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

In re:	)	
	)	
SHELL OFFSHORE, INC.,	)	
Kulluk Drilling Unit	)	OCS Appeal Nos. 08-01 thru 08-03
	)	
OCS Permit No. R10OCS-AK-07-01	)	
(Revised)	)	

RESPONSE OF EPA REGION 10 TO THE PETITIONS FOR REVIEW

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I. INTRODUCTION

On June 18, 2008, the Director of the Office of Air, Waste and Toxics for the U.S. Environmental Protection Agency ("EPA" or "Agency"), Region 10 ("EPA Region 10" or "the Region"), issued an Outer Continental Shelf ("OCS") Air Quality Control Minor Permit under the Clean Air Act to Shell Offshore, Inc. ("Shell") to allow exploratory oil and gas drilling operations in the Beaufort Sea off the Alaska North Slope. On July 17, 2008, Bill MacClarence, P.E., filed a Petition for Review ("MacClarence Petition") of this permit with the Environmental Appeals Board ("EAB" or "Board").[1] The North Slope Borough, the Inupiat Community of the Arctic Slope, and the Alaska Whaling Commission (collectively, "NSB") filed a Petition for Review with the EAB on July 17, 2008 ("NSB Petition"). Alaska Wilderness League, Center for Biological Diversity, Natural Resources Defense Council, Northern Alaska Environmental Center, Pacific Environment, and Restricting Environmental Destruction on Indigenous Lands, a Project of the Environmental Indigenous Network (collectively, "AWL") filed a Petition for Review with the EAB on July 21, 2008 ("AWL Petition"). Pursuant to 40 C.F.R. § 55.6, the procedures in 40 C.F.R. Part 124 apply to this proceeding.

[1] The MacClarence Petition was also sent to the EPA Administrator as a "Public Petition of a Title V Air Quality Permit, Shell Offshore Inc.'s Alaska Outer Continental Shelf (OCS) Air Quality Control Minor Permit No. R10OCS-AK-07-01 (Revised)." Because the Shell permit is an OCS Air Quality Control Minor Permit and not a Title V permit, the EPA program office that handles Title V permit issues has dismissed as inappropriately filed the Title V portion of the Petition. *See* EPA Response Exhibit 1, Letter from William T. Harnett, Director, Air Quality Policy Division, to Bill MacClarence (October 2, 2008).

As explained below, the Petitions for Review should be denied because Petitioners have failed to meet their burden as required under Part 124. Petitioners have failed to show that EPA Region 10's permit decisions in this matter were based on either a clearly erroneous finding of fact or conclusion of law, or involve an important matter of policy or exercise of discretion that warrants review. In particular, Petitioners cannot support their claim that the Region's stationary source determination was in error, because the Region reasonably and consistently considered the relevant legal requirements and Agency guidance and applied them to the specific facts of the proposed Shell activities to determine that each of Shell's planned exploratory operations is a separate source based on a lack of interdependence and proximity between those operations. In addition, Petitioners have not shown that EPA Region 10 erroneously decided not to quantify relief well emissions in setting the emissions limits contained in Permit Conditions 8 and 15.1 or that Record in this case fails to supports the Region's determination that Shell can comply with these permit terms, regardless of whether such a determination is required by Federal or State law. Accordingly, the Petitions for Review should be denied, and the Shell OCS permit should be upheld in its entirety.

II. FACTUAL AND PROCEDURAL BACKGROUND

The three pending Petitions for Review challenge an air quality OCS permit that EPA Region 10 issued to Shell on June 18, 2008 ("2008 Permit"). The 2008 Permit is a revision to an OCS permit that the Region originally issued to Shell on June 12, 2007 ("2007 Permit"), which was remanded to EPA Region 10 by the EAB last year. *See In re Shell Offshore Inc.*, 13 E.A.D. -- (EAB, Sept. 14, 2007) ("Remand Order").

In December 2006, Shell submitted two air permit applications to conduct exploratory oil and gas drilling in the Beaufort Sea. The applications covered air emissions from two drilling units, the Kulluk and the Frontier Discoverer. Shell applied for "minor" permits and requested that emissions of nitrous oxides ("NOx") be limited to less than 245 tons per year at each drill site. With these limits, Shell was not required to go through the more rigorous Prevention of Significant Deterioration ("PSD") permitting process, including a review of best available control technology.

On June 12, 2007, EPA Region 10 issued two OCS Air Quality Control Minor Permits for the Kulluk and Frontier Discoverer (R10OCS-AK-07-01 and R10OCS-AK-07-02, respectively) to Shell authorizing exploratory drilling using the Kulluk and Frontier Discoverer drilling units and their associated support vessels in the OCS of the Beaufort Sea of Alaska. Before the permits became effective, various parties petitioned the EAB to review the permits. Among other issues, the petitioners disputed the Region's determination as to what constitutes a separate OCS stationary source and argued that the Region's determination that each drill site located more than 500 meters apart from another may be treated as a separate source for PSD purposes was in error. After briefing and oral argument, the EAB denied review in part and remanded in part the permits back to EPA Region 10. *See generally* Remand Order at 69. Specifically, the Board remanded the permits on the sole issue of the Region's "stationary source" determination for purposes of determining whether PSD permits would be required for Shell's proposed activities on the OCS. *Id*. The EAB ordered EPA Region 10 to "provide an explanation of its rationale, supported by record evidence, for establishing a 500-meter perimeter as defining the 'stationary source'…[or] modify its determination as

to what constitutes a single stationary source." *Id*. The Board denied review on all other issues raised in the petitions. The EAB also explained that if the petitioners and other participants with standing were not satisfied with the Region's explanation on remand, they could appeal to the EAB upon issuance of the Region's subsequent permitting decision(s). *Id*. The Board further specified that "any appeal shall be limited to the issue being remanded and issues arising as a result of any modification that EPA Region 10 makes to its permitting decisions on remand." *Id*.

Subsequent to the September 14, 2007 Remand Order, Shell supplemented the permit application for the Kulluk and provided additional information to EPA Region 10.[2] *See* EPA Exhibit No. AA-1 (January 8, 2008 Application).[3] After reviewing new and existing information, the Region revised the ambient air impact analysis, and then proposed to modify its determination as to what constitutes a single stationary source and to add or modify some terms and conditions in the OCS permit for the Kulluk drilling unit. With regard to the stationary source determination, after examining relevant Agency guidance and facts presented in the permit application, the Region proposed that the stationary source was each exploratory operation, which consisted of Shell's pollution-emitting activities at each planned drill site along with its associated relief and

[2] Shell asked EPA Region 10 to suspend permitting activity for the Frontier Discoverer drilling rig. Accordingly, EPA Region 10 will not finalize that air permit until further notice from Shell.

[3] References to "EPA Exhibit No." refer to electronic copies of the exhibits to the Certified Index to the Supplement to the Administrative Record ("Record"), which EPA Region 10 provided to the Board and the parties concurrent with the filing of the Certified Index on August 21, 2008.

replacement wells.[4] As EPA Region 10 stated in the Supplemental Statement of Basis for the proposed revised permit:

> The facts presented in the present permitting action show that each Exploratory Operation is separated by open water, and each resides above a different part of the prospect from which distinct data is collected. The activities at one Drill Site are largely independent from activities at another Drill Site. One Exploratory Operation utilizing the Kulluk is not a support facility for activities at another because the exploration activity at one drill site must be concluded before subsequent drilling using the same equipment may begin at a different site. Therefore, consistent with Agency guidance discussed above, each Exploratory Operation in this case is independent and not in close enough proximity to one another to be considered adjacent. *Accordingly for purposes of this permit, EPA Region 10 has determined that the emissions-producing activity associated with a single Exploratory Operation is one stationary source separate from emissions-producing activities associated with another Exploratory Operation*. Emissions from multiple Exploratory Operations, as defined in the permit, are not

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[4] Under the terms of the 2008 Permit, EPA Exhibit No. DD-1:

- An "Exploratory Operation" is defined as "the collection of all OCS Source Activities undertaken to construct a single Planned Well and any of its associated Relief Well(s) and Replacement Well(s)." ¶ 1.6.
- A "Planned Well" is defined as "a well selected in advance of the drilling season that is drilled to collect discrete information." ¶ 1.1.
- A "Relief Well" is defined as "a well drilled near and deflected into a Planned Well that is out of control, making it possible to bring the wild well under control." ¶ 1.2.
- A "Replacement Well" is defined as "a well drilled near a Planned Well that has been plugged and abandoned without being drilled to its intended depth. The Replacement Well is intended to collect, from an alternate location, the same discrete information originally sought from drilling of the Planned Well." ¶ 1.3.
- A "Drill Site" is defined as "a location on the surface of the water occupied by the Kulluk, and from this location the Kulluk is permanently or temporarily attached to the seabed and erected thereon and used for the purpose of exploring resources therefrom. The Kulluk is said to be occupying a Drill Site when the Kulluk is connected to at least one of its anchors and that anchor is attached to the seabed." ¶ 1.4.
- "OCS Source Activities" are defined as "[a]ir pollutant emitting activities undertaken by Kulluk emission…and occurring while the Kulluk is occupying a Drill Site" and includes some emissions from associated support vessels. ¶ 1.5

> aggregated to determine PSD applicability or for compliance with the owner-requested 245 ton-per-year of NO_X limit.

EPA Exhibit No. BB-9 (Supplemental Statement of Basis or "SSOB") at 16 (emphasis added). The Region notified the public of the proposed revised permit, sought public comment, and held public informational meetings and hearings on the Alaska North Slope. *See generally* EPA Exhibit Nos. BB-1 through BB-11.

On June 18, 2008, after considering the public comments it received, EPA Region 10 issued a revised OCS Air Quality Control Minor Permit under the Clean Air Act to Shell for the Kulluk drilling unit at the locations authorized by the Minerals Management Service and located within 25 miles of the State of Alaska's seaward boundary. EPA Exhibit. No. DD-1 (Final 2008 Permit). In issuing the final revised permit, the Region maintained the position that each exploratory operation (i.e., each planned drill site, plus its associated relief and replacement wells) was a separate minor source. *See* EPA Exhibit No. DD-2 at 58-65 (2008 Response to Comment or "RTC"); *see also* EPA Exhibit No. DD-1 at ¶¶ 1.1-1.6 and associated conditions limiting emissions at each exploratory operation.

Thereafter, the pending Petitions for Review from Bill MacClarence, NSB, and AWL were filed with the EAB within the time frame accorded by 40 C.F.R. § 124.19. On August 6, 2008, the Board consolidated the Petitions and granted Shell leave to participate in this permit appeal. On August 18, 2008, in response to a motion filed by AWL, the Board issued an order revising the briefing schedule to allow the Petitioners to file additional arguments based on their review of information from the administrative record that was not previously made available to the public. In addition, on August 19,

2008, the Board issued an Order Requiring Clarification. Specifically, the Board noted that the Shell permit contained a condition (Condition 28) that stayed the effective date of the permit until EPA's Endangered Species Act ("ESA") obligations were fulfilled and the permit (and/or the permit application) was amended as appropriate in response to those ESA actions. After noting that the permit terms challenged in the pending Petitions could change pursuant to Condition 28, the Board sought "clarification from the parties as to whether this matter is ripe for review" and directed the parties to submit this clarification in accordance with the existing briefing schedule in the case. Order Requiring Clarification at 2.

