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

In re:	)
Shell Offshore, Inc.	)
Permit No. R10OCS-AK-07-01, R10OCS-AK-07-02	)

PETITION FOR REVIEW

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INTRODUCTION

Pursuant to 40 C.F.R. §§ 55.6(a)(3) and 124.19(a), Resisting Environmental Destruction On Indigenous Lands, a Project of the Indigenous Environmental Network ("REDOIL"), Northern Alaska Environmental Center, Alaska Wilderness League, Center for Biological Diversity, and Natural Resources Defense Council, hereby petition for review of Permit Nos. R10OCS-AK-07-01 and R10OCS-AK-07-02 issued to Shell Offshore, Inc. ("Shell") on June 12, 2007 by the Environmental Protection Agency ("EPA").

Shell plans to drill up to twelve exploration wells on the Beaufort Sea Outer Continental Shelf ("OCS") over the next three years. This summer, it plans to drill four wells in an area off the coast of the Arctic National Wildlife Refuge using two drill ships, several ice breaking vessels, a series of supply boats, helicopters, and fixed wing aircraft. The Clean Air Act, 42 U.S.C. § 7401, *et seq.*, specifically regulates OCS sources such as the drill ships Shell plans to use. The Act requires that EPA apply the Prevention of Significant Deterioration of Air Quality ("PSD") program to these sources. Accordingly, OCS sources are subject to the more stringent requirements of the PSD program if they emit more than 250 tons of an air pollutant in one year.

It is undisputed that each of the drill ships may emit more than 250 tons of nitrous oxides (NO_x) annually during Shell's proposed exploration drilling. Each drill ship is authorized to emit up to 245 tons NO_x per well, and each may drill up to three wells per year. EPA, however, has allowed Shell to evade the more stringent PSD requirements on the grounds that the ships will emit less than 250 tons of NO_x per well drilled. In so doing, EPA violated the Clean Air Act. There is no regulatory or statutory provision which allows EPA to separate the emissions by well. To the contrary, the Act is unambiguous—if a source, such as the drill ship at issue here, emits more than 250 tons of an air pollutant annually, it must comply with the PSD requirements.

By issuing minor air permits, rather than requiring compliance with the PSD requirements, EPA acted contrary to this plain language and the intent of Congress.

Further, even if EPA could separate the emissions by well, it acted arbitrarily by relying solely on the fact that wells will be more than 500 meters apart to determine that they are not "contiguous or adjacent." There is no showing that EPA evaluated the impacts of emissions at this distance and no justification other than that Shell suggested it.

This issue is an important one. Higher oil prices and aggressive efforts to lease areas in the Arctic OCS are likely to lead to increased oil and gas exploration and associated air pollution. Shell's application is the second in which one ship would drill multiple wells in one year, and in the previous situation, EPA required compliance with PSD requirements. Here, EPA has acted contrary to the clear language of the Clean Air Act and arbitrarily in violation of its own regulations. For those reasons, the Board should accept this appeal, consider full briefing, and vacate the permits issued to Shell.

THRESHOLD PROCEDURAL REQUIREMENTS

Petitioners are Native and conservation groups with an active interest in protecting the Alaskan Arctic and, in particular, the Beaufort Sea. Members of these groups use and enjoy the Beaufort Sea or surrounding Arctic coastal plain for subsistence, recreational, scientific, spiritual, and other uses. These groups have participated extensively in the public processes related to on and offshore oil and gas activities. They have submitted comments, participated in public hearings and other agency proceedings, and filed lawsuits concerning oil and gas leasing, exploration, and development in the Alaskan Arctic, including the National Petroleum Reserve-Alaska and Arctic National Wildlife Refuge. These groups also commented to the Mineral Management Service ("MMS") during its review of Shell's exploration plan and are currently

challenging that agency's approval of the plan in the United States Court of Appeals for the Ninth Circuit. *See Alaska Wilderness League v. Kempthorne*, No. 07-71457 (9th Cir., filed April 16, 2007).

