

review if the subject merchandise is sold in the United States through an importer that is affiliated with such exporter or producer. The request must include the name(s) of the exporter or producer for which the inquiry is requested.

Interested parties must submit applications for disclosure under administrative protective orders in accordance with 19 CFR 351.305. On January 22, 2008, the Department published *Antidumping and Countervailing Duty Proceedings: Documents Submission Procedures; APO Procedures* (73 FR 3634). Those procedures apply to administrative reviews included in this notice of initiation. Parties wishing to participate in any of these administrative reviews should ensure that they meet the requirements of these procedures (e.g., the filing of separate letters of appearance as discussed at 19 CFR 351.103(d)).

These initiations and this notice are in accordance with section 751(a) of the Tariff Act of 1930, as amended (19 U.S.C. 1675(a)), and 19 CFR 351.221(c)(1)(i).

Dated: May 29, 2008.

**Stephen J. Claeys,**

*Deputy Assistant Secretary for Import Administration.*

[FR Doc. E8-12468 Filed 6-3-08; 8:45 am]

**BILLING CODE 3510-DS-P**

## DEPARTMENT OF COMMERCE

### National Oceanic and Atmospheric Administration

RIN 0648-X102

#### Endangered Species and Marine Mammals; File No. 10014-01

**AGENCY:** National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

**ACTION:** Notice; issuance of permit amendment.

**SUMMARY:** Notice is hereby given that the New Jersey Department of Environmental Protection (NJDEP), Division of Science, Research and Technology, P.O. Box 409, Trenton, NJ 08625-0409 has been issued a permit amendment to take marine mammals for purposes of scientific research.

**ADDRESSES:** The permit and related documents are available for review upon written request or by appointment in the following offices:

Permits, Conservation and Education Division, Office of Protected Resources,

NMFS, 1315 East-West Highway, Room 13705, Silver Spring, MD 20910; phone (301)713-2289; fax (301)427-2521; and

Northeast Region, NMFS, One Blackburn Drive, Gloucester, MA 01930-2298; phone (978)281-9300; fax (978)281-9394.

**FOR FURTHER INFORMATION CONTACT:** Patrick Opay or Kate Swails, (301)713-2289.

**SUPPLEMENTARY INFORMATION:** On April 9, 2008, notice was published in the **Federal Register** (73 FR 19194) that a request to amend Permit No. 10014 had been submitted by the above-named organization. The requested permit amendment has been issued under the authority of the the Marine Mammal Protection Act of 1972, as amended (16 U.S.C. 1361 *et seq.*), and the regulations governing the taking and importing of marine mammals (50 CFR part 216).

The permit amendment authorizes the NJDEP to take up to 2,500 common dolphins (*Delphinus delphis*), 3,200 bottlenose dolphins (*Tursiops truncatus*), and 1,280 harbor porpoises (*Phocoena phocoena*) annually through December 31, 2012. The study area would continue to include U.S. waters offshore of southern New Jersey out to a distance of 20 nautical miles.

In compliance with the National Environmental Policy Act of 1969 (42 U.S.C. 4321 *et seq.*), an environmental assessment was prepared analyzing the effects of the permitted activities. After a Finding of No Significant Impact, the determination was made that it was not necessary to prepare an environmental impact statement.

Issuance of this permit amendment was based on a finding that it is consistent with the purposes and policies of the MMPA and ESA. It is believed that the research will further a bona fide scientific purpose and does not involve unnecessary duplication.

Dated: May 30, 2008.

**P. Michael Payne,**

*Chief, Permits, Conservation and Education Division, Office of Protected Resources, National Marine Fisheries Service.*

[FR Doc. E8-12517 Filed 6-3-08; 8:45 am]

**BILLING CODE 3510-22-S**

## DEPARTMENT OF COMMERCE

### National Oceanic and Atmospheric Administration

RIN 0648-XD74

#### Taking Marine Mammals Incidental to Specified Activities; Offshore Exploratory Drilling in the Beaufort Sea off Alaska

**AGENCY:** National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

**ACTION:** Notice of receipt of application and proposed incidental take authorization; request for comments.

**SUMMARY:** NMFS has received an application from Shell Offshore, Inc. (SOI) for an Incidental Harassment Authorization (IHA) to take small numbers of marine mammals, by harassment, incidental to conducting open-water offshore exploratory drilling on Outer Continental Shelf (OCS) oil lease blocks in the Beaufort Sea off Alaska. Under the Marine Mammal Protection Act (MMPA), NMFS is requesting comments on its proposal to issue an IHA to SOI to incidentally take, by Level B harassment, small numbers of several species of marine mammals during the open water drilling program in 2008 and 2009.

**DATES:** Comments and information must be received no later than July 7, 2008.

**ADDRESSES:** Written comments on the application should be addressed to Mr. P. Michael Payne, Chief, Permits, Conservation and Education Division, Office of Protected Resources, National Marine Fisheries Service, 1315 East-West Highway, Silver Spring, MD 20910-3225, or by telephoning the contact listed here. The mailbox address for providing email comments is [PR1.XD74@noaa.gov](mailto:PR1.XD74@noaa.gov). Comments sent via e-mail, including all attachments, must not exceed a 10-megabyte file size. A copy of the application (containing a list of the references used in this document) and NMFS' 2007 Environmental Assessment (EA) on this action may be obtained by writing to this address or by telephoning the contact listed here and are also available at: <http://www.nmfs.noaa.gov/pr/permits/incidental.htm#iha>.

Documents cited in this document, that are not available through standard public library access methods, may be viewed, by appointment, during regular business hours at this address.

**FOR FURTHER INFORMATION CONTACT:** Kenneth Hollingshead, Office of Protected Resources, NMFS, (301) 713-

2289 or Brad Smith, NMFS, Alaska Regional Office 907-271-3023.

#### SUPPLEMENTARY INFORMATION:

##### Background

Sections 101(a)(5)(A) and (D) of the MMPA (16 U.S.C. 1361 *et seq.*) direct the Secretary of Commerce to allow, upon request, the incidental, but not intentional, taking of small numbers of marine mammals by U.S. citizens who engage in a specified activity (other than commercial fishing) within a specified geographical region if certain findings are made and either regulations are issued or, if the taking is limited to harassment, a notice of a proposed authorization is provided to the public for review.

An authorization shall be granted if NMFS finds that the taking will have a negligible impact on the species or stock(s) and will not have an unmitigable adverse impact on the availability of the species or stock(s) for subsistence uses and the permissible methods of taking and requirements pertaining to the mitigation, monitoring and reporting of such takings are set forth. NMFS has defined "negligible impact" in 50 CFR 216.103 as "...an impact resulting from the specified activity that cannot be reasonably expected to, and is not reasonably likely to, adversely affect the species or stock through effects on annual rates of recruitment or survival."

Section 101(a)(5)(D) of the MMPA established an expedited process by which citizens of the United States can apply for an authorization to incidentally take small numbers of marine mammals by harassment. Except with respect to certain activities not pertinent here, the MMPA defines "harassment" as: any act of pursuit, torment, or annoyance which

(i) has the potential to injure a marine mammal or marine mammal stock in the wild [Level A harassment]; or (ii) has the potential to disturb a marine mammal or marine mammal stock in the wild by causing disruption of behavioral patterns, including, but not limited to, migration, breathing, nursing, breeding, feeding, or sheltering [Level B harassment].

Section 101(a)(5)(D) establishes a 45-day time limit for NMFS review of an application followed by a 30-day public notice and comment period on any proposed authorizations for the incidental harassment of marine mammals. Within 45 days of the close of the comment period, NMFS must either issue or deny the authorization.

#### Summary of Request

##### Open Water Exploration Drilling

On February 24, 2008, SOI submitted to NMFS a revision to its October 19, 2007, IHA application to take small numbers of marine mammals, by harassment, incidental to conducting open-water offshore exploratory drilling on Outer Continental Shelf (OCS) oil lease blocks in the Beaufort Sea off Alaska for a 1-year period in 2008 and 2009. As issuance of an IHA is limited to one-year, NMFS anticipates that SOI would submit a new IHA application for this activity to carry its program through to the end of the 2009 open-water season.

NMFS notes that SOI's original IHA application (October 19, 2007) was for the incidental taking of marine mammals, by Level B behavioral harassment, while conducting a two-ship drilling program and a geotechnical program. A description of SOI's original work plan can be found in NMFS' proposed 2007 IHA application notice by SOI (72 FR 17864, April 10, 2007) and is not repeated here. A copy of the October 19, 2007, IHA application is available upon request and a copy of the revised application is available on line or upon request (see ADDRESSES).

In its revised 2008 IHA application, SOI states that in 2008 it would employ only a single drilling unit, the floating, portable marine vessel, called the *Kulluk* in order to conduct a top-hole drilling program at Sivulluq. SOI acquired this OCS lease site during the MMS Lease Sale (LS) 195 in March 2005. The highest priority exploratory targets for 2008/2009 are located offshore of Pt. Thomson and Flaxman Island. However, given the locations of open water conditions during 2008 and permit/authorization stipulations, SOI may elect to re-prioritize well locations on one, or more of their OCS leases (see Figure 1 in SOI's IHA application). Re-prioritizing of drilling prospects due to ice conditions may cause drilling to occur at other Beaufort Sea OCS leases held by SOI, but only those that have been pre-cleared by MMS. For this activity, therefore, the central Beaufort Sea meets the "specified geographic region" requirement of section 101(a)(5)(D) of the MMPA.

The *Kulluk* will be accompanied by two ice management vessels or arctic class anchor handlers, and possibly an estimated two support vessels. One of the arctic class supply vessels may make periodic re-supply trips from Tuktoyaktuk, Northwest Territories, Canada to the rig. The ice management vessels or arctic class anchor handlers which likely will be used are: the M/V

*Vladimir Ignatjuk*, and a vessel as yet to be contracted, but similar to the *Vladimir Ignatjuk*. If one or more of these specific vessels are not used, then similar vessel(s) will be substituted. The re-supply effort will be undertaken by the M/V *Jim Kilabuk*, and an additional multipurpose support vessel similar to the *Kilabuk*.

Other vessels in addition to the *Kulluk*, ice management/ anchor handling vessels, and drilling support vessels may include the arctic-class barge, the *Endeavor* (or similar vessel), plus an associated tug, and the *Norseman II* (or similar vessel), which will support the marine mammal monitoring and mitigation program in the Beaufort Sea during the 2008 open water season. Specifications for the *Kulluk*, and some prospective ice management vessels can be found in Attachment A of SOI's 2008 IHA application (see ADDRESSES). Helicopter aircraft will also be used during the drilling season, helping with crew change support, provision re-supply and Search-and-Rescue operations. In addition, fixed-wing aircraft will be used for marine mammal surveillance over-flights. The aircraft operations will principally be based in Deadhorse, AK.

The *Kulluk* is 81 meters (m) (266 feet (ft)) in diameter with an 11.5 m (38 ft) draft when drilling. It is moored using 12 anchor wires (3.5 inches diameter), each connected to a 15 or 20-ton anchor. During the non-drilling season (approximately from November, 2007 to June, 2008), the *Kulluk* overwintered in the Canadian Beaufort Sea. It is attended at its overwinter location by an ice management vessel.

