"REDLINED" VERSION OF SOI CORRECTED RESPONSE

BEFORE THE ENVIRONMENTAL APPEALS BOARD
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON DC

In re:	)	
Shell Offshore Inc. Kulluk Drilling Unit and Frontier Discoverer Drilling Unit	)	OCS Appeal No. 07-01
OCS Permit Nos. R10OCS-AK-07-01 R10OCS-AK-07-02	)	

SHELL OFFSHORE INC.'S CORRECTED
RESPONSE TO PETITIONS FOR REVIEW

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INTRODUCTION

In February 2006, Region 10 of the United States Environmental Protection Agency ("EPA" or "Agency") began working closely with Shell Offshore Inc. ("SOI") and other affected parties to prepare pre-construction permits for Outer Continental Shelf ("OCS") exploration activity. On June 12, 2007, after nearly sixteen months of intensive work, EPA issued two permits that will protect environmentally sensitive areas while allowing SOI to conduct activity on oil and gas leases located in OCS waters in the central Beaufort Sea. EPA followed long-standing agency practices, made careful estimates, and adopted conservative positions to ensure that the permits met every applicable regulation and statute governing OCS permits. Nevertheless, on June 16, 2007, both the North Slope Borough ("NSB") and Earthjustice[1] (collectively "Petitioners") filed Petitions for Review of SOI's permits with the Environmental Appeals Board ("EAB" or "Board"). As this Response will demonstrate, EPA's permitting decisions were based on reasoned and well-supported findings of fact and conclusions of law, and EPA has not adopted any novel or unusual policy positions that call for EAB review.

FACTUAL AND PROCEDURAL BACKGROUND

On June 12, 2007, Region 10 issued two minor Outer Continental Shelf ("OCS") permits to Shell Offshore Inc. ("SOI") pursuant to Section 328 of the Clean Air Act, 42 U.S.C. § 7627, and 40 CFR Part 55. EPA began working with Region 10 on these permits in February 2006, and submitted its "Notice of Intent" to submit an application for a pre-construction permit on March 22, 2006. In its official application submitted to EPA Region 10 on December 29, 2006,

[1] The Petition filed by the Crag Law Center on behalf of the North Slope Borough will be referred to as the "NSB Petition" through this Response. The Petition filed by Earthjustice on behalf of ~~Earthjustice filed this petition on behalf of~~ Resisting Environmental Destruction On Indigenous Lands ("REDOIL"), the Northern Alaska Environmental Center, the Alaska Wilderness League, the Center for Biological Diversity, and the Natural Resources Defense Council will be referred to as the "REDOIL Petition" throughout this Response~~.~~

SOI proposed to use two drilling units in the Beaufort Sea at multiple OCS drilling locations. SOI proposed to use the Kulluk Submersible Drilling Platform (the "Kulluk") and the Frontier Drilling Discoverer Drillship (the "Discoverer") to drill a combined four wells during the 2007 open water season and to drill additional prospects on other OCS leases during 2008 and 2009.

SOI submitted applications for the Kulluk and the Discoverer that satisfied the requirements of 18 AAC 50.300(b) of the Alaska Implementation Plan, and 18 AAC 50.540(c) and (j) of the State of Alaska Requirements Applicable to OCS Sources, and Region 10 deemed the applications "complete" on February 2, 2007.[2] SOI subsequently supplemented its application with additional information in various submissions to EPA between February and May 2007. EPA received numerous comments from the public on SOI's proposed permits, and a number of oral comments were made during a public hearing held on May 8, 2007 in Nuiqsut, Alaska. Region 10 published a response to comments on June 12, 2007. U.S. Environmental Protection Agency, Region 10, "Response to Public Comments" (July 12, 2007) ("Response to Comments") at 20.[3]

The Kulluk and the Discoverer are portable oil and gas operations as defined by 18 AAC 50.990(124), and so SOI was required to obtain a minor source permit for air quality protection for the Kulluk and Discoverer pursuant to 18 AAC 50.502(c)(2)(A) of the Alaskan regulations governing minor source permits for air quality protection. SOI was also required to obtain a minor source permit for air quality protection pursuant to 18 AAC 50.502(c)(1)(B) because the

[2] Federal regulations governing OCS sources within 25 miles of States' seaward boundaries specifically incorporate the Alaska State Implementation Plan Requirements. 40 C.F.R. § 55.14(a), (d)(2). Although EAB's actions must comply with requirements listed in the Alaska Administrative Code, nothing in the regulations alters or limits EPA's authority to administer or enforce federal law requirements under the OCS regulations or the CAA. 40 C.F.R. § 55.14(c)(3).

[3] EPA's Response to Comments is attached to the NSB Petition as Petitioner's Exhibit 12.

Kulluk and the Discoverer both have the potential to emit greater than 40 tons per year of NO_X~~x~~. On June 12, 2007, EPA Region 10 issued permit number R10OCS-AK-07-01 for the Kulluk (the "Kulluk Permit"), and issued permit number R10OCS-AK-07-02 for the Frontier Discoverer ("Discoverer Permit").[4] The minor source permits issued by Region 10 in this case authorize SOI to mobilize, operate, and demobilize the Kulluk and the Discoverer at drill sites authorized by the Minerals Management Service ("MMS") in the Beaufort Sea OCS.

On July 16, 2007, ~~Petitioners T~~the North Slope Borough and REDOIL ~~Earthjustice ("Petitioners")~~ filed petitions for review of the minor source permits. As discussed below, Petitioners cannot demonstrate that EPA's decision to issue these permits involved a clearly erroneous finding of fact or conclusion of law, or involved an exercise of discretion requiring Environmental Appeals Board ~~("EAB" or "the Board")~~ review. Accordingly, these petitions should be denied.

STANDARD AND SCOPE OF REVIEW

EAB must deny this petition for review unless Petitioners can demonstrate that the permitting authority's decision to issue these permits 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(a)(1); *see In re Teck Cominco Alaska Inc.*, 11 E.A.D. 457, 472 (EAB 2004); *In ~~R~~re Peabody Western Coal Company*, CAA Appeal No. 04-01, slip op. at 15 (EAB, Feb. 18, 2005).

The history of the regulations governing review make clear that the Administrator intended for the Board to exercise its powers of review "only sparingly," and that "most permit

[4] The Kulluk Permit is attached to the NSB Petition as Petitioner's Exhibit 10; the Discoverer Permit is attached to the NSB Petition as Petitioner's Exhibit 11.

conditions should be finally determined at the Regional level." 45 Fed. Reg. 33,290, 33,412 (May 19, 1980) (preamble to rulemaking that established 40 C.F.R. pt. 124); *In re Peabody Western Coal*, slip.op. at 13. The Board itself has repeatedly held that agency policy favors final adjudication of most permits at the Regional level. *See In re Peabody Western Coal*, slip. op. at 13; *In re Teck Cominco,* 11 E.A.D. at 472; *In re Gov't of D.C., Mun. Separate Storm Sewer Sys.*, 10 E.A.D. 323, 332-33 (EAB 2002); *In re Rohm & Hass Co.*, 9 E.A.D. 499, 504 (EAB 2000). Finally, the EAB's jurisdiction is limited to issues related to "conditions" of the federal permit that are claimed to be erroneous. Other matters, such as challenges to agency regulations, are beyond the jurisdictional limits of this proceeding. *In re Federated Oil & Gas of Traverse City*, 6 E.A.D. 722 (EAB 1997); *see also, In re Tondu Energy Co.*, 9 E.A.D. 710, 716 n.10 (EAB 2001) (the appeals process is not generally available to challenge Agency regulations).

Further, the NSB and REDOIL Petitions for Review ~~submitted by NSB and Earthjustice~~ may not simply repeat objections made during the comment period. *See In re Knauf Fiber Glass, GmbH,* 9 E.A.D. 1, 5 (EAB 2000). Rather, Petitioners must demonstrate why the Region's response to these objections is clearly erroneous or otherwise warrants review. *Id.*; *see also In re LCP Chemicals*, 4 E.A.D. 661, 664 (EAB 1993) ("a petitioner must demonstrate why the Region's response to those objections (the Region's basis for its decision) is clearly erroneous or otherwise warrants review").

ARGUMENT

I. THE EAB SHOULD AFFORD EPA GREAT DEFERENCE IN REVIEWING AIR PERMITS.

When a petitioner seeks review of a permit based on issues that are fundamentally technical in nature, the Board assigns an even heavier burden to the petitioner. *See In re Carlota Copper Co.,* 11 E.A.D. 692, 708 (EAB 2004) (explaining that "a petitioner seeking review of

issues that are technical in nature bears a heavy burden because the Board generally defers to the Region on questions of technical judgment."); *In re Teck Cominco,* 11 E.A.D. at 473 ~~slip op. at 22~~ (same); *In re City of Moscow, Idaho,* 10 E.A.D. 135, ~~at~~ 142 (EAB 2001) (same). This demanding standard serves an important function within the framework of the Agency's administrative process; it ensures that the locus of responsibility for important technical decisionmaking rests primarily with the permitting authority, which has the relevant specialized expertise and experience. *See In re NE Hub Partners, L.P.,* 7 E.A.D. 561, 567-68 (EAB 1998), *rev. denied sub nom. Penn Fuel Gas, Inc. v. EPA*, 185 F.3d 862 (3d Cir. 1999).

In other words, where a permit decision turns on the resolution of a technical dispute or disagreement, the Board does not substitute its judgment for the judgment of the decisionmaker specifically tasked with making such determinations in the first instance. "[A]bsent compelling circumstances, the Board will defer to a Region's determination of issues that depend heavily upon the Region's technical expertise and experience." ~~*In re:*~~*In re Envotech, L.P.*, 6 E.A.D. 260, 284 (EAB 1996); ~~*In re:*~~*In re NE Hub Partners, L.P.*, 7 E.A.D. at 568; ~~*In re:*~~*In re Newmont Nevada Energy Investment, L.L.C., TS Power Plant*, PSD Appeal No. 05-04 ~~Permit No. AP4911-1349~~, slip op. at 21 (EAB Dec. 21, 2005). As the EAB explained in *NE Hub Partners,* the Board typically will not grant review where the record demonstrates merely "a difference of opinion or an alternative theory regarding a technical matter." 7 E.A.D. at 567. Instead, where "the views of the Region and the petitioner indicate bona fide differences of expert opinion or judgment on a technical issue," deference to the Region's decision is generally appropriate if "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 of the information in the record." *Id.* at 567-68. This standard is similar to the standard of review applied by federal

courts when reviewing agency rulemaking decisions involving significant technical or scientific issues. *Id.* ~~*See NE Hub*~~ at 568 n.6 (*citing Appalachian Power Co. v. EPA,* 135 F.3d 791, 801-02 (D.C. Cir. 1998)). "[T]he Board typically will not grant review where the record demonstrates merely 'a difference of opinion or an alternative theory regarding a technical matter.'" ~~*In re:*~~*In re Peabody Western Coal*~~, Company*~~, CAA Appeal No. 04-01,~~ slip op. at 17 ~~(EAB Feb. 18, 2005)~~ (*quoting In re NE Hub Partners, L.P.*, 7 E.A.D. at 567).

II. EPA CORRECTLY ISSUED MINOR SOURCE PERMITS.

Whether ~~an~~ facility or exploration site is permitted as a "major source" or a "minor source" depends on the calculation of the Potential to Emit ("PTE") of that source. *See* 18 AAC 50.306; 18 AAC 50.040 (adopting by reference 40 C.F.R. 52.21). If the PTE for a source is calculated to be below 250 tons per year ("tpy") for a given pollutant, then that source does not qualify as a "major source" and is not subject to regulation as a major source under the Clean Air Act. *Id.* However, if the PTE for a source is calculated at above 250 tpy, then the source will be treated as a major source and subject to regulatory requirements such as new source review and best available control technology. *See* ~~*Id.*~~ For this reason, PTE is a technical determination that "is jurisdictional in nature." *Alabama Power Co. v. Costle*, 636 F.3d 323, 352 (D.C. Cir. 1979).

Petitioners challenge EPA's determination on the scope of the "OCS source" in two ways. First, Petitioners argue that Congress defined an OCS Source as a drill ship, and so the Kulluk is a single "OCS Source" even if when it moves across vast expanses of water and drills a number of different locations at different times. Second, Petitioners make different argument regarding aggregation of emissions. NSB argues that even if each drill site is a separate OCS source, EPA was required to aggregate emissions from the different sites because the drill ships had the same SIC code, were under common ownership, and were operating on the same contiguous or adjacent properties. The ~~Earthjustice~~REDOIL Petition similarly argues that EPA

did not adequately justify why facilities located father apart than 500 meters are not "contiguous or adjacent."

The following discussion will rebut Petitioners arguments by demonstrating: (1) -OCSLA and the implementing regulations require EPA to treat separate OCS sites as separate OCS sources; (2) EPA's decision to aggregate emissions from separate activities within 500 meters is a reasonable technical determination owed substantial deference. For these reasons, and the reasons discussed below, the Petitions for review should be denied.

A. OCSLA and the OCS Implementing Regulations Require EPA to Treat Separate Drilling Sites as Separate OCS Sources; Petitioners' "Ship-By-Ship" Approach Is Contrary to the Statute and Regulations and Would Lead to Absurd Results.

Petitioners argue that the definition of "source" under OCSLA requires EPA to permit SOI's operations on a "drill ship by drill ship basis." NSB Petition at 15; ~~EJ~~REDOIL Petition at 12. Petitioners suggest that EPA was required to treat all activities by each drill ship as a single "OCS source" even though the emissions occur at different drill sites and at different points in time. NSB Petition at 17; ~~EJ~~REDOIL Petition at 13. The Board should reject Petitioners' arguments regarding ship-by-ship permitting because: (1) OCSLA and the OCS implementing regulations require EPA to treat separate OCS activities as separate OCS sources, (2) Petitioners ignore completely the applicable regulatory requirements and assert arguments that run contrary to the statute and its underlying policy; and (3) Petitioners' approach would lead to absurd results because it would force EPA to combine the activities of a drill ship even when the vessel is operating at drill sites 30 miles apart, 300 miles apart, or even 3000 miles apart.

1. OCSLA and the OCS implementing regulations require EPA to treat separate OCS drilling sites as separate OCS sources.

A review of the definition of "OCS Source" under the OCS statute and implementing regulations demonstrates that EPA is required to treat separate OCS sites as separate OCS

sources. OCS operations are not conducted on land by traditional "stationary sources," but rather are conducted in open water by vessels that move around and are intermittently attached to the seabed. *See generally* Response to Comments at 38-73. Because OCS operations necessarily involve drilling vessels that can move in water, neither Congress nor EPA could rely on the standard definition of "stationary source" used in other sections of the Clean Air Act when the Outer Continental Shelf Lands Act was revised in 1990. Thus, OCSLA and the implementing regulations now define "OCS Source" in a manner that encompasses the realities of offshore OCS development. *See* 42 U.S.C. 7627(a); 40 C.F.R. § 55.2.