This petition satisfies the threshold procedural requirements set out in 40 C.F.R. § 124. It is timely because it challenges permits issued by EPA on June 12 that were to become effective on July 16. *See* 40 C.F.R. § 124.19(a). Petitioners have standing to petition for review because each submitted comments on the permit application during the public comment period. *Id.* The issues raised in this petition were raised either in those comment letters or in other comments submitted during the relevant time period. *See id.*; 40 C.F.R. § 124.13.

FACTUAL AND STATUTORY BACKGROUND

The Alaska Beaufort Sea stretches from the Chukchi Sea boundary at Point Barrow east to the Canadian border. Vast expanses of this area are untouched by industrial activity and provide important habitat for thousands of species of animals, birds, and fish, including endangered and threatened species such as the bowhead whale and spectacled and Steller's eider. The eastern portion of the Beaufort Sea, including the area in which Shell plans to drill this summer, is offshore of the Arctic National Wildlife Refuge. That area provides habitat for the Porcupine Caribou Herd and polar bears, as well stunning scenery and significant opportunities for wilderness experience including solitude, recreation, and scientific use.

Between 1979 and 2002, the federal government held a total of seven oil and gas lease sales for the Beaufort Sea OCS. *See* MMS, Final Environmental Impact Statement, Beaufort Sea Planning Area Oil and Gas Lease Sales 186, 195, and 202, OCS EIS/EA MMS 2003-001 (February 2003) ("Multi-Sale FEIS") at V-13, *available at* http://www.mms.gov/alaska/

ref/EIS%20EA/BeaufortMultiSaleFEIS_186_195_202/2003_001vol1.pdf. While these lease sales led to the issuance of 660 leases, by early 2003 only 42 of these leases, covering 70,019 acres remained active. *Id.*; *see also* Active Lease Summary Table, *available at* http://www.mms.gov/alaska/lease/hlease/ACTLEASE.HTM. Between 1979 and 2002, 30 exploration wells were drilled in the Beaufort Sea. *See* Multi-Sale FEIS at V-13. All of those wells were abandoned for economic reasons. *Id.*

The situation on the Alaskan OCS, however, is changing. MMS has significantly accelerated oil and gas leasing in the Beaufort Sea over the past four years. Between September 2003 and April 2007, MMS held three lease sales on the Beaufort, and it plans to hold two more in the coming four years. *See* Alaska Lease Sales Schedules *available at* http://www.mms.gov/ld/AKsales.htm; Beaufort Sea - Multiple Sales 186, 195 and 202, *available at* http://www.mms.gov/alaska/cproject/beaufortsale/index.htm. More than 90% of the acreage currently under lease was sold during the first two of these lease sales. *See* Active Lease Summary Table, *available at* http://www.mms.gov/alaska/lease/hlease/ACTLEASE.HTM) (showing that leases totaling 789,095 acres have been issued pursuant to Lease Sales 186 and 195). During the most recent lease sale, oil companies bid on an additional 500,000 acres, for which MMS may issue leases at any time. *See* Sale Day Statistics, *available at* http://www.mms.gov/alaska/cproject/beaufortsale/Sale202/202saleday/SALEDAYSTATS.PDF). MMS also plans to hold three lease sales on the Chukchi Sea OCS over the next five years. *See* Alaska Lease Sales Schedules *available at* http://www.mms.gov/ld/AKsales.htm.

Further, the price of crude oil has increased in the recent past and is projected to remain high. *See* Energy Information Administration, Weekly History of the Spot Price of Crude Oil *available at* http://tonto.eia.doe.gov/dnav/pet/hist/wtotworldw.htm (showing that oil prices have

remained above $30/barrel since May 2004, above $45/barrel since June 2005 and recently exceeded $67/barrel). Given the government's aggressive leasing of the Beaufort Sea in recent years and the persistently high price of oil, exploration drilling in the Arctic Ocean is likely to increase dramatically in coming years.

