



United States Department of the Interior



MINERALS MANAGEMENT SERVICE
Alaska Outer Continental Shelf Region
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503-5823

MAR 18 2010

Received

MAR 22 2010
Office Of Air, Waste
And Toxics

EPA Region 10
Shell Beaufort Air Permit
1200 6th Avenue Suite 900, AWT-I 07
Seattle, WA 98101-3140
Fax: 206-553-0110
Email: R10ocsairpermits@epa.gov

We have reviewed the Permit Number: R10OCS/PSD-AK-2010-01, *EPA Shell Beaufort Proposed OCS/PSD Permit*, published on February 17, 2010. The MMS is submitting the following comments and responses to specific questions posed in the public notice.

We believe that EPA has evaluated the permit on worst-case analyses which has resulted in permit terms and restrictions that limit necessary operational flexibility for personnel and environmental safety without obvious benefits to air quality. These restrictions include limits on the location, movement, and tethering of support craft to the Discoverer and are itemized in our comments below.

1. Requirement O. Icebreaker #1 Requirement O.7. *"Operating Location and Distance from Discoverer. Except when transferring crew and supplies to and from the Discoverer, or traveling on other non-icebreaking activities, Icebreaker #1 shall operate outside of a cone with its apex 150 meters behind the stem of the Discoverer, plus and minus 20 degrees from the centerline of the Discoverer, and extending 4800 meters beyond the bow of the Discoverer."*

This requirement sets a distance and direction prohibition between Icebreaker #1 and the *Discoverer*. We assume the restrictions are to account for a worst-case pollutant modeling concentration that could occur if the wind aligned with the two vessels along their major axis. However, this may be a rare event (wind direction along the major vessel axis). Safe vessel operation requires the flexibility to evaluate on-scene circumstances that might affect the safe operation of the vessels associated with the operation. Ice and weather conditions and ice management operations may require that the location of the associated fleet vessels be organized in such a way as to enhance safety that does not conform to this generic separation scenario. The permit should clarify and accommodate such emergency configurations.

2. Requirement O. 8 *"Attachment to Discoverer. At no time shall Icebreaker #1 be attached to the Discoverer."*

As stated this requirement does not take into account maintaining the safety of these vessels in emergency situations, including transferring crew and supplies in emergency situations. The permit should clarify and accommodate such emergency situations. While the permit provides for notification of EPA if this condition is not met, there is still no direction on when it might be allowed.

3. Requirement P. Icebreaker #2 Requirement P.7. *"Operating Distance from Discoverer. Except when transferring crew and supplies to and from the Discoverer, when traveling on other non-icebreaking activities, or as provided for in Conditions O.8 and O.9, Icebreaker #2 shall operate outside of a cone with its apex 150 meters behind the stern of the Discoverer, plus and minus 20 degrees from the centerline of the Discoverer, and extending 1000 meters beyond the bow of the Discoverer."*

See comments above for O.7 and O.8.

4. Requirement P.10. *"Attachment to Discoverer. At no time shall Icebreaker #2 be attached to the Discoverer."*

See comments above for O.7 and O.8.

5. Requirement R. Oil Spill Response Fleet Requirement R.5. *"Operating Location. Except for transport of crew and supplies to and from the Discoverer or when responding to an oil spill, the oil spill response fleet shall operate at a location that is downwind from the Discoverer."*

It is not at all clear what air quality purpose this serves, and would seem to maximize air quality concentrations from the Discoverer and the response fleet. If there is not an air quality purpose, this requirement should be deleted. MMS has the jurisdiction for oil spill response plans for OCS facilities (30 CFR 254). If there is an air quality purpose, we request that you consult with us with regard to effects on spill response plans.

6. Requirement R.6. *"Attachment to Discoverer. At no time shall the Arctic Endeavor Barge, Point Barrow Tug, Nanuq, Rozema Skimmer or any of the Kvichak work boats be attached to the Discoverer."*

See comments above for O.7 and O.8.

Regarding the air quality modeling:

The emissions scenario used in the screening modeling is very conservative. It assumes the anchor handling vessel, icebreakers, and oil spill response vessels operating at high load 24 hours a day for 182 days. In reality, the drill ship will be located at any specific site for a much shorter time. Furthermore, in the modeling scenario, the drill ship, ice breakers, oil spill recovery vessels, and re-supply vessel are always aligned. In actuality, this alignment will occur infrequently since one icebreaker will move along a 4.8-km perpendicular path and the other icebreaker along a 9.6-km path. The Statement of Basis does not show a modeling analysis that supports the establishment of the cone-shaped restriction zones for the icebreakers.

The modeling analysis assumes a 20 meter per second (m/s) (45 mph) wind speed which results in the lowest plume rise, and hence highest surface concentrations. This gale-force wind speed occurs infrequently. It is not appropriate to apply this meteorology to the conservative scaling factors of 0.6 and 0.1 to obtain 24-hour and annual average concentrations, respectively. It is highly unlikely that the operation of an icebreaker within the cone for an entire 24 hour-period will happen to coincide with a 20 m/sec wind speed. It would be helpful to derive scaling factors from modeling performed for a North Slope facility (for example Northstar), to compare with the standard scaling factors. One also needs to consider that scaling factors are based on a full year of meteorology and emissions. They may be different when applying meteorology specific to a particular season.

Responses to questions:

The public notice solicited comments on two specific aspects of the permit: 1) suitability of the ISC3-Prime modeling system, and 2) adopting an alternative definition of an "OCS source" to consider the Discoverer to be an OCS source when it is sufficiently secure and stable to commence exploration at a drill site. The MMS offers the following recommendations.