Under the OCS statute and regulations, an "OCS Source" includes any "equipment, activity, or facility" which (i) emits or has the potential to emit any air pollutant, (ii) is regulated or authorized under OCSLA, and (iii) is located on the OCS or in the waters above the OCS. *See* 42 U.S.C. 7627(a)(4)(c)(i)-(iii); 40 C.F.R. § 55.2. EPA regulations implementing this definition clearly state that vessels constitute an "OCS Source" only when the vessels are physically attached to the seabed. 40 C.F.R. § 55.2. According to the regulations, an OCS Source:

> 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 . . .; 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. In the preamble to the OCS regulations, EPA explained that drill ship vessels were exempt from regulation as OCS stationary sources unless they are attached to the seabed: "Drill ships are considered to be an 'OCS source' because they are attached, at least temporarily, to the seabed, and so are authorized and regulated pursuant to the OCSLA; as such, ***they will be subject to regulation as stationary sources while attached to the seabed.***" 56 Fed. Reg. 63774, 63777 (Dec. 5, 1991) (emphasis added).

By defining "OCS Source" to include drilling vessels under some circumstances (*i.e.*, when they attached to the seabed) but not all circumstances (*i.e.*, when they are in transit), the regulation *requires* EPA to treat separate drill sites as separate OCS sources. 40 C.F.R. § 55.2. With respect to OCS exploration activities by a single vessel at multiple locations, there simply can be no question that each drill site constitutes a separate OCS source because drilling wells occurs sequentially and non-continuously. A vessel ceases to be an OCS Source while it is in transit between different locations, and neither the OCS statute nor the regulations contemplates that a drill ship retains its status as a single and continuous "OCS source" even while it is traveling across the water and attaching to a distant site at a later point in time.

Disregarding the regulatory language, Petitioners argue that "the fact that Shell takes the same equipment to various locations and attaches and reattaches it repeatedly to the seabed is irrelevant to the definition of OCS Source under Section [sic]." NSB Petition at 17. To the contrary, the definition of OCS Source *hinges* on the fact that a vessel is no longer an OCS Source when it detaches from the seabed. *See* 40 C.F.R. § 55.2; 56 Fed. Reg. at 63777 (drill ships "will be subject to regulation as stationary sources while attached to the seabed"). If EPA were to aggregate all drill sites visited by a particular ship, as Petitioners argue, then EPA would be violating the applicable regulations by regulating a vessel as an OCS source even when it is not "attached to the seabed." *See* 40 C.F.R. § 55.2. Petitioners' approach would not only violate the applicable regulations, but would also violate the statute because EPA lacks the authority to regulate drill ships as stationary OCS sources when they are acting merely as vessels in transit. *See* 56 Fed. Reg. at 63777 (Dec.~~ember~~ 5, 1991). As EPA explained in the preamble to the regulations: "EPA is proposing not to regulate vessels as 'OCS sources,' and any regulations adopted by state and local agencies to directly control vessel emissions will not be incorporated

into part 55 because it would exceed EPA's authority under section 328 [42 U.S.C. § 7627]." *Id.*[5] Thus, the applicable regulations requires EPA to regulate drill ships as OCS sources only when they are attached to the seabed, and thus to consider sequential and non-continuous drilling operations as separate OCS sources.

Applying the applicable OCS regulations, Region 10 found that separate drilling activties by the Kulluk and the Frontier Discoverer were separate OCS sources. *See* Discover Permit at 12; Kulluk Permit at 11. EPA explained in its Statement of Basis that "the OCS source is the equipment . . . that generates air pollutant emissions while located at any drill site within a Beaufort Sea OCS lease block authorized by the MMS." Kulluk Statement of Basis at 5; Discoverer ~~Frontier~~ Statement of Basis at 5. Region 10 reasonably concluded that "[w]hile the drillships [ ] are in transit, the OCS Air Regulations do not apply to the emissions units on the drillships [ ] that would otherwise be subject to regulation under those rules while the drillships [are] anchored to the sea floor." Response to Comment sat 51. Thus, while the Kulluk or the Frontier Discoverer is in transit between different locations, "it remains inherently a vessel" and is not subject to regulation as an OCS Source. *See* Kulluk Statement of Basis at 9-10; Discoverer ~~Frontier~~ Statement of Basis at 9. Because a drill ship is considered an OCS Source only when it is "attached to the seabed," and the drill ship does not somehow retain remain a single, continuous OCS source while traveling to a new location and reattaching to the seabed at a later time, Region 10 properly considered each drill ship site to be a separate OCS Source. 40 C.F.R. § 55.2.

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[5] *See also Santa Barbara Air Pollution Control v. U.S.*, 31 F.3d 1179, 1181 (D.C. Cir. 1994) (in action challenging the EPA implementing regulations at 40 C.F.R. Part 55, the D.C. Circuit held "it was reasonable for the EPA to conclude that OCS sources did not include vessels that were merely traveling over the OCS.").

According to the REDOIL ~~Earthjustice~~ Petition, "[Congress] very specifically defined 'OCS source' to include equipment such as drill ships, without regard to location or number of wells drilled." ~~EJ~~REDOIL Petition at 14. Adopting Petitioner's approach, however, would lead to absurd results. If EPA were required to permit the Kulluk as a single OCS source, "without regard to location or number of wells drilled," SOI would be forced to aggregate emissions from the Kulluk regardless of whether the Kulluk was traveling .3 miles, 30 miles, or 300 miles between drill sites. This is directly contrary to EPA's policy of protecting fixed locations from air impacts – locations that do not move with the drill ship – by forcing EPA to consider impacts at one location by examining emissions that will occur at a distant location. As Region 10 explained in the Kulluk Statement of Basis: "it is the above activity at an OCS drill site the EPA is permitting, and not the Kulluk wherever it goes." Kulluk Statement of Basis at 9.[6] This sensible approach is consistent with the OCS statute and implementing regulations, which defines vessels as OCS sources only when they are attached to the seabed.

Notably, the NSB and REDOIL Petitions for Review ~~and the Earthjustice Petition for Review~~ completely ignore the regulations at 40 C.F.R. Part 55. This is a telling omission. The applicable regulations and the requirement that vessels are OCS Sources only when attached to the seabed were enacted by notice and comment rulemaking, are binding upon the agency, and should be enforced by the Board. *In re Carlton, Inc.*, 9 E.A.D. 690, 692 (EAB 2001) ("the authority of the Board to review permit decisions is limited by the statutes, regulations, and delegations that authorize and provide standards for such review.") (citing 57 Fed. Reg. 5,320

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[6] On March 30, 2007, EPA published a Statement of Basis for the Kulluk permit ("Kulluk Statement of Basis") and a Statement of Basis for the Discoverer permit ("Discoverer Statement of Basis"). The Kulluk Statement of Basis is attached to the NSB Petition as Petitioner's Exhibit 3, and the Discoverer Statement of Basis is attached to the NSB Petition as Petitioner's Exhibit 4. EPA took the identical approach with respect to the Frontier Discoverer. *See* Frontier Discoverer Statement of Basis at 9.

(Feb. 13, 1992)). If the Board were to accept Petitioners' argument that the statute requires ship-by-ship permitting, the Board would effectively be rendering the regulations at Part 55 null and void.[7] It is improper for the Board to review the propriety of an agency regulation in the context of a Petition to Review the conditions of a minor source permit. *In re Federated Oil & Gas of Traverse City*, 6 E.A.D. 722 (EAB 1997).[8] If Petitioners object to treating separate OCS sites as separate OCS sources, the proper context for Petitioners' argument is a direct challenge in federal district court to the underlying OCS regulations at Part 55.

In treating each separate drill site as a separate OCS Source, Region 10 acted reasonably, in a manner entirely consistent with applicable agency regulations, and without clear error. Thus, the Petition for Review should be denied.

2. Emissions from separate OCS sources are not aggregated simply because the same equipment is used at both drilling sites.

The OCS statute and regulations define an "OCS Source" as any "equipment, activity, or facility" which emits or has the potential to emit any air pollutant, is regulated or authorized under OCSLA, and is located on the OCS or in the waters above the OCS. *See* 42 U.S.C. 7627(a)(4)(c)(i)-(iii); 40 C.F.R. § 55.2. In arguing that each drill ship is a single OCS Source wherever it goes, Petitioners rely on a crabbed reading of this statutory language. NSB Petition at 15-18; ~~EJ~~REDOIL Petition at 13-14. Petitioners' argument amounts to nothing more than the simple assertion that: "The Kulluk and Frontier Discoverer are equipment. Both emit pollution.

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[7] The ~~Earthjustice~~ REDOIL petition acknowledges that a Board decision requiring ship-by-ship permitting would render the existing regulations at Part 55 invalid as inconsistent with the organic statute. ~~EJ~~REDOIL Petition at 14 n.5. Recognizing that challenges to implementing regulations are not properly raised in a Petition for Review, however, REDOIL ~~Earthjustice~~ states that "it is not necessary to resolve this issue for purposes of this appeal." *Id.*

[8] *See also, In re Tondu Energy Co.*, 9 E.A.D. 710, 716 n.10 (EAB 2001) (the appeals process is not generally available to challenge Agency regulations).

With this equipment, Shell is [acting] under OCSLA." NSB Petition at 17; *see also* ~~EJ~~REDOIL Petition at 13-14. Petitioners' argument is meritless. As EPA repeatedly explained in the Response to Comments: "EPA agrees that the OCS source is the drillships, and that one counts support vessel emissions to determine NSR applicability." Response to Comments at 53. Petitioners ignore the relevant regulatory language which states that a vessel is only an "OCS Source" when it is attached to the seabed. 40 C.F.R. § 55.2. Thus, both the language of the statute, and the regulations discussed above, demonstrate that separate OCS drill sites constitute separate OCS sources.

Indeed, aggregating emissions from separate drill sites solely because SOI will use the same equipment would violate the intent of Congress by placing OCS operators at a distinct disadvantage from their onshore counterparts. Congress stated that one of the goals of the OCS statute was to bring about a more level regulatory playing field between onshore and offshore activities by "applying the same air quality protection requirements as would apply if the OCS sources were located within the corresponding onshore area." S. Rep. No. 101-228 at 28, 101st Cong., 1st Sess. ~~28~~, *reprinted in* 6 U.S.C.C~~A~~.A.N 3463 (1990). Permitting independent offshore operations as a single OCS Source because operators use the same equipment, while permitting unconnected onshore operations as separate OCS sources, would disproportionately harm OCS operators who rely on vessels to traverse large expanses of water to reach an exploration site, and then conduct activities at multiple sites using the same equipment. Thus, the regulations stating that vessels are OCS sources only when attached to the seabed are entirely consistent with the OCS statute and its underlying policy.

Finally, Petitioner NSB asserts that because EPA is required to include vessel emissions in any "potential to emit" calculation, EPA is therefore required to aggregate the emissions from

all drill sites visited by a particular ship. NSB Petition at 17-18. ~~Again,~~ NSB's argument confuses the definition of an OCS Source with the calculation of an OCS Source's "potential to emit" for new source review purposes. In defining the term "Potential Emissions," the EPA regulations state:

> Pursuant to section 328 of the Act, emissions from vessels servicing or associated with an OCS source shall be considered direct emissions from such a source while at the source, and while enroute to or from the source when within 25 miles of the source, and shall be included in the "potential to emit" for an OCS source.

40 C.F.R. § 55.2; *see also*, 42 U.S.C. § 7627(C). NSB correctly observes that EPA is required to consider emissions from vessels associated with an "OCS Source" as direct emissions from the source when within 25 miles of the source. *See* NSB Petition at 14. But this regulatory requirement relates only to the method for calculating an OCS Source's "potential to emit." Contrary to NSB's argument, this requirement regarding "potential to emit" does not grant EPA the power to regulate a vessel as an "OCS Source" when it is not attached to the seabed, nor to aggregate emissions from the vessel at different points of attachment. NSB's reliance on this "potential to emit" requirement is a red herring, and provides no support for the claim that EPA must permit SOI's operations on a drill ship by drill ship basis.

B. EPA's Decision to Aggregate Separate Drill Sites Only When Separated by Less Than 500 Meters is a Reasonable Technical Determination Owed Substantial Deference.

SOI strongly believes that EPA's permits would be upheld as valid even if there were no conditions in the permit regarding the aggregation of emissions from separate OCS sources. Nonetheless, to accommodate local airshed concerns, SOI requested EPA to aggregate emissions occurring within the same 52-week period and generated by equipment located at separate well sites but within 500 meters of one another. Response to Comments at 60. Based on its technical expertise, and the specific consideration of factors such as air emissions and operational

scenarios, EPA determined that only those sources within 500 meters would be aggregated: "[b]ased on consideration of allowable air emissions operational scenarios and other factors EPA determined this approach was reasonable." Response to Comments at 60.

Petitioners argue that even if EPA properly considered separate drill sites to be separate OCS sources, EPA committed reversible error when it determined that emissions from separate drill sites should be aggregated only if they are closer than 500 meters. Petitioner NSB argues that EPA is required to aggregate emissions from the different sites because the drill ships have the same SIC code, are under common ownership, and will operate on the same contiguous or adjacent properties. The ~~Earthjustice~~REDOIL Petition argues that EPA did not adequately justify why facilities located farther apart than 500 meters are not "contiguous or adjacent."

This section will rebut Petitioners' arguments by demonstrating that: (1) EPA properly considered necessary regulatory factors when determining whether to aggregate emissions from separate drill sites; (2) EPA has broad discretion to determine when to aggregate emissions from separate activities; (3) EPA policy documents demonstrate that EPA relies on its technical expertise to interpret the term "contiguous and adjacent properties"; (4) EPA's decision to aggregate sources within 500 meters was a reasonable exercise of its technical expertise, and (5) EPA's interpretations of section 328 and Alaska's PSD program are consistent with statutory purpose and prior agency practice.

EPA policy dictates that "most permit conditions should be finally determined at the Regional level." *See, e.g.*, 45 Fed. Reg. 33,290, 33,412 (May 19, 1980) (preamble to rulemaking that established 40 C.F.R. pt. 124); *In re Peabody Western Coal*, slip.op. at 13; *In re Teck Cominco,* 11 E.A.D. at 472. Further, Region 10 is owed deference on technical issues. The Region possesses the relevant knowledge and expertise to make a permitting decision that takes

into consideration the unique aspects of a given project under its jurisdiction. The Board should uphold decisions that are a result of the standard permitting process at the Regional level unless the permit condition is clearly erroneous. *See* 40 C.F.R. § 124.19(a).[9] In this case, Region 10 determined that, beyond 500 meters, separate drill sites were not sufficiently "adjacent or contiguous" and combining emissions within 500 meters would not conform to a common sense notion of a plant. *See* Response to Comments at 59-60. This judgment is well supported and plainly not "clearly erroneous."

1. EPA properly considered three factors when determining whether to aggregate emissions from separate activities.

All parties agree that the applicable state and federal laws governing PSD applicability boil down to three factors that EPA must consider when determining whether to aggregate emissions for the purposes of PSD applicability: whether the separate activities involve (1) a common owner or operator; (2) the same Standard Industrial Classification ("SIC") code; and (3) the same contiguous or adjacent propert(ies). *See generally* 40 C.F.R. § 51.166(b)(6); 18 AAC 50.040(h)(4)(B)(iii); Response to Comments at 59; NSB Petition at 19; ~~EJ~~REDOIL Petition at 15-16.