Thereafter, EPA Region 10 filed the Certified Index to the Supplement to the Administrative Record ("Record") on August 21, 2008, and also sent electronic copies of the Supplement to the Administrative Record to the Board and the parties. Petitioner NSB filed a supplemental brief on September 4, 2008 ("NSB Supplement"), in which AWL joined, providing additional arguments based on their review of the Record as well as their initial views regarding the ESA-ripeness issue identified in the Order Requiring Clarification.[5] The Region hereby submits its response to the pending Petitions and the supplemental brief.

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[5] Petitioner MacClarence also submitted a supplemental document on August 24, 2008. However, this brief does not address that document because:

a) The August 24 document does not conform with Board's Order Revising Briefing Schedule (filed August 18, 2008), which allowed Petitioners to file supplements to their Petitions by September 4 , 2008 that "rely on documents contained in the Region's certified index to the administrative record that were not previously made available to petitioners." *Id.* at 3; *see also id.* at n.3 (Supplemental filings "may only address the information not previously filed. The Board will not consider any other revisions to the existing petitions."). MacClarence's August 24 filing does not present arguments based on documents contained in the full Administrative Record,

III. SCOPE AND STANDARD OF REVIEW

The Board's review of final PSD permit decisions is discretionary and the Board's exercise of such discretion is circumscribed. A petitioner bears the burden of convincing the Board that review is warranted. 40 C.F.R. Part 124. Pursuant to 40 C.F.R. § 124.19(a)(6), the EAB will not ordinarily review a permit decision "unless the decision is based on either a clearly erroneous finding of fact or conclusion of law, or involves an important matter of policy or exercise of discretion that warrants review." *In re Prairie*

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but instead suggests additional EPA guidance documents that he argues are relevant to his petition arguments. Accordingly, those documents are not properly before the Board. *See id.*; n.10, *infra.*

b) The August 24 document does not conform with Board's Order Revising Briefing Schedule because the document addresses additional EPA guidance documents that focus on Title V permit issues and general permitting matters, and does not specifically address the source determination arguments raised in either his public comments or his original petition regarding. Accordingly, the arguments raised in the August 24 document are not preserved for review, *see* n.13, *infra*, and only tangentially related to this OCS permit challenge, *see* n.1, *supra.*

c) The August 24 document does not address the ESA-ripeness issue raised in the Board's Order for Clarification (filed August 19, 2008).

d) It does not appear that the August 24 document was formally filed with the Board. The docket for this matter contains only the filing of the electronic version of the documents and its attachments. *See* docket entries no. 21-23 (noting "Received via CDX Electronic"). As the docket does not contain an entry for the filing of the original document prior to the September 4 deadline established in the EAB's Order Revising Briefing Schedule, MacClarence's August 24 document is not officially "filed" with the Board. *See* EAB Website on Electronic Submissions, *available at* http://yosemite.epa.gov/oa/EAB_Web_Docket.nsf/ General+Information/ Electronic+Submission?OpenDocument ("**Note:** At the current time, any electronic submissions will not be considered a substitute for filing an original document with the Clerk of the Board. **The Clerk of the Board must actually receive the original document in hard copy by the document's due date in order for it to be filed timely. Until further notice, the electronic copy of a documents submitted through the Board's electronic submission system will not be treated as a "filed" document.** Electronic submission of the document copy also does not relieve you of the obligation to serve your filing on other parties.") (emphasis in original).

State Generating Co., 13 E.A.D. --, slip op. at 13 (EAB, Aug. 24, 2006). *See also In re Knauf Fiber Glass, GmbH*, 8 E.A.D. 121, 126 (EAB 1999); 40 C.F.R. § 124.19.

A petitioner who possesses standing to appeal is only permitted to raise issues that have been preserved for appeal through public comments. Issues and arguments raised by a petitioner that are not raised during the public comment period will not be considered preserved for review without a demonstration that they were not reasonably ascertainable at the time. *See In re BP Cherry Point*, 12 E.A.D. --, slip op. at 14-15 (EAB, June 21, 2005); *In re AES Puerto Rico, L.P.*, 8 E.A.D. 324, 335 (EAB 1999); *In re Masonite Corp.*, 5 E.A.D. 551, 585 (EAB 1994); *In re SEI Birchwood, Inc.*, 5 E.A.D. 25, 29 (EAB 1994). *See also* 40 C.F.R. §§ 124.13 and 124.19 (a) (requiring members of the public to "raise all reasonably ascertainable issues" during the public comment period, and requiring petitioners to "demonstrate that any issues raised [on review] were raised during the public comment period to the extent required by these regulations," respectively). Issues must be raised during the public comment period to "ensure that the permit issuer has an opportunity to adjust its permit decision or to provide an explanation of why no adjustment is necessary." *AES Puerto Rico*, 8 E.A.D. at 335; *see also In re BP Cherry Point*, 12 E.A.D. --, slip op. at 14-15. If an issue was not properly preserved for review, the EAB will generally deny review of the issue. *Id.*

Once standing is established, the burden is on the petitioner to demonstrate that there is clear error or an important policy consideration that warrants that the permit condition should be reviewed. *See In re BP Cherry Point*, 12 E.A.D. --, slip op. at 11-12; *In re Three Mountain Power, LLC*, 10 E.A.D. 39, 47 (EAB 2001); *In re Steel Dynamics, Inc.*, 9 E.A.D. 740, 743 (EAB 2001). A petitioner is also obliged to allege arguments that

are both specific and substantiated. *In re Avon Custom Mixing Sentices Inc*., 10 E.A.D.700, 708 (2002). These requirements ensure that any issues challenged on appeal are well-defined and actually represent bona fide disagreements between the petitioner and the permit authority. It is not enough that the petitioner merely repeat the objections that it made during the comment period. Instead, the petitioner must "both state the objections to the permit that are being raised for review and explain why the permit decision maker's previous response to those decisions is 'clearly erroneous or otherwise warrants review.'" *In re Kawaihae Cogeneration Project*, 7 E.A.D. 107, 114 (EAB 1997); *see also In re BP Cherry Point*, 12 E.A.D. --, slip op. at 11-12.

In deciding whether review is warranted, it is a long-standing EPA policy to favor final adjudication of most permitting decisions at the regional level. *See In re Prairie State Generating Co.*, 13 E.A.D. --, slip op. at 13 (citing promulgation of the Part 124 regulations and prior EAB cases) As EPA has repeatedly observed, "most permit conditions should be finally determined at the Regional level" and therefore the power of review will only be employed sparingly. *See* 45 Fed. Reg. 33290, 33412 (May 19, 1980) ("power of review should be only sparingly exercised, [and] most permit conditions should be finally determined at the Regional level"); accord *In re Zion Energy L.L.C.*, 9 E.A.D. 701, 705 (EAB 2001). Accordingly, the EAB "assigns a heavy burden to petitioners seeking review of issues that are essentially technical in nature." *In re Gov't of D.C. Mun. Separate Storm Sewer Sys.*, 10 E.A.D. 323, 334 (EAB 2002); *In re City of Moscow, Idaho,* 10 E.A.D. 135, 142 (EAB 2001); *In re Town of Ashland Wastewater Treatment Facility*, 9 E.A.D. 661, 667 (EAB 2001); *In re NE Hub Partners, L.P.*, 7 E.A.D. 561, 567 (EAB 1998), *petition for review denied sub nom. Penn Fuel Gas, Inc. v.*

EPA, 185 F.3d 862 (3d Cir. 1999). When presented with technical issues in a petition, the EAB determines whether the record demonstrates that "the Region duly considered the issues raised in the comments and whether the approach ultimately adopted by the Region is rational in light of all the information in the record." *In re Peabody Western Coal Co.*, 12 E.A.D. --, slip op. at 17 (EAB, Feb. 18, 2005). If the EAB determines that a region gave due consideration to comments received and adopted an approach in its permit decision that is rational and supportable, the EAB typically gives deference to the region's position. *Id.*; *City of Moscow,* 10 E.A.D. at 142.

Finally, in accordance with the EAB Remand Order, any appeal in this matter is limited to the issues being remanded and issues arising as a result of any modification the Region made to its permitting decisions on remand. Remand Order at 69. Thus, any arguments raised by Petitioners that are unrelated to the stationary source determination, revised modeling analysis, or modified portions of the permit are beyond the scope of the remand and are not subject to review here.

IV. RESPONSE TO REQUEST FOR CLARIFICATION

On May 15, 2008, shortly before the revised Shell OCS permit was issued, the U.S. Fish and Wildlife Service ("FWS") listed the polar bear as a threatened species under the ESA. EPA Exhibit No. KK-4 (FWS notice of listing). The U.S. Minerals Management Service ("MMS") has acted as the lead agency for ESA consultation with regard to all federal activity related to oil and gas exploration in the Beaufort Sea, including the Shell activity at issue in this current EAB appeal. *See* EPA Exhibit No. K-8 (memo summarizing MMS consultation process prior to issuance of the initial Shell

permit in 2007).[6] Accordingly, when the polar bear was listed as an ESA-protected species, EPA Region 10 contacted MMS as the lead agency for ESA consultations for Shell's activities and was informed that MMS had re-initiated ESA consultation with FWS with regard to the polar bears. *See* EPA Exhibit No. KK-11 (EPA Region 10 memo, re: MMS Consultation for the Polar Bear for Shell). Rather than further delay issuance of the Shell permit until after completion of MMS' re-initiated consultation, EPA Region 10 issued the Shell OCS permit with Condition 28, which delays the effective date of the permit, and thus prohibits Shell from undertaking the activities authorized therein, until EPA has fulfilled its ESA obligations, if any. Condition 28 also provides that the permit application or permit terms may be amended as appropriate to address ESA issues.

In response to the EAB's Order for Clarification, EPA Region 10 has contacted MMS regarding the status of the re-initiated consultation. The Region has reviewed that consultation process and discussed that process with FWS, with particular regard to coverage of the Region's permitting action. Based on a review of MMS' consultation and the discussions with FWS, as well as its own additional analysis regarding certain consultation requirements, EPA Region 10 has determined that issuance of the revised OCS permit to Shell for exploratory drilling activities is fully compliant with the process for ESA compliance established by FWS for oil and gas related activities in the Beaufort Sea. *See* EPA Response Exhibit 2 (memos from EPA Region 10 documenting the recent

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[6] MMS completed ESA consultations on all other species prior to EPA Region 10's issuance of the 2007 Permit. At that time, EPA Region 10 reviewed those consultations, was satisfied that the OCS permitting action was appropriately covered, and determined that the Region's ESA obligations for those species were satisfied. *See generally* EPA Exhibit No. K-8 (EPA Memorandum to File: Endangered Species Act and Essential Fish Habitat Obligations).

ESA determinations). The Region also determined that no changes to the existing permit terms, including those terms addressed in the Petitions for Review, are called for as a result of the ESA compliance process, including the re-initiated consultation on the polar bear. *Id.* For all of these reasons, the Shell OCS permit is ripe for review under the pending Petitions.[7] *See In the Matter of General Electric Company,* 4 E.A.D. 615, 623 (EAB 1993) ("[I]n the context of permit Appeals under [40 C.F.R. § 124.19(a)], an Appeal is 'ripe' or fit for disposition by the Board if a final permit decision has been issued by the Region, and the petitioner is challenging the permit as it now reads."); *Cf. In the Matter of Multitrade Limited Partnership,* 3 E.A.D. 773, 777 (EAB1992) (finding a CAA permit was not ripe for review because the applicant intended to seek changes in the terms of the permit).

