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

In re:)
Shell Offshore, Inc. Conical Drilling Unit <i>Kulluk</i> OCS Permit No. R10OCS030000)) OCS Appeal Nos. 11-05, 06, & 07))

MOTION FOR LEAVE TO FILE A REPLY BRIEF IN SUPPORT OF THE IÑUPIAT COMMUNITY OF THE ARCTIC SLOPE'S PETITION FOR REVIEW

The Environmental Appeals Board's Order Governing Petitions for Review of Clean Air Act New Source Review Permits creates a presumption against the filing of reply briefs in new source review proceedings before the Board. Standing Order at 3, ¶ 3 (April 19, 2011). Petitioner, Iñupiat Community of the Arctic Slope (ICAS), hereby moves the Board for leave to file a short reply brief in support of its Petition for Review of the air permit issued for Shell's *Kulluk* drillship.

A minor source air permit for the *Kulluk* was previously appealed to the Board, and ICAS appreciates the Board's attention to these matters pertaining to air quality in the Arctic. As with the last minor source permit for the *Kulluk*, this air permit sets an important precedent in that it permits offshore oil and gas activities in the Arctic under a synthetic minor source permit – instead of requiring Shell to obtain a major source, PSD permit. Allowing oil and gas companies to escape a best available control technology (BACT) review for their Arctic operations is a grave concern for local communities whose members spend substantial periods of time offshore in close proximity to emissions units while engaged in subsistence activities.

ICAS filed its Petition on November 28, 2011 and two other petitions were filed that same date. (Docket Nos. 1, 2, 3.) Region 10 and Shell filed their responses to the petitions on December 21, 2011. (Docket Nos. 9 and 10.) Due to the arguments and facts presented by the Region in its response brief, ICAS feels it is appropriate and necessary to submit a concise reply brief (less than 10 pages and just under 3,000 words) and seeks leave to do so for the reasons articulated below.

First, in its response, Region 10 is relying upon administrative orders that were not discussed in the Region's statement of basis or response to comments for the *Kulluk* permit. ICAS seeks leave to address these orders in its reply brief.

Second, ICAS did not have the final certified record when it filed its Petition and there are several documents in the record (or that ICAS assumed would be in the record) that are necessary to presenting ICAS's arguments. Therefore, ICAS seeks leave to discuss these relevant record documents.

Third, Region 10 has focused its arguments regarding Shell's methane emissions and is arguing that Shell will only encounter a finite amount of methane while drilling. ICAS seeks leave to respond to this point especially in light of the contradictory evidence before the agency regarding the amount of methane that can be encountered while drilling a well. The Region must make a reasoned permitting decision and an evolving rationale for its decisions indicates the need for a remand. *See e.g.*, *See In re Austin Powder Co.*, 6 E.A.D. 713, 719-20 (EAB 1997) (agency must make a reasoned permitting decision).

Fourth and finally, ICAS requests the opportunity to clarify its positions and clear up any confusion caused by the Region's response to ICAS's Petition. In particular, ICAS is seeking leave to discuss: 1.) why the permit conditions for NOx and CO are inherently unenforceable

given the myriad of variables at stake; 2.) why the four overlapping comment periods deprived the public of an opportunity to submit reasoned comments on the *Kulluk* permit; 3.) why it is the Region who inaccurately characterized EPA's findings regarding Ozone and why, as a result of EPA's findings, the Region needed to further consider Ozone in the environmental justice analysis; and 4.) why additional consideration of the impacts from NO₂ emissions in subsistence use areas is necessary in the Region's environmental justice analysis.

CONCLUSION

For these reasons, ICAS respectfully requests that the Board grant it leave to file the attached reply brief.

Respectfully submitted,

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Dated: December 29, 2011

CERTIFICATE OF SERVICE

I hereby certify that copies of ICAS's Motion for Leave to File a Reply Brief, the

Proposed Reply Brief, and Word Certification were served by electronic mail upon the following

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OCS Permit No. R10OCS030000)
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[PROPOSED] REPLY BRIEF IN SUPPORT OF THE INUPIAT COMMUNITY OF THE ARCTIC SLOPE'S PETITION FOR REVIEW

In support of its Petition for Review of the air permit issued to Shell Offshore Inc. for its *Kulluk* drillship, the Iñupiat Community of the Arctic Slope (ICAS) submits the following limited points addressing the responses filed on December 21, 2011 to its Petition. This brief is accompanied by a motion demonstrating why the points herein overcome the presumption against filing reply briefs in new source review cases as discussed in the Board's April 2011 Standing Order. New Source Review Standing Order at 3, ¶ 3 (April 19, 2011).