By way of background, Alaska's PSD program requires an owner or operator to obtain a PSD permit before constructing or modifying a major stationary source.[10] *See* 18 AAC 50.302(a)(1), 50.306(a). Alaska defines "stationary source" by incorporating the definition of "stationary source" contained in the code of federal regulations: "stationary source means any

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[9] *See also In re Carlota Copper Co.*, 11 E.A.D. at 708; *In Gov't of D.C. Mun. Separate Storm Sewer Sys.*, 10 E.A.D. at 333; *In re City of Irving, Mun. Separate Storm Sewer Sys.*, 10 E.A.D. 111, 122 (EAB 2001).

[10] OCSLA requires that OCS sources within 25 miles of a state's seaward boundary must comply with the same requirements that apply to sources located in the "corresponding onshore area." 42 U.S.C. 7627(a)(1). In this case, the corresponding onshore area is Alaska, and so operators must comply with the Alaska PSD program.

building, building, structure, facility, or installation which emits or may emit a regulated NSR pollutant." 40 C.F.R. § 51.166(b)(5) (incorporated by Ak. Stat. § 46.14.990(27)).

According to Alaska regulations applicable to OCS sources, the phrase "building, structure, facility or installation" has the meaning given in 40 C.F.R. § 51.166(b):

> 6) Building, structure, facility, or installation means all of the pollutant-emitting activities which belong to the same industrial grouping, are located on one or more contiguous or adjacent properties, and are under the control of the same person (or persons under common control) except the activities of any vessel. Pollutant-emitting activities shall be considered as part of the same industrial grouping if they belong to the same Major Group (i.e., which have the same two-digit code) as described in the Standard Industrial Classification Manual, 1972, as amended by the 1977 Supplement (U.S. Government Printing Office stock numbers 4101-0066 and 003-005-00176-0, respectively).

40 C.F.R. § 51.166(b)(6) (incorporated by 18 AAC 50.040(h)(4)(B)(iii)).[11]

In its Response to Comments, Region 10 distilled the above regulatory language down to three factors that must be used to determine what activities together should be aggregated and considered a single "source": (1) a common owner or operator; (2) the same SIC code; and (3) the same contiguous or adjacent properties. Response to Comments at 59. Petitioner NSB reaches essentially the same conclusion in their Petition for Review. NSB Petition at 11. There is no dispute that all of this exploration activity is being undertaken by the same owner/operator, and that the activity is classified under the same 2-digit SIC code. Therefore, only the "contiguous or adjacent properties" factor is at issue in this case. As discussed in detail below, it is well-established that EPA enjoys broad discretion to interpret the term "contiguous or adjacent

[11] In addition to incorporating the language of 40 C.F.R. § 51.166(b)(6), the Alaska regulations further state that the terms "building, structure, facility or installation" also includes a "vessel": "(A) that is anchored or otherwise permanently or temporarily stationed within a locale; (B) upon which a stationary source or stationary sources are located; not including stationary sources engaged in propulsion of the vessel; and (C) that is used for an industrial process, excluding a tank vessel in the trade of transporting cargo...." 18 AAC 50.040(h)(4)(B)(iii).

properties" in light of the various criteria such as the unique geography of the exploration project, the proximity between areas of development, and interdependence of operations.

Petitioners put forward two conflicting arguments regarding EPA's consideration of the "contiguous or adjacent properties" factor. On the one hand, Petitioner NSB argues that EPA had *no* discretion to decide when to aggregate emissions from SOI's activities on the same lease block or contiguous lease blocks. NSB Petition at 22-24. NSB argues that EPA was required to aggregate emissions from activities on "contiguous or adjacent" lease blocks on the OCS. NSB Petition at 20-28. Petitioner REDOIL~~Earthjustice~~, on the other hand, implicitly concedes that EPA has discretion to interpret the term "contiguous or adjacent." Instead, ~~Earthjustice~~ REDOIL argues that EPA acted arbitrarily EPA failed to provide a rational basis when it determined that drill sites located more than 500 meters apart are not contiguous or adjacent. REDOIL ~~EJ~~ Petition at 15-17. For the reasons set out below, the Board should reject both of these arguments.

2. EPA has broad discretion to determine, on a case-by-case basis, when emissions from separate activities should be aggregated.

Contrary to Petitioner NSB's arguments, it is well-settled that EPA has discretion to weigh the applicable factors and determine when and how to aggregate emissions for PSD purposes. EPA's broad discretion regarding aggregation of sources can be traced back to the initial promulgation of the PSD regulations in 1978, the subsequent review~~ed~~ by the D.C. Circuit Court of Appeals in 1979, and EPA's revision ~~revised~~ of the regulations in 1980.

Aggregation of sources is not specifically addressed in the Clean Air Act, but Section 111(a)(3) of the Act defines source as "any building, structure, facility or installation which emits or may emit any air pollution." 42 U.S.C. § 7411. In 1978, EPA promulgated PSD regulations implementing the CAA, and expanded the definition of "source" to include: "any structure, building, facility, equipment, installation, or operation (or combination thereof) which

is located on one or more contiguous or adjacent properties and which is owned or operated by the same person (or by persons under common control)." 40 C.F.R. § 51.24 (1978). Industry groups challenged this regulation, contending that EPA unlawfully expanded the potential scope of PSD by adding the contiguity and common ownership language. The D.C. Circuit reviewed the rule challenge and issued an initial *per curiam* decision in June 1979. *See Alabama Power Co. v. Costle*, 606 F.2d 1068 (D.C. Cir. 1979). A three-part final opinion was issued in December 1979. *See Alabama Power Co. v. Costle*, 636 F.2d 323 (D.C. Cir. 1979).[12]

In its June opinion, the Court focused specifically on the clause "contiguous or adjacent properties and which is owned or operated by the same person (or by persons under common control)." *Alabama Power*, 606 F.2d at 1077-78. The court held that EPA's approach of grouping pollutant-emitting activities on the basis of proximity and control was generally acceptable because the Agency "has evidenced an intention to ***refrain from unreasonable literal applications*** of the definition and instead to consider as a single source only common sense industrial groupings." *Id.* at 1078 (emphasis added). Thus, the central reason why the *Alabama Power* court upheld the "contiguous or adjacent properties" regulatory language was because EPA retained the discretion to aggregate emissions only when the separate activities constituted a "common sense industrial grouping." EPA was instructed to avoid unreasonable literal applications of the term "contiguous or adjacent properties," and the court ruled that the exercise of EPA's discretion on this matter would be reviewed on a case-by-case basis: "The

[12] The June 1979 preliminary opinion served two purposes: "(1) it enabled the EPA to commence rulemaking or other proceedings necessary to promulgate those revisions in the PSD regulations required by our rulings, and to take other prudent action to effectuate congressional policies; and (2) it allowed the court to entertain, prior to the issuance of this opinion, narrowly focused petitions for reconsideration directed to the panel by the parties." *Alabama Power v. Costle* 636 F.2d at 344. The December 1979 decision incorporated, enlarged, and superceded the court's June per curium opinion. *Id.*

reasonableness *vel non* of EPA action in this regard must await review of specific applications." *Id.*

In light of the court's initial and final *per curiam* opinions in *Alabama Power*, EPA revised the PSD regulations and published new regulatory definitions in August 1980 that remain applicable today.[13] In the preamble for the final rules, EPA confirmed that the new regulations preserved EPA's discretion to aggregate sources in a common sense manner:

> In EPA's view, the December opinion of the court in *Alabama Power* sets the following boundaries on the definition for PSD purposes of the component terms of "source": (1) it must carry out reasonably the purposes of PSD; (2) ***it must approximate a common sense notion of "plant"***; and (3) it must ***avoid aggregating pollutant-emitting activities that as a group would not fit within the ordinary meaning*** of "building," "structure," "facility," or "installation."

45 Fed. Reg. at 52694-95 (emphasis added).

Both the *Alabama Power* opinion and the preamble to the regulations specifically state that proximity should be taken into account when determining whether properties are "contiguous or adjacent." *See Alabama Power*, 636 F.2d at 397 ("EPA should . . . provide for the aggregation, where appropriate, of industrial activities according to considerations such as proximity and ownership."); 45 Fed. Reg. at 52695. The regulations did not specify precise distances, but rather gave EPA discretion to determine, on a case-by-base basis, when emissions from separate activities should be aggregated: "EPA is unable to say precisely at this point how

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[13] In August 1980, EPA promulgated final rules governing State Implementation Plans, New Source Review for PSD Purposes. 45 Fed. Reg. 52676 (Aug. ~~ust~~ 7, 1980). In this rulemaking, EPA amended 40 C.F.R. § 51.24 to include the definitions of "stationary source" and "building, structure, facility, or installation" that are at issue in this permit challenge. *Id.* at 52693-96. In November 1986, EPA promulgated a final rule restructuring and consolidating the regulations for the development of State Implementation Plans. 51 Fed. Reg. 40656 (November 7, 1986). As part of the restructuring, EPA re-designated 40 C.F.R. § 51.24 as 40 C.F.R. 51.166, but did not otherwise change the regulatory language. *Id.* at 40659. Thus, the preamble to the final rulemaking for 40 C.F.R. § 51.24, and caselaw interpreting this regulatory provision, are applicable to the language of 40 C.F.R. § 51.166 applicable in -this case.

far apart activities must be in order to be treated separately. The Agency can answer that question only through case-by-case determinations." 45 Fed. Reg. at 52695.[14]

Only Petitioner NSB challenges EPA's discretion to determine whether properties are contiguous or adjacent for the purpose of emissions aggregation. But NSB's Petition does not address the regulatory history, does not distinguish the *Alabama Power v. Costle* decisions, and does not cite any other statutes or regulations as purporting to limit EPA's discretion in this matter. Instead, flouting each of these, NSB argues that the term "contiguous and adjacent properties" in 40 C.F.R. § 51.166(b)(6) has a plain meaning, and EPA's actions must be consistent with this plain meaning. NSB Petition at 21. According to NSB, EPA has no discretion or flexibility when interpreting the phrase "contiguous or adjacent properties," and should instead implement Alaska's PSD program by adhering to the definitions of "contiguous," "adjacent," and "properties" as they appear in Black's Law Dictionary. NSB Petition at 21.

By demanding that EPA apply a definition of "source" that leads to unreasonable results, NSB endorses a regulatory approach to emissions aggregation that the D.C. Circuit expressly rejected in *Alabama Power v. Costle*. NSB argues that "[b]ecause the Permits authorize Shell to operate on any lease block...all of Shell's operations are a single source under the plain meaning of 40 C.F.R. § 51.166(b), as incorporated by reference in 18 AAC 50.040(h)(4)(b)(iii)." NSB Petition at 27. If the Board were to accept NSB's argument, EPA would be obligated to aggregate OCS activities that have 3 or 30 or 300 miles of open water between them, as long as the emitting activities occur on SOI's contiguous lease block and have the same SIC code. This result would be patently absurd, and would violate the regulations to the extent it forced EPA to

[14] The preamble to the regulations continued: "One commenter asked, however, whether EPA would treat a surface coal mine and an electrical generator separated by 20 miles and linked by a railroad as one 'source,' if the mine, the generator and the railroad were all under common control. EPA confirms that it would not." 45 Fed. Reg. at 52695.

aggregate activities that as group that do not "approximate a common sense notion of 'plant'" and do not fit within the ordinary meaning of "building," "structure," "facility," "installation," or "vessel." 40 C.F.R. § 51.166(b)(6); 18 AAC 50.040(h)(4)(B)(iii); 45 Fed. Reg. at 52695. For these reasons, the Board should reject NSB's "plain meaning" argument and the NSB~~'s~~ Petition for Review should be denied.

3. EPA properly relies on its technical expertise to interpret the term "contiguous or adjacent properties" in light of factors such as proximity, uniqueness, and interrelatedness.

In the Response to Comments, EPA recognized that SOI's activities over the course of a 52-week period may be located on contiguous lease blocks. Petitioner NSB claims that EPA does not, and should not, exercise its discretion and consider factors such as proximity, uniqueness, or interrelatedness if activities occur on properties that satisfy the dictionary definition of "contiguous." NSB Petition at 25-27. This argument ignores the applicable regulations, and almost 30 years of long-standing agency policy. In implementing the stationary source definition for PSD programs, EPA has consistently followed the overarching principles contained in the 1978 *Alabama Power v. Costle* opinion and the preamble to the 1980 final rulemaking. EPA has expanded on these basic principles in policy guidance documents that reinforce the permitting authority's discretion to consider uniqueness, proximity, and interrelatedness when decidinged whether to aggregate emissions. This section discusses three separate EPA Guidance documents spanning ten years that together demonstrate that EPA expects Regional permitting authorities to rely on their technical expertise to interpret the term "contiguous or adjacent properties." Viewed in light of these three documents, there is no merit to NSB's argument that Region 10 lacked the authority to interpret the term "contiguous or adjacent properties" so that its aggregation decision conformed to a common sense notion of a plant.

In the first guidance document, dated May 21, 1998, Region 8 Director Richard Long responded to a "Request for Guidance in Defining Adjacent with Respect to Source Aggregation" from the Utah Division of Air Quality. Specifically, Region 8 was responding to the question: "what is the specific physical distance associated with the definition of 'adjacent.'" *See* SOI Attachment 1 at 1. Region 8 initially responded by referring to the preamble of the 1980 rules: "In brief, our answer is that the distance associated with 'adjacent' must be considered on a case-by-case basis. This is explained in the preamble of the August 7, 1980 PSD rules...." *Id.* Region 8 reported that an exhaustive research effort suggested that question could only be answered through case-by-case determinations:

> After searching the New Source Review Guidance Notebook, and after querying the other Regions and EPA's Office of Air Quality Planning and Standards, we have found no evidence that any EPA office has ever attempted to indicate a specific distance for "adjacent" on anything other than a case-by-case basis.

Id. ~~at 1.~~

After referring to the 1980 preamble and explaining that the determination of "adjacent" is a matter of EPA discretion, Region 8 went on to provide specific guidance on how to exercise that discretion. First, Region 8 noted that "since the term 'adjacent' appears in the Utah SIP as part of the definition of 'source,' any evaluation of what is 'adjacent' must relate to the guiding principle of a common sense notion of 'source.'" *Id.* at 1-2. Second, Region 8 explained that "a determination of 'adjacent' should include an evaluation of whether the distance between two facilities is sufficiently small that it enables them to operate as a single source." Third, Region 8 indicated that sources that have no "functional inter-relationship," and do not operate at the same time or otherwise support each other, would not likely be considered a single source. *Id.* at 3. Finally, Region 8 provided examples of questions that the Utah Division of Air Quality could

pose to permittees that would help the state to evaluate whether two sources were "adjacent" for the purposes of PSD review:

> -- Was the location of the new facility chosen primarily because of its proximity to the existing facility, to enable the operation of the two facilities to be integrated? ***
>
> -- Will materials be routinely transferred between the facilities? ***
>
> -- Will managers or other workers frequently shuttle back and forth to be involved actively in both facilities? ***
>
> -- Will the production process itself be split in any way between the facilities, i.e., will one facility produce an intermediate product that requires further processing at the other facility, with associated air pollutant emissions? ***

Id. at 1-2.

Far from relying on a literal application of the term "adjacent" that could lead to unreasonable results, Region 8 confirmed that an interpretation of the term "adjacent" requires a flexible approach and a fact-specific inquiry. Moreover, this letter, which was reviewed by specialists at OAQPS, the Office of Regional Counsel for Region 8, and by the Office of General Counsel at EPA Headquarters, reinforced EPA's position that decisions relating to "adjacent" facilities and source aggregation are highly technical determinations. *Id.* at 3.