V. ARGUMENT

Petitioners raise three primary issues on appeal. All Petitioners argue that EPA Region 10 improperly determined that each of Shell's planned drill sites is a separate source such that the Region should have issued a PSD permit rather than a minor air quality permit to operate. NSB also asserts that EPA Region 10 improperly determined that Shell could comply with Permit Condition 15.1 (which places an 80-calendar day time limit on activity at each drill site) and improperly determined that Shell could

[7] Without any changes in the Shell OCS permit, a stay of this action is not necessary and there are not additional grounds for Petitioners to challenge the permit. *See generally* NSB Supp. at 2-3.

In addition, because the ESA process has been resolved in this matter, EPA Region 10 need not address generally whether such conditional permits are ripe for review by the Board. *See* Order Requiring Clarification at 2.

comply with Permit Condition 8 (which prevents Shell from emitting more than 245 tons of NOx from a given drill site within a rolling 52-week period). For the reasons explained below, Petitioners' arguments are without merit. Petitioners failed to show that the Region's permit decisions were based on either a clearly erroneous finding of fact or conclusion of law, or involve an important matter of policy or exercise of discretion that warrants review. Accordingly, the Petitions for Review should be denied.

A. EPA Region 10 Reasonably Determined that the Stationary Source for the Permit Consisted of Each Planned Well and Associated Relief and Replacement Wells

Contrary to Petitioners' claims, EPA Region 10 reasonably and consistently considered the relevant legal requirements, as well as the Agency guidance regarding source determinations that the Board identified in the Remand Order (*see id*. at 41, n.37) and applied them to the specific facts of Shell's proposed activities to determine that each of Shell's planned drill sites is a separate source. Petitioners AWL and NSB allege that between the proposed and final permit the Region impermissibly shifted the basis for its determination as to what constitutes a single stationary source ("stationary source determination" or "source determination"), made an erroneous proximity determination, and improperly concluded that the separate drill sites are independent. *See generally* AWL Pet. at 20-40.[8] In addition, Petitioner MacClarence challenges the Region's source determination by alleging that the Region impermissibly and improperly "disaggregat[ed]" the drill sites by relying "entirely" on a memorandum entitled *Source*

[8] As the arguments that AWL and NSB present in support of their stationary source challenges are virtually identical, *compare* AWL Petition at 20-40 *with* NSB Petition at 20-38, the Region will cite only to the AWL brief in responding to the specific stationary source claims from both of these Petitioners.

Determinations for Oil and Gas Industries issued by William L. Wehrum, Acting Assistant Administrator, to Regional Administrators on January 12, 2007 ("Wehrum Oil and Gas Memo"). *See generally* MacClarence Pet. at 1-5; *see also id*. at 5 (reiterating that "the sole purpose of this appeal is to object to EPA's use of the Wehrum Oil and Gas Memo in this permit decision").

As explained in more detail below, Petitioners' claims fail to provide grounds for review and remand of this permit because the Region's Record in issuing the 2008 Permit to Shell supports the stationary source determination. Given that there is no specific Agency guidance regarding stationary source determinations for OCS exploratory drilling operations, and the Board's explicit instructions in the remand, it was a reasonable for the Region to examine a variety of existing EPA source determination guidance and rely on that guidance in varying degrees based on the specific facts of Shell's proposed operations.

1. EPA Region 10 conducted a reasonable and relevant analysis in making its stationary source determination

At the outset, while Petitioners frame their stationary source arguments in terms of EPA Region 10's failure to aggregate or improper disaggregation of the drill sites in making the source determination for the Shell permit, *see* AWL Pet. at 19 (stating EPA "declines to aggregate"); MacClarence Pet. at 2 (discussing EPA's "disaggregation decision"), the relevant statutory and regulatory provisions does not use those terms. While source determination analysis is often framed in terms of "aggregation," [9] under

[9] The aggregation terminology has been used by EPA to describe whether contiguous or adjacent emissions-producing activities should be a part of the same source, including

the relevant law, there is no requirement to begin with the assumption that all sources should be aggregated such that the permitting authority must justify "disaggregation" of sources. Instead, the law requires that permitting authorities begin their analysis with a particular source of emissions and then determine if there are other emissions-producing activities that should be considered part of the same source based on specific characteristics. *See* 40 C.F.R. § 51.166(b)(5) and (6). As will be explained more fully below, EPA Region 10 relied on the applicable law and relevant Agency guidance to properly determine that while the pollution-emitting activities addressed in the Shell permit shared characteristics that could weigh in favor of aggregating them into one stationary source, the overall lack of proximity and interdependence between the activities led to the determination that the pollution-emitting activities at exploratory operations are separate stationary sources.

As explained in the Supplemental Statement of Basis ("SSOB") that was issued with the proposed revised permit, the Region began its stationary source determination by applying the relevant Federal and State law. *See* SSOB at 4-5. Section 328(a) of the Clean Air Act, 42 U.S.C. § 7267, requires EPA to establish requirements to control air pollution from OCS sources located within 25 miles of States' seaward boundaries that are the same as onshore requirements. *See also* 40 C.F.R. § 55.3 (stating that "OCS

(a) guidance documents, *see, e.g.,* Letter from Richard Long, Director, Air Program, U.S. EPA Region 8, to Lynn Menlove, Manager, New Source Review Section, Utah Division of Air Quality, *Request for Guidance in Defining Adjacent with Respect to Source Aggregation* (May 21, 1998);

(b) EAB decisions, *see* Remand Order at 40, n. 37; and

(c) the current Shell permitting process, *see generally* SSOB at 12-16 and RTC at 58-62.

sources located within 25 miles of the states seaward boundary shall be subject to all the requirements of [part 55], which include, but are not limited to, the federal requirements as set forth in section 55.13 of this part and the federal, State and local requirements" of the corresponding onshore area). Therefore, EPA periodically updates the OCS regulations in 40 C.F.R. Part 55 so they remain consistent with the requirements of the corresponding onshore area. *See* 72 Fed. Reg. 5936 (Feb. 8, 2007) (amending Part 55 to update the provisions that pertain to OCS sources off the shore of Alaska to match the state regulations that apply to emissions from OCS sources onshore); 40 C.F.R. § 55.15 Appendix A (identifying the specific State of Alaska regulations that are applicable to OCS sources when the corresponding onshore area is in Alaska).

Under Alaska law, Alaska Stat. § 46.14.990(27) and 18 Alaska Admin. Code ("A.A.C.") § 50.990(105), the definition of an OCS "stationary source" is the same as the "stationary source" definition provided in the federal PSD regulations, 40 C.F.R. § 51.166(b)(5), which defines a stationary source as "any building, structure, facility, or installation which emits or may emit a regulated NSR pollutant." In turn, the Region explained that "building, structure, facility, or installation" is defined in Alaska and EPA regulations such that "OCS source activities that share all of the following characteristics shall be considered one 'stationary source,' for the purpose of determining PSD applicability: (1) a common owner or operator, (2) the same SIC code, and (3) located on contiguous or adjacent property." SSOB at 4-5, citing 40 C.F.R. § 51.166(b)(6), 18 A.A.C. § 50.040(h)(4)(B)(iii), and Alaska Stat. § 46.14.990(4). EPA Region 10 noted that the since the oil and gas exploration activity being permitted was undertaken by the same owner (i.e., Shell) and was classified under the same 2-digit SIC code (i.e., SIC

Major Group 13 for Oil and Gas Extraction), the stationary source determination hinged on "whether Shell's oil and gas exploration activities are located on contiguous or adjacent property." SSOB at 5.[10] Accordingly, EPA Region 10 began with a specific pollution emitting activity – i.e., drilling a planned exploratory well at a particular drill site – and then applied the existing guidance, as relevant, to the specific facts of this situation to determine whether the other pollution emitting activities – i.e., drilling other wells – are contiguous or adjacent to the planned exploratory well such that they should considered part of the same "building, structure, facility or installation" and thus the same stationary source. *See generally* SSOB at 10-16.

In order to provide an understanding of the basis for the analysis of contiguous or adjacent property, the Region summarized the key elements of oil and gas exploration activities generally and the history of such exploration in the Beaufort Sea OCS. SSOB 5-9. In determining the extent of the particular "property" for purposes of the stationary source determination, EPA Region 10 concluded that "the hull of a vessel, when that vessel is attached to the sea floor, is the appropriate unit of property from which to determine whether emissions generating activity is contiguous or adjacent." SSOB at 10. As none of the Petitioners have challenged the Region's determination that each drill site is a different property, the focus must turn to the Region's determination of whether the

[10] The MacClarence Petition lists a number of EPA guidance documents that it argues are in "direct opposition" to the Wehrum Oil and Gas Memo, *see id.* at 3-5, many of which describe a three-part analysis similar to the analsyis the Region performed in this case. As there is no debate that Shell's planned exploratory operations have common control and the same SIC code, guidance documents that do not discuss the contiguous or adjacent analysis are inapplicable. *See, e.g., id.* at document 1 (a memo that focuses on determination of common control).

emissions-generating activities proposed by Shell occurred on contiguous or adjacent properties.

EPA Region 10 began the contiguous or adjacent analysis by focusing on the specific EPA guidance documents that the EAB asked the Region to consider in its 2007 Remand Order. *Id*. at 41, n.37 ("It is appropriate that the Region be afforded the opportunity, in the first instance, to address these [Agency policy documents and prior PSD determinations] when explaining its determination on remand."). The Region "reviewed the [guidance] as suggested by EAB" and found that "EPA has *consistently evaluated two factors* in determining whether activities should be considered a single source: a) proximity and b) interdependence." SSOB at 13 (emphasis added). The Region also noted that while "EPA historically stressed the significance of interdependence" in those determinations, the Agency ultimately made its source determination decisions "[i]n accordance with the case-by-case analysis that form the basis of PSD and Title V permitting actions," such that in each guidance documents EPA examined proximity and interdependence based on the specific facts of the situations addressed in those documents. *Id.*

Accordingly, EPA Region 10 applied the Agency guidance identified by the Board to the specific facts of Shell's proposed activities contained in the permit application and supplemental information provided by Shell. The Region noted that the Shell's proposed activities differed from the activities examined in that guidance. For example, the Region noted that operations at the drill sites are not occurring simultaneously, and thus did not depend upon each other in the manner identified in the guidance, and where not physically connected to one another. *Id.* at 13, 16. The Region

also answered a number of questions regarding interdependence that were posed in the Agency guidance, using the Shell-specific facts. *See generally id.* at 13-14 (presenting a list of four questions with answers based on Shell-specific facts).

EPA Region 10 also made it clear that "[i]n addition to" conducting the interdependence analysis, the Region reviewed the Wehrum Oil and Gas Memo as identified in the EAB Remand Order. SSOB at 15; *id.* at 13 (identifying the Wehrum Oil and Gas Memo as one of the Agency guidance documents the EAB asked the Region to address in the remanded permit process). The Region recognized that the proximity-focused analysis in the Wehrum Oil and Gas Memo "also provides guidance for evaluating whether the Kulluk's activities at separate Drill Sites should be aggregated" and thus examined the proximity-related facts present in the Shell permitting. SSOB at 15. The Region noted that the drill sites are surrounded by open water, spaced at least 1000 meters apart, and must be "far enough apart" to have distinct information-gathering value. *Id.* at 15.

