

Special Accommodations

These meetings are physically accessible to people with disabilities. Requests for sign language interpretation or other auxiliary aids should be directed to Tina O'Hern at the Council (see **ADDRESSES**) at least 5 working days prior to the meeting.

Dated: July 23, 2010.

Tracey L. Thompson,

Acting Director, Office of Sustainable Fisheries, National Marine Fisheries Service.

[FR Doc. 2010-18586 Filed 7-28-10; 8:45 am]

BILLING CODE 3510-22-S

DEPARTMENT OF COMMERCE**National Oceanic and Atmospheric Administration**

RIN 0648-XX87

Marine Fisheries Advisory Committee

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

ACTION: Notice of open public meeting.

SUMMARY: This notice sets forth the schedule and proposed agenda of a forthcoming meeting of the Marine Fisheries Advisory Committee (MAFAC). The members will discuss and provide advice on issues outlined in the agenda below.

DATES: The meeting is scheduled for August 12, 2009, from 2 – 4 p.m. Eastern Daylight Time.

ADDRESSES: Conference call. Public access is available at SSMC3, Room 13817, 1315 East-West Highway, Silver Spring, MD 20910.

FOR FURTHER INFORMATION CONTACT: Heidi Lovett, (301) 713-9070 x-118; e-mail: Heidi.Lovett@noaa.gov.

SUPPLEMENTARY INFORMATION: The MAFAC was established by the Secretary of Commerce (Secretary) on February 17, 1971, to advise the Secretary on all living marine resource matters that are the responsibility of the Department of Commerce. This committee advises and reviews the adequacy of living marine resource policies and programs to meet the needs of commercial and recreational fisheries, and environmental, State, consumer, academic, tribal, governmental and other national interests. The complete charter and summaries of prior meetings are located online at <http://www.nmfs.noaa.gov/ocs/mafac/>.

Matters To Be Considered

This meeting is convening to discuss and consider recommendations of the MAFAC Strategic Planning, Budget and Program Management Subcommittee on the NOAA Next Generation Strategic Plan. This agenda is subject to change.

Dated: July 23, 2010.

Samuel D. Rauch III,

Deputy Assistant Administrator for Regulatory Programs, National Marine Fisheries Service.

[FR Doc. 2010-18666 Filed 7-28-10; 8:45 am]

BILLING CODE 3510-22-S

DEPARTMENT OF COMMERCE**National Oceanic and Atmospheric Administration****Science Advisory Board, Notice of Public Meeting**

AGENCY: Office of Oceanic and Atmospheric Research (OAR), National Oceanic and Atmospheric Administration (NOAA), Department of Commerce (DOC).

ACTION: Notice of Public Meeting.

SUMMARY: This notice sets forth the schedule and proposed agenda of a forthcoming meeting of the NOAA Science Advisory Board. The members will discuss and provide advice on issues outlined in the agenda below.

DATES: The meeting is scheduled for: Wednesday, August 4, 2010 from 3 p.m.–5 p.m. Eastern Time.

ADDRESSES: Conference call. Public access is available at: NOAA, SSMC 3, Room 11836, 1315 East-West Highway, Silver Spring, MD.

FOR FURTHER INFORMATION CONTACT: Dr. Cynthia Decker, Executive Director, Science Advisory Board, NOAA, Rm. 11230, 1315 East-West Highway, Silver Spring, Maryland 20910. (Phone: 301-734-1156, Fax: 301-713-1459, E-mail: Cynthia.Decker@noaa.gov).

SUPPLEMENTARY INFORMATION: The Science Advisory Board (SAB) was established by a Decision Memorandum dated September 25, 1997, and is the only Federal Advisory Committee with responsibility to advise the Under Secretary of Commerce for Oceans and Atmosphere on strategies for research, education, and application of science to operations and information services. SAB activities and advice provide necessary input to ensure that National Oceanic and Atmospheric Administration (NOAA) science programs are of the highest quality and provide optimal support to resource management.

Matters to be Considered: The agenda for the meeting is as follows:

Date and Time: Wednesday, August 4, 2010; 3 p.m.–5 p.m. Eastern Time

Agenda

1. Discussion and consideration of comments from the Working Groups of the NOAA Science Advisory Board on the NOAA Next Generation Strategic Plan and decision on final comments to be transmitted to NOAA.

2. Discussion and consideration of the transmittal letter to NOAA highlighting recommendations from the report from the April 2010 meeting of the Climate Working Group.

3. Discussion and consideration of next actions on NOAA Science Workshop White Paper.

Dated: July 23, 2010.

Mark E. Brown,

Chief Financial Officer, Office of Oceanic and Atmospheric Research, National Oceanic and Atmospheric Administration.

