emissions should be considered direct emissions of the OCS source, because all of their emissions would be part of the OCS source.[35]

C. Region 10 Properly Applied the Applicable Law When Determining That BACT Should Not Be Applied to the *Discoverer*'s Propulsion Engine and the Associated Vessels.

The record supports Region 10's determination that the applicable regulatory and statutory requirements prohibit application of BACT to the *Frontier Discoverer*'s propulsion engine and the associated vessels because they are not part of the OCS source.

1. Region 10 properly concluded that under Part 55, BACT can be applied only to emitting units on the OCS source.

Under Region 10's interpretation of Part 55, only emitting units on the OCS source are subject to BACT. The Region explained that "[t]he OCS regulations make clear that … the emissions from a vessel servicing an OCS source and within 25 miles of the OCS source are not regulated as part of the OCS source." Chukchi RTC at 23. For the reasons discussed above, Region 10 correctly determined that neither the *Frontier Discoverer*'s propulsion engine nor the associated vessels are part of the OCS source. Therefore, under Region 10's interpretation of EPA's regulations, neither source is subject to BACT.

[35] Finally, AEWC complains that EPA did not individually respond to its comment that Region 10's determination when the *Discoverer* becomes an OCS source should include preconstruction activities. AEWC is dissatisfied because Region 10 responded to this comment by referring to its prior response to arguments claiming the regulatory definition of "OCS source" is inconsistent with the statute. AEWC Beaufort Pet. at 31 (citing Chukchi RTC at 12). Region 10's response was appropriate because EPA may regulate only OCS sources. Activities which take place before the *Discoverer* becomes an OCS source are not subject to EPA's permitting authority. Thus, Region 10 properly construed AEWC's argument that preconstruction activities should be regulated as yet another attack on the regulatory definition of OCS source and cross-referenced the appropriate answer. A petitioner is not entitled to repeated responses on the same issue; the agency may group comments as appropriate. *In re Dominion Energy Brayton Point, L.L.C.*, 12 E.A.D. 490, 582-583 (EAB 2006) ("[T]he Region's decision to group related comments together and provide one unified response for each issue raised was an efficient technique, not an indication of unresponsiveness."); *In re NE Hub Partners*, L.P., 7 E.A.D. 561, 583 (EAB 1998).

2. AEWC's arguments that BACT should have been applied to the associated vessels and the Frontier Discoverer's propulsion engine because they are part of the OCS source are without merit.

AEWC does not dispute Region 10's conclusion that BACT applies only to the OCS source. AEWC contends that Region 10 should have imposed BACT on the *Discoverer*'s propulsion engine because the OCS source should have been defined to include that engine. Similarly, AEWC contends that the associated vessels that will operate within 25 miles of the Discoverer are properly part of the OCS source, and therefore are subject to BACT on their emitting units. As discussed above, Region 10's reasonable conclusion that the *Discoverer*'s propulsion engine and the non-attaching vessels associated with the *Discoverer* are not part of the OCS source compelled its rejection of BACT for those emissions sources.

3. Earthjustice's arguments that BACT should have been applied to the associated vessels irrespective of source definition are without merit.

On appeal Earthjustice does not dispute Region 10's definition of the OCS source, which excludes non-attaching associated vessels, but argues that, that the *emissions* of the associated vessels are subject to BACT by virtue of the statutory instruction in the CAA Section 328 definition of OCS source that "[f]or purposes of this subsection, emissions from any vessel servicing or associated with an OCS source, including emissions . . . within 25 miles of the OCS source, shall be considered direct emissions from the OCS source." 42 U.S.C. § 7627(a)(4)(C). Earthjustice acknowledges that the associated vessels are neither OCS sources in their own right nor part of a larger OCS source. Earthjustice Pet. at 10. Nevertheless, Earthjustice advocates that the Board disregard Region 10's interpretation of EPA's Part 55 regulations and interpret Congress's instruction that associated vessel emissions be considered "direct emissions" of the OCS source as a vehicle for subjecting marine vessels to full PSD review. This is a radical

proposition that runs counter not just to Congress's intent in Section 328, but to the entire structure of the Clean Air Act.

Implicit in EPA's Part 55 decisions to include emissions from associated vessels in the related OCS source's potential to emit, and to require overall compliance with applicable air quality standards, but not to subject such vessels to BACT, is the premise that BACT, as an element of the PSD program, (i) applies only to sources that, by their nature, are subject to the PSD program (OCS sources offshore or stationary sources onshore) and (ii) applies to the emissions unit itself, not the emissions. This premise undergirds the concept of BACT as articulated in the Clean Air Act, in the regulations implementing the Act, and in EPA's guidance documents on the subject. While the amount of potential emissions from an OCS or stationary source is used to determine when BACT may apply to that source, there is no support in the law for the concept proposed by Earthjustice that emissions from a vessel or other mobile source that by its nature does not qualify for regulation under the PSD program could render that source subject to BACT. Further, there is no indication that Congress intended to change this fundamental element of the Clean Air Act when it passed Section 328 and instructed the EPA to apply the PSD program offshore. Thus, the Region properly and reasonably interpreted 40 C.F.R. Part 55 as prescribing that associated vessels that are not part of the OCS source are not subject to BACT.

a. The onshore PSD program applies BACT only to stationary sources.

Every layer of the PSD program, from the Act to the regulation and EPA guidance, confirms that BACT applies to stationary source emission *units*, not to "emissions" divorced from a regulated source.

i) The structure of the Clean Air Act indicates that BACT is restricted to stationary sources.

The Clean Air Act makes a broad division between mobile sources and stationary sources. Mobile sources, such as motor vehicles and marine vessels, are regulated by Title II, with broadly applicable emissions control technology and fuel standards.[36] Stationary sources of sufficient size are regulated by Title I, which mandates individual permitting and customized assessments of the best available control technology for the given source. 42 U.S.C. § 7475(a). Notably, the BACT provision does not exist in Title II. Moreover, there is no provision in the onshore application of the Clean Air Act that would operate to "switch" a mobile source into the PSD program based simply upon the volume of emissions it emits.

ii) The statutory definition and use of BACT indicates it applies to actual emissions units, not "emissions."

When it created the PSD program, Congress mandated that "[n]o major emitting facility . . . may be constructed . . . unless – (4) **the proposed facility** is subject to best available control technology for each pollutant subject to regulation under this chapter emitted from, or which results from, such facility". 42 U.S.C. § 7475(a) (emphasis added). This language makes clear that facilities – not emissions – are subject to BACT. The statutory definition of "best available control technology" supports that interpretation:

> The term "best available control technology" means an emission limit 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, . . . for control of each such pollutant.

[36] *See, e.g.*, 42 U.S.C. § 7547 (EPA authority for nonroad engines standards); 40 C.F.R. Part 1043 (emissions standards for marine diesel engines over 130 kW – implementing International Convention for the Prevention of Pollution from Ships (MARPOL) Annex VI); 40 C.F.R. Parts 89 and 1042 (standards for marine diesel engines under 37 kW); 40 C.F.R. Parts 94 and 1042 (standards for marine diesel engines 37 kW and above); 40 C.F.R. Part 80 (diesel fuel regulations).

42 U.S.C. § 7479(3) (emphasis added). Although the amount of potential emissions is relevant to determine whether BACT is required, the technology is applied to the "major emitting facility." In turn, Congress defined a "major emitting facility" as a stationary source. 42 U.S.C. § 7479(1). Thus, in the onshore PSD program, there is no statutory support for the proposition that BACT would be applied to a mobile source, including a vessel.

iii) The regulatory definition and use of BACT indicates it applies to emitting devices, not "emissions."

When EPA promulgated Part 52, implementing the statutory PSD program, it understood Congress to intend that BACT would be applied to stationary sources. Section 52.21(j) (the "control technology review") provides that "[a] new major *stationary source shall apply* best available control technology for each regulated NSR pollutant that *it would have the potential to emit* in significant amounts." 40 C.F.R. § 52.21(j) (emphasis added). This regulation reflects EPA's conclusion that, while BACT applicability hinges on a source's potential emissions, the required technology review is applied to the source's emission unit, not the emissions.[37]

iv) EPA's permitting guidance indicates that BACT applies to emissions sources on which controls can lawfully be imposed, not "emissions."