After examining the specific facts presented by Shell under the interdependence and proximity analysis provided in the Agency guidance, EPA Region 10 then examined the interplay of the interdependence and proximity analysis given the particular circumstances of Shell's exploratory drilling operations to make its stationary source determination. The Region began with the determination that any relief or replacement wells associated with a planned well would be considered the same stationary source as the planned well based on their proximity and interdependence. SSOB at 10-12. In determining that an associated planned, relief, and replacement well is a single stationary source, the Region found that relief and replacement wells are necessarily close to the

planned well (i.e., proximate) and are inherently "operationally dependent" with the planned well, because either the planned well "cannot continue" without the intervention of the relief well, or planned and replacement wells "share the common purpose of collecting the same discrete information about the same location-specific area of a prospect." SSOB at 11.

However, the Region applied the same proximity and interdependence analysis to the specific circumstances involved in drilling different planned wells and reached a different conclusion. In determining that the individual planned wells should not be considered the same stationary source, EPA Region 10 concluded that:

> The facts presented in the present permitting action show that each Exploratory Operation is separated by open water, and each resides above a different part of the prospect from which distinct data is collected. The activities at one Drill Site are largely independent from activities at another Drill Site. One Exploratory Operation utilizing the Kulluk is not a support facility for activities at another because the exploration activity at one drill site must be concluded before subsequent drilling using the same equipment may begin at a different site. Therefore, consistent with Agency guidance discussed above, each Exploratory Operation in this case is independent and not in close enough proximity to one another to be considered adjacent. Accordingly for purposes of this permit, EPA Region 10 has determined that the emissions-producing activity associated with a single Exploratory Operation is one stationary source separate from emissions-producing activities associated with another Exploratory Operation.

SSOB at 16.

After issuing the proposed Shell permit and receiving public comments regarding the specific application of the interdependence and proximity analysis to Shell's proposed activities, EPA Region 10 prepared the 2008 Response to Public Comments ("RTC"), which upheld its initial stationary source determination while elaborating on particular facts and addressing the proximity and interdependence analysis separately in order to respond to specific comments. *Id.* at 58-63. At the outset of the source determination

section, the Region responded to the commenters' general disagreement with the "conclusion that each planned well site constitutes a separate source" as follows:

> We believe that our existing Record fully supports our determination that each planned well site constitutes a separate stationary source for purposes of determining New Source Review applicability. In the Supplemental Statement of Basis that accompanied the proposed permit, we examined the specific facts of this case in light of the Clean Air Act, applicable regulations and relevant agency guidance regarding source determination to conclude that each drill site represented an Exploratory Operation that was operationally independent from other sites and that the various sites were "not close enough in proximity to one another to be considered adjacent." SSOB at 16. As we explain below, we do not believe that the additional information and perspectives submitted by Commenters necessitates a change in this determination.

RTC at 59.

The Region also explained that its determination was guided by the requirements set out in EPA's prior source determinations, including the overall need to apply the regulatory definition of "building, structure, facility or installation" in a way that conformed with "the common sense notion of a plant" RTC at 63; *see also* 45 Fed. Reg. 52676, 52694-695 (August 7, 1980) (explaining that a major source for NSR and PSD permitting purposes "must approximate the common sense notion of a 'plant'"). In addition, the Region noted that many of the past Agency guidance documents regarding interdependence that the Board asked EPA Region 10 to examine, and which the Region in fact analyzed in the SSOB, were actually describing situations in which there was operational dependence because one source served as a support facility for the other. RTC at 62. As explained in more detail below, the Region then addressed the specific comments relating to its conclusions that the individual planned drill sites are neither interdependent nor proximate. After considering the comments and the specific facts about Shell's proposed activities in light of the Agency guidance, EPA Region 10

maintained its determination that each exploratory operation was a separate stationary source because the planned well sites not dependent on or proximate to one another. *See* RTC at 63.

Given the facts presented above, as well as the further explanation provided below, EPA Region 10 complied with the requirements of the Clear Air Act when it applied existing legal requirements and relevant Agency guidance to the specific facts presented in the Record for this permit to determine that each exploratory operation was a separate stationary source. Accordingly, the Region's determination that each planned drill site is a separate stationary source based on their lack of proximity and interdependence should be upheld, and the Petitions for Review should be denied. *See In re Peabody Western Coal Co.*, 12 E.A.D. --, slip op. at 17.

2. EPA Region 10 did not shift its permitting rationale in making its stationary source determination

The Record for the revised Shell 2008 Permit shows that throughout the permitting process, EPA Region 10 relied on two factors – lack of proximity and lack of interdependence – to find that each exploratory drilling operation was a separate stationary source. The Region relied on a number of Agency guidance documents in making its source determination, and while the Region may have presented the proximity and interdependence analysis in a different order in the SSOB and RTC and highlighted different facts in the analysis provided in those two documents, any such perceived change in the Region's rationale is the result of responding to the specific comments about the proposed permit submitted by Petitioners and others. In both the SSOB and the RTC, the Region properly weighed the Agency guidance regarding both interdependence

and proximity against the specific facts of the proposed Shell activities and explained its determination that each exploratory operation is a separate stationary source. Accordingly, there is no basis for AWL and NSB's allegation that EPA Region 10 impermissibly shifted the source determination rationale between the proposal and issuance of the 2008 permit, AWL Pet. at 20-24, or for MacClarence's allegation that the permitting decision was based entirely on the proximity guidance contained in the Wehrum Oil and Gas Memo, MacClarence Pet. at 1-5.

As demonstrated above, at both the proposal stage and the final stage, EPA Region 10 examined both interdependence and proximity in making the stationary source determination in this case, and in so doing, the Region relied on a variety of Agency guidance regarding interdependence and proximity, including the guidance recommended by the Board. *See generally* SSOB at 10-16, RTC at 58-63. It appears that Petitioners perceived a shift in rationale, from primarily interdependence-based to primarily proximity-based, simply because the Region examined interdependence first in the SSOB and proximity first in the RTC, and because a majority of the Agency guidance the EAB specifically instructed EPA Region 10 to address focused on interdependence, given the facts examined in those particular documents.[11] But even in the initial determination provided in the SSOB, it was clear that the Region relied on the specific fact that the exploratory operations are neither dependent nor proximate to determine they should be

[11] Contrary to Petitioners' assertions, AWL Petition at 21, the Region did not identify proximity as the "key factor" in the RTC. Rather, the Region noted that the Agency's "prior determinations considered interdependence rather than proximity to be the key factor in making the source determination" and then explained how reliance on interdependence alone did not seem appropriate given the "unique circumstances" of Shell's planned activities in the OCS. RTC at 60.

separate sources. *See* SSOB at 16 (finding each exploratory operation to be independent and not in close proximity to one another)*; see also* RTC at 61 (describing how the SSOB "also went beyond mere lack of proximity between the individual planned drill site and examined whether case-specific factors indicated an operational dependence that would make the sites 'contiguous and adjacent' for purposes of aggregation."). In addition, while the Region may have described the proximity and interdependence analysis separately in the RTC, instead of grouping those factors together as it did in the SSOB, the Region still considered both factors in making its final source determination. *See* RTC at 59 (response to general source determination comment (13-1) addressing the overall lack of dependence and proximity). Once again, the differentiation of the proximity and interdependence analysis in the RTC was a result of the different types of public comments received about those two factors and the need to respond to those comments in an organized manner.

AWL and NSB also argue that EPA Region 10 impermissibly shifted the basis for its source determination from the interdependence of the informational product collected at each drill site to the lack of operational dependence between the drill sites. AWL Pet. at 22. Not only does the Record show that the Region relied on a lack of both interdependence of the information product and operational dependence at the proposal stage – *see* SSOB at 13-14 (noting that each drill site "is picked for its independent value as a potential source of information" and the information collected "is not transferred between Drill Sites"), and 14-15 (noting that the operations "at each location are not dependent on each other" and concluding that the drill sites are separate sources because "there is no operational interdependence") – but it's a distinction without a difference.

The point of the contiguous or adjacent analysis is to determine if the various drill sites operate as a single plant to produce an integrated product, i.e., whether they fit within "the common sense notion of a plant." An analysis of how the information collected at drill sites is used is a necessary part of the overall analysis to determine if the activities at each drill site proposed by Shell are interdependent, i.e., whether they have operational dependence on one another. In this case, the Region examined the same pollution-emitting activity and reached the same source determination in both the RTC and the SSOB, regardless of the exact phrase used to describe that analysis. *See, e.g.,* RTC at 62 (discussing how the Agency guidance documents regarding interdependence, which were examined in the SSOB, were describing operational dependence based on the fact that one source served as a support facility for the other).

While AWL and NSB try to rely on EAB precedent to support their argument that the Shell permit should be remanded because EPA Region 10 based its permitting decision on "two differing explanations," AWL Pet. at 19, *citing In re Austin Power Co.*, 6 E.A.D. 713 (EAB 1997), that case is inapplicable. In *Austin Power*, the Board focused on the fact that the rationale provided by the permitting agency in the permit record differed from the rationale being provided in the agency's brief in response to the petition to review that was pending before the EAB. *Id.* at 720, citing *In re GSX Services of S.C., Inc.*, 4 E.A.D. 451, 454 (EAB 1992). Accordingly, the EAB in that case was addressing post-hoc rationalization – i.e., providing a different rationale for a final decision to an adjudicatory body after that final decision has already been made. That is not the case here. Thus, *Austin Power* is inapplicable to this matter because the Board's decision does not speak to the ability of the Agency to supplement its permitting rationale in the

process of making a final decision in order to carry out its required duty to adequately respond to comments raised by the public, or even to change its rationale as needed.[12] *See* 40 C.F.R. § 124.17 (requiring the permitting authority to issues a response to comments with the final permit decision). Indeed, Petitioners' interpretation would effectively require that the permitting authority anticipate all comments that could subsequently be raised by the public and address them in issuing the proposed permit – but such a requirement is directly contrary to the permitting process set out in Part 124.