1. Suitability of the ISC3-Prime Modeling System: The MMS is very familiar with the ISC3-Prime Modeling System. The MMS finds that the ISC3-Prime modeling system as applied to this permit application is conservative and is more than sufficient to support this permit action and findings. The MMS recommends for future analyses that EPA consider using the OCD model, since that model was designed for over-water meteorology and includes downwash effects as well.
2. Alternative definition of an OCS Source: The MMS recommends EPA adopt the alternative definition for an OCS source to include "when it is sufficiently secure and stable to commence exploration at a drill site." This definition would be consistent with the MMS regulatory definitions and practices that MMS uses for administering its authorities on the OCS. This office provided written comments on December 16, 2009 from the Regional Supervisor, Field Operations to Ms. Julie Vergeront, Office of the Regional Counsel, describing MMS regulatory definition of an OCS Source. Another copy of that letter is enclosed.

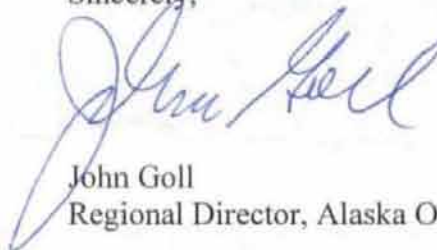
The MMS believes that EPA's current definition of an OCS source based on a single anchor placement contrasts and conflicts with conventional marine operating practices and clearly designated jurisdictional responsibilities between an OCS facility conducting exploratory operations and a marine vessel.

Adopting the revised definition would also clarify permit requirement D.1. This requirement currently prohibits the use of the main propulsion unit on the *Discoverer* once the vessel is an OCS Source. This restriction, when applied to the *Discoverer* when only one anchor has been set, could significantly interfere with the safety of personnel and *Discoverer*.

The MMS also understands that EPA Region 4 recently formed a working group with the MMS Gulf of Mexico Region regarding implementation of the PSD permit program in the eastern Gulf of Mexico and is looking to clarify many of the policy and administrative aspect of the PSD program for OCS facilities similar to those in the Beaufort Sea and Chukchi Sea permits. MMS looks forward to continued coordination between our offices and development of consistent regulatory standards among the EPA Regions.

If you have any questions, please contact Mr. Jeff Walker at 907-334-5300.

Sincerely,

A handwritten signature in blue ink, appearing to read "John Goll". The signature is fluid and cursive, with a large initial "J" and "G".

John Goll
Regional Director, Alaska OCS

Enclosure



United States Department of the Interior



MINERALS MANAGEMENT SERVICE

Alaska Outer Continental Shelf Region

3801 Centerpoint Drive, Suite 500

Anchorage, Alaska 99503-5823

DEC 16 2009

Julie A. Vergeront
Office of Regional Counsel
U.S. Environmental Protection Agency
Region 10
1200 Sixth Avenue, ORC-158
Seattle, WA 98101-3123

Ms. Vergeront:

In response to your email, I'd like to provide the following information which I hope will assist EPA in completing Shell's Prevention of Significant Deterioration (PSD) permits for the Beaufort and Chukchi Seas. Specifically you requested MMS's view on when the Discoverer is "regulated or authorized under Outer Continental Shelf Lands Act (OCSLA)" in connection with the anchoring process.

MMS implementing regulations define a facility at 30 CFR 250.105. The definition of a facility means all installations or devices *permanently or temporarily attached to the seabed* (emphasis added). The same standard is used for administering MMS authorities for both air emissions (30 CFR 250.303) and for platform verification (30 CFR 250.900). We understand the EPA has the same standard under 40 CFR 55.2 for definition of an OCS Source.

Unless and until all anchors have been set, the Alaska Region does not consider the Discoverer Mobile Offshore Drilling Unit (MODU) to be an OCS facility "permanently or temporarily attached to the seabed." Until the Discoverer is permanently or temporarily attached to the seabed, the Discoverer is operated under, controlled by and subject to maritime laws and operating practices. During anchor deployment operations, the Discoverer is under the direction of the vessel master, who has ultimate responsibility under maritime law for the safety of the drillship and crew and the jurisdiction of the U.S. Coast Guard.

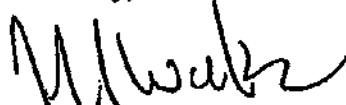
The delineation of responsibilities between the MMS and USCG for anchoring process is further clarified under a 1999 Memorandum of Agreement (MOA) between the MMS and USCG (<http://www.mms.gov/PDFs/cgmoufalFinalMOA-MMSUSCG-OCS01Sep30-04.pdf>) The MOA delineates jurisdictional responsibilities for fixed facilities, floating facilities and MODU. The Discoverer is both a floating facility and a MODU. Under the MOA, the Alaska Region has no jurisdiction for the anchor deployment operations for the Discoverer, as either a MODU or a floating facility. The Alaska Region would exercise regulatory jurisdiction for a site specific mooring analysis for station-keeping only after the Discoverer has been securely and substantially moored so that it cannot be moved without a special effort.

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In addition, this office notes that MMS is not the agency responsible for issuing the permit to anchor the Discoverer. The U.S. Army Corps of Engineers (CORPS) authorizes placement of structures under the Rivers and Harbor Act. The CORPS issued findings that both Shell's Chukchi and Beaufort Sea exploration activities are authorized by the Nationwide Permit (NWP) No. 8, Oil and Gas Structures on the Outer Continental Shelf.

Please let me know if this responds to your request.

Sincerely,



Jeff Walker

Field Operations, Regional Supervisor

cc: Susan Childs, Shell
3601 C Street, Suite 1334
Anchorage, AK 99503-5948