Exploration drilling activities, like those proposed by Shell this summer, may contribute considerably to air pollution above the Beaufort Sea and adjacent coastal areas. Congress has noted that "[t]he construction and operation of OCS facilities emit a significant amount of air pollution which adversely impacts coastal air quality in the United States." S. Rep. No. 101-228 (1989), *reprinted in* 1990 U.S.C.C.A.N. 3385, 3462. "[D]rilling a single exploratory OCS well can cause emissions in excess of one hundred tons of NO. A major uncontrolled offshore oil project can emit pollution in a year which exceeds pollutants emitted by one hundred thousand automobiles (meeting 1988 California emission standards), each traveling 10,000 miles." *Id.* Further, Shell estimates that each drill ship and its supporting vessels will burn more than 1.4 million gallons of diesel fuel per year. *See* Outer Continental Shelf Pre-Construction Air Permit Application, Shell Kulluk 2007 – 2009 Beaufort Sea Exploratory Drilling Program (Dec. 29, 2006) ("Kulluk Application") at 7, Tables 3 & 4; Outer Continental Shelf Pre-Construction Air Permit Application – Frontier Discover 2007 – 2009 Beaufort Sea Exploratory Drilling Program (Dec. 29, 2006) at 7, Table 2.[1] Together, therefore, the drill ships and vessels will burn more than five million gallons of diesel fuel each summer to drill four wells. Such operations emit criteria pollutants including nitrogen oxides, sulfur dioxide, carbon monoxide, coarse particulate

[1] The applications, decisions, and permit documents for the two drill ships are largely identical. Accordingly, for ease of reference, Petitioners cite only documents applicable to the Kulluk drill ship.

matter, and volatile organic compounds, as well as the greenhouse gas carbon dioxide. *See* Kulluk Application at 7, Tables 1 & 2.

In response to concerns about air pollution from sources on the OCS, Congress amended the Clean Air Act in 1990 to include a new provision, Section 328, which mandates "requirements to control air pollution from [OCS] sources." 42 U.S.C. § 7627(a)(1). That provision defines an "OCS source" to include:

> any equipment, activity, or facility which—
> (i) emits or has the potential to emit any air pollutant,
> (ii) is regulated or authorized under the Outer Continental Shelf Lands Act [43 U.S.C. §§ 1331 *et seq.*], and
> (iii) is located on the Outer Continental Shelf or in or on waters above the Outer Continental Shelf.
> Such activities include, but are not limited to, platform and drill ship exploration, construction, development, production, processing, and transportation. For purposes of this subsection, emissions from any vessel servicing or associated with an OCS source, including emissions while at the OCS source or en route to or from the OCS source within 25 miles of the OCS source, shall be considered direct emissions from the OCS source.

Id. § 7627(a)(4)(C). Significantly, Section 328 also requires EPA to promulgate regulations to ensure that OCS sources comply with the PSD provisions of the statute. *Id.* § 7627(a)(1) (requiring compliance with "part C of subchapter I" of the Act).

As its name suggests, the PSD program is intended to prevent existing air quality levels from deteriorating. Its provisions, therefore, seek to protect public health and welfare from the adverse effects of air pollution and "to insure that economic growth will occur in a manner consistent with the preservation of existing clean air resources." 42 U.S.C. §§ 7470(1), (3). The PSD provisions also "assure that any decision to permit increased air pollution . . . is made only after careful evaluation of all the consequences of such a decision and after adequate procedural

opportunities for informed public participation in the decisionmaking process." 42 U.S.C. § 7470(5).