##### Open Water Exploration Drilling—Tophole Sections

SOI's Beaufort Sea open water exploration drilling program includes plans to excavate/drill only the tophole sections for three exploratory well locations. A tophole section typically includes excavation and completion of a mudline cellar (MLC) and drilling and setting of two or three deeper well sections. MLC completions are an essential component of drilling exploration wells in the Arctic Ocean where ice keel gouge might occur. The MLC is a large diameter excavation into which the blow-out preventer and other sub-seabottom wellhead equipment are installed below the depth of possible ice scour. MLCs avoid damage to wellhead equipment possibly caused by the keel of an ice floe excavating into the sea bottom. At times during drilling, the floating drilling rig may need to disconnect from this sub-sea bottom equipment and move away, and this

equipment remains to shut in the well. MLC excavations are typically 20 ft (6.1 m) in diameter and 40 ft (12.2 m) deep. Excavation of a MLC is done by a large diameter bit that is turned by hydraulic motors. SOI plans to excavate MLCs and complete tophole sections at Sivulliq during 2008 (see Figure 1 in SOI's IHA application).

The MLC and the next two or three deeper well sections collectively extend to approximately 3,000 ft (914 m) below the seafloor, and are referred to collectively as the "tophole" section. Topholes are located thousands of feet above any prospective liquid hydrocarbon-bearing strata. As a result, there is no measurable risk of encountering liquid hydrocarbons during the drilling of these topholes.

As mentioned, SOI's priority drilling prospects for the 2008 open water season occur at Sivulliq, located in Camden Bay of the Beaufort Sea. SOI anticipates that the *Kulluk* will excavate and drill tophole sections for three exploratory wells during the 2008 open water season. For its 2008 tophole section drilling program, SOI will not operate the *Kulluk* and associated vessels in Camden Bay until after the Kaktovik and Nuiqsut fall bowhead whale subsistence harvests are completed. Anticipated demobilization of the *Kulluk* from the Alaskan Beaufort Sea will be in November 2008. In total, it is anticipated by SOI that the tophole section drilling program will require approximately 60 days, excluding weather or other operational delays, beginning with mobilization from the Tuktoyaktuk Buoy and ending with return of the *Kulluk* to the Canadian Beaufort Sea near Tuktoyaktuk. SOI assumes approximately 50 of the 60 days of this program will include drilling, while the remaining days include rig mobilization, rig moves between locations, and rig demobilization.

SOI's plan is for the two ice management vessels to accompany the *Kulluk* from its overwintering location (in the Canadian Beaufort Sea) to Sivulliq. One of the ice-management vessels will travel north through the Chukchi Sea and east through the Beaufort Sea after July 1, 2008, before arriving in Canadian waters to assist in the *Kulluk* mobilization. After the 2008 drilling season, in November 2008, SOI expects to demobilize the *Kulluk*. One or two ice management vessels, along with various support vessels such as the *MV Jim Kilabuk*, will accompany the *Kulluk* as it travels east to the Canadian Beaufort Sea (McKinley Bay or Hershel Island). One or more of these ice management vessels may remain with

the *Kulluk* during the winter season if the rig overwinters in the Canadian Beaufort Sea. SOI's base plan for exit from the Beaufort Sea for ice management vessels which are not overwintered with the *Kulluk* is to exit the Beaufort Sea westward. However, subject to ice conditions alternate exit routes may be considered.

#### *Open Water Geotechnical Program*

The open water geotechnical program is expected to begin in July, 2008. SOI plans to bore up to 20 boreholes, each up to 500 ft (152.4 m) in depth, to obtain geotechnical data for feasibility analyses of shallow sub-sea sediments. The boreholes will be completed to depths well above any liquid hydrocarbon-bearing strata. Approximately three potential locations will be investigated at Sivulliq, as well as locations along a prospective pipeline access corridor through Mary Sachs Entrance to landfall in the vicinity of Point Thomson (see Figure 2 in SOI's IHA application). The open water geotechnical program will use borehole excavating equipment mounted on the geotech vessel to advance boreholes through a moonpool located approximately at mid-ship of the geotechnical vessel. The geotech vessel also will have an electronic cone penetrometer (CPT) mounted on it. If used, the CPT unit will collect in-situ soil/sediment sub-sea samples to approximately 150 ft (152.4 m) below the mudline.

Shallow sub-sea bottom sampling for geotechnical analyses at the Sivulliq Prospect and along the access corridor will use a seabed frame to either push a sample tube or a CPT test into the seafloor. Other bottom sediment sampling proposed includes piston coring to a maximum depth of 10 ft (3 m) sub-sea bottom, and box coring to a maximum depth of 1-ft sub-sea bottom.

SOI plans to complete the geotechnical program prior to the fall bowhead whale subsistence harvests of the communities of Kaktovik and Nuiqsut. Including operational delays, it is anticipated that geotechnical borehole drilling, CPT sampling, piston and box coring sampling may be completed in approximately 50 days of work. SOI states that it will not operate the geotechnical program in Camden Bay during the Kaktovik and Nuiqsut fall bowhead whale subsistence harvests. If SOI is unable to complete the planned geotechnical program before the onset of fall whaling for Kaktovik and Nuiqsut, SOI proposes to return to Sivulliq, and/or the prospective pipeline corridor location after the conclusion of the harvest to complete the program.

#### *Marine Mammals*

A total of three cetacean species (bowhead, gray, and beluga whales), three species of pinnipeds (ringed, spotted, and bearded seal), and one marine carnivore (polar bear) are known to occur in or near the proposed drilling areas in the U.S. Beaufort Sea. Other extra-limital species that occasionally occur in very small numbers in this portion of the U.S. Beaufort Sea include the harbor porpoise and killer whale. However, because of their rarity in this area, they are not expected to be exposed to, or affected by, any activities associated with the drilling, and are, therefore, not discussed further. The polar bear is under the jurisdiction of the U.S. Fish and Wildlife Service (USFWS) and is not discussed further in this document. A separate application for a Letter of Authorization (LOA) has been submitted to the USFWS by SOI.

The species and numbers of marine mammals likely to be found within this portion of the Beaufort Sea are listed in Table 4-1 in SOI's IHA application. A description of the biology and distribution of the marine mammal species under NMFS' jurisdiction can be found in several documents, including SOI's IHA applications, MMS' 2006 Final Programmatic EA for Arctic seismic activities, the NMFS/MMS Draft Programmatic EIS for Arctic Seismic in the Beaufort and Chukchi seas and several other documents (e.g., MMS' Final EA for Lease Sales 195 and 202). Information on those marine mammal species under NMFS jurisdiction can be found also in the NMFS Stock Assessment Reports. The 2006 Alaska Stock Assessment Report is available at: <http://www.nmfs.noaa.gov/pr/sars/region.htm>. Please refer to these documents for information on these potentially affected marine mammal species.

#### *Potential Effects of Offshore Drilling Activities on Marine Mammals*

Disturbance by drilling sounds is the principal means of taking by this activity. Drilling vessels, support vessels including ice management vessels, and aircraft may provide a potential second source of noise. The physical presence of vessels and aircraft could also lead to non-acoustic effects on marine mammals involving visual or other cues.

As outlined in previous NMFS documents, the effects of noise on marine mammals are highly variable, and can generally be categorized as follows (based on Richardson *et al.*, 1995):

(1) The noise may be too weak to be heard at the location of the animal (i.e.,

lower than the prevailing ambient noise level, the hearing threshold of the animal at relevant frequencies, or both);

(2) The noise may be audible but not strong enough to elicit any overt behavioral response;

(3) The noise may elicit reactions of variable conspicuousness and variable relevance to the well being of the marine mammal; these can range from temporary alert responses to active avoidance reactions such as vacating an area at least until the noise event ceases;

(4) Upon repeated exposure, a marine mammal may exhibit diminishing responsiveness (habituation), or disturbance effects may persist; the latter is most likely with sounds that are highly variable in characteristics, infrequent and unpredictable in occurrence, and associated with situations that a marine mammal perceives as a threat;

(5) Any anthropogenic noise that is strong enough to be heard has the potential to reduce (mask) the ability of a marine mammal to hear natural sounds at similar frequencies, including calls from conspecifics, and underwater environmental sounds such as surf noise;

(6) If mammals remain in an area because it is important for feeding, breeding or some other biologically important purpose even though there is chronic exposure to noise, it is possible that there could be noise-induced physiological stress; this might in turn have negative effects on the well-being or reproduction of the animals involved; and

(7) Very strong sounds have the potential to cause temporary or permanent reduction in hearing sensitivity. In terrestrial mammals, and presumably marine mammals, received sound levels must far exceed the animal's hearing threshold for there to be any temporary threshold shift (TTS) in its hearing ability. For transient sounds, the sound level necessary to cause TTS is inversely related to the duration of the sound. Received sound levels must be even higher for there to be risk of permanent hearing impairment (called permanent threshold shift or PTS). In addition, intense acoustic or explosive events may cause trauma to tissues associated with organs vital for hearing, sound production, respiration and other functions. This trauma may include minor to severe hemorrhage.

The only anticipated impacts to marine mammals are associated with noise propagation from tophole section drilling activities and associated support vessels, the geotechnical program and from related aircraft

activities, including during marine mammal monitoring activities. Impacts would consist of possible temporary and short term displacement of seals and whales from ensonified zones produced by such noise sources. NMFS and SOI believe that any impacts on the whale and seal populations of the Beaufort Sea activity area are likely to be short term and transitory arising from the temporary displacement of individuals or small groups from locations they may be occupying at the time they are exposed to drilling sounds at a received level of 120 dB or greater (due to the nature of drilling and related vessel noises). In the case of bowhead whales that displacement might well take the form of a deflection of the swim paths of migrating bowheads away from (seaward of) received noise levels at significant distances from the noise source. While this deflection may not be biologically significant (as the bowheads remain within the general migration corridor), it can be significant for subsistence purposes (as will be discussed later).

#### *Potential Impact of the Activity on the Species or Stocks of Marine Mammals*

SOI states that the only anticipated impacts to marine mammals associated with drilling activities would be behavioral reactions to noise propagation from the drilling units and associated support vessels. NMFS notes however, that in addition to these sources of anthropogenic sounds, additional disturbance to marine mammals may result from aircraft overflights and the resulting visual disturbance by the drilling vessels themselves. SOI and NMFS believe, however, that the impacts would be temporary and result in only short term displacement of seals and whales from ensonified zones produced by such noise sources. Any impacts on the whale and seal populations of the Beaufort Sea activity area are likely to be short term and transitory arising from the temporary displacement of individuals or small groups from locations they may occupy at the times they are exposed to drilling sounds at the 160–190 dB (or lower) received levels. As noted, it is highly unlikely that animals will be exposed to sounds of such intensity and duration as to physically damage their auditory mechanisms. In the case of bowhead whales that displacement might well take the form of a deflection of the swim paths of migrating bowheads away from (seaward of) received noise levels. NMFS notes that, to date, studies have not been conducted to test the hypothesis that after deflection

bowheads return to the swim paths they were following prior to deflection at relatively short distances after their exposure to the received sounds.