EPA's guidance is even more explicit. The New Source Review Manual states that "[t]he BACT requirement applies to *each* individual new or modified affected *emissions unit and pollutant emitting activity* at which a net emissions increase would occur."[38] New Source

[37] This explains one of the functions of considering associated vessel emissions as "direct emissions" from the OCS source for purposes of calculating the OCS source's potential to emit a given pollutant in significant amounts. Those additional emissions must be included in determining whether the OCS source needs to implement BACT.

[38] An "emissions unit" is defined as "any part of a stationary source that emits or has the potential to emit any pollutant subject to regulation under the Act." New Source Review Manual at A.2. The term "pollutant emitting activity" is not defined in the Manual, but it appears to be based on the concept of

Review Workshop Manual (DRAFT) (October 1990) ("New Source Review Manual" or "Manual") at B.4 (emphasis added).[39] The Manual further explains that "[e]ach new or modified emissions unit (or logical grouping of new or modified emissions units) subject to PSD is required to undergo BACT review." *Id.* at B.10. It is clearly EPA's practice to first determine whether a source, by its nature, is eligible for PSD review (*i.e.*, whether a source is a stationary source potentially subject to PSD review), then determine whether it is a major source and, if so, whether its emissions of any pollutant are significant enough to warrant BACT, and then to apply BACT to the stationary source.

v) Emissions from mobile sources are incorporated into PSD review only in a limited manner.

The PSD program's treatment of secondary emissions and mobile source emissions in the onshore context demonstrates how EPA has addressed emissions that may be related to, but not emitted by, a stationary source. Such emissions may be excluded from the PSD analysis or included for limited purposes. But in no case does EPA subject the sources of those emissions to substantive PSD requirements such as BACT.

Secondary emissions are "emissions [that] would occur as a result of the construction or operation of a major stationary source or major modification, but [that] do not come from the major stationary source or major modification itself." 40 C.F.R. § 52.21(b)(18).[40] As a general

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"primary activity" which is used as a synonym for "source." *See id*. at A.4. Thus, it does not appear to include "activities" which are not "sources."

[39] While the New Source Review Manual is not binding Agency authority, the Board has frequently affirmed its validity, recently noting that it "has guided state and federal permitting authorities on PSD requirements and policy for many years." *In re Northern Michigan University Ripley Heating Plant*, PSD Appeal No. 08-02, slip op. at 12 (EAB Feb. 18, 2009), 14 E.A.D. ____.

[40] EPA has acknowledged errors of transcription and substance for later parts of this definition not relevant to this analysis. *See* Letter from John Calcagni, Director Air Quality Management Division, EPA (Jan. 8, 1990) , EPA New Source Review (NSR) Archives, available at http://www.epa.gov/ttnnsr01/psd1/p5_26.html.

rule, emissions from mobile sources, such as cars, are not included in secondary emissions, even if an increase in mobile source emissions can be expected as a result of construction of the stationary source. *Id.*; *see also* New Source Review Manual at A.18. Emissions from some mobile sources – those that are not regulated in Title II of the Clean Air Act – are considered secondary emissions. These emissions are considered for specified purposes in PSD reviews of the stationary source with which they will be associated, *e.g.*, the impact analyses required by the PSD program (source impact analysis and additional impact analyses). 40 C.F.R. § 52.21(b)(4), (k), (o); Manual at A.18. However, in the onshore program, mobile source emissions, no matter the quantity, are not subject to BACT, even if included in PSD impact analyses as secondary emissions. Critically, including secondary emissions in PSD impact analyses for a stationary source with which they are associated does not act as a back door to subject the sources that emit those secondary emissions to the full PSD review, including BACT.

b. Section 328 does not change the fundamental concept that BACT applies to emissions units, not "emissions."

Earthjustice argues that because, under Section 328, emissions from vessels associated with an OCS source are considered "direct emissions" from that source, the emissions themselves are subject to the PSD program, and thus subject the vessels to BACT. Earthjustice Pet. at 9-11. As demonstrated above, this interpretation is a radical departure from the way the PSD program operates onshore. In light of Congress's stated intent that the OCS sources be subject to the "same" regulation as if they were onshore, 42 U.S.C. § 7267(a)(1), Earthjustice's argument is tenuous.

When Congress enacted Section 328 in 1990, it did so with full knowledge, not only of its own prior work in creating the PSD program and requiring that major emitting facilities be subject to BACT, but with knowledge of EPA's implementation of that program, including its

treatment of secondary emissions. *See Lorillard v. Pons*, 434 U.S. 575, 580 (1978) ("Congress is presumed to be aware of an administrative or judicial interpretation of a statute and to adopt that interpretation when it re-enacts a statute without change.").

Congress was also aware of the judicially-mandated treatment of dockside emissions from marine vessels in port. As discussed above, in *NRDC v. EPA*, the D.C. Circuit examined the question of treatment of emissions from marine vessels while in port. The court determined that emissions generated from the vessels' "stationary source" activities while in port could be regulated only to the extent they were "'stationary source' emissions of the marine terminal" based upon the Agency's "'control and proximity' regulations" and properly attributable to the terminal. The court instructed EPA to conduct a rule-making addressing those issues. *NRDC v. EPA*, 725 F.2d at 771. Congress is presumed to have been aware of this important and highly relevant judicial decision when it passed Section 328. *See Keene Corp. v. United States*, 508 U. S. 200, 212 (1993) (applying the "presumption that Congress was aware of [prior] judicial interpretations and, in effect, adopted them" when it revised statute); *Cannon v. Univ. of Chicago*, 441 U.S. 677, 699 (1979) ("[I]t is not only appropriate but also realistic to presume that Congress was thoroughly familiar with these unusually important precedents from this and other federal courts and that it expected its enactment to be interpreted in conformity with them."). That EPA believed that associated vessels serving an OCS source have an analogous relationship to ships at dockside is demonstrated by its inclusion of the phrase "in which case only the stationary sources aspects of the vessels will be regulated" in the OCS regulations. 40 C.F.R. § 55.2. EPA interpreted the D.C. Circuit's instruction in *NRDC v. EPA* to authorize it to impose *stationary source* requirements – including BACT – on marine vessels only when the vessel was attached to the OCS source and the emissions were related to stationary source activities. *See* 57

Fed. Reg. 40,792, 40793-94 (Sept. 4, 1992) (Preamble to Part 55) (citing *NRDC v. EPA* for the proposition that "[o]nly the vessel's stationary source activities may be regulated" and concluding that Part 55 will therefore "not regulate vessels en route to or from an OCS facility as 'OCS sources,' nor will it regulate any of the non-stationary source activities of vessels while at dockside."). Region 10 acted consistently with this approach when it required BACT analysis only for emissions units onboard the vessel that would attach to the *Discoverer* (the supply vessel) and only to the stationary source aspects of that vessel.

It is undisputed that Congress intended to "account" for emissions from mobile sources associated with an OCS source. The question before the Board is how Congress intended to do so. EPA has interpreted Congress's instruction that associated vessel emissions should be considered "direct emissions" of the OCS source to mean that those emissions should be considered part of the OCS source's potential to emit. In the definition of "potential emissions" in the OCS regulations, EPA instructs that:

> Pursuant to section 328 of the Act, emissions from vessels servicing or associated with an OCS source shall be considered direct emission from such a source while at the source, and while en route 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.

40 C.F.R. § 55.2. In light of the operation of the PSD program onshore, EPA's regulatory approach was reasonable. Had Congress wanted to actually subject the associated vessels to full PSD analysis, it would have been obvious for Congress to instruct that such *vessels* should be treated as OCS sources. Instead, Congress restricted its instruction to the *emissions* from those vessels, and did so with the background of the onshore program, in which emissions from associated sources can be attributed to a stationary source for purposes of certain elements of the PSD program without subjecting the non-stationary sources to emissions control requirements. Where Congress is silent or ambiguous in its meaning, it is more reasonable to take the limited

interpretation, rather than, as Earthjustice would have this Board do, assuming that by its silence, Congress intended to turn the PSD program on its head in its offshore application by, for the first time, subjecting sources to PSD emissions control requirements based not on their nature as a stationary or OCS source, but by their emissions alone. Even assuming the Board had jurisdiction to review EPA's adoption of 40 C.F.R. Part 55 almost 20 years ago, this radical proposition is inconsistent with the application of the PSD program onshore and should be rejected.