A central provision of the PSD program is the requirement that, prior to constructing any "major emitting facility," an applicant must obtain a permit from EPA. 42 U.S.C. § 7475(a)(1). To obtain a PSD permit, the owner or operator of a proposed major emitting facility must demonstrate that emissions from construction or operation of the facility will not cause or contribute to a violation of any national ambient air quality standard or other applicable emission standard and must conduct monitoring as necessary to determine the effect of emissions on air quality. 42 U.S.C. §§ 7475(a)(3), (a)(7). The proposed facility also will be "subject to the best available control technology for each pollutant subject to regulation . . . emitted from, or which results from, such facility." *Id.* § 7475(a)(4). EPA has defined "best available control technology" to mean "an emissions limitation (including a visible emission standard) based on the maximum degree of reduction for each pollutant subject to regulation under Act . . . ." 40 C.F.R. § 52.21(b)(12).

As relevant here, a "major emitting facility" includes "any . . . source with the potential to emit two hundred and fifty tons per year or more of any air pollutant." 42. U.S.C. § 7479(1). Pursuant to Section 328 of the Clean Air Act, these provisions are applicable to OCS sources. *Id.* § 7627(a)(1). Thus, an OCS source is a major emitting facility subject to the PSD requirements if it emits more than 250 tons of an air pollutant in one year. To determine whether an OCS source exceeds the 250-ton limit, EPA calculates its "potential to emit," which is defined as "the maximum emissions of a pollutant from an OCS source operating at its design capacity." 40 C.F.R. § 55.2. Pursuant to Clean Air Act Section 328, "emissions from any vessel servicing or associated with an OCS source, including emissions while at the OCS source or en route to or

from the OCS source within 25 miles of the OCS source, shall be considered direct emissions from the OCS source." 42 U.S.C. § 7627(a)(4)(C). EPA has interpreted this requirement to mean that those emissions are included in the calculation of an OCS source's potential to emit. *See* 40 C.F.R. § 55.2.

In certain circumstances, EPA considers multiple sources as part of the same "major emitting facility. *See* 40 C.F.R. § 51.166(b) (defining "building, structure, facility, or installation" as "all of the pollutant-emitting activities which belong to the same industrial grouping, are located on one or more contiguous or adjacent properties, and are under the control of the same person (or persons under common control) . . . .").[2]

In the 17 years since the 1990 adoption of Clean Air Act Section 328, ten exploration wells have been drilled on the OCS in the Beaufort Sea.[3] In only one of those instances has the same drilling vessel, operated by the same company, drilled multiple wells in the Arctic Ocean in one calendar year. In 1993, the Kulluk—one of same drill ships Shell proposes to use this summer—drilled three wells on three different leases spread across two prospects on the OCS in the Beaufort Sea. *See* Shell Kulluk Drilling Unit, OCS Minor Permit No. R10OCS-AK-07-01 & Frontier Discoverer Drilling Unit, OCS Minor Permit No. R10OCS-AK-07-02, Response to Public Comments ("Response to Comments") (June 12, 2007) at 57; Beaufort Sea Exploration Wells, *available at* http://www.mms.gov/alaska/fo/wellhistory/BS_WELLS.HTM. At that time,

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[2] EPA regulations subject OCS sources within 25 miles of states' seaward boundaries to federal requirements as well as the state requirements of the corresponding onshore area. *See* 40 C.F.R. 55.3(b). These requirements include the State of Alaska PSD program. *See id.* § 55.14(e)(2). As relevant here, the Alaska regulations are substantially similar to the federal PSD regulations. *See* 18 AAC §§ 50.306, 50.040(h).

[3] Nine of these ten wells were subject to Section 328. *See* MMS, Beaufort Sea Exploration Wells *available at* http://www.mms.gov/alaska/fo/wellhistory/BS_WELLS.HTM.

EPA required that the Kulluk comply with the PSD requirements and issued a PSD permit for the Kulluk based on the total estimated NO_x emissions from all of the drill sites. *See* Response to Comments at 57.