[FR Doc. 2010-18588 Filed 7-28-10; 8:45 am]

BILLING CODE 3510-KD-P

DEPARTMENT OF COMMERCE**National Oceanic and Atmospheric Administration**

RIN 0648-XX45

Takes of Marine Mammals Incidental to Specified Activities; Marine Geophysical Survey in the Northwest Pacific Ocean, July Through September, 2010

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

ACTION: Notice; issuance of an incidental take authorization.

SUMMARY: In accordance with the Marine Mammal Protection Act (MMPA) regulations, notification is hereby given that NMFS has issued an Incidental Harassment Authorization (IHA) to Lamont-Doherty Earth Observatory (L-DEO), a part of Columbia University, to take small numbers of marine mammals, by harassment, incidental to conducting a marine geophysical survey at the Shatsky Rise in the northwest Pacific Ocean, July through September, 2010.

DATES: Effective July 19, 2010, through September 28, 2010.

ADDRESSES: A copy of the IHA and application are available by writing to 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 or by telephoning the contacts listed here. A copy of the application containing a list of the references used in this document may be obtained by writing to the above address, telephoning the contact listed here (*see* **FOR FURTHER INFORMATION CONTACT**) or visiting the internet at: <http://www.nmfs.noaa.gov/pr/permits/incidental.htm#applications>. The following associated documents are also available at the same internet address: Environmental Assessment (EA) prepared by NMFS, and the finding of no significant impact (FONSI). The NMFS Biological Opinion will be available online at: <http://www.nmfs.noaa.gov/pr/consultation/opinions.htm>. Documents cited in this notice may be viewed, by appointment, during regular business hours, at the aforementioned address. Documents cited in this notice may be viewed, by appointment, during regular business hours, at the aforementioned address.

FOR FURTHER INFORMATION CONTACT: Jeannine Cody, Office of Protected Resources, NMFS, (301) 713-2289, ext. 113 or Benjamin Laws, Office of Protected Resources, NMFS, (301) 713-2289, ext. 159.

SUPPLEMENTARY INFORMATION:

Background

Section 101(a)(5)(D) of the MMPA (16 U.S.C. 1371(a)(5)(D)) directs the Secretary of Commerce to authorize, upon request, the incidental, but not intentional, taking of small numbers of marine mammals of a species or population stock, by United States citizens who engage in a specified activity (other than commercial fishing) within a specified geographical region if certain findings are made and, if the taking is limited to harassment, a notice of a proposed authorization is provided to the public for review.

Authorization for incidental taking of small numbers of marine mammals 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. The authorization must set forth the permissible methods of taking, other means of effecting the least practicable adverse impact on the species or stock and its habitat, and monitoring and reporting of such takings. 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. Section 101(a)(5)(D) of the MMPA 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 small numbers of marine mammals. Within 45 days of the close of the public comment period, NMFS must either issue or deny the authorization.

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].

Summary of Request

NMFS received an application on February 2, 2010 from L-DEO for the taking by harassment, of marine mammals, incidental to conducting a marine geophysical survey in the northwest Pacific Ocean. L-DEO, with research funding from the U.S. National Science Foundation (NSF), plans to conduct a marine seismic survey in the northwest Pacific Ocean, from July through September, 2010.

L-DEO plans to use one source vessel, the R/V *Marcus G. Langseth* (*Langseth*), a seismic airgun array, and ocean bottom seismometers (OBS) to conduct a geophysical survey at the Shatsky Rise, a large igneous plateau in the northwest Pacific Ocean. The survey will provide data necessary to decipher the crustal structure of the Shatsky Rise; may address major questions of Earth history, geodynamics, and tectonics; could impact the understanding of terrestrial magmatism and mantle convection; and may obtain data that could be used to improve estimates of regional earthquake occurrence and distribution. In addition to the operations of the seismic airgun array, L-DEO intends to operate a multibeam echosounder (MBES) and a sub-bottom profiler (SBP) continuously throughout the survey.

Acoustic stimuli (*i.e.*, increased underwater sound) generated during the

operation of the seismic airgun array, may have the potential to cause marine mammals in the survey area to be behaviorally disturbed in a manner that NMFS considers to be Level B harassment. This is the principal means of marine mammal taking associated with these activities and L-DEO has requested an authorization to take several marine mammals by Level B harassment.

Description of the Specified Activity

L-DEO's seismic survey on the Shatsky Rise is scheduled to commence on July 24, 2010, and continue for approximately 17 days ending on September 7, 2010. L-DEO will operate the *Langseth* to deploy an airgun array, deploy and retrieve OBS, and tow a hydrophone streamer to complete the survey.