Throughout the permitting process for the revised Shell permit, the Region acknowledged that it was faced with a distinct permitting decision because the existing Agency guidance cited by the EAB and examined in the SSOB did not address the specific type of emissions-producing activity covered by this OCS permit, i.e., the exploratory drilling and associated information gathering. See SSOB at 13 (noting that consideration of the prior "case-specific determinations and the specific facts involved in

[12] Even if the Board were to find that EPA Region 10 shifted the rationale for its stationary source determination between issuance of the proposed and final Shell OCS permit, the Region argues that any such shift would clearly be a logical outgrowth of the permitting process, and thus permissible. *See, e.g., In re Old Dominion Power*, 3 E.A.D. 779, 797-98 (EAB 1992) (acknowledging that "there may be times when a revised permit differs so greatly from the draft version that additional public comment is required," but finding it was not the case there because "the revised permit by all accounts is a logical outgrowth of the notice and comment process and all commenters have had a fair and reasonable opportunity to present their views on the permit"). In this case, the proposed permit and supporting documentation issued by EPA Region 10 provided the public in general, and Petitioners specifically, with adequate notice of the primary factors that the Region was using to make the stationary source determination – proximity and interdependence – such that the public could have "reasonably anticipated" the terms of and basis for the final permit issued by the Region and provided meaningful comments on the issue. *In re District of Columbia Water and Sewer Authority*, , 13 E.A.D. __ (March 19, 2008), slip. op at 65; *see also NRDC v. EPA*, 279 F.3d 1180, 1186 (9th Cir. 2002) (describing the logical outgrowth standard as a focus on what the parties "reasonably could have anticipated" in the final decision based on the draft decision).

this permitting action" highlighted how the circumstances differed from most of the Agency guidance); RTC at 60 (noting that most of the Agency's source determinations "involved neither the unique circumstances found in the oil and gas industries nor the specific circumstances encountered by this OCS permitting"). However, in making the source determination for the Shell permit, the Region still addressed that Agency guidance – including, but not limited to, the Wehrum Oil and Gas Memo. *See* SSOB at 13-14 and RTC at 62-63 (discussing the Agency guidance regarding interdependence and comparing those findings to the specific facts of Shell's proposed operations); SSOB at 15 and RTC at 59-61 (discussing the guidance regarding proximity in the Wehrum Oil and Gas Memo and comparing it to the specific facts of Shell's proposed operations).

Implicit in Petitioners' arguments is the acknowledgement that the Region was required to respond to the public comments, and to the extent a comment focused more heavily on some existing guidance than on others, the response to those comments necessarily did as well. The Region is under a duty to respond to comments adequately, and in so doing, further explanation is often required, but providing more detailed analysis of the rationale already provided does not amount to a change in that rationale. *See In re District of Columbia Water and Sewer Authority*, 13 E.A.D. __ (March 19, 2008), slip. op at 63 (Determining whether the final permit contains a permissible change requires consideration of "the evolution of the permit condition at issue, and the Region's corresponding explanatory statements.")

In this case, EPA Region 10 consistently and permissibly applied a variety of existing guidance – relating to both proximity and interdependence – to the specific facts of the Shell OCS activities being addressed, at both the proposed and final permitting

stages, and determined that each exploratory operation is a single stationary source. Accordingly, the Petitions for Review should be denied because Petitioners cannot support their claims that the Region impermissibly shifted the source determination rationale, AWL Pet. at 20-24, or based its decision entirely on the proximity guidance contained in the Wehrum Oil and Gas Memo, MacClarence Pet. at 1-5.[13]

3. EPA Region 10 reasonably concluded that Shell's exploratory operations are not proximate to one another

In determining that each exploratory operation was a separate stationary source, Region 10 determined that they lacked proximity to one another because each operation will be separated by at least 1,000 meters and the operations had to be located far enough

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[13] The MacClarence Petition also lists a number of "example" EPA guidance documents that it argues are in "direct opposition" to the Wehrum Oil and Gas Memo. *See id.* at 3-5. However, a majority of these guidance documents were not relied upon by EPA in the SSOB or RTC, and MacClarence did not bring them to the attention of EPA in his public comment. In fact, his full public comment did not even discuss Agency guidance on source determinations. His full public comment is as follows:

> It appears that EPA is disaggregating the Shell OCS lease in this permit thus allowing concurrent exploratory activities within separate portions of the lease without considering impacts in total. This is not in accordance with the Clean Air Act, which defines "facility" or "stationary source" as "all contiguous or adjacent activities occurring under common control or ownership."

See EPA Exhibit No. CC-14 (Bill MacClarence Comment on Proposed Permit).

Accordingly, those portions of the MacClarence Petition presenting these guidance documents for the first time on review – namely, references to example guidance documents 1, 2, 3, 5, 6, and 7 on pages 3-5 of the Petition – should be dismissed as not properly preserved for review. *See In re AES Puerto Rico, L.P.*, 8 E.A.D. at 335 (EAB); 40 C.F.R. §§ 124.13 and 124.19(a).

apart to collect distinct information. SSOB at 15; RTC 60-61. Petitioners AWL and NSB assert that the Region's proximity determination was erroneous because its analysis of both of these factors was flawed. AWL Pet. at 24-31. As explained below, Petitioners simply restate the concerns raised in their original comments and fail to show that EPA Region 10 erroneously applied the relevant facts of the Shell activities to determine that the drill sites are not proximate. For these reasons alone, the Petitions should be denied. *In re Kawaihae Cogeneration Project*, 7 E.A.D. at 114; *In re BP Cherry Point*, 12 E.A.D. --, slip op. at 11-12.

Nonetheless, as an initial matter, EPA Region 10's use of the ambient air-related permit requirement that drill sites be separated by at least 1,000 meter as a starting point for the stationary source determination was a reasonable application of a relevant fact in the Shell permitting. Petitioners argue that EPA Region 10 fails to provide "a permissible and rationale basis for the 1,000 meter separation." AWL Pet. at 26. While the Region does not dispute that the Shell permit prohibits drilling activities within 1,000 meters of another planned drill site due to air quality concerns, RTC at 59, simply because the distance was based on air quality concerns does not mean it was improper or erroneous for Region 10 to consider that distance in making its source determination. Unlike the situation presented in the original Shell permit – where the permit record simply noted the National Ambient Air Quality Standards ("NAAQS") analysis required a 500 meter separation between drill sites and did not analyze whether sources beyond 500 meters should be aggregated – in the present permitting decision, the Region acknowledged the "practical constraint" that the 1,000 meter air quality restriction placed on the source determination, SSOB at 15, but then went on to examine other factors that

are relevant to the proximity analysis. Accordingly, the Region "used [the 1,000 meter] distance *as a starting point* to determine if exploratory drilling sites beyond [1,000 meters] should be aggregated" but did not end its analysis there. RTC at 59.

EPA Region 10 also found that at the 1,000 meter distance, the planned drill sites are not proximate because they are far enough apart to collect distinct information. Specifically, the Region determined that the facts in the permit application showed that "each Planned Well must necessarily be at a distance far enough apart from another so as to create a distinct information gathering value…[such that] none of the Exploratory Operations allowed under the proposed permit would be located in close enough proximity to be considered a single stationary source." SSOB at 15; *see also id.* at 12 (noting that the need to collect distinct information at each drill site is supported by the "tremendous capital expenditures" required by the project, "especially" given its off-shore nature). The Region also noted that the lack of other factors indicating operational interdependence also supported a finding that the planned drill sites are not proximate. *Id.*

AWL and NSB argue that the specific nature of the exploratory drilling plan that Shell is proposing, which they refer to as a "step[ped] out" plan, means that the sites must be proximate. AWL Pet. at 28-30 (referring to the description of the project contained on page 6 of the SSOB). But as the Region explained in addressing similar public comments in the Response to Comments, "EPA considered Shell's overall drilling plan in the context of selecting a drilling site" when it initially "found that 'Planned Wells must be located sufficiently far apart so as to collect different pieces of discrete information about the prospect'" Shell was exploring. RTC at 60 (quoting SSOB at 12). Upon considering

the comments received, the Region still concluded that "[t]he very nature of this underlying information gathering leads to a reasonable determination that each Exploratory Operation, i.e., drill site, is a separate source" and explained that

> While some of EPA's prior source determinations may have found that sources separated by distances of more than 1000 meters should be aggregated, as discussed more fully in the SSOB (see pages 12-16) and Response 13-3 below, those prior determinations considered interdependence rather than proximity to be the key factor in making the source determination, so the exact distances separating the interdependent sources were not necessarily relevant to the source aggregation decision. Moreover, those determinations involved neither the unique circumstances found in the oil and gas industries nor the specific circumstances encountered by this OCS permitting.

RTC at 60.

Petitioners also argue that in continuing to conclude that planned drill sites are not proximate, EPA Region 10 improperly relied on the source determination guidance contained in the Wehrum Oil and Gas Memo. AWL Pet. at 29-30; MacClarence Pet. *generally*. As the Region previously explained, the Wehrum Oil and Gas Memo was relevant to the Region's determination because the Memo was specifically issued "to assist permitting authorities in making stationary source determinations for the oil and gas industry," including operations on the OCS. RTC at 60. Moreover, while Petitioners argue that the Wehrum Oil and Gas Memo does not address the type of exploratory drilling that Shell is proposing, the Region already considered similar comments and found that the Memo provides overall guidance "for aggregation for 'oil and gas operations on land, in state waters, and on the federal Outer Continental Shelf (OCS),'" such that the specific circumstances of Shell's proposed drilling operations could be addressed using the case-by-case analysis advocated in the Memo. RTC at 60 (citing Wehrum Oil and Gas Memorandum at 1 and 5).

As evidenced in the Record for this permit and explained above, throughout the permitting process, EPA Region 10 followed the guidance contained in both the Wehrum Oil and Gas Memo and other Agency guidance documents to apply the case-specific circumstances of Shell's exploratory drilling operations in making its source determination. While the Region may have relied more heavily on the Wehrum Oil and Gas Memo in making its proximity determination, it was not unreasonable for the Region to do so since that Memo focused on proximity determinations in the oil and gas industry while the other guidance focused on the interdependence of specific permitting situations involving non-oil and gas production processes. *See In re Ash Grove Cement Co.*, 7 E.A.D. 387, 402-403 (EAB 1997) (finding that the Region appropriately relied on guidance that petitioners thought should be excluded and that the Region appropriately considered case-specific factors in applying that guidance); *In re Dominion Energy Brayton Point*, 13 E.A.D. --, slip op. at 31-32 and n.28 (EAB, Sept. 27, 2007)(finding the Region's use of and reliance on Agency guidance as a factor in selecting a permit limit was reasonable). Accordingly, the Region did not improperly rely on the Wehrum Oil and Gas Memo when it found a lack of proximity in making the overall source determination.

Overall, EPA Region 10 looked at the specific circumstances of Shell's exploratory drilling operations, including the 1,000 meter distance between the sites and the need to place the sites far enough apart to collect distinct exploratory information, and "reasonably concluded that the individual well sites were not proximate under the common sense notion of a 'plant,'" such that the proximity analysis supported the decision not to aggregate the individual exploratory operation into a single source. RTC

at 61. Contrary to Petitioners' assertions, the Region's proximity determination is supported by the Record and a reasonable application of the specific facts in that Record, and the Petitions for Review should be denied.

4. EPA Region 10 reasonably concluded that each Shell exploratory operation is independent

In this permitting action, EPA Region 10 analyzed the specific facts of Shell's proposed exploratory drilling operations and determined that the emissions-producing activities "at one Drill Site are largely independent from activities at another Drill Site." SSOB at 16; *see also* RTC at 61-63. However, AWL and NSB claim that EPA's conclusion is erroneous because Petitioners contend the Record establishes that the drill sites are part of a larger plan "to determine whether and how to produce oil from discovered reservoirs." AWL Pet. at 31. Petitioners begin their argument by restating many of the issues they raised during public comments. *Compare* AWL Pet. at 32-34 *to* RTC at 61 (summarizing the comments arguing "that multiple planned wells on a single prospect are interdependent in several important ways that should lead us to conclude that the wells should be aggregated into one source"). However, the Region looked at the issues raised in the public comments and the information provided by Shell regarding the nature of the exploratory drilling operations and then compared the information with the Agency's guidance regarding interdependence to find that there was not "sufficient operational reliance between locations to support an operational dependence relationship." RTC at 62. The Region explained that the type of individual drill sites that Shell proposed (1) lacked an exchange of tangible product, (2) are not simultaneous or integrated operations, and (3) are not physically connected. *Id.*

AWL and NSB present various arguments to support their argument that "wells used to assist in crafting a production scenario are engaged in a single enterprise, and are thus related." AWL Pet. at 37. It is true that in making the source determination, the Region recognized that some facts indicated a common business plan, such as use of the same ship and crew, SSOB at 14, and acknowledged that "Shell will most likely use information collected at one well to refine its exploratory drilling plans for other locations." RTC at 62. However, EPA Region 10 declined to find "that this sharing of information necessitates a finding that these wells are all a single stationary source" because such information-sharing normally occurs in almost any business venture. *Id*; *see also id*. at 63 ("The mere existence of some relationship between sites is not unequivocal evidence that the sites must be one stationary source."). Instead, the Region examined the specific project information that Shell had provided, and concluded that there was an operational independence that weighed against aggregating the drill sites into a single stationary source.