PROCEDURAL HISTORY

MMS has authorized Shell to drill up to twelve exploration wells on twelve lease tracts in the Beaufort Sea over the next three years. *See* Environmental Assessment (OCS EIS/EA, MMS 2007-009, February 2007) and Finding of No Significant Impact (February 15, 2007) for Shell Offshore, Inc.'s Beaufort Sea Exploration Plan, available at http://www.mms.gov/alaska/ref/EIS%20EA/ShellOffshoreInc_EA/SOI_ea.pdf. During this upcoming summer, Shell plans to drill four exploration wells at the Sivulliq prospect in Camden Bay, which is offshore of the Arctic Refuge. *Id.* Over the following two years, "Shell proposes to drill an undetermined number of wells on additional prospects." *Id.* The additional prospects include two others in Camden Bay, two farther east off the coast of the Arctic Refuge, and one off of the eastern boundary of the National Petroleum Reserve-Alaska. *Id.*

To conduct these exploration activities, Shell plans to bring two drilling vessels, the Kulluk and Frontier Discoverer, and two large icebreakers to the Beaufort Sea. *Id.* at 2-3. In addition, Shell will use "several ice-strengthened supply boats," including at least three vessels for "ice management, anchor handling, and supplies." *Id.* at 3. Shell also will operate up to six helicopters and fixed-wing aircraft at any one time. *Id.* at 4.

On December 29, 2006, Shell submitted two air permit applications to EPA for preconstruction permits for the proposed exploration drilling. According to the application, the drilling seasons will range up to 120 days per year, with operations at successive drill sites lasting 30 to 60 days. Kulluk Application at 1. The applications show that the Kulluk and

Frontier Discoverer each may drill up to three drill site locations per year. *Id.* The applications state that "each drill site is a stationary source" and that each application is "a single application for multiple portable stationary sources." *Id.* Shell also stated its intention to "obtain at least a 500-meter Safety Exclusion Zone" from the Coast Guard in order to "keep non-project related people and vessels a safe distance away from the drilling vessel." *Id.*, Appendix D at 6.

On March 26, 2007, Shell submitted an addendum to the permit applications. In that addendum, Shell adds that "[i]n the interest of ensuring that each drill site (the associated activities) remains as a separate and distinct source from other [Shell] drill sites, [Shell] agrees to maintaining a minimum 500 meter distance between well sites in any one year." Shell Kulluk and Frontier Discoverer Beaufort Sea Exploratory Drilling Program Addendum, OCS Pre-Construction Permit Applications ("Application Addendum") at 6.

On March 30, 2007, EPA issued draft minor source preconstruction permits for the drill ships and two documents entitled "Statement of Basis" explaining the agency's decision. *See* Statement of Basis For Air Quality Control Minor Permit No. R10OCS-AK-07-01 Approval to Construct, Shell Offshore Inc., The Kulluk Drilling Unit ("Kulluk Statement of Basis") (March 30, 2007). EPA then allowed for public comment on the draft permits and statements of basis. During that comment period, Petitioners and other interested parties submitted public comments raising the arguments made in this petition.

On June 12, 2007, EPA issued final Air Quality Control Minor Permits for the two drill ships as well as a Response to Comments. *See* Alaska Outer Continental Shelf Air Quality Control Minor Permit, Approval to Construct, Kulluk Drilling Unit ("Kulluk Permit") (June 17, 2007) at 1; Response to Comments. The permits would become effective on July 16, 2007 and authorize Shell to emit the regulated pollutants on "[a]ny drill site within a Beaufort Sea [OCS]

lease block authorized by [MMS]." Kulluk Permit at 1. They do not limit the time period during which Shell may conduct these exploration activities or the number of wells Shell may drill.

EPA recognizes that each drill ship may emit up to 245 tons of NO_x per well drilled. *See* Kulluk Statement of Basis at 13. The agency has not limited the number of wells each drill ship may drill annually, and Shell has stated that each may drill up to three. Thus, each ship may emit three times 245 tons of NO_x annually. EPA, however, concluded that it was appropriate to issue separate minor permits for the Kulluk and Frontier Discoverer and that the more stringent PSD requirements need not be satisfied. Kulluk Statement of Basis at 11. EPA reaches this conclusion by considering the emissions from each well site separately. *Id.* at 9-11.