However, there is no evidence (and little likelihood) that bowheads exposed to noise resulting from oil drilling and support activities will incur an injury to their auditory mechanisms.

Additionally, while there is no conclusive evidence that exposure to sounds exceeding 160 db have displaced bowheads from feeding activity (Richardson and Thomson, 2002), there is information that intermittent sounds (e.g., oil drilling and vessel propulsion sounds) may cause a deflection in the migratory path of whales (Malme *et al.*, 1983, 1984), but possibly not when the acoustic source is not in the direct migratory path (Tyack and Clark, 1998). Finally, there is no indication that seals are more than temporarily displaced from ensonified zones and no evidence that seals have experienced physical damage to their auditory mechanisms even within ensonified zones. As a result, the only type of incidental taking requested by SOI is that of taking by harassment due to the resultant noise from the oil drilling activity. The only sources of project created noise for the tophole section drilling will be those noises from the *Kulluk* and its support vessels, while noise from the geotechnical program will be solely from the geotech vessel. A sound source verification test will be performed on this vessel early in the season. Although the bulk of the activity will be centered in the area of tophole section drilling or geotechnical activities, potential exposures, or impacts to marine mammals also will occur as the drilling vessel, and ice management vessels, and/or geotechnical vessel mobilize to and from Camden Bay for the respective programs. These impacts were assessed previously in this document.

SOI notes in its IHA application that historical noise propagation studies were performed on the *Kulluk* (Hall *et al.*, 1994) in the Kuvlum prospect drill sites (approximately 12 mi (19.3 km) east of SOI's Sivulliq prospect) that SOI is proposing to drill during 2008 and 2009. Acoustic recording devices were established at 10 m (39 ft) and 20 m (66 ft) depths below water surface at varying distances from the *Kulluk* and decibel levels were recorded during drilling operations. There were large differences between sound propagation between the different depths. At 10-m (39-ft) water depth, the 120-dB threshold had a 0.7-km (0.43-mi) radius around the *Kulluk*. At a depth of 20 m (66 ft) below water

surface, the 120-dB threshold had a radius of 8.5 km (5.3 mi). There is no obvious explanation for the large differences in propagation at the different levels, but possible explanations include the presence of an acoustic layer due to melting ice during the sound studies and/or sound being channeled into the lower depths due to the seafloor topography. However, SOI plans for new sound propagation studies to be performed on the *Kulluk*, ice management, and geotechnical vessel, once these vessels are on locations for tophole section drilling or geotechnical activities in the Beaufort Sea. The results of these sound source verification tests will be used to establish monitoring, safety and exclusion zones for SOI's drilling and support vessels.

*Numbers of Marine Mammals Expected to Be Exposed to Noise from Drilling, Geotech and Vessel Movement Activities*

Using the marine mammal density estimates explained and presented in SOI's IHA application (Table 6-1 for tophole drilling for bowhead and beluga whales, Table 6-2 for tophole drilling for other cetaceans and seals, Table 6-6 for the *Kulluk* transit to and from Camden Bay, and Table 6-8 for SOI's geotechnical program), SOI provided estimates of the numbers of potential marine mammal sound exposures in Tables 6-3 and 6-4 for tophole drilling, Table 6-7 for the *Kulluk* transit to Camden Bay and Table 6-9 for the geotechnical program. Tables 1 (tophole drilling), 2 (transit), and 3 (geotechnical) in this document provide SOI's estimate of the number of exposures the affected stocks of marine mammals will receive

from each component of SOI's planned tophole drilling and geotechnical programs in 2008. It should be noted that these tables have been modified from those in SOI's 2008 IHA application that SOI provided to members of the public. These revisions were made to eliminate duplicate counting and to differentiate between non-authorized taking while in Canadian waters (see below). However, neither NMFS nor SOI believe that harbor porpoise or the narwhal will be affected by SOI's drilling program. SOI's estimated exposures to sounds from its drilling program are provided here. For detailed information on how SOI arrived at these estimates for noise exposures, please see SOI's 2008 IHA application (see **ADDRESSES**). Next we provide a summary of the anticipated exposure levels.

**Table 1.** Summary of the number of potential exposures of marine mammals to received sound levels in the water of  $\geq 120$  dB and ( $\geq 160$  dB) during SOI's proposed tophole drilling activities in the Beaufort Sea, Alaska, Sep – Nov 2008. Not all marine mammals will change their behavior when exposed to these sound levels.

Species	Beaufort Sea		Requested Take Authorization
	Avg.	Max.	
<b>Odontocetes</b>			
<b><i>Monodontidae</i></b>			
Beluga	11 (0)	45 (0)	<b>45 (5)</b>
Narwhal	0 (0)	0 (0)	<b>5 (5)</b>
<b><i>Phocoenidae</i></b>			
Harbor porpoise	0 (0)	1 (0)	<b>5 (5)</b>
<b>Mysticetes</b>			
<i>Bowhead whale</i> <sup>a</sup>	4315 (36)	4315 (36)	<b>4315 (36)</b>
Gray whale	0 (0)	1 (0)	<b>5 (5)</b>
<b>Total Cetaceans</b>	<b>4315 (36)</b>	<b>4316 (36)</b>	
<b>Pinnipeds</b>			
Bearded seal	33 (0)	132 (0)	<b>132 (10)</b>
Ringed seal	647 (0)	2589 (0)	<b>2589 (50)</b>
Spotted seal	6 (0)	25 (0)	<b>25 (5)</b>
<b>Total Pinnipeds</b>	<b>687 (0)</b>	<b>2747 (0)</b>	

<sup>a</sup> See text for description of bowhead whale estimate for the Beaufort Sea

**Table 2.** Estimates of the number of marine mammals in areas where maximum received sound levels in water would be  $\geq 120$  dB and ( $\geq 160$  dB) during SOI's proposed transit from Tuktoyaktuk to Camden Bay towing the *Kulluk*.

Species	Average	Maximum	Requested Take Authorization
<b>Odontocetes</b>			
<b><i>Monodontidae</i></b>			
Beluga	208 (0)	830 (4)	<b>830 (5)</b>
Narwhal	0 (0)	0 (0)	<b>5 (5)</b>
<b><i>Phocoenidae</i></b>			
Harbor porpoise	1 (0)	3 (0)	<b>5 (5)</b>
<b>Mysticetes</b>			
Bowhead whale	196 (0)	1226 (2)	<b>1226 (5)</b>
Gray whale	1 (0)	3 (0)	<b>5 (5)</b>
<b>Total Cetaceans</b>	<b>197 (0)</b>	<b>1229 (2)</b>	
<b>Pinnipeds</b>			
Bearded seal	120 (0)	481 (1)	<b>481 (10)</b>
Ringed seal	2360 (4)	9439 (15)	<b>9439 (50)</b>
Spotted seal	25 (0)	99 (0)	<b>99 (5)</b>
<b>Total Pinnipeds</b>	<b>2505 (4)</b>	<b>10020 (16)</b>	

**Table 3.** Estimates of the numbers of marine mammals in areas where maximum received sound levels in the water would be  $\geq 120$  dB and ( $\geq 160$  dB) during SOI's proposed geotechnical activities in the Beaufort Sea, Alaska, during summer (July – August) and fall (September). Not all marine mammals will change their behavior when exposed to these sound levels. Fall estimates are included in Table 1 for tophole drilling.

Species	Number of Exposure to Sound Levels $\geq 120$ dB and ( $\geq 160$ dB)						Requested Take Authorization
	Summer		Fall		Total		
	Avg	Max	Avg	Max	Avg	Max	
<b>Odontocetes</b>							
<b>Monodontidae</b>							
Beluga	5 (0)	18 (0)	5 (0)	21 (0)	10 (0)	40 (0)	<b>40 (5)</b>
Narwhal	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	<b>5 (5)</b>
<b>Phocoenidae</b>							
Harbor porpoise	0 (0)	1 (0)	0 (0)	0 (0)	0 (0)	1 (0)	<b>5 (5)</b>
<b>Mysticetes</b>							
Bowhead whale	1 (0)	5 (0)	420 (3)	420 (3)	421 (3)	425 (3)	<b>425 (5)</b>
Gray whale	0 (0)	1 (0)	0 (0)	0 (0)	0 (0)	1 (0)	<b>5 (5)</b>
<b>Pinnipeds</b>							
Bearded seal	28 (0)	111 (0)	3 (0)	12 (0)	31 (0)	123 (0)	<b>123 (5)</b>
Ringed seal	544 (0)	2176 (0)	60 (0)	242 (0)	604 (0)	2418 (0)	<b>2418 (5)</b>
Spotted seal	6 (0)	23 (0)	1 (0)	3 (0)	6 (0)	25 (0)	<b>25 (5)</b>
<b>Total Pinnipeds</b>	<b>577 (0)</b>	<b>2310 (0)</b>	<b>64 (0)</b>	<b>257 (0)</b>	<b>642 (0)</b>	<b>2566 (0)</b>	

## BILLING CODE 3510-22-C

*Summary – Tophole Drilling*

The proposed tophole section drilling activities in the Beaufort Sea will involve one drilling vessel that will introduce continuous sounds into the ocean while it is active and possibly two ice-management vessels that would introduce non-continuous sounds if they must break ice. Other routine vessel operations are conventionally assumed not to affect marine mammals sufficiently to constitute “taking”.

## Cetaceans

Effects on cetaceans are generally expected to be restricted to avoidance of a limited area around the drilling operation and short-term changes in behavior, falling within the MMPA definition of “Level B harassment”. The estimated numbers of cetaceans potentially exposed to sound levels sufficient to cause significant biological disturbances are relatively low percentages of the population sizes in the Bering–Chukchi–Beaufort seas, as described below. Based on the 120–dB criterion for intermittent noise from Malme *et al.* (1984), the best (average) estimates of the numbers of individual cetaceans exposed to sounds  $\geq 120$  dB re 1 microPa (rms) represent varying proportions of the populations of each species in the Beaufort Sea and adjacent waters. While SOI estimates approximately 4315 bowheads may be exposed to received levels of greater

than or equal to 120 dB and 160 dB and that is approximately 32 percent of the Bering-Chukchi-Beaufort population of about 13,326 (assuming 3.4 percent annual population growth from the 2001 estimate of 10,545 animals (Zeh and Punt, 2005)), SOI and NMFS estimate that, due to bowheads avoiding the area around tophole drilling activities only 36 individuals will be exposed to sounds  $\geq 160$  dB which equals <1 percent of the population.

A few beluga whales may be exposed to sounds produced by the drilling activities, and the numbers potentially affected are small relative to the population sizes. The best estimate of the number of belugas that might be exposed to  $\geq 120$  dB (11) represents <1 percent of their Beaufort Sea population (39,258). No cetacean species, other than the bowheads, are expected to be exposed to levels  $\geq 160$  dB. Narwhals are extremely rare in the U.S. Beaufort Sea and none are expected to be encountered during the 2008 drilling activity.