In the second guidance document, dated May 19, 1999, the Region 4 Director of Air, Pesticides and Toxics responded to an inquiry from the Mecklenburg County Department of Environmental Protection in Charlotte, North Carolina. SOI Attachment 2. Mecklenburg County had requested an opinion from Region 4 on whether two bulk gasoline terminals owned by Williams Energy Ventures, Inc. should be aggregated for Title V purposes. As in the 1998 document from Region 8, the letter begins by explaining that "EPA has never specifically defined by regulation an exact separation distance that would cause two facilities to be considered as located on adjacent or contiguous properties. Case-by-case variations preclude a

'one size fits all' definition that would be reasonable in every instance." *Id.* at 2. The letter then cites the preamble to the August 7, 1980 final PSD regulations as a source of guidance for interpreting the "contiguous or adjacent properties" requirement. *Id.* at 3.

After referencing a number of available sources, Region 4 then provided its analysis of EPA policy and rendered an opinion on whether the bulk gasoline terminals should be aggregated. The letter explained that whether the facilities were "interdependent" or "linked in some sense" was an important factor in interpreting whether properties are contiguous or adjacent:

> In most of the EPA documents we reviewed, ***the key factor in deciding that separate facilities should be considered as one source was that the facilities were interdependent or linked in some sense.*** Our understanding is that the WEV [Williams Energy Ventures] terminals is that they can and do operate independently, that one terminal does not act as a support operation for the other, and that they are not physically connected by a structure such as a pipeline dedicated to the transfer of material or energy between the two terminals.

Id. at 6 (emphasis added). EPA clearly assumed that, as a threshold matter, any potential aggregation of the emissions from the terminals could occur only if they were operating simultaneously. Even though the terminals were only nine-tenths of a mile apart, EPA Region 4 observed that these facilities were not linked or interdependent, and determined that "based primarily on the lack of interdependence, we conclude that the two WEV terminals can be considered as two separate sources for Title V (part 70) permit applicability purposes." *Id.* at 7. As in the Region 8 example discussed above, EPA again eschewed a literal analysis of the term "contiguous and adjacent properties," and relied on a technical evaluation of interdependence to determine whether the sources should be aggregated.

The third EPA guidance document is a January 12, 2007, memorandum from Acting Assistant Administrator William L. Wehrum to all regional administrators. The purpose of this

memo was to "provide guidance to assist permitting authorities in making major stationary source determinations for the oil and gas industry." SOI Attachment 3 at 1 ("Wehrum Memo"). Like the 1998 and 1999 guidance documents discussed above, the Wehrum memo begins by identifying *Alabama Power v. Costle* and the preamble to the 1980 regulations as the basic principles governing source aggregation, and specifically notes that the "foremost principle that guides our decision-making is that we should apply a 'common sense notion' of a plant." *Id.* at 2. This policy guidance, which EPA indicated extends to oil and gas operations on land, in state waters, and on the OCS, goes on to explicate the core principles of *Alabama Power v. Costle* and the PSD regulations in light of the realities of OCS exploration.

Unlike many industries, land ownership and control are not easily distinguished in the oil and gas industry because subsurface and surface property rights are often owned and leased by different entities. Thus, the Wehrum memo advises regional administrators to exercise their technical expertise and conduct a fact-specific inquiry to determine whether to aggregate sources: "[e]ven when two or more pollutant-emitting activities are clearly under common control and belong to the same 2-digit SIC code, the unique geographical attributes of the oil and gas industry necessitate a detailed evaluation of whether the activities are contiguous and adjacent." Wehrum Memo at 2.

The Wehrum memo ultimately concludes that, where emitting activities are occurring simultaneously and have some connection to each other, proximity can be the most informative factor in determining whether the locations of such concurrent activities are contiguous or adjacent:

> Given the diverse nature of the oil and gas activities, we believe that proximity is the most informative factor in making determinations for these industries. We do not believe it is reasonable to aggregate well site activities, and other production field activities that occur over large geographic

> distances, with the downstream processing plan into a single major stationary source. Aggregation of such geographically-dispersed activities defies the concept of contiguous and adjacent. ***While the land mass may be "contiguous or adjacent" when viewed as a whole, the limited portions of the properties physically associated with the pollutant-emitting activity are not necessarily nearby, connected, or in any way proximate to each other.***

Wehrum Memo at 4 (emphasis added). Thus, the Wehrum memo demonstrates that, as recently as January 2007, EPA has rejected "plain meaning" applications of regulatory definitions, and instead embraced a flexible approach to source aggregation that requires the permitting authority to conduct a detailed inquiry and exercise its technical expertise.

Finally, the Wehrum memo emphasizes that EPA should attempt to approximate the "stationary source" concept in cases where the unique topography of oil and gas exploration prevents the construction of traditional stationary sources – which certainly describes offshore sources. To apply this concept, EPA expects that permitting authorities will apply their technical judgments when evaluating source aggregation of single sites within a larger lease block: "In a great majority of cases, we expect that permitting authorities will find that ***a single surface site*** is the most-suitable industrial grouping because it correlates best with the definition of a stationary source." *Id.* at 5. Thus, EPA specifically endorsed the approach of treating exploration sites as separate stationary sources even if they are located on the same lease block. *Id.*

Together, these three guidance documents show that a clear and consistent policy of recognizing the broad authority of permitting authorities to consider proximity, uniqueness, and interrelatedness when interpreting the term "contiguous and adjacent properties." Although Petitioner NSB does not address or distinguish any of these guidance documents, NSB nonetheless argues that it is EPA policy to apply an ultra-literalist definition of the term "contiguous or adjacent property." NSB Petition at 25-26. Contrary to Petitioner NSB's arguments, in no circumstance and at no time has EPA ever stated it lacks the flexibility and

discretion to interpret the term "property," or to use proximity as a factor in determining whether to aggregate contiguous or adjacent properties. NSB relies exclusively on letters from EPA dated November 1986 and August 1996, which are attached as exhibits 14 and 19 to NSB's petition, to support its claim that EPA has previously embraced NSB's "plain meaning" approach to source aggregation. NSB Petition at 25. Even a cursory review of these letters reveals that neither correspondence even purports to examine the language of 40 C.F.R. § 51.166(b)(6), much less revisit long-standing agency policies. The August 1996 letter from the Region 5 Chief of Permits and Grants section is completely irrelevant as it addresses EPA's flexibility in determining the proper time frame within which to group modification activities. NSB Attachment 14 at page 1-2. NSB apparently cites this letter because its author makes the unremarkable observation that, at some unidentified time in the past, EPA has previously aggregated plants on adjacent properties. *Id.*

The November 1986 letter is a response by the EPA Director of Air, Pesticides, and Toxics Division, to Valero Transmission Company's "request for applicability" determination of PSD requirements. In the letter, which is also largely irrelevant, EPA informed the Texas Air Control Board that the Valero Transmission Company is a support facility for Valero Gathering Company, and thus EPA considered both facilities as one source even though they have different SIC numbers. In the final paragraph of the letter, EPA responded to a hypothetical question from the permittee asking whether proximity between the two facilities could affect their PSD status as a single source. In a brief two-sentence response, EPA explained that the proximity between Valero Transmission Company and Valero Gathering Company would not alter EPA's opinion because the plants were on contiguous properties. EPA then stated that "where sources are not located on contiguous or adjacent properties, EPA cannot say precisely how far apart the

activities must be in order to be treated separately." NSB Petition at 25; NSB Exhibit ~~Attachment~~ 19 at 2. NSB parses EPA's response and argues that the phrase "where sources are not located on contiguous or adjacent properties..." shows that EPA has recognized its own lack of discretion to consider proximity in aggregating sources. NSB Petition at 25. The Board should reject NSB's argument that this two-sentence response to a hypothetical question in a November 1986 letter can somehow provide the basis for reversing almost three decades of consistent EPA policy on aggregating sources. Although this letter does not specifically address EPA's discretion under the PSD regulations, NSB draws unwarranted inferences from the grammatical structure of one sentence addressing a hypothetical question. Unlike the EPA Guidance documents discussed above, this letter does not include an in-depth analysis of the regulatory language, and does not purport to investigate or review long-standing agency policy. The Board should reject NSB's interpretation of the November 1986 and August 1996 letters from EPA Headquarters and Region 5, and deny the Petition.

4. EPA's decision to conservatively aggregate activities within 500 meters was a reasonable exercise of its technical expertise.

As demonstrated above, SOI's vessels are OCS sources only when and where anchored to the seabed, and are thus distinct and separate sources at each location at which the vessel operates, irrespective of whether such consecutive operating locations are on contiguous lease blocks (or on the same lease block). Nevertheless, in accordance with the applicable regulations and EPA policy guidance, EPA properly exercised its technical expertise under 40 C.F.R. § 51.166 and decided that it would be appropriate to aggregate emissions from SOI's separate drill sites that are within 500 meters of each other for PSD purposes. In doing so, EPA considered several factors including local airshed concerns, air emissions and operational scenarios.

a *EPA properly determined that aggregating emissions from SOI's separate drill sites would not support a "common sense notion of plant."*

In the Response to Comments, EPA recognized that SOI's activities over the course of a 52-week period may be located on contiguous lease blocks or on a single lease block. However, EPA recognized its obligation to consider "the fact specific operations scenario presented" and its responsibility to aggregate sources consistent with a "common sense notion of a plant." Response to Comments at 59. In making its aggregation determination, EPA considered three separate facts specific to SOI's operations: (1) the unique nature of SOI's "property" on the OCS; (2) the proximity between potential drill sites; and (3) the operational independence of the drilling operations. *Id.*

First, EPA considered the unique characteristics of OCS development in its analysis. Unlike an onshore manufacturing plant in which a company has exclusive right to the land surface surrounding the plant, SOI does not have exclusive right to anything but the subsurface minerals located hundreds of feet under water. As EPA points out, although some of SOI's lease blocks are contiguous, an "[OCS] lease block, however, covers some 5,760 acres of open water accessible by the public." Response to Comments at 59. In accordance with the applicable regulations, and consistent with the guidance in the 2007 Wehrum memo, EPA found that traditional notions of onshore "contiguous or adjacent properties" do not apply given the unique nature of SOI's "properties" in this manner.

Second, EPA considered the proximity between potential drill sites on OCS blocks. While a lease block covers approximately 5,760 acres of open water, "drillships, on the other hand, occupies [sic] a few of these acres at a single time. The emissions generating activity occurs within a very, very, small fraction of the entire area controlled by Shell." Response to Comments at 59-60. Since each lease block is approximately 9 square miles, and SOI controlled

a number of contiguous lease blocks, EPA recognized that a literal interpretation of the "contiguous or adjacent properties" requirement could lead to the absurd result of aggregating emissions generating activity that could be 25, 50, or even 100 miles apart. In accordance with the applicable regulations, and consistent with the 1998 guidance memorandum from Region 8, EPA rejected the literal interpretation of "contiguous and adjacent properties," and found that SOI's drill sites on even a single lease block may be so far apart that they could not reasonably be aggregated for PSD purposes.

Finally, EPA considered the lack of interrelatedness between the drill sites. Region 10 observed that the Kulluk and the Frontier Discoverer are independent of each other. Response to Comments at 60. Examining each of the drillships separately, EPA concluded "at no time do two drillships s [sic] share a physical connection, and at no time is one drillships [sic] dependent upon the support of another drillships. Their operations are independent in that sense." Region 10 also observed, "[s]o too is a single drillships 's [sic] operation independent from one site to the next." Response to Comments at 60. In other words, the operations of the Kulluk at a particular site X are completely independent from prior or subsequent operations conducted by the Kulluk at site Y.

Based on a fact-specific inquiry and the application of EPA's expertise, Region 10 considered all the available technical information and concluded that "activities undertaken across different drill sites are most likely never contiguous nor adjacent given that the resultant source would not would not [sic] fall within a 'common sense notion of plant.'" Response to Comments at 60. Thus, even though SOI's activities may be located on contiguous underwater lease blocks, EPA was required to evaluate the unique characteristics of OCS exploration, the proximity between drill sites, and interdependence between emissions sources. Based on this

technical inquiry, EPA properly determined that aggregating emissions from SOI's separate drill sites would not support a "common sense notion of plant." EPA's decision to separate emissions by drill site is a reasonable application of the central overarching principle that has guided EPA implementation of the PSD program since the current regulations were adopted in 1980. Moreover, EPA's conclusion is consistent with recent EPA Guidance documents noting that drill sites are often the most suitable industrial grouping "because it correlates best with the definition of a stationary source." Wehrum Memo at 5. The Board should defer to Region 10's application of these long-standing agency policies, and deny the Petitions for Review in this case. *See In re Howmet Corporation*, RCRA Appeal No. 05-04, slip. op. at 14 (EAB, May 24, 2007) (the Board "give[s] greater deference to a position when it is supported by Agency rulings, statements, and opinions that have been consistent over time").

EPA's determination that these drill ships and drill sites are independent defeats Petitioner's argument that EPA has "artificially sub-divided sources." NSB Petition at 30. There is nothing artificial about separating the emissions from two SOI wells drilled by the Kulluk when these wells are (1) completely unrelated, (2) located in different places, (3) drilled at different times, and (4) independent drilling operations. Likewise, there is nothing artificial about separating emissions from the Kulluk and Frontier Discoverer because their operations are unconnected and independent. Just as single OCS sources should not be artificially subdivided for permitting purposes, neither should separate OCS sources be artificially aggregated in a manner that does not conform to a common sense notion of a plant. Thus, in accordance with the applicable regulations, and consistent with the 1999 guidance memorandum from Region 4, EPA interpreted the "contiguous or adjacent properties" term by examining whether the sites were interdependent or linked in some sense.

b *EPA's decision to aggregate emissions from activities within 500 meters is reasonable and well grounded in the record.*

SOI strongly believes that EPA's permits would be upheld as valid even if there were no conditions in the permit regarding the aggregation of emissions from separate drill sites. Nonetheless, to accommodate local airshed concerns, SOI requested EPA to aggregate emissions occurring within the same 52-week period and generated by equipment located at separate well sites but within 500 meters of one another. Response to Comments at 60. Based on its technical expertise, and the specific consideration of factors such as air emissions and operational scenarios, EPA determined that only those sources within 500 meters would be aggregated: "[b]ased on consideration of allowable air emissions operational scenarios and other factors EPA determined this approach was reasonable." Response to Comments at 60. Thus, EPA's Response to Comments lists several different considerations that underpin EPA's 500 meters permit condition: (1) "local airshed concerns," (2) "air emissions"; and (3) "operational scenarios." Response to Comments at 60. In addition, EPA states that "other factors" played a role in determining that the 500 meter condition was reasonable. This conclusion, which is based on a fact-specific inquiry of SOI's OCS program, is also consistent with EPA's practice in other industries of separating pollutant-emitting activities located outside a 400 meter (¼ mile) area. *See* Wehrum Memo at 5 n.16.[15]

During the public comment process, Petitioner NSB commented that using a 500 meter distance was "arbitrary and capricious," and recommended that EPA aggregate all emissions less than 25 miles apart. Response to Comments at 67. EPA properly considered this comment,

[15] As explained in the Wehrum memorandum : "[I]n making major stationary source determinations for this industry [oil and gas], some Southern States apply a rule that generally results in separating pollutant-emitting activities located outside a ¼ mile radius."

applied its technical expertise to the question, and determined that the 500 meter standard was reasonable:

> Aggregating drillships s [sic] separated by 25 miles does not result in a "common sense notion of a plant" given that there would be no physical connection between the two drill sites, and only vast areas if in open water with no air pollutant emitting activities. ***On the other hand, EPA determined in this case that activity within 500 meters is close enough to be contiguous and adjacent.*** One of the goals of the OCS statute was to bring about a more level regulatory playing field between oil and gas activities occurring in State waters and oil and gas exploration activity in the manner this commenter advocates. ***Therefore, EPA determined that the 500 meter rather than a 25 mile threshold is reasonable in this case.***

Response to Comments at 68 (emphasis added).