In short, Region 10 correctly concluded that it would properly account for associated vessel (mobile source) emissions in Shell's projects by including them in the *Frontier Discoverer*'s potential to emit, as directed by 40 C.F.R. 55.2. By so doing, it would require Shell to control those emissions so as to ensure compliance with applicable air quality standards, but would not subject those vessels to BACT analysis.

IV. EPA'S PARTICULATE MATTER DETERMINATIONS ARE PROPER AND ENTITLED TO DEFERENCE.

AEWC contends that Region 10 "failed to obtain sufficient information on $PM_{2.5}$" to adequately determine background air quality in the areas that will be impacted by emissions from Shell's operations in the Chukchi and the Beaufort Seas. AEWC asserts that the Region (1) violated EPA regulations "that call for collocated sampling of $PM_{2.5}$ from a monitor with an approved quality assurance project plan to establish background levels of the pollutant;" (2) "failed to calculate or model the amount of secondary $PM_{2.5}$ that would be generated by Shell's operations;" and (3) failed to conduct an adequate BACT analysis for $PM_{2.5}$. AEWC Chukchi Pet. at 32; AEWC Beaufort Pet. at 32. In addition, AEWC contends that in issuing the Beaufort Permit, Region 10 violated requirements for at least four months of $PM_{2.5}$ background data. AEWC Beaufort Pet. at 32. AEWC's claims are without merit because they challenge highly

technical decisions by the Region that were reasonable and supported by record information, and which the Region fully explained. For those reasons, the Board should defer to the Region's technical determinations. *See City of Attleboro*, slip op. at 10, 62; *Peabody W. Coal Co.*, 12 E.A.D. at 34.

A. Region 10 Did Not Commit Clear Error In Determining that Two Months Worth of Collocated Sampling of $PM_{2.5}$ Ambient Air Quality Data at Deadhorse Was Sufficient to Validate the Precision of the $PM_{2.5}$ Ambient Air Quality Data Collected at Wainwright and Badami.

AEWC's first argument comes down to whether the Region clearly erred in its interpretation and application of requirements in a technical appendix to the EPA regulations that govern collocated sampling of $PM_{2.5}$ at monitoring stations in a PSD air quality monitoring network. Collocated sampling refers to locating two sampling instruments in close proximity and comparing the measurements they report. This is a method of verifying the precision of the instrument and the sampling procedure, both at the location with the collocated sampler and at other locations in the network using the same equipment and procedures. AEWC argues Region 10 technical staff clearly erred by determining that approximately two months of collocated sampling data was sufficient to verify the precision of the method, rather than requiring that the collocated sampling continue for the eight month period during which background sampling was being done with the same type of instrument at Wainwright (for the Chukchi Permit) and for the four month period of sampling at Badami (for the Beaufort Permit). AEWC says Region 10 technical staff also clearly erred by allowing the organization conducting the collocated sampling to submit a quality assurance program plan ("QAPP") for the collocated sampling procedure during the sampling effort, rather than in advance.

AEWC also contends the Beaufort Permit was not based on a full four months of data, and therefore is invalid. Significantly, AEWC does not dispute Region 10's determination that

eight months' and four months' worth of $PM_{2.5}$ monitoring data were sufficient to characterize background $PM_{2.5}$ levels on the North Slope for purposes of, respectively, the Chukchi and Beaufort Permits.[41] It should also be noted at the outset that AEWC does not cite any record evidence that would suggest that it was unreasonable for Region 10 to conclude that the collocated sampling that Shell's contractor conducted in fact verified the precision of the sampling instrument and procedure. Nor does AEWC claim that the $PM_{2.5}$ data on which Region 10 relied was not accurate or suffered from instrumentation or procedural deficiencies. Nor does AEWC offer any evidence that the QAPP was deficient or that, at any time, the collocated sampling deviated from the QAPP. Thus, AEWC's argument is merely a formalistic objection to Region 10's interpretation of the Agency's sampling procedures, and does not challenge the validity of any of the resulting technical determinations.

1. Region 10 reasonably determined that two months of collocated sampling was sufficient to validate network monitoring data.

The PSD rules on which AEWC relies in making this argument require the applicant to provide "an analysis of ambient air quality in the area that the major stationary source or major

[41] Region 10 explained its conservative rationale for requiring approximately eight months of data for the lead Chukchi Permit in the Response to Comments on that permit by noting that the period during which data was collected is expected to have the greatest seasonal $PM_{2.5}$ readings. Chukchi RTC at 102-103 ("During the months from July to October, the land surrounding the Wainwright monitoring station is generally free from any ground cover such as snow and ice. Under this environmental condition, EPA expects the Wainwright station to measure higher $PM_{2.5}$ concentrations during this period than during the other times of the year because increased human activities during the warmer summer months and wind entrainment are two sources that elevate particulate concentration levels."). Region 10 further noted that the Permits prohibit emissions during part of the time for which there is no monitoring data (January 1 through March 5). *Id*. at 103. Finally, Region 10 concluded that during the only period when the Permit authorizes activities but for which no data is available (November 1 through December 31), "the area surrounding the monitoring station is expected to be covered with ice and snow during this period, thereby reducing human activity-generated and wind entrained fine particulates." *Id.* Indeed, as Region 10 expected, this conservative assumption was confirmed by data collected between November 1 and December 7, 2009, which demonstrated lower levels of $PM_{2.5}$ than those observed in summer months. Region 10 reasonably concluded that a "complete and adequate analysis" could be accomplished with $PM_{2.5}$ data gathered between March 6, 2009 and December 7, 2009.

modification would affect" for pollutants that will be emitted in "significant" amounts. 40 C.F.R. § 52.21(m)(1)(i). This analysis "shall contain continuous air quality monitoring data gathered for purposes of determining whether emissions of that pollutant would cause or contribute to a violation of the standard or any maximum allowable increase." 40 C.F.R. § 52.21(m)(1)(iii). Generally,

> the continuous air quality monitoring data that is required shall have been gathered over a period of at least one year and shall represent at least the year preceding receipt of the application, except that, if the Administrator determines that a complete and adequate analysis can be accomplished with monitoring data gathered over a period shorter than one year (but not to be less than four months), the data that is required shall have been gathered over at least that shorter period.

40 C.F.R. 52.21(m)(1)(iv). This requirement applies only to the data which will be used in the impact analysis, not to the collocated data that will be used to verify the accuracy of the monitoring data.

The requirements for collocated data do not have such clear instructions regarding the time period that data must be collected. The rule specifies that "[t]he owner or operator of a major stationary source or major modification shall meet the requirements of Appendix B to part 58 of this chapter during the operation of monitoring stations for purposes of satisfying paragraph (m) of this section." 40 C.F.R. § 52.21(m)(3). Only two provisions of Appendix A to Part 58 pertain to collocated monitoring:

> 3.2.5.5. For each PSD monitoring network, one site must be collocated. A site with the predicted highest 24-hour pollutant concentration must be selected.
>
> 3.2.5.6. The two collocated monitors must be within 4 meters of each other and at least 2 meters apart for flow rates greater than 200 liters/min or at least 1 meter apart for samplers having flow rates less than 200 liters/min to preclude airflow interference. Calibration, sampling, and analysis must be the same for both collocated samplers and the same as for all other samplers in the network.

The purpose of collocated monitoring is to confirm, through simultaneous comparative monitoring at one location in an air quality monitoring network, the accuracy of a given

monitoring device and method of operating the device so as to validate the data obtained by the same device and method at other stations in the network. *See* 40 C.F.R. Part 58, Appendix A, 3.2.5.5 and 3.2.5.6.

ConocoPhillips Alaska Inc. ("CPAI") took the lead in establishing a collocated monitoring station in the latter part of 2009, to be operated on behalf of CPAI and Shell by AECOM. *See* Letter from Bradley Thomas (CPAI) to Herman Wong (EPA), Aug. 19, 2009 (Attachment E). CPAI explained that it planned to install a monitoring station in Deadhorse, thereby creating a network with locations at Wainwright and Deadhorse (and later Badami). The stations would use exactly the same equipment (FEM $PM_{2.5}$ monitors) and operating procedures and be operated by the same contractor. Data from the second collocated "station audit monitor" at Deadhorse would be used to "generate precision and bias estimates" applicable to determine the validity of data from each of the three stations. *Id*. at 3.