## Pinnipeds

A few pinniped species are likely to be encountered in the drilling activity area, but the ringed seal is by far the most abundant marine mammal that will be encountered. The best (average) estimates of the numbers of individuals exposed to sounds at received levels  $\geq 120$  dB re 1 microPa (rms) during the drilling activities are as follows: ringed seals (647), bearded seals (33), and

spotted seals (6), (representing <1 percent of their respective Beaufort Sea populations). Pinnipeds are unlikely to react to intermittent (steady) sounds until they are at much higher sound pressure levels than 120 dB re 1 microPa, so it is probable that only a small percentage of those would actually be disturbed. Based on density calculations provided in SOI's IHA application, no pinnipeds are estimated to be exposed to sounds  $\geq 160$  dB.

*Summary – Geotechnical Program*

As mentioned, the proposed geotechnical program activities in the Beaufort Sea will involve one geotech vessel, that will introduce intermittent/continuous sounds into the ocean while it is active. Other routine vessel operations are conventionally assumed not to affect marine mammals sufficiently to constitute rising to a level requiring an authorization under section 101(a)(5)(D) of the MMPA (provided they are not conducting ice management activities or towing barges or drilling equipment).

## Cetaceans

Effects on cetaceans are generally expected to be restricted to avoidance of a limited area around the geotechnical activities and short-term changes in behavior, falling within the MMPA definition of “Level B harassment”. Furthermore, the estimated numbers of animals potentially exposed to sound levels sufficient to cause significant

biological disturbances are relatively low percentages of the population sizes in the Bering–Chukchi–Beaufort seas, as described next.

Based on the 120–dB criterion for intermittent/continuous noise effects, the best (average) estimates of the numbers of individual cetaceans exposed represent varying proportions of the populations of each species in the Beaufort Sea and adjacent waters. For this activity, SOI estimates that approximately 425 bowheads will be exposed to sound pressure levels of 120 dB or greater. This level is approximately 3.1 percent of the Bering–Chukchi–Beaufort population of 13,326 animals. However, due principally to diverting away from noise from the drilling activity, SOI estimates that only 3 individuals are estimated to be exposed to sounds  $\geq 160$  dB equaling  $< 1$  percent of the population. These animals may be feeding or engaging in non–migratory behavior and therefore are unlikely to be affected by seismic sounds  $\leq 160$  dB.

A few belugas may be exposed to sounds produced by the geotechnical activities; therefore, the numbers potentially affected are small relative to the population sizes. As mentioned previously, narwhals are extremely rare in the U.S. Beaufort Sea and none are expected to be encountered during the geotechnical work. The best estimate of the number of belugas that might be exposed to  $\geq 120$  dB (10) represents  $< 1$  percent of their population. No species, other than the bowhead whale, are expected to be exposed to levels  $\geq 160$  dB.

#### Pinnipeds

A few pinnipeds are likely to be encountered in the geotechnical activities area, but the ringed seal is by far the most abundant marine mammal that will be encountered. The best (average) estimates of the numbers of individuals exposed to sounds at received levels  $\geq 120$  dB re 1 microPa (rms) during the geotechnical activities are as follows: ringed seals (604), bearded seals (31), and spotted seals (6), (representing  $< 1$  percent of their respective Beaufort Sea populations). SOI notes that pinnipeds are unlikely to react to steady sounds until they are much stronger than 120 dB re 1 microPa, so it is probable that only a small percentage of those would actually be disturbed. Based on density calculations provided in SOI's IHA application, no pinnipeds are estimated to be exposed to sounds  $> 160$  dB.

#### Summary – Towing the Kulluk

A vessel towing the *Kulluk* through the Canadian Beaufort Sea from Tuktoyaktuk to the US-Canadian border would travel about 358 km (222 mi). Transit from the US-Canadian border to the Sivulliq prospect in western Camden Bay would be about 170 km (106 mi) in length for a total transit length of approximately 528 km (328mi). Although SOI has estimated potential exposure levels for both sections of the transit, because the taking of marine mammals inside Canadian territorial waters cannot be authorized under the MMPA, NMFS will authorize only those takings (by harassment) estimated to result within U.S. waters.

Sounds produced by a vessel towing the *Kulluk* have not been measured. As a surrogate, measurements of sounds produced by the *Gilavar* in Camden Bay while it towed 32 airguns and four hydrophone streamers were used as estimates of the  $\geq 160$  dB and  $\geq 120$  dB distances. The estimated  $\geq 160$  dB distance from the *Gilavar* measurements is 10 m (3.3 ft) and the  $\geq 120$  dB distance is 6.3 km (3.9 mi). Using these distances and the estimated trackline distance above the area of water potentially ensounded to  $\geq 160$  dB would be approximately 11 km<sup>2</sup> and to  $\geq 120$  dB would be approximately 6653 km<sup>2</sup>.

Average and maximum estimates of bowhead whale densities along the transit route were estimated from aerial survey data collected during the month of September near Kaktovik reported in Richardson and Thompson (eds. 2002, Table 6–6). Densities of belugas used in this analysis are the same as shown in the “ice margin” column of Table 6–1 as these densities are also reasonable estimates of beluga density in the waters through which this transit will likely occur. All other species densities are the same as those presented in the “nearshore” (0–200 m water depth) column in Table 6–2 in SOI's 2008 IHA application.

#### Cetaceans

Effects on cetaceans are generally expected to be restricted to avoidance of a limited area around the towing vessel activities due to the noise. These short-term changes in behavior fall within the MMPA definition of “Level B harassment”. Furthermore, the estimated numbers of animals potentially exposed to sound levels sufficient to cause disturbance are relatively low percentages of the population sizes in the Bering–Chukchi–Beaufort seas, as described next.

Based on the 120–dB criterion for intermittent/continuous noise effects caused by ship propulsion noise, the best (average) estimates of the numbers of individual cetaceans exposed represent varying proportions of the populations of each species in the Beaufort Sea. For this activity, SOI estimates that approximately 196 bowheads (63 in U.S., 133 in Canada) will be exposed to sound pressure levels of 120 dB or greater. This level is less than 1 percent of the BCB population of the BCB population of 13,326 animals. Also, due principally to diverting away from noise from the drilling activity, SOI estimates that no bowheads individuals will be exposed to sounds  $\geq 160$  dB.

Some belugas may be exposed to sounds produced by the *Kulluk* towing activities; (total 208 (66 in U.S.; 141 in Canada). However, the number of potentially affected belugas isare small relative to their population size. The best estimate of the number of belugas that might be exposed to  $\geq 120$  dB represents  $< 1$  percent of their population. As mentioned previously, narwhals are extremely rare in the U.S. Beaufort Sea and none are expected to be encountered during the towing operation. Due to the time of the year that towing will take place, and the small zone of influence by towing operations, no cetacean species are expected to be exposed to levels  $\geq 160$  dB.

#### Pinnipeds

Pinnipeds are likely to be encountered while towing the *Kulluk* from Tuktoyaktuk to Sivulluq with the ringed seal by far the most abundant marine mammal that will be encountered. The best (average) estimates of the numbers of individuals exposed to sounds at received levels  $\geq 120$  dB re 1 microPa (rms) during the towing activities are as follows: ringed seals (755 in U.S.; 1605 in Canada), bearded seals (39 in U.S.; 82 in Canada), and spotted seals (8 in U.S.; 17 in Canada). SOI notes that pinnipeds are unlikely to react to steady sounds, such as those produced by a vessel towing another vessel, until the sound levels are significantly higher than 120 dB re 1 microPa, so it is probable that only a small percentage of those would actually be disturbed. A total of 4 ringed seals potentially could be exposed to sounds  $> 160$  dB.

#### Potential Impact On Habitat

SOI states that the proposed tophole drilling and related activities will not result in any permanent impact on habitats used by marine mammals, or to



their prey sources. Any effects would be temporary and of short duration at any one location. The effects of the planned drilling activities are expected to be negligible. It is estimated that only a small portion of the animals utilizing the areas of the proposed activities would be temporarily displaced from that habitat. During the period of SOI's geotech activities, most marine mammals would be dispersed throughout the Beaufort Sea area. The peak of the bowhead whale migration through the Beaufort Sea typically occurs in September and October, and SOI will discuss its efforts to reduce potential impacts during this time with the affected whaling communities. Starting in late-August, bowheads may travel in proximity to the drilling activity and some might be displaced seaward by the planned activities. The numbers of cetaceans and pinnipeds subject to displacement are small in relation to abundance estimates for the affected mammal stocks.

In addition, SOI states that feeding does not appear to be an important activity by bowheads migrating through the eastern and central part of the Alaskan Beaufort Sea in most years. In the absence of important feeding areas, the potential diversion of a small number of bowheads is not expected to have any significant or long-term consequences for individual bowheads or their population. Bowheads, gray, or beluga whales are not expected to be excluded from any significant habitat.

The proposed activities are not expected to have any habitat-related effects that would produce long-term effects to marine mammals or their habitat due to the limited extent of the acquisition areas and timing of the activities.

#### *Potential Effects of Drilling Sounds and Related Activities on Subsistence Needs*

SOI notes that there could be an adverse impact on the Inupiat fall bowhead subsistence hunt if whales were deflected seaward (further from shore) in the traditional hunting areas north of Pt. Thomson in Camden Bay. The impact could be that whaling crews would have to travel greater distances to intercept westward migrating whales thereby creating a safety hazard for whaling crews and/or limiting chances of successfully striking and landing bowheads. For 2008, the geotechnical program is planned to occur before subsistence whaling begins, while the tophole section drilling will not occur until after the bowhead whaling season has concluded.

This potential impact on the bowhead subsistence hunt is proposed by SOI to

be mitigated through the application of mitigation procedures described later in this document and implemented by a Conflict Avoidance Agreement (CAA) between SOI, the Alaska Eskimo Whaling Commission (AEWC) and the whaling captains' associations of Kaktovik, Nuiqsut and Barrow. SOI believes that the proposed mitigation measures will minimize adverse effects on whales and whalers. (see Mitigation later in this document). Regardless of whether a 2008 CAA is successfully negotiated, SOI states that it is committed to the mitigation measures described later in this document. As a result, NMFS believes that there should not be an unmitigable adverse impact on the availability of the marine mammal species, particularly bowhead whales, for subsistence uses.

#### *Proposed Mitigation for Subsistence Hunting*

NMFS regulations (50 CFR 216.104(b)(13)) require IHA applicants for activities that take place in or near a traditional Arctic subsistence hunting area and/or may affect the availability of a species or stock of marine mammal for Arctic subsistence uses to submit a Plan of Cooperation (POC) or similar information that identifies what measures have been taken and/or will be taken to minimize any adverse effects on the availability of marine mammals for subsistence uses. First, NMFS regulations require a statement that the IHA applicant has notified and provided the affected subsistence community with a draft POC. A summary of SOI's POC meetings during 2006 and 2007 is provided in SOI's 2008 IHA application.