AWL and NSB also argue that EPA's determinations that some Shell submissions qualified as confidential business information ("CBI") supports their argument that Shell's drilling operations are interdependent. NSB Supplement at 4-5. As a general matter, EPA Region 10 has not made a final CBI "determination," but pursuant to 40 C.F.R. Part 2 is simply withholding from the public portion of the Record the information that Shell has claimed as CBI. *See* HH-5 in Record (Shell's 2/4/08 CBI substantiation letter). Even if such a determination were made, it would involve a determination on the general confidential nature of information, not a specific determination about how that information should be used in the permitting decision. Finally, to the extent that

Petitioners are arguing that Shell's activities across a single prospect are part of a single enterprise, NSB Supplement at 4, the Region has already explained that sharing information about an overall prospect is the type of information-sharing that "occurs in the course of normal operations for almost any business venture serving or operating in multiple locations. We decline to make…information sharing a basis for making a source determination, because such criteria could be applied broadly to find operational dependence in virtually any business operation." RTC at 62. As a practical matter, the position argued by Petitioners AWL and NSB could lead to absurd results, requiring aggregation of all operations of a particular business anywhere into a single stationary source simply because information is shared between those operations.

In maintaining that individual drill sites are single sources based on the fact that they are independent, EPA Region 10 noted that the information provided in the various comments it received, including comments presenting information similar to that presented in the Petitions, "highlight the complexity of operational relationships in this industry and do not provide a clearly objective criterion for distinguishing when operational relationships move from independent to dependent status." RTC at 63. Accordingly, the Region then looked at the specific facts of the Shell project and found it "was reasonable for EPA to determine that the sites should not be aggregated into a single source" given that Shell would collect discrete exploratory information from individual drill sites and that the specifics of the collection at each site was not operationally dependent on the information collected at other sites. *Id.*

While Petitioners argue at length that the assessment of the specific facts must lead to the opposite conclusion, the Region considered the specific facts and applied the

existing guidance to those facts as relevant. The Record shows that EPA Region 10 assessed the information provided about the project and made technical assessments about exact nature of the information being collected and the interdependence of that information. After considering all the information in the Record, the Region made the rational determination that the individual drill sites are independent, and the results of that analysis supported the conclusion that each exploratory operation is a separate stationary source. Accordingly, the Region's source determination should be upheld, and the Petitions for Review should be denied. *See In re Peabody Western Coal Co.*, 12 E.A.D. --, slip op. at 17 (EAB, Feb. 18, 2005).

Overall, EPA Region 10 applied the relevant statutory and regulatory standards and examined the Agency guidance on source determinations in reaching its conclusion that each individual exploratory operation in the Shell permit was a separate stationary source. Given the lack of specific Agency guidance regarding stationary source determinations for OCS exploratory drilling operations, it was reasonable for the Region to examine Agency guidance on source determinations and to rely on that guidance in varying degrees based on the specific facts of Shell's proposed emissions-producing activity – relying more on the Agency guidance focusing on proximity when making the proximity determination and relying more on the Agency guidance focusing on interdependence in making the interdependence analysis. *In re Ash Grove Cement Co.*, 7 E.A.D. at 402 (finding that a Region may rely on particular Agency guidance "when writing an individual permit, provided that the Region 'perform[s] a permit-specific analysis' for any particular application of the guidance") (*quoting In re Environmental Waste Control, Inc.*, 5 E.A.D. 264, 273 (EAB 1994)). In so doing, the Region reasonably

concluded that the individual drill sites are neither proximate nor interdependent and should thus be considered separate stationary sources for CAA permitting purposes. Because there was no clear error in the source determination made by EPA Region 10, the Board should deny the Petitions for Review as to this issue.

B. Permit Conditions 8 and 15.1 are Valid Permit Requirements

Permit Condition 8 states that NOx emissions from a single exploratory operation may not exceed 245 tons within a rolling 52-week period so that the operation will remain a minor source. Condition 15.1 of the permit states that the Kulluk may not occupy drill sites associated with the same exploratory operation for more than 80 calendar days in aggregate, within a rolling 52-week period. Petitioner NSB argues that both the 245-ton NOx limit in Permit Condition 8 and the 80-day limit in Permit Condition 15.1 are owner requested limits ("ORLs") under Alaska regulations (which have been incorporated into EPA's OCS regulations) and that, under these regulation, EPA Region 10 was required to determine that Shell is capable of complying with these limits before including them in the permit. In addition, Petitioner NSB argues that, to the extent the Region did conclude Shell was capable of complying with these two limits, this conclusion is erroneous because the Region did not account for emissions from relief wells when calculating potential emissions from this operation. NSB Pet. at 43. Petitioner NSB also asserts that the RTC failed to adequately address the comments related to the 80-day limit in Permit Condition 15.1. *See generally* NSB Pet. at 41 - 44.

For the reasons set forth below, EPA Region 10's decision not to quantify relief well emissions in setting these two emissions limits was not erroneous. The Region agrees with Petitioner NSB that the Alaska regulations do require EPA Region 10 to find

that Shell can comply with the 245-ton per year NOx limit in Condition 8 since the purpose of the limit is to ensure the operation remains a minor source, but the Region contends that the record supports the its conclusion that Shell can comply with this permit limit. It is also EPA Region 10's position that the Alaska regulations do not require the Region to demonstrate that Shell could meet the limit in Permit Condition 15.1 but, even if they do, Shell is in fact capable of meeting this limit and, contrary to Petitioner NSB's assertion, the RTC adequately addresses the public comments on this issue. Therefore, Petitioner NSB have failed show that there is clear error or important policy issue that warrants review by the Board and the Board should deny review of the permit limits n Permit Condition 8 and Permit Condition 15.1.

1. EPA Region 10's decision not to quantify relief well emissions is not clearly erroneous

As defined in the permit, an "exploratory operation" includes the planned well and any associated relief well. Final 2008 Permit 1.6 (defining the term "Exploratory Operation"); *see also* n.4, *supra*. Therefore, emissions from an exploratory operation include emissions generated by the planned well, as well as emissions generated by any associated relief well. Petitioner NSB argues that because the precise amount of emissions to be generated if a relief well is needed cannot be calculated, EPA Region 10's conclusions about Shell's ability to comply with the limits in Permit Condition 8 are contrary to law. Petitioner NSB contends that these conclusions are arbitrary because the permit lasts for an indefinite number of years and allows an indefinite number of wells, and therefore it is not possible to reach a rational conclusion regarding the likelihood of an out-of-control well "blowout" or to predict the number of relief wells. NSB Pet. at 48.

As EPA Region 10 explained in the RTC, emissions generated during relief well operations are considered part of the stationary source so any emissions from relief wells are included in the annual emissions calculations. RTC at 45. The Region acknowledges that the potential emissions associated with relief wells were not quantified in the permitting analysis but contends that it is neither required nor necessary to predict the relief well emissions before issuing the permit. In Petitioner NSB's view, because EPA Region 10 did not require Shell to submit additional information regarding relief well emissions, there was no legal basis for the Region to determine Shell could drill a relief well and still comply with the 245 ton per year NOx limit and remain a minor source. NSB Pet. at 49. The Region recognizes that the likelihood of ever having to drill a relief well is unpredictable. The exact number of relief wells, if any, to be drilled during the life of the permit is unknown because relief wells are drilled only in sudden, unpredictable, and infrequent situations as may be necessary to control an out of control well in catastrophic, unforeseen circumstances. *See e.g.* RTC at 44-45 and sources cited (describing relief wells generally and the rare need for them). It is true that the Region did not require Shell to provide additional information quantifying relief well emissions. However, because the potential emissions generated by relief wells are unpredictable and simply are not quantifiable in advance, it would be fruitless to request the company to submit specific emission calculations or additional information on such an unpredictable scenario. Therefore, the Region's approach is reasonable.

Petitioner NSB also claims that Shell is required to submit contingency plans for oil spills and that those plans should include permitting of the potential air emissions associated with response actions. NSB Pet. at 50. Petitioner NSB further states that "if

those response actions cannot be planned and completed in compliance with the 250 ton per year limit for minor source status, EPA must legally require Shell to obtain a major source permit and conduct a [best available control technology review] of the equipment that will be used to drill both planned wells and any associated relief wells." NSB Pet. at 50.

Petitioner NSB is suggesting that when determining whether Shell could operate as a minor source, EPA Region 10 must include emissions that could result from sudden or unpredictable emergency response actions. The Region disagrees. An interpretation of the PSD applicability provision, requiring the permitting agency to always include unforeseen, infrequent, or unpredictable emissions in determining whether the source is a major source subject to PSD would likely result in all applicants undergoing PSD review. The Board previously considered what emissions needed to be included in potential to emit calculations for the 2007 permits and noted:

> In this case, the [Kulluk and Frontier Discoverer OCS] Permits include an [owner requested limit] limiting the sources' NO_X emissions to 245 tpy, below the major source threshold of 250 tpy. Shell's PTE calculation properly took this limitation into consideration. *While NSB may have preferred that the Region require a calculation of Shell's maximum capacity to emit NO_X absent federally enforceable limitations, neither the Act nor the applicable regulatory provisions require such a calculation.* Rather, Shell was required to calculate the sources' maximum capacity to emit a pollutant taking into consideration "[a]ny [federally enforceable] physical or operational limitation on the capacity of the source to emit a pollutant." 40 C.F.R. § 52.21(4). This is precisely what occurred in this case.

EAB Remand Order at 51 (emphasis added). A similar calculation for relief wells is not required here.

Permit Condition 8 imposes a federally enforceable limit on Shell's potential to emit at each exploratory operation. Permit Condition 8 limits the emissions to less than the 250 tons per year major source threshold. In determining whether a minor permit is appropriate, EPA Region 10 reasonably considered this federally enforceable limit and determined that a major permit is not required. This interpretation is consistent with even the earliest decisions regarding the potential to emit provisions in the PSD regulations. In *U.S. v. Louisiana-Pacific Corporation*, 682 F. Supp. 1142 (D.Colo. 1988), the court summarized the holding in *Alabama Power Co. v. Costle*, 636 F.2d 323 (D.C. Cir. 1979), and stated:

> 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 operation. Rather, the concept contemplates the maximum emissions that can be generated while operating the source as it is intended to be operated and as it is normally operated. Of course, it is possible that a source could be operated without the control equipment designed into it or that a Konus heater could be operated so badly that the fire would go out. Yet, *Alabama Power* stands for the proposition that hypothesizing the worst possible emissions from the worst possible operation is the wrong way to calculate potential to emit.