In short, the responses fail to demonstrate that Region 10 of the Environmental Protection Agency (EPA) issued a lawful air permit. Shell's *Kulluk* operations have the potential to emit NOx, CO, SO₂, and GHGs far in excess of the major source thresholds for these pollutants. Nevertheless, the *Kulluk* permit fails to contain enforceable limits that will ensure Shell's emissions remain below the major source thresholds. Additionally, Region 10 erred in holding an abbreviated public process for the permit and by failing to notify members of Iñupiat communities that an interpreter was available during the public hearing on the permit. The Region further erred in preparing its environmental justice analysis with resulting consequences

for locally affected, minority, subsistence communities. Therefore, ICAS respectfully requests that the Board remand the permit to Region 10 for further proceedings.¹

ARGUMENT

1. The Permit Fails To Contain Enforceable Provisions That Ensure Shell's *Kulluk* Operations Will Remain A Minor Source.

Region 10 erred in issuing a synthetic minor source air permit for the *Kulluk* that fails to contain enforceable permit limits on Shell's emissions of NOx, CO, GHGs, and SO₂. A major source permit is necessary here to provide both the operational flexibility Shell requires and the protection of air quality for the benefit of local communities as required by law.

a. NOx and CO blanket emission limits are insufficient.

Shell's *Kulluk* operations as described by Region 10 are "variable" and change "from well-to-well and season-to-season due to factors such as weather, sea state, remoteness of the drilling site." RTC at 27 (J-3 at J243). The operations include numerous emission units the emissions from which "will also vary depending on the activity being conducted," *i.e.*, construction of the mudline cellar or exploratory drilling or different amounts of ice breaking depending upon the ice that is present. *Id.* The Region's efforts to capture all these variables and translate them into practically enforceable permit conditions have failed.

The parties agree that for NOx and CO the permit contains blanket or "source-wide" emissions limits, Region 10 Br. at 15, the development and use of emissions factors (rather than direct monitoring of NOx and CO emissions), and monitoring of fuel use and calculation of NOx

As the Board is likely already aware, in a December appropriations bill Senator Murkowski included a provision transferring authority for OCS air permitting from EPA to the Department of Interior for those areas offshore of the North Slope of Alaska. HR3671. This provision provides that it does not "invalidate or stay (1) any air quality permit pending or existing as of the enactment of this Act; or (2) or any proceeding related thereto." *Id.* (d)(1)-(2). As a result of the language in section d, a remand of the *Kulluk* air permit to Region 10 should not deprive EPA of jurisdiction over this matter.

and CO emissions (based on the emission factors). Given the variability of Shell's operations these provisions fail to ensure Shell will remain a minor source.

Nor does the Region's reliance upon guidance for other sources, such as VOC surface coaters, justify the permit conditions at issue here. None of this guidance was designed for or based on offshore oil and gas operations in the Arctic. Rather, the guidance documents upon

The Region also cites to the Administrator's order in: *In re Matter of Orange Recycling and Ethanol Production Facility, Pencor-Masada Oxynol, LLC*, Pet. No. II-2001-05 (Adm'r Apr. 8, 2002) (B-17 at B642-43). Region 10 Br. at 15. However, that order also fails to support the *Kulluk* permit. There the permit called for "extensive data collection procedures and quality assurance measures" that included "stack testing and direct real-time continuous emissions measurements (CEM) to track the total daily emissions from the facility" in addition to a "a 365-day 'rolling cumulative total' emissions limit" with emissions recorded each day. *In re Matter of Orange Recycling, Pencor-Masada Oxynol*, (B-17 at B643). Here, neither CEMs nor stack testing are being used to track the daily total emissions.

which the Region relies were designed and tailored for other industries based on years of data from their operations, and these documents fail to account for the variables at play in Shell's operations. 1989 PTE Guidance (B4 at B180-1); 1995 Grain Facility Guidance (B10 at B265-6). If ice conditions are far worse than predicted and drilling or mudline cellar construction requires engines to operate at higher levels than anticipated, the permit will not account for these facts because generic emissions factors are used to calculate Shell's emissions (instead of actual monitoring). Calculations are only made on a weekly basis and not daily to ensure the operator has time to react if the emissions approach the blanket limits in the permit. At the end of the day, the Region has created too many values to sub-in for the variables in Shell's operations and by relying upon these values (instead of real world data) may never know truly what the emissions are from Shell's *Kulluk* operations let alone ensure they remain below the major source thresholds.