AEWC does not assert that Deadhorse was an inappropriate site for collocated monitoring in the three-station network or that the location was otherwise contrary to Section 3.2.5.5. Nor does AEWC dispute that the location or operation of the Deadhorse collocated monitors was entirely consistent with section 3.2.5.6 of Appendix A, or that the "calibration, sampling and analysis" was not the same for all the samplers in the network. Beyond these requirements, neither of the cited provisions in Appendix A mentions a required duration of collocated sampling, let alone that it be co-incident with the operation of the air quality monitoring network for a period of four months, one year, or any other period of time. The purpose of collocated sampling is to validate the accuracy of equipment and methods used in all stations in an air quality monitoring network. It is a means to validate on a one-time basis the

equipment and methods used in a network, not to continuously validate air quality data obtained by all stations in a network.

Region 10 technical staff reasonably concluded this validation could be and was accomplished by approximately two months worth of collocated data. Where the equipment and methods remained the same during the eight months of sampling in the network at Wainwright and four months at Badami, it was not clear error for technical experts to conclude that two months of collocated data could and did confirm the adequacy and precision of the Wainwright and Badami datasets from which ambient air quality offshore at, respectively, Shell's Chukchi and Beaufort leases was inferred.

Region 10 explained in detail its rationale for concluding that the collocated sampling conducted at Deadhorse provides reliable results sufficient to validate the requisite four months of data collected at Wainwright and Badami:

> Although 40 C.F.R. § 52.21(m)(3) does require that a PSD monitoring station meet the requirements of Appendix A, 40 C.F.R. § 52.21(m)(1)(iii) and (iv), which do not reference Appendix A, makes clear that EPA has considerable discretion in determining the extent and duration of air quality data needed for a complete and adequate air quality analysis. **EPA interprets 40 C.F.R. § 52.21(m) to provide EPA the discretion in appropriate circumstances to find its requirements met where the collocated monitoring requirement of Appendix A is met for a sufficient period to determine that there is at least four months of data that, as a whole, is sufficiently accurate and reliable to provide a "complete and adequate" analysis, consistent with the purposes for which Appendix A is referenced in 40 C.F.R. § 52.21(m) .**

Chukchi RTC at 112 (emphasis added). Region 10 concluded that two months' of collocated data were sufficient to verify that the monitoring stations were providing accurate data for its analyses.

AEWC suggests that Region 10 technical staff had different views on whether collocated sampling data was required to be collected throughout the air quality monitoring effort. They ascribe to Mr. Herman Wong at Region 10 the following statement from an August 2009 e-mail:

"[M]y interpretation of the regulations [40 C.F.R. 52.21(m)(1)(iv) and (m)(3)] is that any valid and useable $PM_{2.5}$ data in a PSD application ambient air quality analysis must be collected during the period in which there was concurrent and collocated sampling occurring at a monitoring state or network station." AEWC cites this as "E-mail Herman Wong to Christopher Hall at 3 (Aug. 18, 2009)." AEWC Chukchi Pet. at 39 and Ex. 23. However, the e-mail in which the quoted statement appears is embedded in an e-mail from Christopher Hall at Region 10 to Thomas Damiana at AECOM. The embedded e-mail in question appears to be from Herman Wong to Dennis Crumpler at EPA's Research Triangle Park, in which Mr. Wong provided his "thoughts" on an e-mail sent on August 17, 2009, by Mr. Crumpler to Mr. Wong. It is not possible to tell whether the language that AEWC quotes actually comes from Mr. Crumpler's original text or was inserted by Mr. Wong.[42]

Whoever the source, on its face, this quoted statement does not suggest that it is anyone's opinion that the regulation unambiguously requires complete overlap between the period of $PM_{2.5}$ data collection and the operation of a collocated sampler, or that validating the network's precision could not be accomplished with collocated sampling during some subsidiary period of time within the $PM_{2.5}$ data collection effort. Indeed, reading the entire e-mail exchange makes it clear that the regulatory requirement is ambiguous and requires technical interpretation:

> 3. At Wainwright, valid $PM_{2.5}$ data collection started on 06 March 2009. Assuming that the collocated sampling program at Prudhoe begins by 01 September 2009,
>
> Is the $PM_{2.5}$ data collected from 06 March 2009 to 30 August 2009 acceptable even though there was no concurrent collocated sampling during this period?

[42] In the email, Mr. Wong states his comment, apparently embedded in Mr. Crumpler's text, are in color, but the document included in the Administrative Record does not preserve the distinction.

> A strict interpretation would be that the data does not meet 40 CFR Part 51.21(m)(3) [sic] which links to Appendix A in 40 CFR Part 58.
>
> A discretionary interpretation would be "yes" provided there are 25 valid samples pairs between 6 March 2009 and 5 March 2010 (assuming a one year data collection program).
>
> **I agree with the discretionary interpretation. Keep in mind that this is not a carte blanc [sic] acceptance of the data from Wainwright. A couple of the 5 subsequent bias measurements could be made at Wainwright. And, if there are other independent reasons to suspect the accuracy (bias) or precision of the data, those concerns would need to be resolved**.

Id. (bold font in original). The fact that Agency technical staff had an internal discussion about divergent interpretations of the collocated sampling requirement simply confirms that the regulation is ambiguous. In any event, Mr. Wong appears to have subsequently agreed with the "discretionary interpretation" going forward during the Chukchi permitting process, as did, more importantly, Region 10's decision-makers.[43]

[43] In October, after collocated sampling was underway, Mr. Wong received a report from CPAI that "we're on our 5th day of collocated data collection." E-mail from Brad Thomas to Herman Wong, October 26, 2009 (AEWC Chukchi Pet. Ex. 19). Mr. Wong responded by indicating that he and Christopher Hall at Region 10 agreed with the "Deadhorse station location, equipment and operations," with no suggestion that the collocated sampling data, though acquired starting in late October, would not be sufficient to validate the $PM_{2.5}$ air quality data that CPAI's contractor AECOM had been collecting since March 6. E-mail from Herman Wong to Brad Thomas, Oct. 28, 2009 (AEWC Chukchi Pet. Ex. 19).

On November 17, Mr. Wong provided an information request to Shell representatives specifying information needed in order for EPA staff to prepare a revised ambient air quality impact analysis for the Chukchi Permit. *See* E-mail from Herman Wong to Janis Hastings, Nov. 18, 2009 (AEWC Chukchi Pet. Ex. 20). Among other items, he specified "Twenty-five (25) days of FEM/FEM data for precision" and "Twenty-five (25) days of FRM/FEM data for bias," a reference to Appendix A's requirements for collocated sampling data. *Id*. At the same time, he indicated that Region 10 would need a minimum of four months of $PM_{2.5}$ measurements, from July 1 to October 31 "plus any portions of November and December" that would become available. Clearly, Mr. Wong did not interpret Appendix A to Part 58 to require collocated samples for the same four month period (plus November and December); rather, what mattered was to acquire 25 days of collocated data as a check on the precision and lack of bias in those four months of data.

2. Region 10 reasonably determined that the Quality Assurance Program Plan for collocated sampling could be approved after collocated sampling was in progress.

AEWC also claims that, as a matter of law, collocated sampling could not go forward until Region 10 approved the QAPP for the collocated sampling activity. AEWC relies on section 2.1.2 of Appendix A to Part 58, which requires "every environmental data operation to have a written and approved QAPP prior to the start of the EDO[Environmental Data Operation]." *Id.*[44] Region 10 approved the QAPP for the $PM_{2.5}$ sampling program on January 5, 2010. But it is clear from the record that Region 10 took pains at that time to confirm that previously acquired data met the QAPP requirements. As the Region explained:

> This permit action is supported by air quality measurements from the Wainwright monitoring station covering the period from November 8, 2008 to December 7, 2009 (March 6, 2009 to December 7, 2010 with respect to $PM_{2.5}$). **The hourly measurements have been reviewed, compared to the Quality Assurance Program Plan (QAPP) and accepted by EPA**. EPA believes this data meets the requirements of 40 C.F.R. § 52.21 (m)(1)(iii).

Chukchi RTC at 99 (emphasis added).