For the 2008 proposed open water activities, SOI met with the AEWC and the whaling captains associations of Nuiqsut, Kaktovik, Wainwright, Pt. Hope, and Barrow between February 7–11, 2008 to address concerns from affected bowhead whale subsistence users regarding SOI's 2007 open water program and planned upcoming 2008 open water activities. If successfully negotiated and signed, a CAA would be a component of SOI's 2008–2009 POC and is anticipated it will cover the proposed Beaufort Sea exploratory drilling program. In addition, in 2008 SOI held several community POC meetings to discuss SOI's 2008 open water programs in the Beaufort and Chukchi Seas.

Also, in order to assess the concerns of other affected subsistence users, SOI also met with the marine mammal commissioners of the AEWC, Alaska Beluga Whale Committee, Ice Seal Committee, and the Nanuq Commission during a two-day meeting

December 12–13, 2007 in Anchorage to discuss 2007/2008 programs. Additional meetings have been held during the spring, 2008.

SOI plans to hold community meetings in Barrow, Nuiqsut, Kaktovik, Wainwright, Point Hope, and Point Lay, regarding its Beaufort and Chukchi Seas 2008 open water programs. During these meetings, SOI states that it will focus on lessons learned from the 2007 open water program and, present the proposed 2008 program activities, and describe SOI's adaptive management approach toward conducting its activities. SOI states that it will continue to hold meetings with the above mentioned marine mammal commissions that are focused on ice seals, walrus, polar bears, and beluga.

NMFS regulations also require affected IHA applicants to provide a description of what measures the applicant has taken and/or will take to ensure that proposed activities will not interfere with subsistence whaling or sealing. For SOI's open water exploration drilling of the tophole sections at Sivulluq, SOI states that the *Kulluk* and all support vessels will operate in accordance with the provisions of the POC. The POC is developed to mitigate effects of SOI's proposed program(s) where activities would take place in or near a traditional Arctic subsistence hunting area and/or may affect the availability of a species or stock of marine mammal for Arctic subsistence uses. SOI has consulted in the past and will consult this year with affected Beaufort (and Chukchi) Sea communities and marine mammal associations for the development and improvement of the POC. For the drilling program, SOI's POC with Beaufort Sea villages will address vessel transit, drilling and associated activities. It is the intention of SOI to negotiate a CAA with the AEWC, and whaling captain's associations of affected Beaufort and Chukchi Sea villages, as a component of the POC. If a CAA is negotiated with AEWC, then the provisions of the CAA will be included in the POC. In the absence of a signed CAA, SOI states that it is committed to implementing the mitigation measures described later in this section of the notice and will implement these measures, which are intended to minimize any adverse effects on the availability of marine mammals for subsistence uses.

In addition, NMFS notes that a POC will specify times and areas to avoid in order to minimize possible conflicts with traditional subsistence hunts by North Slope villages for transit and drilling operations. For its 2008 tophole

section drilling program, SOI has stated that it will not operate the *Kulluk* and associated vessels in Camden Bay until after the Kaktovik and Nuiqsut fall bowhead whale subsistence harvests are completed. Appropriate operational restrictions applicable for future open-water drilling activities (2009 and beyond) will be developed in consultation with affected communities via the POC.

The geotechnical vessel's activities will also operate in accordance with the provisions of a POC. SOI plans to complete the geotechnical program prior to the fall bowhead whale subsistence harvests of the communities of Kaktovik and Nuiqsut. SOI states that it will not operate the geotechnical program in Camden Bay during the Kaktovik and Nuiqsut fall bowhead whale subsistence harvests. If SOI is unable to complete the planned geotechnical program before the onset of fall whaling for Kaktovik and Nuiqsut, SOI plans to return to Sivulliq, and/or prospective pipeline corridor after the conclusion of the harvest to complete the program.

SOI states that the *Kulluk*, the geotech vessel and all support vessels and aircraft will operate in accordance with the conditions of a CAA currently being negotiated with the AEWC. However, regardless of whether a CAA is signed, SOI states that it will implement the following key mitigation measure concepts that will be included in SOI's POC:

1. If not completed prior to the bowhead whale subsistence hunt, the geotechnical program will cease during the Kaktovik and Nuiqsut (Cross Island) fall bowhead whale subsistence harvests. The geotechnical vessel will be relocated out of Camden Bay during this time.

2. Communications system between operator's vessels and the whaling hunting crews. This includes the 24 hours per day operation of communication centers in Kaktovik (Call center) and Deadhorse (Com center) areas, which are staffed by Inupiat operators, and the installation of radio equipment in the whaler's boats. The Deadhorse Com center and Kaktovik Call center also provides a method for other subsistence hunters, such as seal hunters, who can communicate with the industry vessels.

3. Provision for marine mammal observers (MMOs) aboard all project vessels (see below).

4. Conflict resolution procedures.

5. Plan all vessel and aircraft routes to minimize the impact on subsistence hunts. Aircraft will not operate below 1000 ft. (309 m) unless approaching, landing or taking off, or unless engaged

in providing assistance, or in poor weather low ceiling, or other emergency situation.

6. A "Good Neighbor Policy" that provides for financial compensation in the unlikely event that an oil spill diminishes the availability or usability of subsistence resources such as bowhead or beluga whales, seals, walrus, polar bear, fish or water fowl.

7. Provisions for rendering emergency assistance to subsistence hunting crews.

#### **Proposed Marine Mammal Mitigation and Monitoring Measures**

SOI has proposed implementing a marine mammal mitigation and monitoring program (4MP) that will consist of monitoring and mitigation during the exploratory drilling activities. In conjunction with monitoring during SOI's seismic and shallow-hazard surveys (subject to an upcoming notice and review), monitoring will provide information on the numbers of marine mammals potentially affected by these activities and permit real time mitigation to prevent injury of marine mammals by industrial sounds or activities. These goals will be accomplished by conducting vessel-, aerial-, and acoustic-monitoring programs to characterize the sounds produced by the drilling and to document the potential reactions of marine mammals in the area to those sounds and activities. Acoustic modeling will be used to predict the sound levels produced by the shallow hazards and drilling equipment in the U.S. Beaufort Sea. For the drilling program, acoustic measurements will also be made to establish zones of influence (ZOIs) around the activities that will be monitored by observers. Aerial monitoring and reconnaissance of marine mammals and recordings of ambient sound levels, vocalizations of marine mammals, and received levels should they be detectable using bottom-founded acoustic recorders along the Beaufort Sea coast will be used to interpret the reactions of marine mammals exposed to the activities. The components of SOI's monitoring program is briefly described next. Additional information can be found in SOI's IHA application.

#### *Mitigation and Monitoring Measures During Transit of the Chukchi and Beaufort Seas*

A Chukchi Sea vessel transit mitigation plan has been developed to identify transit strategies that will minimize and mitigate possible impacts to marine mammals and subsistence hunting activities in the offshore and adjacent coastal areas along the transit

route if vessels associated with SOI's drilling program transit through the Chukchi Sea on the way to the Sivulliq prospect in the eastern Alaskan Beaufort Sea. The plan relies principally on strategies of avoidance, minimization, monitoring, and communication to reduce exposure of marine mammals to sound levels and visual stimuli that could be capable of disturbance, displacement, or significant alteration of behavior.

Avoidance of areas where exposure of marine mammals to disturbance will be accomplished in the Chukchi Sea by positioning the transit route > 50 mi (80 km) offshore and, to the extent possible, in open water. By remaining > 50 mi (80 km) offshore, the transit route remains away from areas of coastal concentration of marine mammals, including seals, walrus, and beluga whales. By remaining in open water, to the greatest extent possible, noise levels will be kept to a minimum. In open water, the transit will be relatively slow and steady and will not require engine revving or other operations that increase cavitation.

In the event that the presence of ice in the transit route makes the maintenance of a > 50 mi offshore buffer in the Chukchi Sea practicable, SOI proposes to reduce this buffer in favor of maintenance of a 0.5 mi (804 m) buffer between the transit route and the ice edge. By staying out of the ice, the vessels will minimize sound emission levels and will remain away from hauled out concentrations of walrus and seals. The transit distance from shore may decrease below the desired 50 mi buffer but SOI notes it will not enter the polynia zone.

On-board MMOs will be on duty on all vessels during the transit and will direct vessel transit to remain, where possible, one-half mile or greater from marine mammals (understanding that marine mammals may approach the vessels) to and avoid collisions with marine mammals. During ice transits, MMOs will supplement aerial surveys and assist in the maintenance of buffers and observation of marine mammal concentrations and behaviors. If such observations demonstrate disturbance behavior, buffers will be adjusted as appropriate.

#### *Vessel-based Marine Mammal Monitoring Program*

The vessel-based operations will be the core of SOI's 4MP. The 4MP will be designed to ensure that disturbance to marine mammals and subsistence hunts is minimized, that effects on marine mammals are documented, and to collect baseline data on the occurrence and distribution of marine mammals in

the study area. Those objectives will be achieved, in part, through the vessel-based monitoring and mitigation program.

The 4MP will be implemented by a team of experienced MMOs, including both biologists and Inupiat personnel, approved in advance by NMFS. The MMOs will be stationed aboard the drilling vessel, the geotechnical vessel, and associated support vessels throughout the drilling period. The duties of the MMOs will include watching for and identifying marine mammals; recording their numbers, distances, and reactions to the drilling operations; initiating mitigation measures when appropriate; and reporting the results. Reporting of the results of the vessel-based monitoring program will include the estimation of the number of "takes."

The vessel-based operations of SOI's 4MP will be required to support the vessel based drilling or geotechnical activities in the central and eastern Alaskan Beaufort Sea (July through October). The dates and operating areas will depend upon ice and weather conditions, along with SOI's arrangements with agencies and stakeholders. Exploratory drilling activities are expected to occur after whaling during 2008, whereas geotechnical activities are expected to occur prior to whaling during 2008. Vessel-based monitoring for marine mammals will be done throughout the period of drilling operations in compliance with monitoring requirements contained in the IHA issued to SOI, if warranted.

The vessel-based work will provide: (1) the basis for real-time mitigation, (2) information needed to estimate the "take" of marine mammals by harassment, (3) data on the occurrence, distribution, and activities of marine mammals in the areas where the drilling program is conducted, (4) information to compare the distances, distributions, behavior, and movements of marine mammals relative to the source vessels at times with and without drilling or ice-management activity, (5) a communication channel to Inupiat whalers and the Whaling Coordination Center, and (6) employment and capacity building for local residents, with one objective being to develop a larger pool of experienced Inupiat MMOs.

All MMOs will be provided training through a program approved by NMFS. At least one observer on each vessel will be an Inupiat who will have the additional responsibility of communicating with the Inupiat community and (during the whaling

season) directly with Inupiat whalers. Details of the vessel-based marine mammal monitoring program are described in the IHA application.