The *Langseth* will transit to the Shatsky Rise, located at 30–37 °N, 154–161 °E in international waters offshore from Japan. Some minor deviation from these dates is possible, depending on logistics, weather conditions, and the need to repeat some lines if data quality is substandard. Therefore, NMFS plans to issue an authorization that extends to September 28, 2010.

Geophysical survey activities will involve conventional seismic methodologies to decipher the crustal structure of the Shatsky Rise. To obtain high-resolution, 3-D structures of the area's magmatic systems and thermal structures, the *Langseth* will deploy a towed array of 36 airguns as an energy source and approximately 28 OBSs and a 6-kilometer (km) long hydrophone streamer. As the airgun array is towed along the survey lines, the hydrophone streamers will receive the returning acoustic signals and transfer the data to the vessel's onboard processing system. The OBSs record the returning acoustic signals internally for later analysis.

The Shatsky Rise study (*e.g.*, equipment testing, startup, line changes, repeat coverage of any areas, and equipment recovery) will take place in international waters deeper than 1,000 meters (m) (3,280 feet (ft)) and will require approximately 17 days (d) to complete approximately 15 transects of variable lengths totaling 3,160 kilometers (km) of survey lines. Data acquisition will include approximately 408 hours (hr) of airgun operation (17 d × 24 hr).

The scientific team consists of Drs. Jun Korenaga (Yale University, New Haven, CT), and William Sager (Texas A&M University, College Station, TX).

NMFS outlined the purpose of the program in a previous notice for the proposed IHA (75 FR 28568, May 21,

2010). The activities to be conducted have not changed between the proposed IHA notice and this final notice announcing the issuance of the IHA. For a more detailed description of the authorized action, including vessel and acoustic source specifications, the reader should refer to the proposed IHA notice (75 FR 28568, May 21, 2010).

Comments and Responses

A notice of receipt of the L-DEO application and proposed IHA was published in the **Federal Register** on May 21, 2010 (75 FR 28568). During the comment period, NMFS received comments from the Marine Mammal Commission (Commission). The public comments can be found online at: <http://www.nmfs.noaa.gov/pr/permits/incidental.htm>. Following are their comments and NMFS' responses.

Comment 1: The Commission recommends that before issuing the requested IHA, NMFS provide additional justification for its preliminary determination that the planned monitoring program will be sufficient to detect with a high level of confidence, all marine mammals within or entering the identified exclusion zones.

Response: NMFS believes that the planned monitoring program will be sufficient to detect (using visual detection and PAM), with reasonable certainty, most marine mammals within or entering identified exclusion zones (EZs). This monitoring, along with the required mitigation measures, will result in the least practicable adverse impact on the affected species or stocks and will result in a negligible impact on the affected species or stocks.

At present, NMFS views the combination of visual and passive acoustic monitoring as the most effective mitigation techniques available for detecting marine mammals within or entering the exclusion zone. L-DEO and the federal funding agency (NSF) are receptive to incorporating proven technologies and techniques to enhance the current monitoring and mitigation program. Until proven technological advances are made, nighttime mitigation measures during operations include combinations of the use of protected species visual observers (PSVOs), PAM, night vision devices, and continuous shooting of a mitigation gun. Should the airgun array be powered-down, it is believed that the operation of a single airgun continues to serve as a sound source deterrent to marine mammals. In the event of a complete airgun array shut down, for mitigation or repairs, then science is suspended until one half hour after civil dawn (when PSO's are

able to clear the safety zone). Science does not begin until the entire safety radius is visible for at least 30 minutes.

In cooperation with NMFS, L-DEO will be conducting efficacy experiments of night vision devices (NVD) during a future *Langseth* cruise. In addition, in response to a recommendation from NMFS, L-DEO is evaluating the use of handheld thermal imaging cameras to supplement nighttime mitigation practices. These devices are currently successfully utilized by another federal agency while conducting nighttime seismic operations.

Comment 2: The Commission recommends that NMFS require the applicant to use location-specific environmental parameters to re-estimate exclusion zones and verify the estimates with field measurements prior to or at the beginning of the study.

Response: L-DEO and the NSF have invested significant resources into the *Langseth's* seismic equipment calibration studies. The data results from the studies were peer reviewed and the calibration results, viewed as conservative, were used to determine the cruise-specific exclusion zones. With the expected low density of marine mammals, combined with the remote, deep water survey location, NMFS has determined that the exclusion zones identified in the IHA are appropriate for the survey.

Comment 3: The Commission recommends that NMFS require the applicant to re-estimate exposures based upon location-specific environmental parameters and associated ensounded areas.