There can be no doubt that Region 10 adequately explained its determination of the validity of the data on ambient $PM_{2.5}$ levels used in modeling impacts from Shell's activities. With respect to the Chukchi Permit, Region 10 provided a comprehensive and detailed justification for its determination:

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[44] Section 2.1.2 of Appendix A states:

> The QAPP is a formal document describing, in sufficient detail, the quality system that must be implemented to ensure that the results of work performed will satisfy the stated objectives. The quality assurance policy of the EPA requires every environmental data operation (EDO) to have a written and approved QAPP prior to the start of the EDO. It is the responsibility of the monitoring organization to adhere to this policy. The QAPP must be suitably documented in accordance with EPA requirements (reference 3 of this appendix).

- The QAPP for the Wainwright Near-Term Station, as approved by EPA on January 5, 2010, describes monitoring objectives and quality control checks to assure proper operation.

- The $PM_{2.5}$ BAM [background air] monitors were initially calibrated to the tolerance requirements of the approved QAPP.

- Instrument calibrations of the $PM_{2.5}$ BAM have been performed on a quarterly basis. All calibrations have passed, thus verifying the proper operation of the BAM monitors.

- Daily flow checks have been conducted for each BAM monitor instrument, which helps confirm instrument accuracy. All instruments have passed these checks.

- Quarterly independent flow check audits are conducted for each BAM to verify instrument accuracy. All instruments have passed these audits.

- The Wainwright Near-Term Station data set being relied upon for this permit passed calibration and/or independent performance audits.

- The data from the Wainwright Near-Term Station is documented and is identifiable with respect to time, site, parameter, scale, and units.

- Log reports are available that record biweekly on-site inspection of the instrumentation and site.

- Documentation of the traceability of maintenance and calibration exists in sufficient detail to allow reconstruction of instrument history.

Chukchi RTC at 112. These factors, Region 10 concluded, established that the onshore ambient $PM_{2.5}$ data was sufficiently reliable to provide a "complete and adequate" analysis, consistent with the purposes for which Appendix A is referenced in 40 C.F.R. § 52.21(m). *Id.* ("Based on the totality of the available information regarding precision and bias for the $PM_{2.5}$ monitoring data collected at the Wainwright Near-Term Station since March 6, 2009, EPA concludes that the data meets the requirements of 40 C.F.R. § 52.21(m).").

Further, based on its analysis of the data, Region 10 utilized a background concentration of 11.4 μg/m^3 (which Region 10 called "conservative")[45]. Chukchi SOB at 106. Where an interpretation is based on a highly technical quality control requirement, based on rigorous technical analysis and yields a very conservative result, the Board should not second-guess the Region. *See City of Attleboro,* slip op. at 62 (in challenge to the Region's interpretation of a technical document, "the Board gives deference to a permit issuer's determination of issues that depend heavily upon its technical expertise and experience.") (citing *In re Envotech, L.P.*, 6 E.A.D 260, 284 (EAB 1996)).

3. Region 10 reasonably determined that it had four months of ambient air quality data from the Badami station.

With respect to AEWC's contention that EPA did not have four months of $PM_{2.5}$ air quality data upon which to determine background air quality at Badami and, inferentially, offshore in the Beaufort Sea, AEWC is again elevating form over substance, failing to identify any adverse impact as a result of the alleged error. As Region 10 observed in its Response to Comments, "EPA regulations allow for as little [as] a 4 month monitoring period and EPA's quality assurance requirements only require a minimum of 80% valid days during a period. . . . [T]he $PM_{2.5}$ data set collected at Badami . . . does have 110 valid days which constitutes 90% of the days during a 4-month period." Beaufort RTC at 33. Thus, Region 10 had more valid background air quality data points than were required.

Further, in response to any potential issues related to the background value selected, Region 10 again thoroughly explained its decision to utilize the highest measured concentration at Badami of 7.1 μg/m^3 as a "reasonable onshore value to use to represent background

[45] The average background concentration of $PM_{2.5}$ observed at Wainwright was 3.3 μg/m^3. Chukchi SOB at 107, Table 5-10.

concentrations at Shell's Beaufort offshore project locations." Beaufort RTC at 35. Region 10 carefully explained why it selected this value instead of using the higher Wainwright background data:

> Both of these monitoring sites are onshore, rather than offshore, and both reflect the impact of local, onshore sources. The Wainwright site is located within a Native Village and immediately adjacent to unpaved roads and the unpaved airport. The Badami site is located within an industrial site far from human habitation and village activities. It is not unexpected that the Wainwright site would experience higher levels than the Badami site and in fact, the Badami site provides a more representative background level for offshore locations. **Note, however, that even if EPA used the Wainwright offshore background value of 11.4 µg/m3, the project would still comply with the** $PM_{2.5}$ **NAAQS at the location of maximum impact**.

Beaufort RTC at 37 (emphasis added). And as with the Chukchi Permit, Region 10 has documented in great detail how it evaluated the quality of the Badami data in accordance with the applicable QAPP, and tailored the QAPP to the very low ambient levels of $PM_{2.5}$ on the North Slope, to ensure NAAQS compliance. Region 10 noted that "EPA has worked closely with AECOM to ensure the adequacy of the Badami, Wainwright and Deadhorse QAPPs and to put into place quality control requirements for each monitoring instrument and process that are as good as or better than that required by regulation or guidance," that the "QAPPS for Badami, Wainwright and Deadhorse were reviewed in detail and approved by EPA," and that using the "AECOM precision and bias equations for the Deadhorse data collected through November 28, 2009, . . . EPA has therefore concluded that the precision and bias goals are being met for the primary F[ederal] E[quivalent] M[onitor] and audit F[ederal] R[eference] M[onitor] $PM_{2.5}$ monitors in the AECOM monitoring network." Region 10 concluded:

> Data from the collocated samplers at Deadhorse have been submitted to EPA through December 15, 2009. From a review of the data submitted, EPA has determined that the precision and bias goals through December 15, 2009 are being met. See the January 7, 2010, Deadhorse Quality Assurance memo.`

Beaufort RTC at 43. Again, EAB does not generally second-guess detailed interpretations, like this one, of highly technical quality control requirements, based on rigorous technical analysis. *See City of Attleboro*, slip op. at 62.

B. Region 10 Did Not Commit Clear Error In Determining that Adequate Technical Tools Are Not Available to Quantify Formation of Secondary $PM_{2.5}$ From Shell's Emissions.

AEWC argues that Region 10 "committed clear error by not calculating or accounting for the formation of secondary particulate matter as a result of Shell's operations." AEWC Chukchi Pet. at 40; AEWC Beaufort Pet. at 39.[46] AEWC contends that the Region should have considered secondary $PM_{2.5}$ "in calculating Shell's potential to emit and in ensuring compliance with the NAAQS." *Id*. AEWC's basic complaint is that "Region 10 never calculated or modeled whether or how secondary $PM_{2.5}$ could impact air quality and whether Shell could demonstrate compliance with the NAAQS." *Id*. at 43, 42.

Region 10 fully addressed this issue in its Response to Comments on the Chukchi Permit, acknowledging the concern about secondary $PM_{2.5}$ but explaining that "there are, however, limitations in the tools and models currently available to address secondary $PM_{2.5}$ emissions." The Region explained that, in its view:

> [T]he conservatism built into the modeling assumptions that were used in conducting the air impact analysis for this project . . . mitigate against the possibility that $PM_{2.5}$ would cause or contribute to a violation of the NAAQS. In addition, EPA also notes that the modeled $PM_{2.5}$ emission rates for most of the Discoverer drill ship combustion sources were estimated to equal the PM10 emission rates from such sources. This is another layer of conservatism that impacts the modeling of $PM_{2.5}$ emissions. Consequently, EPA believes the cumulative effect of these conservative assumptions has adequately accounted for the possibility of secondary formation of $PM_{2.5}$.

[46] AEWC offers in support of this argument the Declaration of Megan Williams, Exhibit 14 to AEWC's Chukchi Petition and Exhibit 17 to AEWC's Beaufort Petition. The declaration is not in the record, and Shell has moved to strike it.