#### *Mitigation and Monitoring Measures During Drilling Activities*

SOI's proposed offshore drilling program incorporates both design features and operational procedures for minimizing potential impacts on marine mammals and on subsistence hunts. The design features and operational procedures have been described in the IHA applications and are summarized here. Survey design features to reduce impacts include: (1) timing and locating some drilling support activities to avoid interference with the annual fall bowhead whale hunts from Kaktovik, Nuiqsut (Cross Island), and Barrow; (2) conducting pre-work modeling (and early season field assessments) to establish the appropriate 180 dB and 190 dB safety zones (if necessary), and the 160 and 120 dB behavior radii; and (3) vessel-based (and aerial) monitoring to implement appropriate mitigation (and to assess the effects of project activities on marine mammals). Also, the potential disturbance of marine mammals during drilling operations will be minimized further through the implementation of several ship-based mitigation measures as discussed below.

Under current NMFS guidance "safety radii" for marine mammals around acoustic sources are customarily defined as the distances within which received pulse levels are  $\geq 180$  dB re 1 microPa (rms) for cetaceans and  $\geq 190$  dB re 1 microPa (rms) for pinnipeds. These safety criteria are based on an assumption that lower received levels will not injure these animals or impair their hearing abilities, but that higher received levels might have a potential for such effects. Greene (1987) reported SPLs ranging from 130–136 dB (rms) at 0.2 km (656 ft) from the *Kulluk* during drilling activities (drilling, tripping, and cleaning) in the Arctic. (Higher received levels up to 148 dB (rms) were recorded for supply vessels that were underway and for icebreaking activities.) As a result, SOI believes that the tophole exploratory and geotechnical drilling and the activities of the support vessels are not likely to produce sound levels 180 dB (rms) or greater and thereby have potential to cause temporary hearing loss or permanent hearing damage to any marine mammals. Consequently, standard mitigation as described later in this document for seismic activities including shut down of any drilling activity should not be necessary (unless sound monitoring tests described elsewhere in this document indicate

SPLs at or greater than 180 dB). If testing indicates SPLs will reach or exceed 180 dB or 190 dB, then appropriate mitigation measures would be implemented by SOI to avoid potential Level A harassment of cetaceans (at or above 180 dB) or pinnipeds (at or above 190 dB). Mitigation measures may include reducing drilling or ice management noises, whichever is appropriate. Moreover, SOI plans to use MMOs onboard the drill ships and the various support and supply vessels to monitor marine mammals and their responses to industry activities. In addition, an acoustical program and an aerial survey program which are discussed in previous sections will be implemented to determine potential impacts of the drilling program on marine mammals.

#### *Marine Mammal Observers*

MMOs will be required onboard each vessel to ensure that observations can be conducted efficiently and without fatigue. MMOs will be required onboard each vessel to meet the following criteria: (1) availability for monitoring and consultation coverage during periods of drilling operations in daylight; (2) maximum of 4 consecutive hours on watch per MMO; (3) maximum of approx. 12 hours on watch per day per MMO. The observer(s) (MMOs and Inupiat) will watch for marine mammals from the best available vantage point on the operating source vessel, which is usually the bridge or flying bridge. The observer(s) will scan systematically with the naked eye and 7 50 reticle binoculars, supplemented with night-vision equipment when needed (see below). Personnel on the bridge will assist the marine mammal observer(s) in watching for pinnipeds and whales. The observer(s) will give particular attention to the areas around the vessel. When a mammal sighting is made, the following information about the sighting will be recorded: (1) Species, group size, age/size/sex categories (if determinable), behavior when first sighted and after initial sighting, heading (if consistent), bearing and distance from drilling vessel, apparent reaction to drilling noise (e.g., none, avoidance, approach, paralleling, etc.), closest point of approach, and behavioral pace; (2) time, location, heading, speed, and activity of the vessel (if underway at the time), sea state, ice cover, visibility, and sun glare; (3) the positions of other vessel(s) in the vicinity of the source vessel. This information will be recorded by the MMOs at times of whale and seal sightings.

The ship's position and its heading, and speed (if the vessel is underway),

activity state (e.g., drilling, non-drilling), and water temperature, water depth, sea state, ice cover, visibility, and sun glare will also be recorded at the start and end of each observation watch, every 30 minutes during a watch, and whenever there is a change in any of those variables. Distances to nearby marine mammals will be estimated with binoculars containing a reticle to measure the vertical angle of the line of sight to the animal relative to the horizon. Observers may use a laser rangefinder to test and improve their abilities for visually estimating distances to objects in the water.

However, previous experience showed that this Class 1 eye-safe device was not able to measure distances to seals more than about 70 m (230 ft) away. However, it was very useful in improving the distance estimation abilities of the observers at distances up to about 600 m (1968 ft)—the maximum range at which the device could measure distances to highly reflective objects such as other vessels. Experience indicates that humans observing objects of more-or-less known size via a standard observation protocol, in this case from a standard height above water, quickly become able to estimate distances within about plus or minus 20 percent when given immediate feedback about actual distances during training.

In addition to routine MMO duties, Inupiat observers will be encouraged to record comments about their observations into the “comment” field in the database. Copies of these records will be available to the Inupiat observers for reference if they wish to prepare a statement about their observations. If prepared, this statement would be included in the 90-day and final reports documenting the monitoring work.

Night-vision equipment (“Generation 3” binocular image intensifiers, or equivalent units) will be available for use when needed during nighttime observations. However, past experience with night-vision devices (NVDs) in the Beaufort Sea and elsewhere indicates that NVDs are not nearly as effective as visual observation during daylight hours (e.g., Harris *et al.*, 1997, 1998; Moulton and Lawson, 2002). However, for drilling and geotechnical operations, the safety zone is stationary and is sufficiently small to allow effective monitoring of the safety zones.

#### *Proposed Additional Mitigation Measures*

In addition to the standard mitigation and monitoring measures discussed in SOI’s IHA application, NMFS is also proposing to require in the IHA, additional mitigation measures to

protect feeding and migrating bowhead whales in the U.S. Beaufort Sea. These include (1) not conducting drilling operations during the bowhead migration and subsistence hunting periods and vessel and aerial monitoring requirements to look for feeding gray and bowhead whale concentrations and migrating bowhead whale cow/calf pairs. If changes in behavior are observed during operations, drilling operations must cease until the whales have migrated past the drilling location.

#### *Underwater Acoustical Monitoring Program*

As described in more detail in SOI’s IHA application, sounds produced during the drilling and geotechnical operations and vessels supporting the offshore drilling program will be measured in the field during typical operations. These measurements will be used to establish potential disturbance radii for respective marine mammal groups within the project area. The goals and objectives of SOI’s planned work are: (1) to measure the distances from the various sound sources to broadband received levels of 170, 160, and 120 dB rms re 1 microPa (sounds are not expected to reach 180 dB from the drilling and geotechnical vessels), and (2) to measure the radiated vessel sounds vs. distance for the source and support vessels. The measurements will be made at the beginning of the specific activity (i.e., shallow hazards survey activity and drilling activity) and all safety and disturbance radii will be reported within 72 hours of completing the measurements. For the drilling operation, a subsequent mid-season assessment is proposed to be conducted to measure sound propagation from combined drilling operations during “normal” operations. For drilling activities, the primary radii of concern will be the 160-dB disturbance radii (although measurements will be made to the 180-dB isopleth). In addition to reporting the radii of specific regulatory concern, distances to other sound pressure level isopleths down to 120 dB (if measurable) will be reported in increments of 10 dB. The distance at which received sound levels become  $\geq 120$  dB for continuous sound (which occurs during drilling activities as opposed to impulsive sound which occurs during seismic activities) is sometimes considered to be a zone of potential disturbance for some cetacean species by NMFS. SOI plans to use vessel-based MMOs to monitor the 160-dB disturbance radii around the drilling vessels and, if necessary, to implement mitigation measures for the 190- and

180-dB safety radii. An aerial survey program will be implemented to monitor both the drilling and seismic activities in the Beaufort Sea.

SOI plans to use a qualified acoustical contractor to measure the sound propagation of the vessel-based drilling rig during periods of drilling activity, and the drill ship, geotech vessel and support vessels while they are underway at the start of the field season. Noise from ships with ice-breaking capabilities will be measured during periods of ice-breaking activity. These measurements will be used to determine the sound levels produced by various equipment and to establish any safety and disturbance radii if necessary. Bottom-founded hydrophones similar to those used in 2006 and 2007 for measurements of vessel-based seismic sound propagation will likely be used to determine the levels of sound propagation from the drill rigs and associated vessels. An initial sound source analysis will be supplied to NMFS and the drilling operators within 72 hours of completion of the measurements, if possible. NMFS proposed to clarify in the IHA that the sound source analysis will be provided to NMFS within 24 hours of submission to SOI. A detailed report on the methodology and results of these tests will be provided to NMFS as part of the 90-day report following completion of the drilling program.

#### *Aerial Survey Monitoring Program*

SOI proposes to conduct an aerial survey program in support of its dual seismic exploration and drilling programs in the Beaufort Sea during summer and fall of 2008. SOI notes that the objectives of the aerial survey will be to: (1) advise operating vessels as to the presence of marine mammals in the general area of operation; (2) collect and report data on the distribution, numbers, movement and behavior of marine mammals near the drilling operations with special emphasis on migrating bowhead whales; (3) support regulatory reporting and Inupiat communications related to the estimation of impacts of drilling operations on marine mammals; (4) monitor the accessibility of bowhead whales to Inupiat hunters and (5) to document how far west of drilling activities bowhead whales travel before they return to their normal migration paths, and if possible, to document how far east of drilling operations the deflection begins.

The same aerial survey design will be implemented by SOI during the summer (one week prior to beginning of offshore operations until August 20) and fall

(August 20 - five days after cessation of operations, or until agreement is reached that the bowhead migration has ended) periods, but during the early summer, the surveys will be flown twice a week and during the late summer and fall, flights will be conducted daily. During the early summer, few cetaceans are expected to be encountered in the nearshore Alaskan Beaufort Sea where the drilling operation will be conducted (see particularly Moore *et al.* (1989b), Moore and Clarke (1989, 1991), Moore (1992), Moore *et al.* (1989a, 1993, 2000), Moore and Reeves (1993), Moore and DeMaster (1997), Miller *et al.* (1998, 1999, 2002) and those that are encountered are expected to be either along the coast (gray whales: (Maher (1960), Rugh and Fraker (1981), Miller *et al.* (1999), Treacy (2000)) or among the pack ice (bowheads: Moore *et al.* (1989b), and belugas: Moore *et al.* (1993), Clarke *et al.* (1993)) north of the area where drilling activities are to be conducted. During some years a few gray whales are found feeding in shallow nearshore waters from Barrow to Kaktovik but most sightings are in the western part of that area.

During the late summer and fall, the bowhead whale is the primary species of concern, but belugas and gray whales are also present. Bowheads and belugas migrate through the Alaskan Beaufort Sea from summering areas in the central and eastern Beaufort Sea and Amundsen Gulf to their wintering areas in the Bering Sea (Clarke *et al.*, 1993; Moore *et al.*, 1993; Miller *et al.*, 2002). Small numbers of bowheads are sighted in the eastern Alaskan Beaufort Sea starting mid-August and near Barrow starting late August, but the main migration does not start until early September. The bowhead migration tends to be through nearshore and shelf waters, although in some years small numbers of whales are seen near the coast and/or far offshore. Bowheads frequently interrupt their migration to feed (Ljungblad *et al.*, 1986a; Lowry, 1993; Landino *et al.* 1994; Würsig *et al.* 2002; Lowry *et al.* 2004) and their stops vary in duration from a few hours to a few weeks (Koski *et al.*, 2002). Opportunistic feeding areas are in coastal and shelf waters near and east of Kaktovik.