Response: See the response to Comment 2. NMFS has concluded that the exposures estimated in the IHA are appropriate for this survey.

Comment 4: Clarify the qualifiers "when practical," "if practical," and "when feasible" with respect to: (1) Using two marine mammal observers to monitor the exclusion zone for marine mammals during daytime operations and nighttime start-ups of the airguns; (2) using crew members to assist observers in detecting marine mammals and implementing mitigation requirements; and (3) using marine mammal observers during daytime periods to compare sighting rates and animal behavior during times when seismic airguns are and are not operating.

Response: The *Langseth* typically carries five trained, NMFS-qualified and experienced PSVOs for every seismic study involving use of an airgun system comparable to that planned for the upcoming project. PSVOs are appointed by L-DEO with NMFS concurrence. L-

DEO will utilize two (except during meal times and restroom breaks), NMFS-qualified, vessel-based PSVOs to watch for and monitor marine mammals near the seismic source vessel during all daytime airgun operations and before and during start-ups of airguns day or night. PSVOs will have access to reticle binoculars, big-eye binoculars, and night vision devices to scan the area around the vessel. PSVOs will alternate between binoculars and the naked eye to avoid eye fatigue. During all daytime periods, two PSVOs will be on duty from the observation tower to monitor. During mealtimes it is sometimes difficult to have two PSVOs on effort, but at least one PSVO will be on watch during bathroom breaks and mealtimes. Use of two simultaneous observers increases the effectiveness of detecting animals near the source vessel. However, during meal times, only one PSVO may be on duty.

The complement of five PSVOs will rotate shifts, with generally three PSVOs typically on watch at a time, with duty shifts lasting typically one to four hours. Two PSVOs will also be on visual watch during all nighttime start-ups of the seismic airguns. A third PSVO will monitor the PAM equipment 24 hours a day to detect vocalizing marine mammals present in the action area. In summary, a typical daytime cruise would have scheduled two PSVOs on duty from the observation tower, a third PSVO on PAM, and a fourth and fifth PSVO off duty in preparation for shifts.

L-DEO will also instruct the *Langseth* crew to assist in detecting marine mammals and turtles and implementing mitigation requirements.

Last, PSVOs will conduct observations during daytime periods when the seismic system is not operating for comparison of sighting rates and behavior both with versus without airgun operations and between acquisition periods.

Comment 5: Propose to L-DEO that it revise its study design to add pre- and post-seismic survey assessments as a way of obtaining more realistic baseline sighting rates for marine mammals, as well as better assessment of impacts and recovery from those impacts.

Response: Extending the survey is not practicable from an operational standpoint for the applicant. Due to the remote location of the survey and the length of time needed to conduct the requested science experiment, there is little time left for the vessel to operate without the need for refueling and servicing.

During the cruise, there will be significant amounts of transit time pre- and post-survey during which PSVOs

will be on watch (e.g., prior-to and after seismic portions of the survey and during the deployment and retrieval of the OBSs. Considering the low marine mammal density anticipated at this survey site, it is unlikely that the information would result in any statistically robust conclusions for this particular seismic survey.

Comment 6: Clarify the qualifier “ideally,” including the conditions under which the towed hydrophones would not be monitored, and clarify and describe the conditions that it assumes would render the use of passive acoustic monitoring impracticable for supplementing the visual monitoring program.

Response: The primary PAM streamer on the *Langseth* is a digital hydrophone streamer. Should the digital streamer fail, back-up systems should include an analog spare streamer and a hull-mounted hydrophone. Every effort would be made to have a working PAM system during the cruise. In the unlikely event that all three of these systems were to fail, L-DEO would continue science acquisition with the visual based PSVO program. Until further technological advances are made with the PAM system, it is still viewed as a supplementary enhancement to the visual monitoring program. If weather conditions were to prevent the use of PAM, then conditions would also likely prevent the use of the airgun array.

The towed hydrophones will ideally be monitored 24 hours per day while at the seismic survey area during airgun operations, and during most periods when the *Langseth* is underway while the airguns are not operating; PAM may not be possible if damage occurs to both the primary and back-up hydrophone arrays during operations.

Comment 7: Extend the monitoring period to at least one hour before initiation of seismic activities and at least one hour before the resumption of airgun activities after a shutdown because of a marine mammal sighting within an exclusion zone.