The agency then states that the emissions from the separate well sites can be aggregated to comprise one facility under 40 § C.F.R. 51.166(b)(6), only if they are closer than 500 meters apart. *Id.* at 10 ("What needs to be determined is the maximum distance between two OCS sources for which EPA still considers them to remain close enough in proximity so as to be considered contiguous or adjacent. We are determining that distance, in this case, to be 500 meters."). On the grounds that none of the well sites will be closer than 500 meters, EPA determines that the drill ships are not "major emitting facilities" subject to regulation under the PSD program.

ARGUMENT

By permitting Shell's two drill ships as minor sources, rather than major emitting facilities, EPA has allowed Shell to avoid meeting the more stringent requirements of the PSD program. To reach that result, EPA relies both on an impermissible interpretation of the plain language of the Clean Air Act and an arbitrary determination under its own regulations. By determining that it could grant permits on the basis of emissions at each individual well site,

rather than on the basis of the emissions from each drill ship, EPA has violated the plain language of the Clean Air Act. Second, even if EPA could permit the individual well sites, it acted arbitrarily by determining, without any justification, that the sites were not "contiguous or adjacent" if they were more than 500 meters apart.

I. EPA ACTED CONTRARY TO THE PLAIN LANGUAGE OF THE CLEAN AIR ACT BY PERMITTING THE INDIVIDUAL WELL SITES, RATHER THAN THE DRILL SHIPS, AND, THEREBY, ALLOWING SHELL TO AVOID MEETING THE PSD PERMIT REQUIREMENTS.

As explained above, in 1990, Congress amended the Clean Air Act to cover emissions on the OCS and specifically required that the PSD program apply to these "OCS sources." In this case, EPA has recognized that the drill ships are OCS sources for purposes of the Clean Air Act, but has allowed Shell to avoid regulation under the PSD program by considering separately the emissions from different wells drilled during the same year. That decision contravenes the clear language of the Clean Air Act.[4]

The applicable law is very clear: the PSD requirements apply to "any . . . source with the potential to emit two hundred and fifty tons per year or more of any air pollutant." 42 U.S.C. § 7479(1). Congress has specifically made those requirements applicable to the OCS. *See* 42 U.S.C. § 7627(a). And, in the OCS context, Congress has specifically defined the term "source" to include drill ships like the ones Shell proposes to use this summer. *See id.* § 7627(a)(4)(C). Thus, if OCS sources, like the drill ships at issue here, have the potential to emit more than 250 tons of any air pollutant in a given year, they must comply with the PSD requirements.

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[4] It also is contrary to the only permit decision previously made for an OCS source in the Arctic under the 1990 amendments to the Clean Air Act. *See supra* pp. 8-9.

EPA, however, has acted contrary to this clear language by permitting the drill ships as minor sources not subject to the PSD requirements. It has done so despite acknowledging that the "OCS sources" subject to regulation are the drill ships, *see* Response to Comments at 52 ("EPA agrees with the commenter in that the OCS source is the drillships [sic] and its associated vessels."); Kulluk Statement of Basis at 5-6 (identifying the emissions sources from the Kulluk as the "OCS Source"), and that each ship may emit more than 250 tons of NO_x, a regulated air pollutant, during the upcoming year. *See supra* p. 11 (explaining that each vessel may emit up to 245 tons of NO_x per well and that, each may drill up to three wells each summer). Given those facts, EPA must require compliance with the PSD requirements.