682 F. Supp. at 1158-1159. Similarly, in permitting the Shell operations, the Region was not required to quantify emissions from the "worst", or unpredictable emergency, situation in which relief wells would be necessary.

Contrary to Petitioner NSB's claim, EPA Region 10 did not exempt relief well emissions from air quality permitting requirements. The air emissions generated by the relief wells, as described in Shell's oil spill contingency plan (EPA Exhibit No. GG-2 at 1-22 and 1-23 (Shell Beaufort Sea Oil Discharge Prevention and Contingency Plan (ODPCP)), are regulated by the permit. EPA Region 10 did consider that relief well

emissions, if any, would be generated using the equipment already regulated under the permit and thus would be subject to the emission limits and the monitoring, recordkeeping, and reporting requirements already placed on that equipment under the existing permit terms. RTC at 46. Thus, if a relief well is needed, any emissions generated will be calculated, reported, and included in the rolling 52-week period for the relevant exploratory operation. Therefore, it will be possible to determine if the total actual emissions for each exploratory operation exceed the permitted minor source level.

EPA Region 10 acknowledges that Shell requested the NOx limit in Permit Condition 8 to avoid triggering PSD review and it is an ORL within the meaning of Alaska's ORL regulations, which have been incorporated into the OCS regulations. The Region also recognizes that the criteria specified in the ORL regulations at 18 A.A.C. § 50.542(f)(8)(A)[14] must be satisfied before it can include an ORL in an OCS permit. However, Petitioner NSB is incorrect when it asserts that the Region failed to conclude that Shell could comply with Permit Condition 8. To the contrary, the Region appropriately determined that Shell was capable of complying with the owner requested NOx limit. In the RTC, EPA Region 10 concluded that Shell is capable of complying with the 245 ton per year NOx limit even when relief well emissions are considered and that it was appropriate to issue a minor permit establishing the ORL pursuant to 18 A.A.C.§ 50.542(f)(8)(A). See RTC at 44.

In determining that Shell was capable of complying with the ORL of 245 tons per year NOx, thereby allowing the company to avoid PSD review, EPA Region 10

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[14] *See* section B.2, *infra*, for a detailed discussion of this regulation.

considered a number of factors. First, it considered Shell's projections of annual emissions and determined that the projections were reasonable. RTC at 44. It evaluated the need for relief wells on the OCS in the past, and the probability that a relief well would be necessary here. *Id.* The record demonstrates that drilling a relief well is only necessary under infrequent and unpredictable conditions. As Shell indicated, "the probability that the Kulluk might need to drill a relief well for any given Planned Well is approximately 1 in 5,960." EPA Exhibit No. CC-16 (Memo from Paul Smith, attached to the May 6, 2008 Shell letter to EPA) ("Smith Memo") at 11. Indeed, the Region recognized that Shell may never drill a relief well during exploratory drilling in the Beaufort Sea. RTC at 45. EPA Region 10 also considered the other conditions in the permit that require the company to calculate, track, and report NOx emissions, including any emissions that would result in the unlikely event a relief well is required. *See* Final Permit Conditions 8.1 through 8.7. Such provisions will help ensure that emissions are tracked closely so that, if necessary, operations can be curtailed to ensure the limit is not violated. Furthermore, the Region considered Shell's awareness that relief well emissions are included in the 245 ton per year limit, Smith Memo at 11, and Shell's written commitment to comply with the permitted limits, RTC at 44 (citing Shell's June 5, 2007 email to EPA Region 10).

As a result of these permit conditions, Shell must plan for any emissions likely to be generated by relief wells in its operational planning for each exploratory operation. Given the recordkeeping requirements in the permit, Shell will know well ahead of time if its emissions are approaching the 245 tons per year limit. It has the ability to curtail or cease operations associated with a particular exploratory operation should emissions

approach the major source threshold. However, even if permit limits are exceeded, any emissions generated in excess of the permit limit will be evaluated in accordance with EPA's excess emission and sham permitting policies. *See* EPA Exhibit Nos. EE-13, EE-14, EE-15, EE-16 and EE-18. In this instance, if the emissions from a single exploratory operation exceed the major source threshold of 250 tons of NOx per year, Shell could be subject to enforcement action or major source permitting as appropriate.

Given the type of activity being permitted, the information in the record, the infrequent and unpredictable nature of relief wells, and the terms and conditions in the permit, it was not necessary for the Region to quantify emissions from relief wells when concluding that Shell could operate as a minor source and comply with the 245 ton per year NOx limit. The permitting standards do not require the Region to determine whether a source is capable of exceeding the permit limits – the standard is whether the source is capable of meeting it. Based on the record here, the Region reasonably determined that Shell could meet the permit limits. Thus, in light of the facts specific to this permitting action, EPA Region 10's position that Shell could operate at minor source levels in compliance with the 245 tons per year of NOx limit in Permit Condition 8 is not erroneous. Therefore, Petitioner NSB has not met its burden and review should be denied on this issue.

2. The 80-day limit in Permit Condition 15.1 is reasonable and supported by the record

i. Alaska regulations do not require EPA Region 10 to determine whether Shell can meet the 80-day limit in Permit Condition 15.1

Petitioner NSB argues that the 80-day limit in Permit Condition 15.1 is an ORL and therefore the provisions regarding ORLs in Alaska's regulation at 18 A.A.C.§

50.542(f)(8)(A), and incorporated into the federal OCS regulations, required EPA Region 10 to determine that the stationary source – in this case, the emissions-producing activity associated with a single exploratory operation – is capable of complying with Permit Condition 15.1. NSB Pet. at 38. As an initial matter, this issue was not preserved for review. While Petitioner NSB's comments questioned Shell's ability to comply with the 80-day limit, *see* EPA Exhibit No. CC-5 at 13 and 27 (NSB comment letter and Harvey Declaration), the comments did not reference 18 A.A.C. § 50.542(f)(8)(a) and did not specifically state that the Region failed to satisfy the ORL approval criteria in 18 A.A.C. § 50.542(f)(8)(a). Because EPA Region 10 did not have an opportunity to address the applicability of the18 A.A.C. § 50.542(f)(8)(a) during the permitting process, the issue is not preserved for review and NSB's Petition should be denied in this respect. *See AES Puerto Rico*, 8 E.A.D. at 335. Nonetheless, as explained below, the 80-day limit is not an ORL within the meaning of the Alaska regulations because Shell requested and the Region included the 80-day limit to protect ambient standards, rather than to avoid PSD applicability. Therefore, the ORL approval criteria in 18 A.A.C. § 50.242(f)(8) do not apply to Permit Condition 15.1.

Permit Condition 15.1 states:

> 15.1 The permittee shall not have the Kulluk occupy Drill Sites associated with the same Exploratory Operation for more than 80 calendar days in aggregate, during a rolling 52-week period.

Under the Clean Air Act and applicable Alaska regulations, if a single stationary source has the potential to emit more than 250 tons per year of NOx, a PSD permit is necessary. 42 U.S.C. § 7479(1). The Alaska regulations applicable to OCS sources contain specific provisions pertaining to minor source permits and include a regulation

allowing sources to request that its emissions be limited to minor source levels. More specifically, under the applicable Alaska regulations, an ORL is a limitation that is requested to make unnecessary an otherwise applicable permitting requirement. See 18 A.A.C. § 50.508, 18 A.A.C. § 50.225, and 18 A.A.C. § 50.544.[15] Thus, the ORL

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[15] The relevant Alaska regulations are as follows:

18 A.A.C. § 50.508. Minor permits requested by the owner or operator. An owner or operator may request a minor permit from the department for…

> (5) establishing an owner requested limit (ORL) for a stationary source; the owner or operator may avoid a permit classification under AS 46.14.130 if the department approves an owner requested limit on the source's ability to emit air pollutants; a limitation approved under an ORL is an enforceable limitation for the purpose of determining
>
> (A) stationary source-specific allowable emissions; and
>
> a stationary source's potential to emit; or…

18 A.A.C. § 50.225. Owner-requested limits.

> **…**
>
> (b) To request approval under this section of limits on the ability to emit, the owner or operator shall submit to the department…
>
> (6) citation to the requirement that the person seeks to avoid, including an explanation of why the requirement would apply in the absence of the limit and how the limit allows the person to avoid the requirement; and

18 A.A.C. § 50.544. Minor permits: content.

> **…**
>
> (h) A minor permit establishing an owner requested limit (ORL) under 18 A.A.C. § 50.508(5) consists of a letter of approval from the department. In the letter of approval, the department will

regulations allow an owner to request pollutant-specific limitations to reduce the source's potential to emit to a level at which the major source permit requirements are not applicable.

The state regulations also specify certain criteria that the permitting authority must meet prior to issuing a minor permit. Petitioner NSB alleges that EPA Region 10 failed to satisfy the criteria in 18 A.A.C. § 50.542(f)(8)(A). This regulation provides, in part:

> (f) Approval criteria. The department will:
>
> …
>
> (8) approve a minor permit establishing an owner requested limit under 18 A.A.C. § 50.508(5) if the
> (A) stationary source is capable of complying with the limit; and
> (B) the permit conditions are adequate for determining continuous compliance with the limit; …

18 A.A.C. § 50.542(f).

Petitioner NSB seems to assert that because the 80-day limit was included at Shell's request, it is an ORL within the meaning of 18 A.A.C. § 50.508. This is not correct. The term "owner requested limit" in the ORL regulations is not intended to encompass every condition or limitation that is included in the permit at the owner's

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> (1) describe the terms and conditions of the approval, including the limits, specific testing, monitoring, recordkeeping, and reporting requirements;
>
> (2) list all equipment covered by the approval;
>
> (3) describe the permit that the limit allows the owner or operator to avoid; and
>
> (4) set out the statement "I understand and agree to the terms and conditions of this approval" followed by a space for the owner's or operator's signature; the ORL becomes effective on the date of the signature.

request, only those that are included to avoid classification as a major source. Thus, not all limits in a permit are ORLs within the meaning of 18 A.A.C. § 50.508.

In this case, Shell requested the 80-day limit to ensure that the exploratory operations will comply with the annual national ambient air quality standard (NAAQS) for nitrogen dioxide (NO_2), *not* to reduce its potential to emit NOx so as to avoid the PSD requirements. In other words, the 80-day limit would be necessary even if the exploratory operation was permitted as a major source. Therefore, the ORL regulations, including the requirements of 18 A.A.C. § 50.542(f)(8), do not apply.

As explained in Shell's 2008 Application to EPA Region 10, the 80-day limit is but one of the operational restrictions that Shell asked to be included in its permit to ensure that the exploratory drilling would not result in NO_2 NAAQS exceedances.[16] In EPA Region 10's February 13, 2008 Staff Ambient Air Quality Impact Analysis Report, the Region characterized the 80-day limit as one of the operating conditions relied on in the modeling analysis to demonstrate Shell's project would comply with the NO_2 NAAQS and indicated that the Region did not view it as an ORL to avoid PSD applicability. EPA Exhibit No. FF-2 at 1 and 6 (EPA's February 13, 2008 Staff Ambient Air Quality Impact Analysis Report). Furthermore, Condition 15.1 is included in the section of the permit entitled "Ambient Air Quality (NO_2, PM10, and SO_2)", rather than the section entitled "Owner Requested Limits Rendering Prevention of Significant

[16] Specifically, Shell's 2008 Permit Application contained a number of operational parameters in its NAAQS analysis, including "the maximum duration at any well site of 80 days (while an OCS source), in any one year" and explained that the modeling analysis takes that limitation into account. EPA Exhibit No. AA-1 (January 8, 2008 Application).