Response: As the Commission points out, several species of deep-diving cetaceans are capable of remaining underwater for more than 30 minutes; however, for the following reasons NMFS believes that 30 minutes is an adequate length for the monitoring period prior to the start-up of airguns:

(1) Because the *Langseth* is required to monitor before ramp-up of the airgun array, the time of monitoring prior to start-up of any but the smallest array is effectively longer than 30 minutes (ramp-up will begin with the smallest airgun in the array and airguns will be added in sequence such that the source

level of the array will increase in steps not exceeding approximately 6 dB per 5 minute period over a total duration of 20 to 30 minutes);

(2) In many cases PSVOs are making observations during times when the seismic airguns are not being operated and will actually be observing prior to the 30-minute observation period anyway;

(3) The majority of the species that may be exposed do not stay underwater more than 30 minutes; and

(4) All else being equal and if deep-diving individuals happened to be in the area in the short time immediately prior to the pre-start-up monitoring, if an animal's maximum underwater dive time is 45 minutes, then there is only a one in three chance that the last random surfacing would occur prior to the beginning of the required 30-minute monitoring period and that the animal would not be seen during that 30-minute period.

Also, seismic vessels are moving continuously (because of the long, towed array) and NMFS believes that unless the animal submerges and follows at the speed of the vessel (highly unlikely, especially when considering that a significant part of their movements is vertical [deep-diving]), the vessel will be far beyond the length of the exclusion zone (EZ) radii within 30 minutes, and therefore it will be safe to start the airguns again.

The effectiveness of monitoring is science-based and the requirement that mitigation measures be “practicable.” NMFS believes that the framework for visual monitoring will: (1) Be effective at spotting almost all species for which take is requested; and (2) that imposing additional requirements, such as those suggested by the Commission, would not meaningfully increase the effectiveness of observing marine mammals approaching or entering the EZs.

Comment 8: The Commission recommends that, before issuing the requested IHA, NMFS require that observers collect and analyze data on the effectiveness of ramp-up as a mitigation measure during all such procedures.

Response: The IHA requires that PSVOs on the *Langseth* make observations for 30 minutes prior to ramp-up, during all ramp-ups, and during all daytime seismic operations and record the following information when a marine mammal is sighted:

(i) Species, group size, age/size/sex categories (if determinable), behavior when first sighted and after initial sighting, heading (if consistent), bearing and distance from seismic vessel,

sighting cue, apparent reaction to the airguns or vessel (e.g., none, avoidance, approach, paralleling, etc., and including responses to ramp-up), and behavioral pace; and

(ii) Time, location, heading, speed, activity of the vessel (including number of airguns operating and whether in state of ramp-up or power-down), Beaufort wind force sea state, visibility, and sun glare.

One of the primary purposes of monitoring is to result in “increased knowledge of the species” and the effectiveness of monitoring and mitigation measures; the effectiveness of marine mammal's reaction to ramp-up would be useful information in this regard. NMFS has asked NSF and L-DEO to gather all data that could potentially provide information regarding the effectiveness of ramp-ups as a mitigation measure. However, considering the low numbers of marine mammal sightings and low numbers of ramp-ups, it is unlikely that the information will result in any statistically robust conclusions for this particular seismic survey. Over the long term, these requirements may provide information regarding the effectiveness of ramp-up as a mitigation measure, provided animals are detected during ramp-up.

Post-cruise monitoring reports required by the IHA contain vast amounts of sighting data. LGL Ltd., Environmental Research Associates (LGL), a contractor for L-DEO, has processed sighting and density data, and their publications can be viewed online at: http://www.lgl.com/index.php?option=com_content&view=article&id=69&Itemid=162&lang=en. Post-cruise monitoring reports are currently available on the NMFS MMPA Incidental Take Program Web site and future reports will also be available on the NSF Web site should there be interest in further analysis of this data by the public.

Comment 9: The Commission requests that NMFS work with the applicant to correct discrepancies within the application and between the application and **Federal Register** notice. The last paragraph of page 8 of the application states that “[t]hirty-three cetacean species including 26 odontocete species and seven mysticetes may occur in the Shatsky Rise area * * *” but then goes on to state that the “[i]nformation on the occurrence, distribution, population size, and conservation status for each of the 34 marine mammal species that may occur in the study area is presented in Table 2. The text of the notice refers to 34 species of marine mammals that

could be taken by harassment, but Table 3 in the notice lists only 32 species.

Response: NMFS could find no discrepancies in L-DEO's application between the last paragraph on page 8 and Table 2. The application discussed 33 species which included 26 odontocetes, seven mysticetes and the addition of one pinniped, the northern fur seal (*Callorhinus ursinus*), totaling 34 species shown in Table 2.

Please note that Table 3 combines three cryptic species (Ginkgo-toothed beaked whale, Stejneger's beaked whale, and Hubb's beaked whale into one category, named *Mesoplodon spp.*; thus reducing the number of species listed in Table 3 by two for a total of 32 species. However, the total number of species that could be taken by harassment remains at 34 animals.