The aerial survey procedures will be generally consistent with those during earlier industry studies (Davis *et al.*, 1985; Johnson *et al.*, 1986; Evans *et al.*, 1987; Brueggeman *et al.*, 1992; Miller *et al.*, 1997, 1998, 1999, 2002; Patterson, 2007). This will facilitate comparison and pooling of data where appropriate. However, the specific survey grids will be tailored to SOI's operations and the

time of year. During the 2008 field season SOI will coordinate and cooperate with the aerial surveys conducted by MMS and any other groups conducting aerial surveys in the same region.

SOI notes that the timing, duration, and location of SOI's drilling operations are subject to change as a result of unpredictable weather and ice issues, as well as regulatory and stakeholder concerns. As a result, SOI's recommended approach is flexible and able to adapt at short notice to changes in the operations. For information on SOI's summer and fall aerial survey design, please refer to SOI's 2008 IHA application.

#### *Acoustic Monitoring Program*

Determining the potential effects of drilling noise on migration bowhead whales will be complicated by the presence of ice-management and other support vessels that may contribute to underwater sound levels. Miles *et al.* (1987) reported higher sound pressure levels (SPLs) from ice-breakers underway in open water than from vessel-based drilling activity. SPLs from dredging activity, a working tug, and an icebreaker pushing ice were also greater than those produced by vessel-based drilling activity. However, sounds produced during drilling activity are relatively continuous while ice management vessel sounds are considered to be intermittent, and there is some concern that continuous and intermittent sounds may result in behavioral reactions (at least in mysticete whales) at a greater distance than impulse sound (i.e., seismic) of the same intensity.

Acoustic localization methods provide a possible alternative (or supplement) to aerial surveys for addressing these questions. As compared with aerial surveys, acoustic methods have the advantage of providing a vastly larger number of whale detections, and can operate day or night, independent of visibility, and to some degree independent of ice conditions and sea state-all of which prevent or impair aerial surveys. However, acoustic methods depend on the animals to call, and to some extent one must assume that calling rate is unaffected by exposure to industrial noise. Bowheads do call frequently in the fall, but there is some evidence that their calling rate may be reduced upon exposure to industrial sounds, complicating interpretation. Also, acoustic methods require development and deployment of instruments that are stationary (preferably mounted on the bottom) to record and localize the whale

calls. According to SOI, acoustic methods would likely be more effective for studying impacts related to a stationary sound source, such as a drilling rig that is operating within a relatively localized area, than for a moving sound source such as that produced by a seismic source vessel. SOI's proposed study is described next.

#### *Acoustic Study of Bowhead Deflections*

SOI plans to deploy an acoustic net array program in the Beaufort Sea in 2008, similar to that which was done in 2007, but enhanced by the use of directional acoustic systems that permit localization of bowhead whale and other marine mammal vocalizations. The purpose of the array will be to further understand, define, and document sound characteristics and propagation resulting from vessel-based drilling operations that may have the potential to cause deflections of bowhead whales from their migratory pathway. Of particular interest will be the east-west extent of deflection (i.e. how far east of a sound source do bowheads begin to deflect and how far to the west beyond the sound source does deflection persist). Of additional interest will be the extent of offshore (or towards shore) deflection that occurs.

Greeneridge Sciences plans to conduct the whale migration monitoring using the passive acoustics techniques developed and used successfully since 2001 for monitoring the migration past BP's Northstar production island northwest of Prudhoe Bay. Those techniques involve using directional autonomous seafloor acoustic recorders (DASARs) to measure the arrival angles of bowhead calls at known locations, then triangulating to locate the calling whale. Thousands, in some years tens of thousands, of whale calls have been located each year since 2001. Greeneridge Sciences developed and tested a new model of DASAR under SOI's sponsorship in 2006. The new design proved to be operational during field deployment in 2006 and is proposed for use in the 2008 migration monitoring.

This acoustic localization method will provide important information for addressing the whale deflection question. As compared with aerial surveys, acoustic methods have the advantage of providing a vastly larger number of whale detections, and can operate day or night, independent of visibility, and to some degree independent of ice conditions and sea state-all of which prevent or impair aerial surveys. However, acoustic methods depend on the animals to call, and to some extent assume that calling

rate is unaffected by exposure to industrial noise. Bowheads do call frequently in fall, but there is some evidence that their calling rate may be reduced upon exposure to industrial sounds, complicating interpretation. The combined use of acoustic and aerial survey methods will provide a suite of information that should be very useful in assessing the potential effects of drilling operations on migrating bowhead whales.

The objective of this study is to provide information on bowhead migration paths along the Alaskan coast, particularly with respect to industrial operations and whether and to what extent there is deflection due to industrial sound levels. Using passive acoustics with directional autonomous recorders, the locations of calling whales will be observed for a six- to ten-week continuous monitoring period at five coastal sites (subject to favorable ice and weather conditions). Essential to achieving this objective is the continuous measurement of sound levels near the drillship. For more information on SOI's proposed acoustic program, please see its IHA application.

#### **Reporting**

##### *Daily Reporting*

In its IHA application, SOI proposes to collect, via the aerial flights, unanalyzed bowhead sighting and flightline data which will be exchanged between MMS and SOI on a daily basis during the field season. Each team will also submit its sighting information to NMFS in Anchorage each day. After the SOI and MMS data files have been reviewed and finalized, they will be shared in digital form.

##### *90-day Technical Report*

The results of the 2008 SOI vessel-based monitoring, including estimates of take by harassment, will be presented in the "90 day and technical report(s)" that are usually required by NMFS under IHAs. SOI proposes that these technical report(s) will include: (1) summaries of monitoring effort: total hours, total distances, and distribution through study period, sea state, and other factors affecting visibility and detectability of marine mammals; (2) analyses of the effects of various factors influencing detectability of marine mammals: sea state, number of observers, and fog/glare; (3) species composition, occurrence, and distribution of marine mammal sightings including date, water depth, numbers, age/size/gender categories, group sizes, and ice cover; (4) sighting rates of marine mammals versus

operational state (and other variables that could affect detectability); (5) initial sighting distances versus operational state; (6) closest point of approach versus seismic state; (7) observed behaviors and types of movements versus operational state; (8) numbers of sightings/individuals seen versus operational state; (9) distribution around the drilling vessel and support vessels versus operational state; and (10) estimates of take based on (a) numbers of marine mammals directly seen within the relevant zones of influence (160 dB, 180 dB, 190 dB (if SPLs of that level are measured)), and (b) numbers of marine mammals estimated to be there based on sighting density during daytime hours with acceptable sightability conditions.

In addition, the 90-day report will contain an analysis of all acoustic data in order to address the following primary data analysis questions: (a) to determine when, where, and what species of animals are acoustically detected on each DASAR, (b) to analyze data as a whole to determine offshore distributions as a function of time, (c) to quantify spatial and temporal variability in the ambient noise, and (d) to measure received levels of seismic survey events and drill ship activities. The detection data will be used to develop spatial and temporal animal detection distributions. Statistical analyses will be used to test for changes in animal detections and distributions as a function of different variables (e.g., time of day, time of season, environmental conditions, ambient noise, vessel type, operation conditions).

##### *Comprehensive Report*

Following the 2008 open-water season a comprehensive report describing the proposed acoustic, vessel-based, and aerial monitoring programs will be prepared. The comprehensive report will describe the methods, results, conclusions and limitations of each of the individual data sets in detail. The report will also integrate (to the extent possible) the studies into a broad based assessment of industry activities and their impacts on marine mammals in the Beaufort Sea during 2008. The report will form the basis for future monitoring efforts and will establish long term data sets to help evaluate changes in the Beaufort Sea ecosystem. The report will also incorporate studies being conducted in the Chukchi Sea and will attempt to provide a regional synthesis of available data on industry activity in offshore areas of northern Alaska that may influence marine mammal density, distribution and behavior.

This report will consider data from many different sources including two

relatively different types of aerial surveys; several types of acoustic systems for data collection (net array, vertical array, DASARB, and OBH systems), and vessel based observations. Collection of comparable data across the wide array of programs will help with the synthesis of information. However, interpretation of broad patterns in data from a single year is inherently limited. Much of the 2008 data will be used to assess the efficacy of the various data collection methods and to establish protocols that will provide a basis for integration of the data sets over a period of years.

#### **Endangered Species Act (ESA)**

NMFS issued a Biological Opinion on June 16, 2006, regarding the effects of this action on ESA-listed species and critical habitat under the jurisdiction of NMFS. The Opinion concluded that this action is not likely to jeopardize the continued existence of listed species or result in the destruction or adverse modification of critical habitat. Due to the presence of fin and humpback whales in the Chukchi and Beaufort seas in 2007, the MMS has begun additional consultation on the proposed seismic survey activities in the Beaufort and Chukchi seas during 2008. NMFS will also consult on the issuance of the IHA under section 101(a)(5)(D) of the MMPA to SOI for this activity. Consultation will be concluded prior to NMFS making a determination on the issuance of an IHA. A copy of the 2006 Biological Opinion is available at: <http://www.mms.gov/alaska/ref/BioOpinions/ARBOIII-2.pdf>.

#### **National Environmental Policy Act (NEPA)**

In July, 2004, the MMS prepared an EA for LS-195 to determine whether or not new information indicates that the proposed lease sale would cause new significant impacts; ones that were not addressed in the Final EIS for Beaufort Sea Planning Area Oil and Gas Lease Sales 186, 195, and 202 (MMS, 2003a) (the Multiple-Sale EIS). This EA incorporated all of the relevant material in the Multiple-Sale EIS by reference. It also reexamined the potential environmental effects of the Proposed Action and alternatives as a result of new information on potential impacts and issues that were not available at the time MMS completed the Multiple-Sale EIS in February 2003. Because the Beaufort Sea sale proposals and projected activities are very similar, if not almost identical for each lease sale, MMS prepared a single EIS for all three Beaufort Sea sales that was first analyzed in the 5-year OCS Leasing

Program for 2002–2007 (MMS, 2002a). The Multiple-Sale approach focuses the NEPA/EIS process on the identification of differences among the proposed sales and on new information and issues.

Subsequent to releasing the EA on LS–195, in August, 2006, MMS released a third NEPA document for the proposed Beaufort Sea Planning Area OCS LS–202. That EA further updated the information contained in the two previously mentioned NEPA documents. However, SOI's proposed 2008 exploratory drilling project is on leases obtained from MMS as a result of the Beaufort Sea LS–195, not LS 202. However, the EA for LS 202 updates the environmental information found in the EA for LS 195.

The MMS made a FONSI for LS–195 on July 2, 2004, based on information contained within its EA, that implementation of the subject action is not a major Federal action having significant effects on the environment within the meaning of NEPA. The MMS determined, therefore, that a new EIS would not be prepared.