Deterioration (PSD) Review Unnecessary." Final 2008 Permit at 22. Thus, the record clearly demonstrates that EPA Region 10 included Condition 15.1 to make enforceable an operational restriction that was needed to demonstrate compliance with the NO_2 NAAQS, *not* for the purpose of avoiding PSD review.

Because the 80-day limit in Permit Condition 15.1 was included in the Shell permit to protect the NAAQS rather than to avoid PSD applicability, it is not an ORL within the meaning of the ORL regulations. Therefore, the approval criteria in 18 A.A.C. § 50.242(f)(8), including the requirement that the Region demonstrate that the source can meet the limit requested, does not apply to Permit Condition 15.1, and Petitioner NSB's argument is without merit and its Petition regarding this issue should be denied.

ii. EPA Region 10's position is that Shell can comply with the 80-day limit in Permit Condition 15.1 and this decision is supported by the record

Even though EPA Region 10 was not required by the Alaska ORL regulations to determine whether Shell could meet Condition 15.1, the record shows that the Region did in fact consider whether Shell could comply with this permit condition.

Because an exploratory operation is defined to include any associated relief wells, Petitioner NSB questions whether the Kulluk could drill a planned well and any associated necessary relief well within the 80-day limit in Permit Condition 15.1. Petitioner NSB asserts that the Supplemental Statement of Basis "failed to include a demonstration by EPA that Shell could drill both a planned well and a relief well within the 80-day time limitation in Condition 15.1." NSB Pet. at 42. Petitioner NSB argues that because the company could need up to 60 days to drill a planned well, there would be little time left, given the 80-day limit, to drill a relief well if one was needed. *Id.* at 38.

Contrary to Petitioner NSB's arguments, EPA Region 10 reasonably determined, based on careful review and analysis of the information before it, that Shell can comply with the 80-day limit in Condition 15.1. In reaching this conclusion, EPA Region 10 considered a variety of information about relief wells. Specifically, the Region reviewed and considered:

- *Information Shell provided regarding the estimated time needed to drill each individual well*. Specifically, Shell conservatively estimated that it will take 59 days to drill a deeper planned well and 43 days to drill a shallow planned well and explained that the time it would take to drill a relief well, should one even be needed, was estimated to be between 16 and 34 days depending on the depth. EPA Exhibit No. A-2 at 4 (Shell Dec. 29, 2006 Kulluk application). Information provided by Shell also explained that relief wells are used as a last resort and stated that it would take approximately 16 days from blowout to well killing to drill a relief well at a 8000 foot well and about 34 days at a 14,000 foot well). ODPCP at 1-22, 1-23; EPA Exhibit No. E-23 (March 8, 2007 Email from Rodger Steen (Air Sciences) to Dan Meyer (EPA) entitled, "Fleet Activity Spreadsheets," including attachments.
- *Information that Petitioner NSB provided in Susan Harvey's Affidavit, during the public comment period*. Ms. Harvey stated Shell's exploration plan called for 60 days to drill a planned well and stated relief wells are not discretionary. NSB Comments, Harvey Affidavit at 5.
- *Information regarding the likelihood of blowouts and the potential need for relief wells*. Information in the record shows that there is a low probability that a relief well would ever be required. *See e.g*. EPA Exhibit Nos. GG-3, LL-10 and CC-16; RTC at 45.
- *Additional information regarding oil and gas activity in the Arctic.* The Record includes information such as EPA Exhibit No. LL-9, Table 1 (Hydrotechnical Construction, "Operating Requirements for and Historical Operations of Arctic Offshore Drilling Systems in the United States" (March 1994)); EPA Exhibit No.

BB-9.14. (SSOB Attachment 14 Alaska OCS Region – Minerals Management Service, Beaufort Sea Exploration Wells).

- *The recordkeeping and reporting requirements in the permit*. For example, in order to document compliance with Permit Condition 15.1, EPA Region 10 included a permit condition requiring the company to record, among other things, the date and hour for the initial and final operation of the Kulluk at each drill site. S*ee* Final 2008 Permit Conditions 15.3 and 2.4.

While EPA Region 10 recognizes that it is *possible* for Shell to exceed the 80-day limit contained in Permit Condition 15.1, that does not mean that Shell is not *capable* of complying with the limit. As explained more fully below, the company is well aware of the 80-day limitation and there are a number of actions Shell can take to adjust its operational practices to avoid violating the permit condition. *See* RTC at 36. In the simplest terms, for each individual exploratory operation, Shell will need to determine how many days may be spent drilling the planned well while leaving sufficient time to drill a replacement or relief well should one be needed. EPA Region 10 recognizes that Shell may need to curtail planned well drilling sooner than anticipated in order to leave sufficient time for a relief well, but the recordkeeping requirements contained in the permit make it possible for Shell to track the number of days the Kulluk is at each exploratory operation and to plan accordingly. Thus, based on review of the information before it, EPA Region 10's position that Shell can comply with the 80-day limit in Permit Condition 15.1 is reasonable and is supported by the record.

iii. EPA Region 10 adequately responded to the public comments regarding the 80-day limit in Permit Condition 15.1

Petitioner NSB contends that EPA failed to adequately respond to the concern it raised during the public comment period regarding whether both a planned well and any needed relief well could be drilled in compliance with the 80-day limit in Condition 15.1. NSB Pet. at 41. Because EPA Region 10 fully considered and responded to these comments, this argument is unfounded.

The Region acknowledges that NSB's public comments questioned Shell's ability to comply with the 80-day limit. *See* NSB comments at 13 and 27 and Harvey Affidavit at 5. In "Category 7: Eighty Day Operating Limit Not Supported" of the RTC, EPA Region 10 summarized NSB's comments on this topic as follows:

> **COMMENT:** The NSB states that neither EPA nor Shell computed the air pollution associated with drilling a relief well and replacement well when computing the total air pollution from this project. Neither EPA nor Shell provided any information to show how an exploration well, replacement well, and relief well could all be drilled, one after another, within 80 days. Adequate time must be allocated for air pollution associated with a relief well, since this is a necessity in the event of a blowout. Given that it takes approximately 47 days to drill a Relief Well in the Beaufort Sea, EPA must amend the permit to limit to 33 days (80 – 47) the collective time that Shell is allowed to drill a Planned Well and Replacement Well for any given Exploratory Operation.

RTC at 36.

Petitioner NSB's comments recognize that before finalizing the permit, EPA Region 10 evaluated the need to plan for a relief well, including the likelihood of ever needing to drill a relief well. However, NSB still argues the response was insufficient to justify the Region's conclusion that relief wells could be drilled within 80 days. NSB Pet. at 42. Contrary to Petitioner NSB's claims, EPA Region 10 did respond to the

comment and that response was adequate to support the Region's position that Shell could comply with this condition. *See* RTC at 36 and 37. In responding to NSB's comment, EPA Region 10 discussed relief wells and analyzed the low probability that a relief well would ever be required. *See id.* at 44-45. In addition to stressing that the 80-day limit was included at Shell's request to ensure NO_2 protection, *see* EPA Exhibit No. AA-1 at 2 (Shell Jan 8, 2008 Ambient Analysis Report), the Region also reviewed information regarding the likelihood of blowouts and the potential need for relief wells, s*ee* RTC at 37, and considered the recordkeeping and reporting requirements in the permit, *see* Final 2008 Permit at ¶2.

Overall, EPA Region 10 determined that there were sufficient recordkeeping and monitoring requirements in the permit to document compliance with the 80-day limit and that additional permit changes were not necessary. The evaluation was summarized in the RTC as follows:

> It was not necessary for Shell to demonstrate its ability to collectively drill within the 80-day period a Planned Well, Replacement Well, and Relief Well. Shell simply needed to demonstrate its ability to comply with NAAQS assuming compliance with the "operational restrictions. It did that. The resultant permit contains adequate monitoring, recordkeeping and reporting to document compliance with the 80-day limit and applicable emission limits. See Conditions 15.1 and 15.3 of the permit. No permit amendments, including those recommended by NSB, are necessary to assure compliance with the NAAQS or the 245 tpy NO_X limit.

RTC at 36. Thus, contrary to Petitioner NSB's contention, the Region responded directly to NSB's comment in the RTC and explained that it determined additional analysis was not necessary to conclude that the company could comply with the permit condition.

While Petitioner NSB contends that the response is insufficient to satisfy the requirements of 40 C.F.R. Part 124, the RTC clearly meets the standard. Part 124 provides that the permitting authority shall "briefly describe and respond to all significant comments on the draft permit...raised during the public comment period, or during any hearing." 40 C.F.R. § 127.17(a)(2). In this case, the RTC discussion regarding relief wells, as explained fully above, demonstrates that EPA Region 10 gave "serious consideration" to the comments. *See In re RockGen Energy Ctr*., 8 E.A.D. 536, 557 (EAB 1999) (stating that the rules requiring response to public comment "contemplate that the permit issuer will be informed by and give serious consideration to public comments").

While much of the discussion in EPA Region 10's response to NSB's comments regarding relief wells focused on the 245-ton per year limit in Permit Condition 8, the extensive documentation regarding relief wells in the Record , including the RTC itself, demonstrates that the Region gave careful consideration to NSB's comments regarding relief wells, including the company's ability to drill both a planned and relief well with 80 days. Furthermore, the response summarized above is clear and thorough enough to explain the basis for EPA Region 10's view that neither additional information, additional evaluation, nor additional permit language regarding relief wells or Permit Condition 15.1 was necessary. The RTC describes the Region's response to the comments NSB submitted about relief wells and the 80-day limit in Permit Condition 15.1 and fully satisfies the requirements of 40 C.F.R. § 124.17 (a)(2). Therefore, Petitioner NSB's has failed to show that EPA Region 10 did not adequate respond to public comments about Permit Condition 15.1, and review should be denied.

VI. CONCLUSION

As shown above, Petitioners have failed to meet their burden on review because they have not demonstrated that EPA Region 10 committed clear error and have failed to raise any important policy considerations on any of the grounds raised in the Petitions for Review. Accordingly, for the foregoing reasons, EPA Region 10 respectfully requests the EAB to deny the Petitions for Review and uphold the Shell OCS permit in its entirety.

Dated this 6th day of October, 2008.

Respectfully submitted,

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CERTIFICATE OF SERVICE

I hereby certify that copies of the Response of EPA Region 10 to the Petitions for Review (OCS Appeal Nos. 08-01 thru 08-03) were served on the following persons via U.S. Mail and electronic mail:

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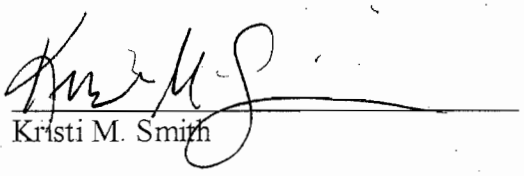

Kristi M. Smith