Comment 10: The Commission requests that NMFS advise the applicant of the need to use the 160-dB re 1 $\mu\text{Pa}_{(\text{rms})}$ threshold for all cetaceans as currently used by the Service or to explain the bases for using some other sound level as the appropriate threshold.

Response: The applicant understands that the 170-dB level is currently not an accepted threshold level for an authorization from NMFS. The requested takes are based on the 160-dB level.

In closing, NMFS is open to meeting with the Commission to further discuss the broad issues raised in their comments, which relate to more than just the IHA contemplated here. NMFS' staff has contacted Commission staff in response to this request and will follow up to schedule a meeting this year.

Description of the Marine Mammals in the Area of the Specified Activity

Thirty-four marine mammal species may occur in the Shatsky Rise survey area, including 26 odontocetes (toothed cetaceans), 7 mysticetes (baleen whales) and one pinniped. Six of these species are listed as endangered under the U.S. Endangered Species Act of 1973 (ESA; 16 U.S.C. 1531 *et seq.*), including the north Pacific right (*Eubalena japonica*), humpback (*Megaptera novaeangliae*), sei (*Balaenoptera borealis*), fin (*Balaenoptera physalus*), blue (*Balaenoptera musculus*), and sperm (*Physeter macrocephalus*) whale.

The western North Pacific gray whale (*Eschrichtius robustus*) occurs in the northwest Pacific Ocean and is listed as endangered under the ESA and as critically endangered by the International Union for Conservation of Nature (IUCN). L-DEO does not expect to encounter this species within the survey area as gray whales are known to

prefer nearshore coastal waters. Thus, L-DEO does not present analysis for this species nor does the application request take for this species.

NMFS has presented a more detailed discussion of the status of these stocks and their occurrence in the northeastern Pacific Ocean, as well as other marine mammal species that occur around Shatsky Rise, in the notice of the proposed IHA (75 FR 28568, May 21, 2010).

Potential Effects on Marine Mammals

Summary of Potential Effects of Airgun Sounds

Level B harassment of cetaceans and pinnipeds has the potential to occur during the seismic survey due to acoustic stimuli caused by the firing of a single airgun or the 36-airgun array which introduces sound into the marine environment. The effects of sounds from airguns might include one or more of the following: Tolerance, masking of natural sounds, behavioral disturbance, temporary or permanent hearing impairment, or non-auditory physical or physiological effects (Richardson *et al.*, 1995; Gordon *et al.*, 2004; Nowacek *et al.*, 2007; Southall *et al.*, 2007). Permanent hearing impairment, in the unlikely event that it occurred, would constitute injury, but temporary threshold shift (TTS) is not an injury (Southall *et al.*, 2007). Although the possibility cannot be entirely excluded, it is unlikely that the project would result in any cases of temporary or permanent hearing impairment, or any significant non-auditory physical or physiological effects. Some behavioral disturbance is expected, but NMFS expects the disturbance to be localized and short-term.

The notice of the proposed IHA (75 FR 28568, May 21, 2010) included a discussion of the effects of sounds from airguns on mysticetes, odontocetes, and pinnipeds, including tolerance, masking, behavioral disturbance, hearing impairment, and other non-auditory physical effects. Additional information on the behavioral reactions (or lack thereof) by all types of marine mammals to seismic vessels can be found in L-DEO's application and NMFS' EA. The notice of the proposed IHA also included a discussion of the potential effects of the multibeam echosounder (MBES) and the sub-bottom profiler (SBP). Because of the shape of the beams of these sources and their power, NMFS believes it unlikely that marine mammals will be exposed to either the MBES or the SBP at levels at or above those likely to cause harassment. Further, NMFS believes

that the brief exposure of cetaceans to a few signals from the multi-beam bathymetric sonar system is not likely to result in the harassment of marine mammals.

Anticipated Effects on Marine Mammal Habitat

A detailed discussion of the potential effects of this action on marine mammal habitat, including physiological and behavioral effects on marine fish and invertebrates was included in the proposed IHA (75 FR 28568, May 21, 2010). Based on the discussion in the proposed IHA notice and the nature of the activities (limited duration), the authorized operations are not expected to result in any permanent impact on habitats used by marine mammals, including the food sources they use. The main impact associated with the activity will be temporarily elevated noise levels and the associated direct effects on marine mammals.

Mitigation

In order to issue an incidental take authorization (ITA) under Section 101(a)(5)(D) of the MMPA, NMFS must set forth the permissible methods of taking pursuant to such activity, and other means of effecting the least practicable adverse impact on such species or stock and its habitat, paying particular attention to rookeries, mating grounds, and areas of similar significance, and the availability of such species or stock for taking for certain subsistence uses.