Chukchi RTC at 122. The Page Memorandum, an internal EPA document cited by AEWC, AEWC Beaufort Pet. at 41, actually confirms that tools are not available to calculate or model quantitatively the impacts of potential secondary $PM_{2.5}$ formation. The Page Memorandum notes that "secondary formation of $PM_{2.5}$ from emissions of NOx, SOx and other compounds from sources across a large domain will often contribute significantly to the total ambient levels of $PM_{2.5}$." Page Memorandum at 3 (Exhibit 26 to AEWC Chukchi Pet.). However, as this memorandum also notes, the tools are not yet available for Region 10 to assess with any precision the potential impacts of secondary $PM_{2.5}$ because EPA's approved model for near-field $PM_{2.5}$ impacts, AERMOD, does not account for secondary formation of $PM_{2.5}$. *Id*. at 9.[47] For this reason, the memorandum advises:

> In determining whether such contributions may be important, keep in mind that peak impacts due to facility primary and secondary $PM_{2.5}$ are not likely to be well-correlated in space or time and these relationships may vary for different precursors. We plan to issue separately additional guidance regarding this issue.

Id. at 9.

This is consistent with technical determinations set forth in EPA's notice of proposed rulemaking to implement the New Source Review program for $PM_{2.5}$, which notes that "EPA has not approved any models that can reliably predict the localized ambient $PM_{2.5}$ impacts of precursors (e.g., SO_2 and NO_x) emitted from individual stationary sources." 75 Fed. Reg. 6827, 6833 (Feb. 11, 2010). EPA there explains that the photochemical conversion science is not developed, especially for short distances, such as "ambient air" immediately adjacent to the *Discoverer*, and directs that evaluations of $PM_{2.5}$ ambient impacts from a single source should focus on direct $PM_{2.5}$ emissions:

[47] And, of course, due to the absence of Arctic offshore meteorological data, AERMOD was not available to Shell, which instead utilized the much more conservative ICS3-PRIME screening model to predict air quality impacts from its operations.

> [F]or the present, regional-scale models available for considering chemical transformations associated with the impacts of $PM_{2.5}$ and its precursors are designed to account for impacts of multiple sources over relatively wide distances, and have not been approved by EPA for localized permitting purposes.

Id.

Thus, in the absence of available modeling tools, the Region did not clearly err in its qualitative assessment that secondary $PM_{2.5}$ emissions would not be significant and that such emissions were, in any case, already adequately accounted for in Shell's highly conservative air impacts model. That is exactly the sort of assessment the Page Memorandum recommends. There is no basis for the Board to overturn this carefully considered technical determination. *See City of Attleboro*, slip op. at 62.

C. Region 10 Did Not Commit Clear Error In Conservatively Assuming For Purposes of BACT Analysis That All PM Emissions from Shell's Project Would Be $PM_{2.5}$.

AEWC argues that Region 10 failed to distinguish between $PM_{2.5}$ and PM_{10} emissions in its BACT analysis for particulate matter sources in Shell's operation. However, as the Region explained, its assumption that all particulate matter emitted from all emission units on the *Discoverer* should be evaluated and regulated as if it were $PM_{2.5}$, which are smaller particles with potentially more adverse air quality impacts, is "a conservative assumption." Chukchi SOB at 67. Most important, the record confirms that the Region's assumption was reasonable:

> Throughout the BACT section [of the Statement of Basis] PM, $PM_{2.5}$ and PM_{10} emissions will be addressed together for all emission units except the incinerator since it is assumed that essentially all of the PM and PM_{10} emissions are also $PM_{2.5}$ emissions, and the control technologies available for $PM_{2.5}$ emissions on the types of equipment aboard the *Discoverer* will also effectively control PM and PM_{10}.

Id. at 51. Thus, in any case, any control technology deemed to be BACT for $PM_{2.5}$, based on the availability of controls and their effectiveness and cost-effectiveness is necessarily appropriate for larger forms of particulates. Again, in its quest to identify a "clear error," AEWC elevates

form over substance, offering not a single example of how Region 10's conservative assumption that treated all particulate emissions as $PM_{2.5}$ could have resulted in an erroneous determination of what control measures are BACT for PM_{10}. The Board should defer to Region 10's technical determination. *See City of Attleboro*, slip op. at 62.

V. EPA PROPERLY APPLIED THE STANDARDS IN EFFECT AT THE TIME THE PERMITS WERE ISSUED TO SHELL.

AEWC contends that "[b]y failing to require Shell to comply with the new NO_2 NAAQS, EPA committed a clear legal error." AEWC Chukchi Pet. at 60.[48] AEWC points out that EPA published the new NO_2 NAAQS as a final rule on February 9, 2010 – before the Chukchi and Beaufort Permits were issued – and, according to AEWC, Region 10 was therefore compelled to require Shell to comply with the new standard. *Id*.

AEWC's contention is wrong because, as Region 10 states, there is no requirement that a PSD permit ensure compliance with requirements that come into effect after the PSD permit has been issued. Chukchi RTC at 135. As AEWC concedes (Chukchi Pet. at 60), the new NO_2 NAAQS did not take effect until April 12, 2010 – *after* both permits had been issued. Primary National Ambient Air Quality Standards for Nitrogen Dioxide, 75 Fed. Reg. 6,474 (Feb. 9, 2010).[49] Thus, the new NO_2 NAAQS is not applicable to either of Shell's permits.

Applicants for PSD permits must demonstrate that emissions from their facilities will not cause or contribute to a violation of any "applicable" NAAQS. 42 U.S.C. § 7475(a)(3); *In re: Seminole Electric Cooperative, Inc*., PSD Appeal No. 08-09, slip op. at 5 (EAB, September 22, 2009), 14 E.A.D. ___. EAB decisions have consistently held that that the date of permit issuance

[48] Because the discussion of AEWC's final three arguments is virtually identical in both petitions, the remainder of this Response will refer exclusively to AEWC's Chukchi Petition.

[49] Under the Congressional Review Act, the new standard could not have taken effect prior to the passage of 60 days following publication in the Federal Register, during which period of time Congress could have determined that the standard would not take effect at all. 5 U.S.C. § 801(a)(3).

is the critical date for measuring applicable legal requirements. *Phelps Dodge Corp.*, 10 E.A.D. at 478 n. 10 ("[T]he Region's obligation, as the permit issuer, is to apply the CWA statute and implementing regulations in effect at the time the final permit decision is made"); *Prairie State Generating Company*, slip op. at 85, 13 E.A.D. ___ ("[L]ong-standing EPA policy states that the BACT determination is made on the date that the permit is issued."); *see also Alabama v. EPA*, 557 F.2d at 1110 ("We affirm EPA's conclusion that the appropriate BPT limitations to be applied in a permit are those in effect at the time of initial permit issuance.").

The Board has speculated whether it has discretion to remand a permit to apply a new regulatory requirement where the regulation does not specifically state it applies retroactively. *Dominion Energy Brayton Point, LLC*, 12 E.A.D. 490, 617 (EAB 2006). Nevertheless, should such discretion exist, it is exercised sparingly, with good reason. *Id.* at 616; *In re J&L Specialty Prods. Corp.*, 5 E.A.D. 31, 66 (EAB 1994). As the Administrator has noted, "to allow permit limitations and conditions to change according to a 'floating' standard or guideline during the pendency of a permit review proceeding would be highly disruptive and counterproductive." *U.S. Pipe & Foundry Co.*, NPDES Appeal No. 75-4435 (Adm'r 1975), *aff'd in part, rev'd in part sub nom. Alabama v. EPA*, 557 F.2d 1101, 1108 (5th Cir. 1977).. This is especially true where, as in this case, the Region wrote and issued the Chukchi and Beaufort Permits at a time when the new NAAQS was not effective and, if reviewed by Congress, might never have become effective.

The fact that PSD permits are preconstruction – as opposed to operational – permits further supports EPA's decision not to prospectively apply the then-pending new NO_2 NAAQS. PSD permits, like other preconstruction permits, are typically issued for "unlimited duration" and new regulatory requirements are not imposed on the source via the PSD permit, except in

connection with a major modification to the source that substantially increases emissions or a reopening for cause. Chukchi RTC at 52-53. The purpose of PSD permits is to authorize construction under applicable standards at a moment in time – the date of permit issuance by the permitting authority – so that construction can proceed with certainty about applicable emissions limits and controls. The purpose of PSD permits is not to continuously apply new legal requirements to a new or modified source as they become effective.