EPA has allowed Shell to avoid the PSD requirements based on the conclusion that each drill ship will emit less than 250 tons of NO_x at each well site. To reach that determination, EPA first finds that a drill ship becomes an OCS source once it is attached to the ocean floor. It then concludes that, effectively, when the drill ship finishes drilling and is disconnected from the ocean floor, it stops being an OCS source and then becomes a brand new OCS source, subject to a separate PSD determination, when it is re-attached to the ocean floor to drill a new well. *See, e.g.*, Kulluk Statement of Basis at 9-10; Response to Comments at 51 ("While the drillships s [sic] are in transit, the OCS Air Regulations do not apply to the emissions units on the drillships s [sic] that would otherwise be subject to regulation under those rules while the drillships is anchored to the sea floor.") & 52. The law does not allow this piecemeal permitting process.

The Clean Air Act does not allow EPA to treat emissions from the well sites separately for purposes of determining whether the PSD requirements apply. Nothing in the Clean Air Act or the relevant federal or state regulations allows EPA to separate the emissions from the same source, during the same year, based on the well site at which those emissions occur. By doing

so, EPA has applied a new definition—one not authorized by Congress—of the term "source." For purposes of these permits, EPA effectively defines an "OCS source" as the drill ship at a single well site. *See, e.g.,* Kulluk Statement of Basis at 9 ("[I]t is the above activity at an OCS drill site that EPA is permitting, and not the Kulluk wherever it goes."). Congress did not authorize that definition; it very specifically defined "OCS source" to include equipment such as drill ships, without regard to location or number of wells drilled.

Further, to allow EPA to separate emissions from the same source by location contravenes the clear intent of Congress, which specifically made the PSD requirements applicable to sources that emit more than 250 tons of a pollutant per year. EPA's determination here will allow each drill ship to emit up to three times that limit annually. *See supra* p.11 (stating that each vessel may emit up to 245 tons of NO_x per well and may drill up to three wells each summer). Congress did not create an exception for OCS sources allowing them to exceed the 250-ton annual limit, and EPA should not be allowed to do so here.[5]

Accordingly, EPA applied a definition of "source" that does not comport with the plain language of the Clean Air Act. It may not separate the emissions from the drill ships by well site

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[5]EPA also has acted contrary to the plain language of the Clean Air Act in concluding that the drill ships are OCS sources only when attached to the ocean floor. *See* Kulluk Statement of Basis at 9. EPA has determined that, because OCSLA only allows regulation of vessels that are "permanently or temporarily attached to the seabed," the definition of "OCS source" under the Clean Air Act includes vessels only during the time that they are attached. *See* 40 C.F.R. § 55.2; Outer Continental Shelf Air Regulations, 57 Fed. Reg. 40792, 40793 (Sept. 4, 1992); *cf.* Alaska Stat. § 46.14.990(4). Congress, however, required that an OCS source be "regulated or authorized under [OCSLA]" and "on the [OCS] or in or on waters above the [OCS]." 42 U.S.C. §§ 7627(a)(4)(ii) & (iii). EPA's interpretation of subpart (ii) as allowing regulation of drill ships only when they are attached to the ocean floor renders subpart (iii) entirely redundant. Ultimately, it is not necessary to resolve this issue for purposes of this appeal. Whether or not the drill ships are OCS sources while not attached to the sea floor, EPA still may not separate their emissions by well site.

and, instead, must consider all emissions in one year to determine whether a drill ship must meet the PSD requirements. Because each drill ship is authorized to emit more than 250 tons of NO_x per year, the Clean Air Act mandates compliance with the PSD requirements.

II. EVEN IF EPA COULD TREAT THE SEPARATE WELLS AS INDIVIDUAL SOURCES, IT ACTED ARBITRARILY BY RELYING, WITHOUT ANY JUSTIFICATION, ON A 500-METER LIMIT AS THE SOLE CRITERION TO DETERMINE THAT THE SOURCES ARE NOT "CONTIGUOUS OR ADJACENT."

EPA determined that emissions from each well site should be treated separately in determining whether PSD requirements must be met. As explained above, that determination conflicts with the plain language of the Clean Air Act. Even if, however, EPA could separate the emissions by well site, it acted arbitrarily in deciding that emissions from the well sites need not be aggregated to determine whether PSD requirements must be met.