L-DEO has based the mitigation measures described herein, to be implemented for the seismic survey, on the following:

(1) Protocols used during previous L-DEO seismic research cruises as approved by NMFS;

(2) previous IHA applications and IHAs approved and authorized by NMFS; and

(3) recommended best practices in Richardson *et al.* (1995), Pierson *et al.* (1998), and Weir and Dolman, (2007).

To reduce the potential for disturbance from acoustic stimuli associated with the activities, L-DEO and/or its designees will implement the following mitigation measures for marine mammals:

(1) Exclusion zones;

(2) power-down procedures;

(3) shutdown procedures, including procedures for species of concern such as emergency shut-down procedures for North Pacific right whales; and

(4) ramp-up procedures.

Exclusion Zones—During the study, all survey effort will take place in deep (greater than 1,000 m) water. L-DEO

uses safety radii to designate exclusion zones and to estimate take (described in greater detail in Section VII of the application) for marine mammals. Table 1 shows the distances at which three

sound levels (160-, 180-, and 190-dB) are expected to be received from the 36-airgun array and a single airgun. The 180- and 190-dB levels are shut-down criteria applicable to cetaceans and

pinnipeds, respectively, as specified by NMFS (2000); and L-DEO used these levels to establish the EZs.

TABLE 1—MEASURED (ARRAY) OR PREDICTED (SINGLE AIRGUN) DISTANCES TO WHICH SOUND LEVELS ≥ 190 , 180, AND 160 DB RE: 1 μ PA COULD BE RECEIVED IN DEEP (>1000 M; 3280 FT) WATER FROM THE 36-AIRGUN ARRAY, AS WELL AS A SINGLE AIRGUN, DURING THE SHATSKY RISE SEISMIC SURVEY, JULY—SEPTEMBER, 2010 (BASED ON L-DEO MODELS AND TOLSTOY *et al.*, 2009).

Source and volume	Tow depth (m)	Predicted RMS Distances (m)		
		190 dB	180 dB	160 dB
Single Bolt airgun 40 in ³	*9–12	12	40	385
4 Strings 36 airguns 6,600 in ³	9	400	940	3,850
	12	460	1,100	4,400

*The tow depth has minimal effect on the maximum near-field output and the shape of the frequency spectrum for the single 40-in³ airgun; thus the predicted safety radii are essentially the same at each tow depth.

If the protected species visual observer (PSVO) detects marine mammal(s) within or about to enter the appropriate EZ, the *Langseth* crew will immediately power down the airguns, or perform a shut down immediately (see Shut-down Procedures).

Power-Down Procedures—A power down involves decreasing the number of airguns in use such that the radius of the 180-dB zone is decreased to the extent that marine mammals are no longer in or about to enter the EZ. A power down of the airgun array can also occur when the vessel is moving from one seismic line to another. During a power down for mitigation, L-DEO will operate one airgun. The continued operation of one airgun is intended to alert marine mammals to the presence of the seismic vessel in the area. In contrast, a shut down occurs when the *Langseth* suspends all airgun activity.

If the PSVO detects a marine mammal (other than a north Pacific right whale—see Shut-down Procedures) outside the EZ, but it is likely to enter the EZ, L-DEO will power down the airguns to a single airgun before the animal is within the EZ. Likewise, if a mammal is already within the EZ when first detected L-DEO will power down the airguns immediately. During a power down of the airgun array, L-DEO will also operate the 40-in³ airgun. If the PSVO detects a marine mammal within or near the smaller EZ around that single airgun (Table 1), L-DEO will shut down the airgun (see next Section).

Following a power down, L-DEO will not resume airgun activity until the marine mammal has cleared the safety zone for the full array. L-DEO will consider the animal to have cleared the EZ if:

- A PSVO has visually observed the animal leave the EZ, or

- a PSVO has not sighted the animal within the EZ for 15 minutes. for small odontocetes (or pinnipeds), or 30 min. for mysticetes and large odontocetes, including sperm, pygmy sperm, dwarf sperm, and beaked whales.

During airgun operations following a power down (or shut down) whose duration has exceeded the time limits specified previously, L-DEO will ramp-up the airgun array gradually (see Shut-down Procedures).

Shut-down Procedures—L-DEO will shut down the operating airgun(s) if a marine mammal is seen within or approaching the EZ for the single airgun. L-DEO will implement a shut down:

- (1) If an animal enters the EZ of the single airgun after L-DEO has initiated a power down, or
- (2) If an animal is initially seen within the EZ of the single airgun when more than one airgun (typically the full airgun array) is operating. L-DEO will not resume airgun activity until the marine mammal has cleared the EZ, or until the PSVO is confident that the animal has left the vicinity of the vessel. Criteria for judging that the animal has cleared the EZ will be as described in the preceding section.