Finally, as Region 10 has noted, as the owner of a "temporary source" under Title V, Shell will be required to demonstrate compliance with the NO_2 NAAQS and any applicable NO_2 increment, as well as any other newly promulgated NAAQS or PSD increment that is then in effect, when it applies for a Title V operating permit. Chukchi RTC at 136. Section 504(e) of the Act allows EPA to issue a single permit authorizing emissions from similar operations at multiple temporary locations and provides that "[n]o such permit can be issued unless it includes conditions that will assure compliance with all the requirements . . . *at all authorized locations* . . ." 42 U.S.C. § 7661(c) (emphasis added); Chukchi RTC at 136. The regulations implementing the "temporary source" provision include, for purposes of this Title V demonstration, "any national ambient air quality standard or increment" within the meaning of "applicable requirement." 40 C.F.R. § 71.2; Chukchi RTC at 136. Thus, Shell will be required to certify in its Title V application that it is in compliance with all applicable requirements in effect at the time it submits its application. Chukchi RTC at 136. For this further reason, this is not a case where the Board should exercise its discretion to apply a new NAAQS retroactively to pre-construction permits issued by the Region, which permits complied when issued with all applicable air quality requirements.

VI. EPA PROPERLY EXCLUDED EMISSIONS POTENTIALLY RESULTING FROM MALFUNCTION FROM THE *DISCOVERER*'S POTENTIAL TO EMIT.

AEWC contends the potential to emit calculations that underlie the permits are not adequate because they "fail[] to account for 'the maximum capacity' of Shell's operations in violation of clear legal requirements." AEWC Chukchi Pet. at 62. Specifically, AEWC argues that Region 10 should have included in its potential to emit calculations: "the clean-up of an oil spill pursuant to Shell's Oil Spill Response Plan; the 'other' vessels that Shell claims will remain more than 25 miles away from the drill ship including the oil tanker, the barge, and shallow water landing craft; and the drill ship's propulsion engine." *Id*. As to Shell's oil-response plans, AEWC suggests that emissions for such a response are "routine operations" because, "Shell's clean-up operations are well documented and are even rehearsed by the company." *Id.* at 65. AEWC argues, citing the Board's decision in *Indeck-Elwood, LLC*, that Region 10 could not provide Shell "an automatic exemption for these excess emissions" because doing so would violate EPA's longstanding excess-emissions policy. *Id.* Finally, AEWC suggests that EPA failed to "address this [excess emissions] policy in responding to comments regarding the need to model the emissions from responding to an oil spill." *Id.* at 66.

As required by the PSD and OCS regulations, EPA ensured that all pollutant-emitting activities proposed for routine operation were considered in the air quality modeling analysis. Chukchi RTC at 93. Under the PSD regulations, "potential to emit" means "the maximum capacity of a stationary source to emit a pollutant under its physical and operational design." 40 C.F.R. § 52.21(b)(4). The OCS regulations define "potential emissions" as "the maximum emissions of a pollutant from an OCS source operating at its design capacity" and add that "[p]ursuant 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 en route 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." 40 C.F.R. § 55.2. Emissions from emergency or upset conditions are generally not considered in determining allowable emissions[50] and therefore not considered in the air quality impact analysis for PSD permits. Chukchi RTC at 93 (citing 40 C.F.R. Part 51, Appendix W, Section 8.12, fn a.) ("Malfunctions which may result in excess emissions are not considered to be a normal operating condition" and "generally should not be considered in determining allowable emissions.")

While Shell acknowledges current events being played out in the Gulf of Mexico, Region 10 properly excluded from the potential to emit calculation any emissions from a hypothetical clean-up of an oil spill. Region 10 concluded that "[t]here is no information at this time to suggest that emissions from oil spills and related response activities, a blow out, or shallow gas hazards would be the result of poor maintenance, careless operation, or other preventable conditions." Chukchi RTC at 93. While asserting that "[b]ecause an oil spill is such a likely, and not merely an unforeseeable event, Shell is employing an entire 'oil spill response' (OSR) fleet as part of its proposed operations" (Chukchi Pet. at 63), AEWC cites no evidence that contradicts the Region's conclusion. In fact, contrary to AEWC's suggestions, Shell's extensive planning to prevent an oil spill and shallow hazards "indicate just the opposite" of AEWC's suggestion: that such events are unlikely because Shell has taken and will continue to take all appropriate steps to substantially reduce the potential for such a contingency. Chukchi RTC at 93. AEWC's novel theory aside, Shell's planning for an oil-spill response emergency does not

[50] Allowable emissions are calculated "using the maximum rated capacity of the source (unless the source is subject to federally enforceable limits which restrict the operating rate, or hours of operation, or both) and…[t]he emissions rate specified as a federally enforceable permit condition. . . ." 40 C.F.R. § 52.21(b)(16).

turn such an emergency into the "routine operations" of the project any more than a fire drill makes a catastrophic fire part of the "routine operations" of an office building.

In conformity with the OCS regulations, Region 10 properly excluded from the potential-to-emit calculation any emissions from the "other vessels" AEWC suggests should have been included because the Region concluded, and the permits require, that "[u]nder normal and routine operations, these vessels are not expected to operate within 25 miles of the Discoverer while the Discoverer is an OCS source." Chukchi RTC at 95. Chukchi Permit Condition B.8 specifically requires that these ships – the tanker, barge, and shallow water landing craft –not come within 25 miles of the Discoverer while it is an OCS source. *Id.* To the extent any of these vessels move within 25 miles in response to an emergency – which is clearly not "routine operations" – EPA will evaluate any such operation and potentially take enforcement action in accordance with the excess emissions policy. *Id.*

Region 10 properly excluded emissions from the *Discoverer*'s propulsion engine because the propulsion engine will not be operated while the *Discoverer* is an OCS source. Chukchi RTC at 26-27. As the Region explained, "it is not possible to be 'within 25 miles of an OCS source,'" when the *Discoverer* is traveling to the drill site and there is not yet any OCS source. *Id.* at 27. AEWC's general statements – that "this response is not adequate" and "[n]or is the EPA's response that it will provide a proper response to these emissions when they occur" (AEWC Chukchi Pet. at 66) – do not challenge EPA's application of the OCS regulations and lack the specificity necessary to warrant the Board's consideration.

AEWC is correct that the Region cannot provide an automatic exemption for excess emissions. But Region 10 has *not* done so. The requirement to report excess emissions does not relieve Shell of its duty to comply with all requirements of this permit. Chukchi RTC at 61. Nor

does the reporting requirement authorize Shell to operate in violation of permit terms and conditions. *Id.* Condition A.2 in each permit states that Shell must comply with all requirements of the permit and that failure to do so is a violation the Act, subject to enforcement action. *Id*. EPA views all excess emissions as violations of the applicable emission limitations. "Policy Regarding Excess Emissions during Malfunctions, Startup, and Shutdown," Steven A. Herman, Assistant Administrator for Enforcement and Compliance (Sept. 20, 1999) (EPA Ex. B-24). This policy states that, "[t]he best assurance that excess emissions will not interfere with NAAQS attainment, maintenance, or increments is to address excess emissions through enforcement discretion." *Id.*, Attach., at 2.

The Board's decision in *Indeck-Elwood, LLC*, PSD Appeal No. 03-04 (EAB, Sept. 27, 2006) does not alter this conclusion because in that case the permitting authority *had* provided Indeck with a "permit [that] could arguably shield excess emissions arising from poor operation and maintenance or design." Slip op. at 76. Specifically, the Board "remand[ed] the permit conditions that exempt Indeck from complying with short-term emission limits during SSM [start-up, shutdown, or malfunction] events." *Id*. Shell's permits provide no exemption for *any* excess emissions; all excess emissions will be treated as violations. Chukchi RTC at 61. EPA has merely concluded that it will address any excess emissions under its enforcement discretion approach and has reasonably declined to quantify the hypothetical.

VII. EPA PROPERLY DETERMINED THAT IT SATISFIED ITS ENVIRONMENTAL JUSTICE OBLIGATION.

EPA's environmental justice analysis is sufficient on both substantive and procedural grounds. Substantively, EPA properly determined that "no high and adverse human health or environmental effect" exists based upon the demonstration that the permitted emissions from these projects would not create a violation of the NAAQS. Procedurally, EPA provided

abundant opportunities for North Slope communities to participate in the decision-making process for both permits, going beyond the requirements of 40 C.F.R. Part 124.