In particular, the values used for the emissions factors are a grave concern. No matter how the Region characterizes them, they are based on a test done at the beginning of the season that includes only three operating loads. Region 10 Br. at 16. The Region's decision to generate generic emissions factors from such tests that are applicable across the board, while simultaneously toting the variability of Shell's operations simply fails to comport. Nor has the Region justified its reliance on data from Shell's *Discoverer* operations, which are distinct from its *Kulluk* operations whether subject to post-combustion controls or not.³ At the end of the day,

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Region 10 only distinguishes ICAS's argument that the *Discoverer* stack tests cannot be used for the *Kulluk* because the *Discoverer* is subject to BACT and the *Kulluk* operations are not, by stating that the relevant engines are not subject to post-combustion controls. Region 10 Br. at 21. However, as the Board is aware, BACT encompasses far more than just post-combustion controls. For example, Shell committed to use ultra low sulfur fuel (15ppm) in its *Discoverer* operations but is only using low sulfur fuel (100 ppm) for its *Kulluk* operations. RTC at 28 (J-3 at J244). The use of different types of fuel with varying sulfur contents impacts the NOx

the *Kulluk* permit contains nothing more than blanket restrictions on NOx and CO emissions without sufficient emissions factors or monitoring to ensure that these restrictions are met.

b. The greenhouse gas permit conditions are not practically enforceable.

Region 10 argues that it is relying upon an inherent limit in Shell's operations to ensure that Shell's methane emissions will remain below a certain level. Region 10 Br. at 25. The Region argues this limit is based on the "finite amount of methane present in the hydrocarbon-bearing zones into which Shell will drill." *Id.* However, when faced with two very different estimates of this "finite amount" of methane, SOB for ConocoPhillips at 35 (ICAS Exhibit 12) (183 tons per month of CO_{2e}); Kulluk RTC at 34 (J3 at J252) (17 tons per month of CO_{2e}), the Region simply accepted them both. This acceptance undermines the agency's conclusion that methane is subject to an inherent limitation. Moreover, the Region failed to articulate a rationale basis for accepting the two very different "finite" amounts of methane. It also failed to explain why it was appropriate to rely on both ConocoPhillips' estimate, which is based on a compilation of industry data compiled by an industry trade group, and Shell's estimate, which is based on the results from drilling a handful of wells in the Arctic. Without these explanations and a rational decision resulting there from, there is nothing to which the Board can defer on regarding the methane limitations in the *Kulluk* permit.

2. Region 10 Committed Clear Errors In The Public Process For The Permit And In Undertaking Its Environmental Justice Analysis.

Region 10 responded to ICAS's public participation and environmental justice arguments jointly. Region 10 Br. at 37. Thus, ICAS will address these two important issues collectively as well.

emissions documented during the stack tests – thus making the *Discoverer* results inapplicable to the *Kulluk* emission units.

a. The public process for the permit was flawed.

The Region failed to provide sufficient time for local community members to comment on the *Kulluk* air permit because of the overlapping public comment periods. Between July and September, Region 10 accepted public comments on four different air permits for offshore oil and gas exploration in the Arctic. Region 10's argument that it provided 46-days for public comment on the *Kulluk* permit, Region 10 Br. at 37, is in error. In reality, local communities only have the resource to comment upon one air permit at a time. As a result of the overlapping comment periods, local communities had less than 30 days to review the record for the *Kulluk* permit and submit their comments. ICAS recognizes this is a unique situation and that multiple air permits are not usually under consideration for the same airsheds at the same time. However, this does not mean that local communities should be forced to shoulder the burden of responding to so many permit applications at once. The decision to overlap the public comment periods deprived local communities of the opportunity to weigh the permit records and provide meaningful public comments.

With respect to the use of an interpreter at the one public hearing for the permit, the record fails to show that the Region made it known an interpreter was available. The transcript from the public hearing on the *Kulluk* air permit contains a lengthy introduction by EPA that fails to indicate the availability of an interpreter. Kulluk Public Hearing Transcript (I39 at I1990-I1994). The record fails to contain the sign-in sheet referenced by the EPA employee in the transcript, *id.* at I1993, and by ICAS in its Petition. ICAS Petition at 10. Therefore, there is no way to verify whether a statement was made regarding a translator on the sign-in sheet or

whether that statement was in English.⁴ Having an interpreter present, Region 10 Br. at 39, and letting people know an interpreter is available to those who may need the interpreter's services are two entirely different matters. By failing to let members of the public know that an interpreter was available and in a language they could understand, Region 10 failed to provide an adequate opportunity for public involvement at the hearing on the permit.

b. Region 10 committed clear error by failing to address its own Ozone findings and proposed new standard in the environmental justice analysis.