Petitioner ~~Earthjustice~~REDOIL argues that Region 10 acted arbitrarily because "EPA offers no explanation, other than the fact that Shell suggested it, for choosing 500 meters." REDOIL Petition at 16. This argument ignores the Response to Comments and is plainly wrong. EPA considered several factors that are highly technical in nature, including local airshed concerns, air emissions and operational scenarios. Response to Comments at 60. EPA's technical decisions are supported by the administrative record, and thus deserve great deference from the Board.

Neither NSB nor ~~Earthjustice~~REDOIL have demonstrated that EPA's conclusion regarding the reasonableness of a 500 meters standard was "clearly erroneous." To the contrary, EPA's decision to grant a minor source permit for SOI's exploration activities in the Beaufort Sea was well reasoned and within the scope of EPA's authority under the applicable PSD regulations. Hence, the petition for review should be denied.

5. EPA's Interpretations of Section 328 and Alaska's PSD Program are Consistent with Statutory Purpose and Prior Agency Practice.

A recent onshore permitting decision by the Alaska Department of Environmental Conservation ("ADEC"), as reviewed by EPA Administrator Stephen Johnson, demonstrates that SOI's permits are perfectly consistent with ADEC agency practice and federal law. In early 2004, ADEC issued an Operating/Construction permit to BP Exploration (Alaska) Inc. for Gathering Center #1 ("GC#1") located within the Prudhoe Bay Unit.[16] In a Statement of Basis published on February 17, 2004, ADEC interpreted the requirements of 40 C.F.R. § 51.166(b) and discussed the application of the three relevant factors (SIC code, common ownership, and "contiguous or adjacent properties") for aggregating sources. SOI Attachment 4 at 3. As in the present case, ADEC declined to aggregate all emissions sources simply because the emissions occurred on the same lease or contiguous leases. In interpreting the term "contiguous or adjacent properties," ADEC determined that the relevant "property" is the improved surface areas, and not the entire lease area:

> To determine if the "property" or "properties" are located in close proximity, the relevant "property" must first be identified. ADEC has determined that within the North Slope Oilfields "property" is considered to be the improved surface areas (pads) because: (1) oil and gas production activities occur over vast areas in which there is limited surface disturbance, (2) land use permits must be obtained from the state for any surface disturbances, (3) the unique permafrost environment limits the extent of any surface disturbances, and (4) the pollutant emitting activities are located on the pads.

Id. 3. Mirroring EPA's considerations in the present case, ADEC considered factors such as uniqueness and proximity to conclude that it could only aggregate pollutant-emitting activities that fit a "common sense notion of a plant." *Id.* at 3. In the same way that Region 10 accounted for the publicly accessible open water between SOI's drill sites, ADEC's permitting decisions accounted for the expanses of tundra separating BP's well pads: "[i]n the context of the Prudhoe

[16] The BP permit was issued for well emissions, rather than construction activities as in this case.

Bay Unit, the relevant units of property are the pads on which the sources are situated, as distinguished from the surrounding tundra." *Id.* at 4.

When deciding whether to aggregate emissions from well pads or processing facilities, ADEC did not adopt a specific distance threshold (such as EPA's 500 meters). Unlike offshore OCS development in which neither the drillships nor the drill sites are interdependent, the facilities required for onshore crude petroleum and natural gas production are often interdependent. Nevertheless, ADEC used its discretion, and the flexibility afforded under 40 C.F.R. § 51.166, to implement what it referred to as a "wagon wheel" model based on the production centers (hubs) and well pads (spokes). *Id.* at 4. Within this conceptual framework, ADEC concluded that the relevant "plant" was the well production pads that extract the raw materials from the subsurface and deliver them to the factory for processing. The permit issued by ADEC aggregated sources from those wellhead and separation facilities that "cannot exist without each other and constitute a complete production plant." *Id.* at 5.

EPA received two petitions requesting that the Administrator object to ADEC's issuance of this permit to BP Petroleum (Alaska) Inc. Among other things, the petitioners argued ADEC violated the Clean Air Act when the agency declined to aggregate all sources within the entire Prudhoe Bay Unit. SOI Attachment 5 at 1. Thus, the petitioners in that case made virtually the exact same argument put forward by NSB and ~~Earthjustice~~REDOIL in this case. On April 20, 2007, the EPA Administrator denied petitioners' request to object to the permit. In his order denying the petition, Administrator Johnson reviewed the ADEC's explanation of its aggregation decision, and determined that the petitioners did not provide "any argument as to why ADEC's decision not to aggregate, which is described in great detail in the Statement of Basis for the final Revision 1 permit, is unreasonable." SOI Attachment 5 at 8. Moreover, Administrator Johnson

ruled that "neither Petition identifies any flaw under the Clean Air Act in the Revision 1 permit that resulted from the allegedly deficient decision not to aggregate all facilities in the [Prudhoe Bay Unit]." *Id.* at 8. Thus, the EPA Administrator specifically endorsed ADEC's decision not to aggregate emissions even when development occurred on "contiguous or adjacent properties."

Administrator Johnson's April 2007 Order provides useful and persuasive precedent for the Board in the present case. Just as the Administrator declined to challenge ADEC's interpretation of the term "contiguous or adjacent properties" and application of the wagon wheel model, the Board should similarly decline to review EPA's interpretation of the same term and application of the 500 meters threshold. The Administrator's recent order makes clear that permitting authorities may disaggregate even simultaneously operating sources within the same lease block or on contiguous leases. Here, Region 10 adequately considered the relevant factors of uniqueness, proximity, and interrelatedness, and Petitioners NSB and ~~Earthjustice~~REDOIL have failed to identify any argument why Region 10's decision to aggregate sources within 500 meters is clearly erroneous.

Despite clear evidence to the contrary, Petitioner NSB puts forward a number of arguments that EPA's interpretation of the applicable regulations "must fail as contrary to the statutory purpose" of the Clean Air Act. NSB Petition at 29. First, Petitioner NSB claims that SOI's minor source permits are contrary to the statutory purpose because "EPA's interpretation allows a single OCS Source to emit 249 tons of a pollutant at one site, pull anchor and move over 501 meters, and emit 249 tons of a pollutant *ad infinitum* without complying with PSD." NSB Petition at 29. This concern is completely unfounded. In its Response to Comments, Region 10 addressed this possibility and concluded it was simply not feasible for SOI to begin drilling at a site, move 501 meters, and then finish drilling at the same site:

> EPA determined that it is not reasonable (or perhaps even feasible) to anticipate that a drillships [sic] would begin to drill a well or wells from one drill site, extract itself from the site, re-position itself at another nearby location, and then begin to drill the unfinished well or wells to completion.

Response to Comments at 60. Thus, EPA applied its technical judgment and concluded that SOI's exploration program would be inconsistent with any plan to "pull anchor and move over 501 meters."[17]

Second, NSB argues that EPA's interpretation allows SOI to "artificially" sub-divide sources. This argument relies on the mistaken assumption that SOI's drill sites are part of a single OCS source that could somehow be subdivided. In fact, as discussed in detail above, EPA reasonably concluded that each SOI drill site is a separate OCS source because the separate OCS sources are not a "common sense industrial grouping" and do not fit a "common sense notion of plant." Moreover, consistent with this conclusion, SOI's drill sites in fact cannot be artificially subdivided. As EPA pointed out, unlike many conventional onshore manufacturing or other facilities' operations, drilling of one of SOI's offshore wells simply cannot be undertaken partially in one location and partially in another location 501 meters away. Moreover, a vessel is not even an "OCS Source" except when it is anchored to the seabed at a particular location.

Third, Petitioner NSB argues that EPA's 1993 decision to grant ARCO a major source permit for its exploration plan in the Beaufort Sea undermines EPA's decision to aggregate emissions in this case. NSB Petition at 31. However, the ARCO decision serves as no precedent for this case because the two projects are vastly different. In this case, SOI has estimated NOx emissions of 245 tpy per drill site, and has committed to Owner Requested Limits that will ensure that this estimate is not exceeded. ~~Frontier~~ Discoverer permit at 12; Kulluk permit at 11.

[17] On their face, the permits provide SOI with the ability to drill different wells at different well sites 500 meters apart. There is nothing in the record that demonstrates SOI's intent to drill different wells at such a close proximity.

By contrast, ARCO predicted 2,311.9 tons over a 4-month period, which EPA determined to be 578 tons per drill site. Response to Comments at 57. Thus, SOI will remain below the major source threshold, while ARCO's emissions were significantly higher than needed to qualify as a major source *at each drill site*. Moreover, Petitioner complains that ARCO was a major source, yet they fail to recognize that SOI has agreed be bound by its ORL, resulting in significantly less air pollutant emissions.

Comparisons with the ARCO operation are also inappropriate because new regulations have been adopted since 1993. The applicable Alaska regulation, 18 AAC 50.502(c)(2)(A), which dictates that a portable oil and gas operation must obtain a minor source permit, had not yet been promulgated in 1993 when EPA issued the ARCO permit; this provision was adopted in 2004. Alaska law now dictates that onshore and offshore drilling operations like SOI's drill ships obtain a minor source permit. *See* 18 AAC 50.502(c)(2)(A).

III. EPA PROPERLY FOUND THAT SOI'S POTENTIAL TO EMIT ("PTE") NOx AT EACH DRILL SITE WILL NOT EXCEED 250 TONS PER YEAR, SUCH THAT NO PSD MAJOR SOURCE PERMIT IS REQUIRED.

NSB makes several arguments related to EPA's calculation of the "potential to emit" of SOI's sources, claiming that: (1) EPA failed to provide relevant information in the administrative record for the draft permit; (2) EPA improperly based potential to emit ("PTE") on expected or average emissions; and (3) EPA erred in issuing SOI's Owner Requested Limits ("ORLs"). Each of these arguments is meritless. The fact that a ***sub-part*** to the PTE calculation information was not indicated in the notice for public comments document index did not materially prejudice Petitioner NSB and does not call EPA's overall permitting decision into question. Furthermore, the PTE calculation is adequate because averaging may properly be used to determine limits. Finally, Petitioner's argument that Owner Requested Limits ("ORL") are not relevant to the PTE calculation fails because this is contrary to authority established by the EPA, EAB, and Alaska

regulations. Consequently, Petitioner's objections to the PTE calculation fail, and the EAB should uphold EPA's finding that the drill sites are not major stationary sources.

A. The Failure to Reference "Projected Fleet Activity Information" in the Notice for Public Comments Does Not Invalidate the PTE Calculation.

Prior to issuing the Statement of Basis, EPA requested that SOI provide it with additional documentation to ***supplement*** the existing PTE calculation. ~~EPA~~ Response to Comments ~~,~~ at 19. On March 8, 2007, EPA received information from SOI pertaining to operating hours and operating loads for individual emission units. This information ***was in addition to*** information already included in the original application that modeled multi-pollutant, multi-year equipment-specific emissions resulting in facility-wide NO_X~~*~~ emissions of 245 tons per year, i.e., total NO_X~~*~~ emissions per site, including associated vessels when operating within 25 miles of the site. While it is true that SOI's new documentary evidence was not indexed in the Statements of Basis, this was an oversight with no practical import that caused no prejudice to Petitioner or any member of the public.[18]

NSB's claim to the contrary—that the failure during the comment period to reference twenty pages of SOI material in an index—is exaggerated and misleading.[19] The projected fleet activity information was only a small part of the PTE material. Moreover, though not referenced in applicable indices, ***no claim is made that these documents were not actually included in the***

[18] Moreover, this general issue relating to the thoroughness of the application and the fact material was provided in waves was already raised during the Public Comment period, and more than adequately responded to by EPA. ~~EPA~~ Response to Comments at 26.

[19] In addition to complaining that the projected fleet activity material was not clearly indexed for the comment period, Petitioner laments that it received these documents in the administrative record for this current appeal late. Nonetheless, Petitioner's inability to review twenty pages of excel spread sheet could have been cured by requesting such documents earlier. EPA's Response to Comments ~~, dated June 12, 2007,~~ indicates the fleet activity material was available as of that date, *see* Response to Comments at ~~(p.~~ 19~~)~~, although by its own admission, NSB unaccountably did not request the administrative record until two weeks later, June 27, 2007, almost half-way into the thirty-day period for appeals.

record. Even if these 20 pages of documents had not been made available to the public—and they were— this is harmless error because EPA would still have been able to issue the final permit on June 12, 2007. According to 40 C.F.R. 124.18(b)(4), EPA could properly base a ***final*** permitting decision on material introduced after the public comment period closed. Clearly, contrary to Petitioner's arguments, no absolute right exists to perfect notification of all supporting documents during a comment period.

NSB's reliance on *Sierra Club* does not change this conclusion. *See Sierra Club v. Johnson*, 436 F.3d 1269, 1280 (11th Cir. 2006). That case did not consider whether non-disclosure of a minor piece of documentary information, whose existence could be reasonably gleaned from other parts of the official record and which could be found in the record, compelled EPA to reopen public comments. Rather, the 11th Circuit in that case looked at whether a state agency's failure to comply ***with a specific rule*** concerning issuing notice (40 C.F.R. § 70.7(h)(1)) compelled EPA to take certain action ***under another specific rule*** (42 U.S.C. § 7661d(b)(2) (providing that the EPA Administrator "shall issue an objection" if a permit is defective)). In the present case there is no specific regulatory commandment that the indices for the public record be infallible, and consequently *Sierra Club*'s statutory interpretation of rules not applicable here is inapposite.

Finally, prejudice could not have occurred due to the listing oversight because the only rights that accrue to the public during the comment period are to require EPA to justify its ultimate permitting choice.[20] Because most of SOI's calculations concerning PTE were already

[20] NSB suggests that had it been aware of the fleet activity material, it might have sought out the advice of technical experts to analyze this data. NSB Petition at 37. Such a claim of prejudice rings hollow if Petitioner did not seek such experts with regard to the majority of the PTE calculation materials which clearly were available; indeed, one wonders how long review of 20 pages of excel spread sheet calculations would take. If the time between receiving the fleet activity material and submitting the

apparent from the listed record, the public had an opportunity to require EPA to justify the Agency's calculations. Despite the technical lack of notice with regard to this particular document, Petitioner nonetheless is now able to raise, and has raised, the adequacy of the challenged calculations in this appeal. Consequently, it cannot be said that NSB suffered any legal injury due to any procedural misstep.