AEWC contends that "Region 10 committed clear legal error by not requiring the completion of an environmental justice analysis for the Chukchi air permit." AEWC Chukchi Pet. at 69; AEWC Beaufort Pet. at 70. AEWC states that "North Slope communities have markedly higher rates of pulmonary disease, have different genetic predispositions to disease, and are substantially more vulnerable to morbidity and mortality from air pollution than the general population in the U.S." AEWC Chukchi Pet. at 67. Specifically, AEWC argues that that Region 10 "failed to require any modeling or calculation of secondary $PM_{2.5}$ [], any demonstration of compliance with $PM_{2.5}$ increments, or compliance with the new NO_2 NAAQS." *Id.* at 69. AEWC argues that "EPA's reliance solely on compliance with the NAAQS to protect human health" was misplaced and that "EPA needs to provide a new rationale for failing to conduct an environmental justice analysis." *Id.* at 71.

AEWC's arguments are unfounded because EPA has satisfied its substantive environmental justice obligations by determining that project emissions will not exceed NAAQS and, therefore, no adverse impacts exist. The threshold inquiry in an environmental justice analysis is whether a "high and adverse human health or environmental effect" in fact exists. This inquiry is satisfied by a determination that NAAQS will not be exceeded. *See In re Knauf Fiber Glass, GMBH*, 9 E.A.D. 1, 17 (EAB 2000) (given finding of no adverse impact based on conclusion that additional pollutants will not result in exceedance of NAAQS or PSD increment, the Board need not address objections to numerous aspects of Region's environmental justice analysis); *Kulluk I*, slip op. at 67-68 (same). If an agency determines that no high and adverse human health or environmental effect exists, based on NAAQS compliance or otherwise, no

further analysis is required. EPA's responsibility under EO 12898 "to identify[] and address[], as appropriate, disproportionately high and adverse human health or environmental effects," 59 Fed. Reg. 7629 (Feb. 16, 1994), does not create a substantive right or individual right of action that supplements established PSD OCS permitting requirements – for example, there is no separate environmental justice requirement to perform modeling where EPA had already determined that no adverse impacts will occur. *See e.g.*, *In re Ash Grove Cement Company*, 7 E.A.D. 387, 413 (EAB 1997) ("Neither the Executive Order nor EPA's strategy specifically requires that quantitative risk assessment, as opposed to other means, be used to identify the potential for disproportionate impacts on minority populations.").

In this case, EPA's determination – that the emission limits in the permit will control emissions such that air quality in the region continues to attain the applicable health-based NAAQS – demonstrates that Region 10's no-adverse-impacts determination is reasonable. EPA has established that neither the Chukchi nor the Beaufort project will cause NAAQS levels to be exceeded. Chukchi SOB at 110 ("All of the modeled operating scenarios for the Discoverer and its Associated Fleet resulted in predicted total concentration impacts, including existing background data, below the level of the NAAQS."); Beaufort SOB at 115 (same).

This ends the analysis because, under this Board's precedents, a demonstration of compliance with the NAAQS is sufficient to meet environmental justice responsibilities. The Board has held that "[t]he NAAQS are the Agency's standards, designed to protect human health and welfare with an adequate margin of safety," and rejected precisely the same argument that AEWC here advances. *Kulluk I*, slip op. at 67-68 (citing *Knauf Fiber Glass*, 9 E.A.D. 1 at 16-17 (EAB 2000). On that basis the Board has refused to address an argument that EPA should perform an independent environmental analysis, where the agency, relying on NAAQS,

"determined that no such adverse effects cognizable under the PSD permit program will result from the issuance of the Permits." *Id.*

Moreover, AEWC's argument that the NAAQS are not protective of local populations because of the special sensitivities of North Slope residents fundamentally misunderstands the nature of the NAAQS. The NAAQS protect public health – with an adequate margin of safety – by taking into account the health of sensitive populations such as asthmatics, children, and the elderly. CAA § 109(b); *Amer. Lung Ass'n v. EPA*, 134 F.3d 388, 389 (1998) ("NAAQS must protect not only average healthy individuals, but also 'sensitive citizens' — children, for example, or people with asthma, emphysema, or other conditions rendering them particularly vulnerable to air pollution.") (citing legislative history[51]). Objections to the NAAQS themselves may be addressed during the NAAQS review process, which occurs every few years. 42 U.S.C. § 7409(d); Chukchi RTC at 138.[52]

In addition, it should be noted that EPA has satisfied its procedural obligations regarding public participation through the public notice and comment process. In its petitions AEWC does not argue that EPA failed to adequately engage the North Slope communities in the permit

[51] The legislative history of section 109 indicates that a primary standard is to be set at "the maximum permissible ambient air level . . . which will protect the health of any [sensitive] group of the population," and that for this purpose "reference should be made to a representative sample of persons comprising the sensitive group rather than to a single person in such a group." S. Rep. No. 91-1196, 91st Cong., 2d Sess. 10 (1970).

[52] AEWC's citation to EPA's recently promulgated short-term NO_2 standard does not demonstrate that compliance with the standard in place at the time the permits were issued would present a special health issue for local communities. The new short-term NOx standard was specifically designed to protect communities near highways, where repeated exposures to short-term high concentrations of NO_2 could raise concerns. Primary National Ambient Air Quality Standards for Nitrogen Dioxide, 75 Fed. Reg. 6,474, 6,479 (Feb. 9, 2010). In contrast, Shell's projects will be temporary and located far from any local communities, thus minimizing the impact of any short-term onshore impacts from NOx. Even disregarding the legal principle established in prior Board decisions that NAAQS compliance satisfies the requirements of the Executive Order, EPA could reasonably determine that the health concerns that motivated the new NO_2 standard would not warrant additional analysis on the NO_2 emissions from these projects because of the very different circumstances.

process. *See* AEWC Chukchi Pet. at 67-71; AEWC Beaufort Pet. at 67-72. Moreover, any arguments that EPA did not meet its public participation obligations are waived because EPA did not receive comments suggesting EPA has not met all requirements for public participation in issuing the January 2010 re-proposed permit. Chukchi RTC at 138-139; Beaufort RTC at 63; 40 C.F.R. § 124.13; 40 C.F.R. § 124.19; EAB Practice Manual at 34; *In re City of Phoenix*, 9 E.A.D. 515, 526 (EAB 2000).

Nevertheless, even if such a claim were made, the North Slope communities have been provided full opportunity for involvement in the permit decision-making process as discussed in Sections 1 and 6 of the Statements of Basis. Chukchi SOB at 13-15, 119-120; Beaufort SOB at 14-16, 133-34. In an effort to engage the potentially affected communities at the beginning of the process, managers of EPA Region 10's air and water programs conducted early outreach on air and water permitting in May 2009 in Kotzebue and Barrow. Chukchi RTC at 138-139; Beaufort RTC at 63. Although a lesser effort would have been legally adequate, EPA then held community meetings, public hearings, and conference calls to specifically solicit input on environmental justice concerns. Chukchi RTC at 139; Beaufort RTC at 63. Following these informal consultations, the public was afforded notice of the proposed permit and an opportunity to comment in accordance with 40 C.F.R. § 124.10. In total, the public had 103 days to comment on the Chukchi Permit as proposed and re-proposed, and 30 days to comment on the substantially identical Beaufort Permit.

Finally, the fact that the Agency extended the initial public comment period for the Chukchi Permit, re-proposed that permit and again asked for comment, as well as provided for full comment on the Beaufort Permit, and, more importantly, that throughout the permitting process Region developed increasingly stringent permit limits for emissions from Shell's

projects shows that there was adequate community participation. *See Knauf Fiber Glass*, 9 E.A.D. 1 at 17 (EAB 2000); *In re AES Puerto Rico L.P.*, 8 E.A.D. 324, 351-52 (EAB 1999).

CONCLUSION

EPA conducted thorough and exhaustive analyses of Shell's exploratory operations before approving these permits. The record supports Region 10's well-articulated rationales for issuing these permits. The Petitioners have failed to demonstrate a clear error in the Region's decision to issue the Chukchi and Beaufort Permits. Therefore EAB should deny the Petitions for Review.

DATED this 7th day of June 2010.

Respectfully submitted,

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CERTIFICATE OF SERVICE

I herby certify that I have caused a copy of the foregoing Response to Petitions for Review to be served by electronic mail upon:

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