Region 10 accuses ICAS of inaccuracies in arguing that the Region needed to address its own scientific findings regarding Ozone and its proposal to revise the 8-hour Ozone NAAQS. Region 10 Br. at 40. However, it is the Region who was inaccurate in its response. First, and contrary to the Region's response, Region 10 Br. at 40-1, EPA did find that the existing 8-hour Ozone standard is inadequate to protect public health and welfare. *See* Draft Final Decision at 1⁵ (EPA "has determined that different standards than those set in 2008 are necessary to provide the requisite protection of public health and welfare"); 75 Fed. Reg. 2,938 (Jan. 19, 2010) ("EPA proposes that the level of the 8-hour primary standard, which was set at 0.075 ppm in the 2008 final rule, should instead be set at a lower level within the range of 0.060 to 0.070 parts per million (ppm), to provide increased protection for children and other 'at risk' populations against an array of O3- related adverse health effects"); 75 Fed. Reg. at 2,943 ("The CASAC explained that it did not endorse the [2008] revised primary O3 standard as being sufficiently protective of public health because it failed to satisfy the explicit stipulation of the Act to provide an adequate margin of safety").

The sign-in sheet for the Anchorage hearing is available in the record but says nothing about an interpreter. Kulluk Public Hearing Sign In Sheet (I-43).

Available at: http://www.epa.gov/glo/pdfs/201107_OMBdraft-OzoneNAAQSpreamble.pdf (last visited December 27, 2011).

Second, it was the President and not the agency who decided not to finalize the new standard.⁶ Indeed, the final rule as it was sent to OMB is available on-line.⁷ Therefore, the record is clear: EPA decided that the current 8-hour Ozone NAAQS is inadequate and then Region 10 relied upon compliance with that inadequate standard in its environmental justice analysis. Especially after the Board's decision in *Shell Gulf of Mexico and Shell Offshore Inc.*, OCS Appeal Nos. 10-01-04, slip.op. at 82 (EAB Dec. 30, 2010) this was a clear error.

c. Region 10 erred by not considering the impacts from mobile and nonmobile source emissions on subsistence hunters and fishers while offshore.

The air pollution from *all the vessels* associated with Shell's offshore operations have long been a concern for North Slope communities, including the mobile sources that are not regulated under the current permit. Concern over these emissions stems in part from the fact that local subsistence hunters and fishers spend significant amounts of time offshore in closer proximity to offshore sources of air pollution than modeling for onshore impacts indicates. The Region never addresses these concerns together -i.e., what the impacts are from Shell's overall (i.e., mobile and non-mobile source) emissions to subsistence hunters and fishers while offshore in key subsistence use areas. Region 10 argues that the pollution from the mobile sources will disperse and the impacts on shore will be low but again this argument fails to discuss what the air quality will be like in subsistence use areas.

This failure is critical. The modeling Shell did for its Chukchi operations shows that its mobile source emissions of NOx are on the order of 158 tons per drilling season. ICAS Exhibit

See http://www.nationaljournal.com/whitehouse/obama-delays-new-smog-standard- (last visited December 27, 2011).

Draft Final Rule. http://www.epa.gov/glo/pdfs/201107_OMBdraft-OzoneNAAQSpreamble.pdf (last visited December 27, 2011).

15 at 3. Shell's permitted operations include the emission of 240 tons per year of NOx, which takes up 81 percent of the NAAQS when background is included. Adding over half that amount of NOx again is not inconsequential, especially to a sensitive population that is often offshore and in closer proximity to the pollution sources.⁸

Nevertheless, instead of gathering and analyzing this information, the Region concluded it did not have sufficient information to estimate the "mobile source emissions" that are "not subject to regulation under these permits." RTC at 115 (J3 at J331-32). ICAS has shown such information was available and that it is important to the environmental justice analysis given the high level of pollution that will be emitted by the mobile sources associated with Shell's operations. *Cf. In re Avenal Power Center, LLC*, PSD Appeal Nos. 11-02-05, slip.op. at 21-22 (EAB Aug. 18, 2011) (addressing mobile sources in the environmental justice analysis and noting that "motor vehicle emissions are by far the greatest concern"). Thus, the Region erred by failing to account for mobile source emissions in its environmental justice analysis and by failing to address the impacts from this pollution in key subsistence areas on a minority population that is particularly vulnerable to this kind of pollution.

CONCLUSION

For the foregoing reasons and those contained in its Petition for Review, ICAS respectfully requests that the board remand the *Kulluk* air permit to Region 10.

Respectfully submitted,

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Again, by citing to this emission inventory ICAS does not suggest that it is valid. In the past, Shell has submitted emissions information to DOI that EPA concluded was insufficient or inaccurate.

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Dated: December 29, 2011

WORD CERTIFICATION

Petitioner Iñupiat Community of the Arctic Slope hereby certifies that its Reply in Support of its Petition for Review of Permit No R10OCS030000 is less than 3,000 words. Petitioner certifies that its Petition contains 2,996 words.

Respectfully submitted,

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Dated: December 29, 2011