B. Because Averaged "Worst Case" Modeling and ORLs Are *Enforceable* Physical and Occupational Limitations, the PTE NOx Calculation Is Consistent With Minor Permitting.

The PTE definition under the Outer Continental Shelf Air Regulations is:

> ***the maximum emissions of a pollutant from an OCS source operating at*** its design capacity. ***Any physical or operational limitation*** on the capacity of a source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as a limit on the design capacity of the source ***if the limitation is federally enforceable***.

40 C.F.R. § 55.2 (emphasis added); ~~.~~ ~~S~~*see also* 40 C.F.R. § 52.21(b)(4). Thus, PTE is properly measured based on a source's inherent capacity to emit air pollutants, as modified by certain restrictions on emissions. All parties agree this regulation specifies the applicable standard; Petitioner's dispute really focuses on whether Region 10 was justified in calculating PTE based on enforceable "physical or operational limitations" rather than on hypothetical 24 hour-a-day, 365 day-a-year "maximum emissions."

While citing scant authority for its position, *see* ~~Petitioner~~ NSB Petition ~~Brief~~ at 37-53 (citing four distinct cases in total, only two of which deal with substantive interpretations of PTE), Petitioner NSB takes the extreme position that very little can qualify as a "physical or

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Petition were insufficient for this task, NSB could have mitigated the supposed harm by promptly seeking out the fleet activity material when it was first available, on July 12, 2007. *See supra* note 20~~1~~.

operational limit,"[21] even if it is obvious and verifiable that the source in actuality will not operate every hour of the day, all through the year. Based on NSB's narrow understanding of PTE, calculation of PTE becomes conflated with maximum possible emissions. In other words, NSB's petition essentially argues that the permits are invalid because it might be physically possible for SOI to operate at greater than its permitted or forecast capacity.

NSB's assault on the natural meaning of 40 C.F.R. ~~p~~Part 55 takes two forms. First, Petitioner argues that because SOI's "worst case" emissions model (a conservative method by which to calculate PTE) may be imprecise, all of the equipment on each drillship and on associated vessels should be presumed to be working at full capacity all the time. Consequently, because this figure for raw capacity exceeds 250 tons of NO_X~~*~~ per year, it is argued, the Kulluk and Frontier Discoverer are "major sources." Second, Petitioner claims that limiting PTE to 250 tons per year is not achievable here even though SOI has agreed to shut down its facility once it is poised to exceed 250 tons per year—because ORLs *per se* cannot qualify as a PTE "physical or operations limitation." Petitioner's sole authority for its contention is the twenty-year old district court case, *U.S. v. Louisiana-Pacific Corp.*, 682 F. Supp. 1122, 1131-33 (D. Colo. 1987) (finding annual caps on emissions insufficient to qualify as a physical or operational limitation on emissions).[22] Petitioner then quickly retreats from this argument, stating that, in any event, the present case involves an improperly-granted ORL.

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[21] NSB notes in its Petition~~:~~, "Normal operations are ***not*** the operations that Shell ***assumes*** will be necessary ~~(p. 39)~~. . . . " and "~~. . .~~ potential to emit ***must*** be based on maximum emissions at design capacity, ***not on a permit applicant's forecasts***. . . . ~~(p. 41) . . .~~ [forecasts] are not part of the physical or operational design of the emissions units~~(p. 41)~~." NSB Petition at 39, 41 (emphasis added).

[22] Though *U.S. v. Louisiana-Pacific Corp. ~~LP~~* appears to speak to the issue of whether what we now call ORLs should be considered in determining the PTE calculation, Judge Arraj there acknowledged he was making up the law because this was a case of first impression:

The only issues here are (1) whether SOI's worst case averaging approach to calculating PTE at each drill site as less than 250 ton per year is valid and (2) whether the ORL for each site that prohibits emissions of NOx in excess of 245 tons per year fit the definition of enforceable "physical or operational limitations." Because the particular worst case emissions calculated here are defensible maximum emissions[23] and because the 245 ton ORL is a federally enforceable physical or operational limitation, both were appropriately considered in Region 10's PTE calculation, and properly resulted in "minor source" status for SOI's drill ships at each site..

1. SOI's modeling "worst case" averages properly establishes a source's "physical or operational limitations."

A worst-case calculation is a conservative estimate of all the potential emissions that could occur under a source's real-life operating circumstances. SOI's worst case calculation is contained in Appendix B to its applications and the spreadsheets submitted to EPA on March 8, 2007. NSB takes issue with a series of alleged factual imperfections associated with this model.[24]

> There is precious little prior authority dealing, even in a general way, with the proper construction of the term "potential to emit." Moreover, with regard to the narrow and unique issues enumerated and discussed in this litigation, the parties have been unable to supply any helpful citation in their briefs, and the court has similarly been unable to locate any caselaw bearing directly on these points. Thus, since the issues raised in this case appear to present novel questions of law, the court must address them without the benefit of any precedent with which to guide the analysis.

~~*U.S. v.* *Louisiana-Pacific Corp.*~~, 682 F.Supp. at ~~1141,~~ 1157, n.20. ~~(D.Colo. 1988).~~

[23] "The broad holding of *Alabama Power* is that potential to emit does not refer to the maximum emissions that can be generated by a source hypothesizing the worst conceivable opetration. Rather the concept contemplates the maximum emissions that can be generated while operating the source as it is intended to be operated and as normally operated.." *Louisiana-Pacific Corp.* ~~*Id.*~~, 682 F. Supp. at 1158.

[24] Petitioner first complains that estimates of sea conditions in the Beaufort—which impact the emissions levels of support vessels—may be incorrect. Though these figures are based on Arctic records for the last three years, NSB warns: "Ice conditions range widely from year to year." NSB Petition at 39. *See also*

Because the current dispute centers around Region 10's choice of data for use in certain mathematical models (although NSB has proffered no alternative data sets),[25] the present issue is a technical one. *In re Peabody Western Coal, ~~Co., CAA Appeal No. 04-01,~~* slip. op. at 13 ~~(EAB Feb. 18, 2005)~~ (potential to emit is a technical determination). As such, deference to Region 10 is particularly appropriate in this case where such calculation is being challenged. *See, e.g., In re Carlota Copper Co.*, 11 E.A.D. 664 (E.A.B. 2004). Simply throwing up alternative theories or expressing discomfort does not overcome this presumption.[26] Moreover, under the standard of review, NSB must show EPA was clearly wrong in its permitting decision. A petitioner "must

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~~EPA~~ Response to Comments at 41-44. Second, NSB feels that the engine utilization percentages on the Kulluk, the Vladimir Ignatjuk, and the Kilabuk may be understated. *See also* ~~EPA~~ Response to Comments at 38, 41-43, 45-46 (Ignatjuk not specifically mentioned). Finally, Petitioner notes that while the worst case projection is based on as much as a 59-day drilling program, the Permit allows up to 75 days at the site. NSB Petition at 38. *See also* ~~EPA~~ Response to Comments at 41-43. Consequently, the term of the worst case calculation may be insufficient to establish an accurate PTE value. Throughout these objections, NSB condemns the EPA-approved methodologies, such as averaging and unconfirmed data sets, used to produce the worst case calculation. Moreover, using a hypothetical involving twice as many trips by the Jim Kilabuk to the drill site, NSB suggests that, at 245 tons per year, SOI is perilously close to the PTE NOx maximum of 250 tons per year, and as such, SOI should further limit its operations to create a greater emissions "cushion." Nonetheless, NSB concedes that even under its hypothetical, the excess emissions generated by the Kilabuk's extra trips would not cause the PTE limit to be exceeded.

[25] ~~*In re:*~~ *In re Environmental Disposal Systems, Inc.*, UIC Appeal No. 04-01, slip. op. at 51 (EAB, Sept. 6, 2005) ("we expect, in a challenge to technical issues, a petitioner to present us with references to studies, reports, or other materials that provide relevant, detailed, and specific facts and data about permitting matters that were not adequately considered by a permit issuer.") (citation omitted).

[26] *See, e.g.*, Response to Comments at 41-43: "It is the commenter's belief that SOI ***should be required*** to provide operating records for the Kulluk and Discoverer to verify combustion source usage requirements in previous similar exploration wells, so that the agencies and public can determine if the operating hours and usage restrictions proposed by SOI are realistic and appropriate. . . . ~~. .~~ There is not a scrap of justification provided for this assumption, no ice data, and no equivalent historical operating records..." Response to Comments at 43-44: "Some commenters argue that EPA ***should have*** deemed the application incomplete and ***requested SOI to provide historical operating records*** from the Kulluk, Frontier Discoverer (if applicable), and associated icebreakers operating in the Beaufort Sea in the past. With that data, SOI may have been able to construct an emissions inventory based upon ice conditions as they exist during the early to mid 1990's, the last time the Kulluk was deployed to the Beaufort Sea. However, EPA does not believe that the uncertainty surrounding Shell's ability to complete a hole under heavy ice conditions should compel EPA to deny Shell's application. EPA does not believe the intent of the ORL permitting program was to reject such applications under the circumstances." (emphasis added).

demonstrate why the [permit issuer's] response to those objections (the [permit issuer's] basis for its decision) is clearly erroneous or otherwise warrants review." *In re Steel Dynamics, Inc.*, 9 E.A.D. 740, 744 (EAB 2001) (*quoting In re LCP Chems.*, 4 E.A.D. 661, 664 (EAB 1993)). Here, NSB neither meets the standard of review, nor overcomes the deference properly accorded to the agency. Region 10's expert opinion is that the estimated values for air emissions from the project were realistic and reasonable:

> Even if EPA could quantify the uncertainty in emissions factors and monitored parameters, EPA does not think it is appropriate to reduce the emissions cap to accommodate the possibility that all inputs are biased low to a degree equivalent to the each parameter's respective tolerance range. In EPA's view, there is an equal probability that the inputs may be biased high.

~~EPA~~ Response to Comments at 26. In the face of uncertainty, this is a rational manner in which to proceed, even if it is not NSB's preferred method. Petitioner's discomfort alone is insufficient to subject EPA's decision to review.

Moreover, Petitioner questions EPA's approval of the permits based on the notion there is some *per se* rule preventing "forecasts" or averaging from being used to determine the physical or operational limitations of a source. The *Steel Dynamics* decision refutes such a claim. In that case, the EAB expressly upheld the practice of "averaging" in order to render a PTE calculation:

> COW contends that in determining potential to emit, the concept of averaging test results from several steel mills is fundamentally wrong because "to dilute an otherwise accepted data point by averaging it with other lower emission rates will not generate a maximum potential emission rate" ...[however]... IDEM and SDI are correct in arguing that averaging emissions factors can be an acceptable method of determining a facility's potential to emit.

In re: Steel Dynamics, Inc., 9 E.A.D. 740 (citing Department of Environmental Quality, *New Source Review Permit Program* at A.22 (April 2002)). Indeed, in *Steel Dynamics* the EAB was particularly liberal in its deference. There, an approximation of Steel's facilities based on dissimilar low-emission facilities was found to be proper, even though Steel's plant was known

to pollute in much greater quantities—and indeed there were more representative facilities in the United States from which data were available. Nonetheless, the EAB considered any error on the facts of that case harmless. Consequently, EAB precedent compounds the conclusion rendered by the standard of review that NSB has not raised serious objection to EPA's evaluation of SOI's PTE calculation.

2. SOI's reliance on an ORL for the purpose of calculating PTE was proper.

Even if the worst case calculation were deemed insufficient, PTE nonetheless can be achieved through the use of SOI's agreement to cease emissions before the minor source PTE limit is breached—an Owner-Requested Limit, or ORL. EPA has long recognized that the Clean Air Act allows ORLs to artificially qualify what otherwise would be a major source for "synthetic minor" permitting.[27] NSB alleges, however, based on a mischaracterization of *Lousiana-Pacific*, that as a "blanket restriction," an ORL may not serve as a physical or operational limitation in the PTE calculation. *See ~~U.S. v.~~ Louisiana-Pacific Corp.*, 682 F.Supp. at ~~1122,~~ 1132 (D.Colo. 1987); *U.S. v. Louisiana-Pacific Corp.*, 682 F.Supp. 1141, 1160 (D.Colo. 1988). Petitioner's argument can be summarized as: a blanket prohibition may not be considered in a PTE calculation, and an ORL is a blanket prohibition, therefore all ORLs are excluded for PTE calculation purposes.

NSB fails to disclose, however, the numerous subsequent EPA guidance memoranda in the intervening two decades which narrow *Lousiana-Pacific*'s holding to merely those instances where a permit lacks concrete production or operating limits to ensure emission limitation caps

[27] *See, e.g.*, SOI Attachment 7 (John Seitz, Options for Limiting Potential to Emit (PTE) of a Stationary Source Under Section 112 and Title V of the Clean Air Act (January 25, 1995) at 1-2) ("in situations where unrestricted operation of a source would result in a potential to emit above major-source levels, such sources may legally avoid program requirements by taking federally-enforceable permit conditions which limit emissions to level below the applicable major source threshold.").

(ORLs) are enforced. *See* SOI Attachment 6 (John Seitz, *Guidance on Limiting Potential to Emit in New Source Permitting* at 5-6). Here, verifiable methods will be in place under the permits to ensure ORL compliance.

EAB jurisprudence and relevant Alaska state regulations further contradict the notion that ORLs cannot be used to achieve a minor source PTE limit. Though NSB fails to note this authority as well, the EAB has twice recognized that the permittee's promises, embodied in a permit, can be taken into account in establishing PTE.[28] The Alaska minor permit regulations also provide that a proper ORL can be used for PTE calculation purposes. 18 AK ADC 50.508(5)("a limitation approved under an ORL is an enforceable limitation for the purpose of determining ... (B) a stationary source's potential to emit"). Based on this authority, NSB's attack on ORLs and on well-settled procedures for writing and enforcing synthetic minor permits should properly be dismissed.

3. The particular ORL issued in this case was proper.

NSB's final argument is that this particular ORL is not valid because it lacks "enforceability." This is specious both legally and factually.

a SOI meets the necessary ORL application requirements under the applicable regulations.

First, NSB engages in a hyper-technical inquiry as to whether SOI has met the precise application requirements set forth by the Alaska regulations: specifically whether it included all the information and materials required under the ORL application provisions. 18 AAC

[28] *In re Peabody Western Coal Co.*, CAA Appeal No. 04-01, slip. op. at 13 (February 18, 2005) ("In many cases, a source may seek to limit its PTE, if possible, to avoid potentially more burdensome regulation in the future. In order to accomplish this, a facility may ask the permitting authority to impose enforceable limits on the source's capacity to emit ...[then going on to discuss synthetic minor permits]"); *In re Steel Dynamics, Inc.*, 9 E.A.D. 165, n.13 (EAB 2000) (citing Amicus Brief with approval for the proposition that "In cases where a source's PTE 'would otherwise be significant, the source may choose to limit its PTE beneath [the] significance threshold to avoid PSD review and application of [BACT].' Such a source is called a 'synthetic minor' source...") (citation omitted).