In accordance with NOAA Administrative Order 216–6 (Environmental Review Procedures for Implementing the National Environmental Policy Act, May 20, 1999), NMFS has reviewed the information contained in these three MMS NEPA documents and determined that while these NEPA documents accurately and completely describe the environmental setting for NMFS' proposed action (the 20087 SOI exploratory drilling project) and other identified alternatives, the potential impacts on marine mammals, endangered species, and other marine life that could be impacted by the preferred alternative and the other alternatives has not been fully described and analyzed, especially as it relates to NMFS' issuance of authorizations under the MMPA, and the potential impacts due to NMFS' IHA issuance. To update these documents, NMFS completed its own EA in 2007 which incorporates by reference relevant information contained in the Multiple-Sale EIS, the Beaufort Sea Lease Sale 195 EA, and the Beaufort Sea Lease Sale 202 EA. On October 24, 2007, NMFS also issued a FONSI to support theon its issuance of an IHA to SOI for taking marine mammals incidental to its offshore drilling project. As a result of the EA and FONSI, NMFS has determined that the preparation of an EIS was not necessary and none was prepared. A copy of NMFS' EA and FONSI for this action are available electronically (see ADDRESSES).

For 2008, NMFS has preliminarily determined that the proposed action discussed in this document is not substantially different from the 2007 action. A final decision on whether the action differs in a manner requiring NMFS to amend its 2007 EA and issue a new FONSI will be made by NMFS prior to making a final decision on the proposed issuance of an IHA to SOI for this activity.

#### Preliminary Conclusions

Based on the information provided in SOI's application and other referenced documentation, NMFS has preliminarily determined that the impact of SOI conducting its exploratory, tophole and geotechnical drilling programs in the U.S. Beaufort Sea in 2008 will have no more than a negligible impact on a small number of marine mammals. NMFS has preliminarily determined that the short-term impact of conducting exploratory drilling by the two drilling vessels (*Kulluk* and the geotechnical vessel) and by supporting vessels, including ice management vessels in the U.S. Beaufort Sea may result, at worst, in a temporary modification in behavior by certain species of marine mammals, including vacating the immediate vicinity around the two activity areas due to noise resulting from drilling and ship movements.

While behavioral and avoidance reactions may be made by these species in response to the resultant noise, this behavioral change is expected to have a negligible impact on the animals. While the number of potential incidental harassment takes will depend on the distribution and abundance of marine mammals (which vary annually due to variable ice conditions and other factors) in the area of drilling operations, the number of potential harassment takings is estimated to be small as indicated in Tables 1, 2 and 3 in this document. In addition, no take by death and/or serious injury is anticipated or would be authorized; there is almost a zero potential for an oil spill to result from the drilling activity as it will not penetrate into oil bearing strata, and the potential for temporary or permanent hearing impairment is low due to the low SPLs associated with drilling activities. Also, harassment takings are likely to be minimized through the incorporation of the monitoring and mitigation measures mentioned in this document and required by the authorization. No rookeries, mating grounds, areas of concentrated feeding, or other areas of special significance for marine mammals occur within or near the

planned area of operations during the season of operations.

As SOI notes in its IHA application, there could be an adverse impact on the Inupiat bowhead subsistence hunt if the whales were deflected seaward (further from shore) in the traditional hunting areas north of Pt. Thomson in Camden Bay. NMFS believes that this could result in whaling crews being forced to travel greater distances to intercept westward migrating whales thereby creating a significant safety hazard for whaling crews (with a potential loss of life), limiting chances of successfully striking and landing bowheads, and/or not landing bowheads quickly before decomposition and spoilage occurs. Prior to issuing an IHA for activities that take place in Arctic waters, NMFS must ensure that the taking by the activity will not have an unmitigable adverse impact on subsistence uses of marine mammals. In 50 CFR 216.103, NMFS has defined an "unmitigable adverse impact" to mean:

an impact resulting from the specified activity: (1) That is likely to reduce the availability of the species to a level insufficient for a harvest to meet subsistence needs by: (i) Causing the marine mammals to abandon or avoid hunting areas; (ii) Directly displacing subsistence users; or (iii) Placing physical barriers between the marine mammals and the subsistence hunters; and (2) That cannot be sufficiently mitigated by other measures to increase the availability of marine mammals to allow subsistence needs to be met.

SOI states that the potential impact on subsistence users of marine mammals will be reduced mitigated throughby the application of mitigation procedures described in its application and implemented by a CAA between the SOI, the AEWC and the whaling captains' associations of Kaktovik, Nuiqsut and Barrow. Mitigation measures implemented by NMFS under Letters of Authorization or IHAs previously included: (1) warm shutdown of drilling operations during the subsistence hunt, and (2) moving the drilling vessels either further offshore or behind the barrier islands. For example, in 2007, measures taken to ensure that there would not be an unmitigable adverse impact on subsistence uses of marine mammals included: (1) limiting the activity to a single exploratory drilling vessel, (2) cease drilling operations beginning August 25, 2007, and (3) to relocate all equipment and related vessels offsite no later than August 27, 2007.

Therefore, presuming that effective mitigation and monitoring measures will be contained in SOI's 2008 IHA and will be fully implemented by SOI, NMFS has preliminarily determined



that SOI's proposed drilling and geotechnical activity would result in the harassment of small numbers of marine mammals; would have no more than a negligible impact on the affected marine mammal stocks; and, subject to development of mitigation measures during discussions with interested parties, would not have an unmitigable adverse impact on the availability of species or stocks for subsistence uses. In addition, implementation of these effective mitigation measures ensures that the taking, by Level B harassment of marine mammals by SOI's offshore drilling activity will have the least practicable effect on marine mammal individuals and populations.

As a result, NMFS proposes to issue an IHA to SOI for conducting an offshore drilling program in the U.S. Beaufort Sea in 2008, provided the previously mentioned monitoring and reporting requirements are incorporated.

Dated: May 29, 2008.

**Helen W. Golde**

*Deputy Director, Office of Protected Resources, National Marine Fisheries Service.*  
[FR Doc. E8-12513 Filed 6-3-08; 8:45 am]

**BILLING CODE 3510-22-S**

## CORPORATION FOR NATIONAL AND COMMUNITY SERVICE

### Information Collection; Submission for OMB Review, Comment Request

**AGENCY:** Corporation for National and Community Service.

**ACTION:** Notice.

**SUMMARY:** The Corporation for National and Community Service (hereinafter the "Corporation") has submitted a public information collection request (ICR) entitled Annual Reporting Questions for Program Development and Training grants, and Disability Inclusion grants to the Office of Management and Budget (OMB) for review and approval in accordance with the Paperwork Reduction Act of 1995, Public Law 104-13 (44 U.S.C. Chapter 35). Copies of this ICR, with applicable supporting documentation, may be obtained by calling the Corporation for National and Community Service, Ms. Amy Borgstrom at (202) 606-6930. Individuals who use a telecommunications device for the deaf (TTY-TDD) may call (202) 565-2799 between 8:30 a.m. and 5 p.m. eastern time, Monday through Friday.

**ADDRESSES:** Comments may be submitted, identified by the title of the information collection activity, to the Office of Information and Regulatory

Affairs, Attn: Ms. Katherine Astrich, OMB Desk Officer for the Corporation for National and Community Service, by any of the following two methods within 30 days from the date of publication in this **Federal Register**:

- (1) By fax to: (202) 395-6974, Attention: Ms. Katherine Astrich, OMB Desk Officer for the Corporation for National and Community Service; and
- (2) Electronically by e-mail to: [Katherine\\_T.\\_Astrich@omb.eop.gov](mailto:Katherine_T._Astrich@omb.eop.gov).

**SUPPLEMENTARY INFORMATION:** The OMB is particularly interested in comments which:

- Evaluate whether the proposed collection of information is necessary for the proper performance of the functions of the Corporation, including whether the information will have practical utility;
- Evaluate the accuracy of the agency's estimate of the burden of the proposed collection of information, including the validity of the methodology and assumptions used;
- Propose ways to enhance the quality, utility, and clarity of the information to be collected; and
- Propose ways to minimize the burden of the collection of information on those who are to respond, including through the use of appropriate automated, electronic, mechanical, or other technological collection techniques or other forms of information technology, e.g., permitting electronic submissions of responses.

### Comments

A 60-day public comment Notice was published in the **Federal Register** on Tuesday, March 4, 2008. This comment period ended May 5, 2008. No public comments were received from this Notice.

**Description:** The Corporation is seeking approval of the attached Annual Reporting Questions for Program Development and Training grants, and Disability Inclusion grants. Applicants will respond to the questions included in this ICR in order to report on their use of federal funds and progress against their annual plan.

**Type of Review:** New Information Collection.

**Agency:** Corporation for National and Community Service.

**Title:** Annual Reporting Questions for Program Development and Training grants, and Disability Inclusion grants.

**OMB Number:** None.

**Agency Number:** None.

**Affected Public:** State service commissions.

**Total Respondents:** 54.

**Frequency:** Annually.

**Average Time per Response:** 8 hours.  
**Estimated Total Burden Hours:** 432 hours.

**Total Burden Cost (capital/startup):** None.

**Total Burden Cost (operating/maintenance):** None.

Dated: May 19, 2008.

**Kristin McSwain,**

*Director, AmeriCorps State and National.*

[FR Doc. E8-12486 Filed 6-3-08; 8:45 am]

**BILLING CODE 6050--\$-P**

## CORPORATION FOR NATIONAL AND COMMUNITY SERVICE

### Information Collection; Submission for OMB Review, Comment Request

**AGENCY:** Corporation for National and Community Service.

**ACTION:** Notice.

**SUMMARY:** The Corporation for National and Community Service (hereinafter the "Corporation") has submitted a public information collection request (ICR) entitled CNCS Application Instructions and Reporting Questions to the Office of Management and Budget (OMB) for review and approval in accordance with the Paperwork Reduction Act of 1995, Pub. L. 104-13 (44 U.S.C. Chapter 35). Copies of this ICR, with applicable supporting documentation, may be obtained by calling the Corporation for National and Community Service, Ms. Amy Borgstrom at (202) 606-6930. Individuals who use a telecommunications device for the deaf (TTY-TDD) may call (202) 565-2799 between 8:30 a.m. and 5 p.m. eastern time, Monday through Friday.

**ADDRESSES:** Comments may be submitted, identified by the title of the information collection activity, to the Office of Information and Regulatory Affairs, Attn: Ms. Katherine Astrich, OMB Desk Officer for the Corporation for National and Community Service, by any of the following two methods within 30 days from the date of publication in this **Federal Register**:

- (1) By fax to: (202) 395-6974, Attention: Ms. Katherine Astrich, OMB Desk Officer for the Corporation for National and Community Service; and
- (2) Electronically by e-mail to: [Katherine\\_T.\\_Astrich@omb.eop.gov](mailto:Katherine_T._Astrich@omb.eop.gov).

**SUPPLEMENTARY INFORMATION:** The OMB is particularly interested in comments which:

- Evaluate whether the proposed collection of information is necessary for the proper performance of the functions of the Corporation, including whether the information will have practical utility;