Emissions must be aggregated from OCS sources if they "belong to the same industrial grouping, are located on one or more contiguous or adjacent properties, and are under the control of the same person . . . ." 40 C.F.R. § 51.166(b)(6). EPA determined that, for the well sites here, the first two requirements are met—the sources are all owned by Shell and all share the same industrial code. According to EPA, therefore, whether the sources should be aggregated depends on whether they are "contiguous or adjacent." *See* Kulluk Statement of Basis at 10 ("What needs to be determined is the maximum distance between two OCS sources for which EPA still considers them to remain close enough in proximity so as to be considered contiguous or adjacent.").

EPA has based that determination solely on the distance between drill sites. In its permit application, Shell suggested that emissions from well sites be aggregated only if they are closer than 500 meters. *See* Application Addendum at 6; Kulluk Statement of Basis at 10. Without any explanation or justification, EPA simply has accepted Shell's suggestion and issued a blanket

statement that emissions from wells located further than 500 meters apart need not be aggregated. *See* Kulluk Statement of Basis at 10 ("We are determining that distance, in this case, to be 500 meters.").[6]

EPA offers no explanation, other than the fact that Shell suggested it, for choosing 500 meters. *See id.*; Response to Comments at 67-68.[7] Neither the Statement of Basis nor the Responses to Comments reflect any evaluation of the effects of emissions from sources 500 meters apart or, in fact, at any other distance. Further, Congress required that emissions from vessels up to 25 miles from the drill ship be included as emissions from the OCS source. 42 U.S.C. § 7627(a)(4)(C). Though this statement may not directly inform whether two sources are "contiguous or adjacent," it does evidence congressional intent that EPA should consider emissions from significantly farther apart than 500 meters.

Under these circumstances, EPA cannot rely solely on the simple assertion that the sources are more than 500 meters apart to justify the conclusion that they are not "contiguous or

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[6] In its Response to Comments, EPA also states that

> [t]he emissions generating activity occurs within a very, very small fraction of the entire area controlled by Shell. A "common sense notion of plant" does not support aggregating emissions across vast swaths of area upon which no emissions generating activity occurs. Even if two drillships should be operating within the same lease block, the ships could still be separated by a number of miles.

Response to Comments at 59-60. These statements are similarly arbitrary. The permit does not limit the location at which Shell may drill, other than to say that the sites may not be closer than 500 meters. There is no reason, therefore, to assume that the well locations will be far apart.

[7] Petitioners do not agree that EPA should determine whether sources are "contiguous or adjacent" based solely on their distance from each other. In this case, however, the Board need not address that issue because the distance chosen by EPA is arbitrary and, accordingly, cannot form the sole basis for the agency's determination in any event.

adjacent."[8] EPA has provided no rational basis for choosing the 500 meter cutoff and has shown no facts that might justify why facilities located farther apart than 500 meters are, by definition, not "contiguous or adjacent." The agency, therefore, has acted arbitrarily. *See, e.g., Sierra Club v. EPA*, 346 F.3d 955, 961 (9th Cir. 2003) (stating that the agency must be able "to articulate a rational connection between the facts found and the choice made") (internal punctuation and citation omitted); *Resources Ltd. v. Robertson*, 35 F.3d 1300, 1304 (9th Cir. 1994).

CONCLUSION

EPA violated the clear language of the Clean Air Act and acted arbitrarily in violation of its own regulations in determining that the exploration drilling proposed by Shell does not require PSD permits. Accordingly, the Environmental Appeals Board should accept this petition, consider full briefing on these issues, and vacate the permits subject to this appeal.

Respectfully submitted this 16th day of July, 2007,

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[8] It is also noteworthy that Shell proposed a 500-meter "Safety Exclusion Zone" from the Coast Guard to keep vessels away from the drill sites. *See* Kulluk Application, Appendix D at 6. It appears, therefore, that Shell does not intend to drill simultaneously at locations closer than 500 meters in any event.