§ 50.225(b)(2)-(7). NSB ascribes unwarranted significance to one alleged shortcoming in the information SOI submitted with its applications, namely, "a calculation of the stationary source's actual emissions" and "calculation of the effect the limit will have on the stationary source's potential to emit." NSB Petition, at 42. But there was no practical or legal consequence to SOI's omission to provide a figure for "actual emissions" in the present case. SOI is operating an exploration program for the first time in the Beaufort Sea. With no past emissions, it is difficult to determine what "actual emissions" will be. Federal regulations resolve this practical problem of how to forecast the current rate of something that has not happened by using potential to emit as a stand-in figure. 40 C.F.R. § 52.21(b)(21)(iv) ("For any emissions unit that has not begun normal operations on the particular date, actual emissions shall equal the potential to emit of the unit on that date.") A further Alaska regulation incorporates this federal definition by reference. 18 AAC § 50.990(1). Consequently, because PTE and actual emissions are coterminous within the meaning of the applicable Clean Air Act provisions, SOI in fact did not err in providing the information in its ORL application, and in fact met its statutory obligations.

b The ORL in the present case is practically enforceable.

NSB's alternative challenge to enforceability is a factual one, that the ORL is somehow not enforceable. NSB variously claims that the monitoring associated with SOI's compliance with this ORL: (i) must be "short-term and specific," NSB Petition at ~~(p. 44)~~, (ii) "where feasible, should require a continuous emissions monitor," NSB Petition at ~~(p. 45)~~, (iii) should be "continuous and direct, where feasible," NSB Petition at ~~(p. 47)~~, (iv) should involve "initial and periodic direct measurement," ~~(p. 48)~~ but that "[if] not feasible, surrogate monitoring may be used," NSB Petition at ~~) (p. 48)~~, and that "source-specific emissions tests or continuous emissions monitors are usually preferred," NSB Petition at ~~(p. 50)~~ (citations omitted throughout).

As should be clear from this survey, Petitioners seem unable to identify specific monitoring methods that they say SOI should put in place. As discussed below, the permits impose detailed, specific and effective real-time monitoring requirments for the drillships. NSB cannot come close to demonstrating that EPA clearly acted incorrectly in light of the given test. *See In re Newmont Nevada Energy Inv., L.L.C.,* PSD Appeal No. 05-04, slip. op. at 67 (EAB, Dec. 21, 2005) ("All things considered, we again find it appropriate to defer to NDEP's technical expertise . . . ACE has failed to come forward with sufficient evidence on appeal to cause us to question the Division's analytical conclusions regarding particulate monitoring); *see also In re Steel Dynamics, Inc.*, 9 E.A.D. 165, 194 (EAB 2000) ("'[W]here an alternative control option has been evaluated and rejected, those favoring the option must show that the evidence "for" the control option clearly outweighs the evidence "against" its application.'") (citation omitted).

NSB apparently would require that any and all monitoring must be almost instantaneous, must employ near infallible methodologies, and must be conducted by disinterested third parties, continuously present on the drilling unit. Indeed, NSB suggests that the standard should be monitoring that predicts future conditions before they happen. *See* NSB Petition, at ~~p.~~ 47 (suggesting necessity of utilizing a monitoring methodology that does not have to wait "until a violation has already occurred" to ensure the emissions cap is not violated). In fact, SOI's monitoring will provide ample notice to allow operations to be shut down should it become necessary in order to comply with the overall 245 ton limit in the permits. NSB raises the spectre of SOI being left entirely to its own devices with regards to monitoring, and suggests

that, if an exceedance occurred, it would only be long after the fact, if at all, that anyone would be notified of this information.[29] Nothing could be further from the truth.

The permits include more than sufficient monitoring requirements. EPA has imposed (and SOI has agreed to abide by) detailed, comprehensive, testing and monitoring procedures sufficient to ensure advance warning that the source may be approaching applicable limits and to ensure compliance and enforceability. EPA has thoroughly evaluated the monitoring requirements at issue, has employed its permitting and technical expertise, and has concluded that such monitoring will fully provide for Clean Air Act compliance:

> Monitoring requirements will enable Shell to track its emissions closely, and ***Shell will know whether it is approaching noncompliance with the NOX ORL***. The permit ***requires Shell to record every 15 minutes load levels*** (surrogate for NOX) from the engines constituting approximately 90% or more of the emissions. Although the permit ***requires Shell to calculate cumulative NOX emissions once per week***, EPA would ***expect Shell to deploy a data acquisition and handling system that also computes drill site cumulative emissions at least once per day*** for those large emission units employing data loggers .... As Shell states in its February 7, 2007 letter to EPA, "This (NOX tracking) equation ***allows for the tracking of the total NOX emission as time progresses*** and allows Shell to predict if (in the unlikely event) that a drilling program would need to be terminated before completion." Additionally, Shell has committed to comply with the 250 tpy NOX cap and is aware that operations must be suspended when the cap is reached. ***Condition 7.4 of each permit requires Shell to record NOX emissions on a weekly basis***.

Response to Comments at 43-44 (emphasis added).

EPA has expressly considered and addressed all of the concerns underlying NSB's demands for different monitoring requirements. Nothing in NSB's petition rebuts what EPA has set forth in its Response to Comments. Nor can NSB demonstrate that EPA's approval of the monitoring provisions in the permits would rise to the requisite level of the standard of review,

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[29] *See, e.g.*, NSB Petition, at ~~p.~~ 45 ("Shell's ORL is a limit based on actual annual emissions, as measured on a rolling 52-week rolling basis . . . .[T]~~t~~his is precisely the type of limit that is practically unenforceable.")

particularly given the technical nature of the monitoring requirements EPA is evaluating an imposing. *See In re Steel Dynamics, ~~Inc.,~~* 9 E.A.D. at ~~165,~~ 219-20, 222, 225, 231-34 ~~(EAB 2000)~~ (no clear error shown in series of enforceability challenges where compliance monitoring provisions appear adequate).

IV. REGION 10 PROPERLY ACCEPTED THE AMBIENT AIR QUALITY DATA AND MODELING METHODS PROPOSED BY SOI.

The standard of review for reviewing EPA's modeling techniques and appropriate data sets is set forth in *In re Hawaii Electric Light Company, Inc.*, where the EAB stated that the "***choice of appropriate data sets for the air quality analysis is an issue largely left to the discretion of the permitting authority*** . . . ~~. .~~" *In re Hawaii Electric Light Company, Inc.*, 8 E.A.D. 66, 98 (EAB 1998) (internal citations omitted) (emphasis added). Despite this very deferential standard, Petitioner NSB nonetheless argues that the Board should second-guess EPA's approval of the type of air quality model that SOI used, the ambient air quality data used in the modle, and resulting impact assessment.

Here, NSB fails to overcome the strong presumption in favor of the Agency's choice of air quality analysis data used to predict compliance with the National Ambient Air Quality Standards ("NAAQS"). NSB complains that EPA's model may not be optimal for Arctic conditions. NSB also takes issue with the fact that site-specific ambient air quality testing was not carried out. EPA regulations specify generally applicable air quality models for use in precisely these situations. Nothing requires EPA to depart from these specified models or to use a model more narrowly specific to a particular regional climate. Nor is site-specific air quality testing mandated by accepted EPA guidance.

Here, EPA properly evaluated the data and modeling at issue, and applying its expertise, concluded that air quality data from another North Slope drilling project was fully representative

and that the modeling being used was sufficient to fully evaluate potential air impacts. NSB does not rebut EPA's explanation as to why the modeling and air quality data at issue were fully representative of potential impacts and offers no basis for the Board to- question EPA's technical conclusions.

A. SOI's Modeling Meets all Applicable Standards.

EPA guidance sets forth a tiered approach to the application of various modeling techniques. *See, e.g.*, Response to Comments at 34. So long as applying a standard air modeling analysis does not show a violation of NAAQS levels or, in the case of a major source, any exceedance of the allowable PSD ~~Prevention of Significant Deterioration ("PSD")~~ increment, then no higher level of model sophistication is warranted. *See* SOI Attachment 13 at C.24, 51 ("New Source Review Workshop Manual – Draft" (October 1990))~~NSR Manual at C.24, 51~~; *In re BP Cherry Point*, PSD Appeal No. 05-01, slip. op. at 26 (EAB, June 21, 2005) ("BP conducted preliminary ambient modeling to determine the maximum impact of the Facility's emissions. . . . ~~. . .~~ On its face, the preliminary air quality analysis demonstrates that the Facility's contribution to ambient levels of NAAQS pollutants would be less than the applicable significant impact levels specified in EPA guidance. . . ~~. . .~~ Region 10 [therefore properly] concluded that BP need not perform a full ambient analysis as otherwise required under EPA's regulations and guidance."). Acceptable models for making this preliminary assessment are specified in EPA's Guideline on Air Quality Models, 40 C.F.R. pt. 51, app. W., 40 C.F.R. § 52.21(l)(1).

Here, SOI used the established Appendix W-approved "screen" method to conduct the ***initial*** site modeling. Based on the conservative results of the protective screen method, EPA found that neither NAAQS (nor PSD) increments would be threatened. Response to Comments at 31. That modeling first established no violations using assumed monitors 500 meters from the

emissions sources; thereafter, using the more sophisticated ISC-PRIME monitoring system, no exceedences were found even right at the emissions sources. In this case, a very careful and conservative method was used to determine that NAAQS (and PSD) increments would not be exceeded.

Moreover, there was no obligation to use a model specifically designed for Arctic maritime conditions. *See In re AES Puerto Rico LP*, 8 E.A.D. 324, 336-37 (EAB 1999) (rejecting proposed alternative model that apparently ***took unique tropical conditions in Puerto Rico into account***, in favor of established model designated by Appendix W). EPA's reliance on modeling methodologies established in its own regulations is entirely reasonable:

> The screening methods used by Shell to model the project's emissions ... is an EPA model used in accordance with EPA guidance. The air quality effects of sources not included in the modeling analysis were accounted for by using background air quality data considered to be adequately or conservatively representative of the project area. The meteorological conditions employed in the screening modeling methodologies are designed to cover the complete range of possible dispersion conditions existing in the atmosphere, even extreme low wind speed, inversion conditions.

~~EPA~~ Response to Comments at 32.

NSB obscures the fact that there must be a threshold finding of a NAAQS (or in the case of a major source PSD increment) violation to require higher-level modeling. What it decries as an antiquated modeling technique is, in fact, the EPA-approved methodology for determining whether a NAAQS or PSD increment violation is anticipated. If no such violation is predicted, no additional modeling is required. The problem for NSB is that the EPA-specified modeling techniques used here demonstrated that emissions simply would not be significant enough to warrant the secondary further modeling.

EPA followed clearly articulated EPA regulations and applicable guidance in approving the modeling for the permits here at issue. Further, NSB has no basis to suggest that EPA's

technical judgment on these issues, which is entitled to significant deference, is clearly incorrect. *In re Ash Grove Cement Co.*, 7 E.A.D. 387 (EAB 1997) (EAB defers to agency determination of issues which depend heavily upon agency technical expertise and background); *In re Carlota Copper Co.*, 11 E.A.D. 692 (EAB 2004) (In general, "a petitioner seeking review of issues that are technical in nature bears a heavy burden because the Board generally defers to the [permitting authority] on questions of technical judgment."). The Petitioner's challenges to the air modeling supporting the permits should be rejected.

B. SOI's Data Adequately Establish Impact and Are Properly Based on Representative Sampling.

With regard to the data collection methods proposed by SOI and accepted by EPA, NSB's Petition essentially repeats its earlier comments concerning the lack of site-specific data sampling, rather than refuting, as EAB's procedures require, EPA's response to those comments. NSB generally discusses the lack of North Slope environmental data, citing Board on Environmental Studies and Toxicology, Polar Research Board, Cumulative Environmental Effects of Oil and Gas Activities on Alaska's North Slope at 153 (2003) (hereinafter "Oil and Gas on North Slope"). NSB goes on to dismiss SOI's use of a representative data set from another project in Alaska conducted by British Petroleum (Badami).

Representative data gathered from off-site locations may always be used in lieu of on-site air monitoring to establish ambient air quality. *See* SOI Attachment 13 ("New Source Review Workshop Manual – Draft (October 1990) at ~~NRS Draft Manual at~~ C.18-.19); *See* SOI Attachment 14 (Environmental Protection Agency, "Ambient Monitoring Guidelines for Prevention of Significant Deterioration (PSD),"~~,~~ EPA-450/4-87- 007 (May 1987) at §§ 2.2 and 2.4~~) (hereinafter, "Ambient Guidelines")~~; *accord, In re Kawaihae Cogeneration Project*, 7 E.A.D. 107 (EAB 1997). So long as the ambient data from Badami are "representative" of the

North Slope, there is no duty to conduct site-specific monitoring. Here, EPA concluded that the Badami data set is representative and there is no substantiated indication to the contrary. The NRS Draft Manual and Ambient Guidelines establish the critical indicia of "representativeness" as being: (1) monitor location; (2) quality of the data; and (3) currentness of the data. SOI Attachment 13 ~~*Id.*~~ at C. 18; SOI Attachment 14 at § 2.4. Badami meets all three of these criteria.

While Badami is on land in the North Slope Eastern Region, and the project involves drilling off the North Slope to the north and west of Prudhoe Bay, the two areas are not geographically distinct. EPA recognized that air quality is broadly similar across the Beaufort Sea coast. ~~EPA Response to~~Response to Comments at 54. Moreover, the EAB has previously upheld the use of carry-over of climatic/geographic data between different sites in Hawaii, Puerto Rico, and California. *See, e.g., In re Encogen Cogeneration*, 8 E.A.D. 244 (EAB 1998); *In re AES Puerto Rico LP*, 8 E.A.D. 324 (EAB 1999); *In re Knauf Fiber Glass, Gmbh*, 8 E.A.D. 121 (EAB 1999); *but see In re Hawaii Elec. Light Co.*, 8 E.A.D. 66, 97 (EAB 1998) (rejecting data set from point seventy kilometers from source, subject to different prevailing winds, and involving multi source emissions or areas of complex terrain). Using the Badami data set to stand in for the North Slope is reasonable, and is an appropriate exercise of EPA's discretion. *In re Hibbing Taconite Co.*, 2 E.A.D. 838, 851 (EAB 1989) (denying review of permitting authority's decision to use "representative" off-site data); *accord In re Knauf Fiber Glass, ~~GmbH~~*, 8 E.A.D. at ~~121,~~ 147 ~~(EAB 1999)~~ (upholding permitting authority's exercise of discretion in exempting permit applicant's collection of pre-construction, on-site ambient air data or meteorological data).

V. EPA MET ALL APPLICABLE PUBLIC PARTICIPATION REQUIREMENTS AND ESTABLISHED REGULAR AND MEANINGFUL CONSULTATION AND COLLABORATION WITH TRIBAL OFFICIALS.

In its Petition for Review, NSB asks the Board to review EPA's exercise of discretion in scheduling public hearings on two grounds: (1) EPA denied NSB an opportunity for meaningful participation in the permit decision; and (2) EPA's actions violate Executive Order 13175 by failing to extend the public comment process and making certain material available for review. NSB Petition at 59-64. NSB's arguments are without merit. First, EPA provided all commenters, including NSB, a meaningful opportunity to comment. The record demonstrates that NSB seized this opportunity and participated extensively. Second, Executive Order 13175 does not apply to the EPA's decision to issue air permits to SOI. Even if Executive Order 13175 did apply to permitting activities, EPA more than adequately complied with Executive Order 13175 by soliciting comments from the federally-recognized tribes with the North Slope Borough and by making EPA officials available for government-to-government consultation.

A. EPA Provided All Commenters a Meaningful Opportunity to Comment, and NSB Seized This Opportunity and Participated Extensively.

EPA has wide latitude to control the public participation process for OCS permitting. *See* 40 C.F.R. Part 124. The regulations require only that EPA issue a public notice of any draft permit, and provide at least 30 days for public comments on the draft permit. 40 C.F.R. § 124.10(b)(1). EPA is not required to hold public hearings on any permit issued pursuant to 40 C.F.R. Part 124. Rather, EPA has discretion to hold a public hearing if the agency determines that there is significant public interest in a permit decision or a hearing would help clarify issues. 40 C.F.R. § 124.12(a)(1)-(2).

There can be no dispute that EPA met all applicable regulatory requirements for public participation. On April 5, 2007, EPA distributed SOI's two permit applications, EPA's two proposed air permits, and EPA's technical support document/statement of basis for the proposed permits. EPA also sent a Notice of Public Hearing on April 5, 2007, to Barrow, Nuiqsut, and

Kaktovik and EPA's Offices in Anchorage, Alaska. The notice informed interested parties that a public hearing would be held in Nuiqsut on May 8, 2007 and that public comments would be accepted until May 12, 2007. *See* SOI Attachment 15 at 19 (EPA Notice of Public Hearing at 1).

EPA went to great lengths to ensure that any interested party could submit informed and meaningful public comments. A hard copy of SOI's air pollution impacts analysis and EPA's preliminary decision were made available for public review at the Nuiqsut, Barrow, and Kaktovik City offices and in EPA's offices in Anchorage, Alaska and Seattle, Washington. *See* Response to Comments at 79. Indeed, NSB seized the opportunity to participate and submitted extensive comments. On May 11, 2007, NSB submitted "Detailed Air Quality Comments" on all aspects of EPA's proposed permits. *See* SOI Attachment 8. These comments were 17 pages long, and were transmitted with an eight-page single-spaced cover letter summarizing NSB's comments. *Id.* EPA posted NSB's comments on its website and made them available for public review. *See* Response to Comments at 79.

EPA also took steps to allow interested parties to participate in public hearings. Written invitations to the public hearing were displayed at the Nuiqsut Post Office and the Nuiqsut City Office beginning April 5, 2007. *See* SOI Attachment 9 at 1 (Public Hearing Testimony Summary at 1). EPA also placed advertisements in the Anchorage Daily News on April 5, 2007, providing general notice that it would be holding an information session and public hearing that would be open to the public. *See id.*; *see also* Response to Comments at 80.

On May 8, 2007, EPA Region 10 representatives held an informational session for questions and answers in Nuiqsut, Alaska. *See* Response to Comments at 80. During this meeting, EPA explained the proposed permits and the relevant air quality factors that were

considered in the proposed permits. Response to Comments at 80. Following the informational session, a public hearing was held, and recorded, during which individual community members provided oral or written public comments. No less than 6 residents and representatives of the Village of Nuiqsut provided public testimony, including the Nuiqsut Whaling Captain, the City of Nuiqsut Cultural Coordinator, and a representative from the Nuiqsut City Council. *See* SOI Attachment 9 at 1-14 ~~(Public Hearing Testimony Summary at 1-14)~~.

Despite the fact that EPA went to great lengths to ensure meaningful public participation, and NSB participated extensively by submitting oral and written comments, Petitioner NSB now claims that EPA denied affected communities an opportunity for meaningful participation. NSB Petition at 59. NSB's claim stems from a letter to EPA dated April 18, 2007, in which NSB requested that hearings be deferred until after the traditional spring subsistence activities were concluded in the first week of June. EPA carefully considered the request, but ultimately decided not to defer the public hearing or to extend the public comment period. As EPA explained in its response letter dated May 8, 2007:

> We acknowledge and respect the importance of providing North Slope communities the opportunity to express their concerns regarding potential impacts that these projects may have on their subsistence lifestyle and I am concerned about the difficulty of North Slope residents doing so during the spring hunt. At the same time, however, I also considered that expediting energy related projects is a national priority, and that conditions on the North Slope are such that extending our permitting process would delay exploration activity for an entire year. Additional, I took into account the amount of information-sharing and other communication that has already occurred with the North Slop Borough regarding these permits.

SOI Attachment 10 at 1.

There are no standards in the applicable regulations which govern EPA's review of a request to extend a comment period. *See generally* 40 C.F.R. Part 124. Thus, Region 10 had broad and unfettered authority to grant or deny NSB's request to extend the comment period as it

saw fit. In exercising this authority, EPA carefully weighed the interests of all parties involved when deciding whether to extend the comment period. As demonstrated by the letter quoted above, EPA acknowledged the interests of NSB members, and carefully weighed the factors in making its decision. *See* SOI Attachment 10 at 1-2. The Board should uphold decisions that are a result of the standard permitting process at the Regional level unless the permit condition is clearly erroneous. *See* 40 C.F.R. § 124.19(a).[30] As such, the Board should defer to EPA's reasonable and well-grounded decision for limiting the public comment to 33 days, and deny NSB's Petition for Review.

B. Executive Order 13175 Does Not Apply to the Issuance of Air Permits; EPA Adequately Consulted with Federally-Recognized Tribal Groups.

Petitioner NSB argues that EPA violated Executive Order 13175 by failing to extend the public comment process and failing to make certain material available for review. NSB Petition at 63-64. Executive Order 13175, entitled "Consultation and Coordination With Indian Tribal Governments," provides direction to Federal agencies to "establish regular and meaningful consultation and collaboration with tribal officials in the development of Federal policies that have Tribal implications." 65 Fed. Reg. 67249 (Nov. 9, 2000). Policies that have tribal implications include:

> regulations, legislative comments or proposed legislation, and other policy statements or actions that have substantial direct effects on one or more Indian tribes, on the relationship between the Federal Government and Indian tribes, or on the distribution of power and responsibilities between the Federal Government and Indian tribes.

See SOI Attachment 11, Executive Order 13175 at § 1(a).

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[30] *See also In re Carlota Copper Co.*, 11 E.A.D. at 708; *In Gov't of D.C. Mun. Separate Storm Sewer Sys.*, 10 E.A.D. at 333; *In re City of Irving, Mun. Separate Storm Sewer Sys.*, 10 E.A.D. at 122.

Contrary to NSB's assertions, Executive Order 13175 does not apply to EPA's permitting decision in this case. On its face, the Executive Order applies only to certain limited actions by the federal government. The permits Region 10 issued to SOI do not quality as either "regulations," "legislative comments" "proposed legislation," "policy statements," or "policy actions," and therefore are not covered under Executive Order 13175.

Moreover, policy decisions made in the context of air permitting are not "policies that have Tribal implications" under the Executive Order. In EPA's draft guidance for implementing Executive Order 13175, which was published in the Federal Register on April 19, 2006, the agency addressed the question: "Do the Requirements of Executive Order 13175 Apply to Permitting Activities?" 71 Fed. Reg. 20314, 20328 (April 19, 2006).[31] EPA explained its current position with respect to permitting actions: "to the extent they do not in and of themselves require any action or compliance by Tribal governments, these actions will not have direct effects on such governments and will not have Tribal implications." *Id.* at 20328. EPA further clarified that a permit does not have "Tribal implications" simply because it may affect an area of interest to a Tribal government:

> Thus, permits issued to non-Tribal facilities would generally be considered as not having Tribal implications even if the facility is located in or near Indian country or some other area of interest to a Tribal government since the effect on the Tribe would be indirect in nature.

Id.

In the present case, the permits issued by Region 10 do not have direct "Tribal implications" because they were issued directly to permittee SOI and do not require any action or

[31] On April 19, 2007, EPA published in the Federal Register a "Notice; request for public comments" on this draft guidance document for implementing executive order 13175. The comment period closed on July 18, 2006. EPA has not yet published a final action regarding the adoption of this guidance document.

compliance by Tribal government. Given that the permits for the Kulluk and Frontier Discovered would have only an indirect effect on the federally-recognized Tribal communities of the North Slope Borough, Executive Order 13175 does not apply in this case.

Even if the Board were to find that Executive Order 13175 is applicable to EPA's permitting decision, EPA has met the requirements of the Executive Order by consulting with federally-recognized Tribal groups. In response to Executive Order 13175, EPA Region 10 developed its own "Tribal Consultation Framework." *See* SOI Attachment 12. According to Region 10:

> "Consultation" means the process of seeking, discussing, and considering the views of federally recognized tribal governments at the earliest time in EPA Regions 10's decision-making. Consultation generally means more than simply providing information about what the agency is planning to do and allowing comment. Rather, consultation means respectful, meaningful, and effective two-way communication that works toward a consensus reflecting the concerns of the affected federally recognized tribe(s) before EPA makes its decision or moves forward with its action.

Id. at 1. EPA Region 10 successfully implemented the Tribal Consultation Framework in its interactions with the federally recognized tribal villages of the North Slope Borough. On February 21, 2007, EPA sent a letter and fact sheet via certified mail to the Presidents, Chairman, Village Coordinator, and First Chiefs of 30 federally-recognized tribes, inviting tribes to initiate government-to-government consultation if they desired. Response to Comments at 79. The Native Village of Nuiqsut responded to EPA's request, and the parties scheduled a government-to-government consultation conference call on March 26, 2006. *Id.* at 79. EPA initiated the call on March 26 with the Native Village of Nuiqsut, but representatives from the Native Village of Nuiqsut did not join the call. *Id.*

Petitioner NSB claims that EPA did not comply with Executive Order 13175, arguing that it did not "give effect to the government-to-government relationship between the Native

Alaskan communities and EPA." NSB argues that by denying its request for the actual operating records for the Kulluk and the Frontier Discoverer, EPA ignored local government, tribal, and resident input in violation of Executive Order 13175. As a preliminary matter, nothing in Executive Order 13175, or in the Region 10 Tribal Consultation Framework, requires EPA to make records available to the tribal villages. Despite NSB's special status, the federally-recognized tribal villages have no sovereign right to SOI's operations data. Furthermore, as EPA explained in its Response to Comments, this information was not a necessary component of SOI's applications:

> Some commentators argue that EPA should have deemed the application incomplete and requested Shell to provide historical operating records from the Kulluk, Frontier Discoverer (if applicable), and associated icebreakers operating in the Beaufort Sea in the past. With that data, Shell may have been able to construct an emissions inventory based upon ice conditions as they exist during the early to mid 1990's, the last time the Kulluk was deployed to the Beaufort Sea. However, EPA does not believe that the uncertainty surrounding Shell's ability to complete a hole under heavy ice conditions should compel EPA to deny Shell's application. EPA does not believe the intent of the ORL permitting program was to reject such applications under the circumstances.

For these reasons, NSB's Petition should be denied.

VI. EPA HAS ADEQUATELY ADDRESSED ENVIRONMENTAL JUSTICE CONCERNS, THEREBY OBVIATING ANY NEED FOR REVIEW IN THIS CASE.

NSB confuses the nature of EPA's responsibility under Executive Order 12898 "[to] identify[] and address[], ***as appropriate***, disproportionately ***high and adverse*** human health or environmental effects," 59 Fed. Reg. 7629, 7629 (Feb. 16, 1994) (emphasis added), with a substantive right that supplements established PSD OCS minor source permitting requirements. *See generally In re: Chemical Waste Mgmt. of Ind.*, 6 E.A.D. 66 (EAB 1995). NSB's argument to the contrary, the mere assertion of untested claims of harm do not set in motion an exhaustive comparative demographic investigation or proportional population analysis. By considering

environmental justice issues in a logical order, the Agency reasonably disposed of NSB's objections before reaching any stage requiring such intensive fact-finding.

The threshold inquiry in environmental justice analysis is to determine whether a high and adverse human health or environmental effect in fact exists. *In re Knauf Fiber Glass*, 9 E.A.D. 1, 17 (EAB 2005) ("As there has been no serious contention that the additional PM10 emissions from the proposed facility would in fact lead to an adverse impact, and as the Executive Order concerns itself with effects that are 'adverse,' we find it unnecessary to address Petitioners' other objections, including those relating to the demographic analysis"). Here, NSB elides this preliminary step and merely reiterates issues previously submitted in comments. In its Petition, NSB suggested that there were community concerns of higher local mortality rates, increased chronic pulmonary disease, and high cancer incidences among Alaskan Inupiat Natives relative to the general population. NSB Petition at 68. This allusion to potential harm is adequately answered by EPA's documented findings.

EPA importantly established that NAAQS levels will not be exceeded. ~~EPA~~ Response to Comments at 78. This ends the analysis. The only way the community's air quality health concern would be valid would be if NAAQS did not adequately account for the community's health and welfare. This effort by NSB to call NAAQS itself into question is legally inappropriate, and in any case unnecessary. NAAQS limits protect public health, by taking into account even the health of "sensitive" populations such as asthmatics, children, and the elderly. ~~EPA~~ Response to Comments at 92. Thus, there was no need to conduct any follow-up population studies because there is no legitimate health basis clearly being disregarded by EPA.

Moreover, Petitioner errs in suggesting that it is ***patently*** clear that environmental justice studies apply to this case. Unlike typical situations involving an intersection of industry and

community, here, the emissions source is at sea, as far as twenty-five miles from shore. It is not physically located within any potentially affected community. Furthermore, an environmental justice analysis is limited in scope. Based on its analysis, EPA predicted ambient concentrations of emissions as close as 3.7 miles from the drilling site. EPA's Response to Comments at 36 ("EPA would expect that maximum impact from the drilling operation to occur near the drill rig because of downwash. Impacts at a downwind distance of 15 miles are small when compared to the modeled impacts."). Due to the lack of emissions and the distance between nearby communities and the sources, even assuming NAAQS exceedances, there will be no human or environmental effect. *See In re Envotech LP*, 6 E.A.D. 260 (EAB 1996) (approving Region Five technical decision to limit scope of environmental justice analysis to two mile radius around underground injection control permit site); ~~*In re:*~~*In re Chemical Waste Mgmt. of Ind.*, 6 E.A.D. 66 (EAB 1995) (finding consideration of environmental justice limited to 1 mile radius from emissions source properly within agency discretion). Again the threshold inquiry obviates the need for full-blown secondary analysis. Because no effect on communities will occur within the relevant area of consideration, it is impossible to determine any disproportionate effect.

Moreover, the EPA encouraged and provided sufficient opportunity for public participation in the permitting process. Although lesser means would have been legally adequate, EPA (1) conducted a community meeting in an area alleged to be affected by the project, (2) solicited comments from all members of the public by mail, and (3) engaged in dialogue with tribal representatives of affected communities. ~~EPA~~ Response to Comments at 78; ~~S~~*see also In re Knauf Fiber Glass, GmbH,* 9 E.A.D. 1, 13 (EAB 2000) (noting public participation needs only to fulfill regulatory obligations and need not go beyond basic requirements).

Consequently, because an environmental justice analysis is not required in this context, EPA acted properly in resolving its environmental justice inquiry at the threshold stage. Because NSB cannot demonstrate that EPA's action was clearly incorrect, the standard of review compels rejection of NSB's environmental justice arguments.

CONCLUSION

For the foregoing reasons, EAB should deny the Petition for Review.

DATED this 30~~26~~th day of July 2007.

Respectfully submitted,

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