Considering the conservation status for North Pacific right whales, L-DEO will shut down the airgun(s) immediately in the unlikely event that this species is observed, regardless of the distance from the *Langseth*. L-DEO will only begin a ramp-up if the right whale has not been seen for 30 minutes.

Ramp-Up Procedures—L-DEO will follow a ramp-up procedure when the airgun array begins operating after a specified period without airgun operations or when a power down has exceeded that period. L-DEO proposes that, for the present cruise, this period

would be approximately 8 minutes. This period is based on the 180-dB radius (940 m, 3,084 ft) for the 36-airgun array towed at a depth of 9 m relation to the minimum planned speed of the *Langseth* while shooting (7.4 km/h, 4.6 mi/h). Similar periods (approximately 8–10 minutes) were used during previous L-DEO surveys.

Ramp-up will begin with the smallest airgun in the array (40-in³). Airguns will be added in a sequence such that the source level of the array will increase in steps not exceeding six dB per five-minute period over a total duration of approximately 35 minutes. During ramp-up, the PSVOs will monitor the EZ, and if marine mammals are sighted, L-DEO will implement a power down or shut down as though the full airgun array were operational.

If the complete EZ has not been visible for at least 30 minutes prior to the start of operations in either daylight or nighttime, L-DEO will not commence the ramp-up unless at least one airgun (40-in³ or similar) has been operating during the interruption of seismic survey operations. Given these provisions, it is likely that the airgun array will not be ramped up from a complete shut down at night or in thick fog, because the outer part of the safety zone for that array will not be visible during those conditions. If one airgun has operated during a power-down period, ramp-up to full power will be permissible at night or in poor visibility, on the assumption that marine mammals will be alerted to the approaching seismic vessel by the sounds from the single airgun and could move away. L-DEO will not initiate a ramp-up of the airguns if a marine mammal is sighted within or near the applicable EZs during the day or close to the vessel at night.

NMFS has carefully evaluated the applicant's mitigation measures and has considered a range of other measures in the context of ensuring that NMFS prescribes the means of effecting the least practicable adverse impact on the affected marine mammal species and stocks and their habitat. Our evaluation of potential measures included consideration of the following factors in relation to one another: (1) The manner in which, and the degree to which, the successful implementation of the measure is expected to minimize adverse impacts to marine mammals; (2) the proven or likely efficacy of the specific measure to minimize adverse impacts as planned; and (3) the practicability of the measure for applicant implementation.

Based on our evaluation of the applicant's mitigation measures, as well as other measures considered by NMFS or recommended by the public, NMFS has determined that the required mitigation measures provide the means of effecting the least practicable adverse impacts on marine mammal species or stocks and their habitat, paying particular attention to rookeries, mating grounds, and areas of similar significance.

Monitoring and Reporting

In order to issue an ITA for an activity, section 101(a)(5)(D) of the MMPA states that NMFS must set forth "requirements pertaining to the monitoring and reporting of such taking." The MMPA implementing regulations at 50 CFR 216.104(a)(13) indicate that requests for IHAs must include the suggested means of accomplishing the necessary monitoring and reporting that will result in increased knowledge of the species and of the level of taking or impacts on populations of marine mammals that are expected to be present in the action area.

L-DEO proposes to sponsor marine mammal monitoring during the present project, in order to implement the mitigation measures that require real-time monitoring, and to satisfy the anticipated monitoring requirements of the IHA. L-DEO's Monitoring Plan is described below this section and was planned as a self-contained project independent of any other related monitoring projects that may be occurring simultaneously in the same regions. L-DEO is prepared to discuss coordination of its monitoring program with any related work that might be done by other groups insofar as this is practical.

Vessel-based Visual Monitoring

PSVOs will be based aboard the seismic source vessel and will watch for marine mammals near the vessel during daytime airgun operations and during any start-ups at night. PSVOs will also watch for marine mammals near the seismic vessel for at least 30 minutes prior to the start of airgun operations after an extended shut down. When feasible, PSVOs will also observe during daytime periods when the seismic system is not operating for comparison of sighting rates and behavior with airgun operations versus without airgun operations. Based on PSVO observations, L-DEO will power down or shut down the airguns when marine mammals are observed within a designated EZ or are about to enter a designated EZ. The EZ is a region in which a possibility exists of adverse effects on animal hearing or other physical effects.

During seismic operations at the Shatsky Rise, five PSVOs will be based aboard the *Langseth*. L-DEO will appoint the PSVOs with NMFS' concurrence. At least one PSVO and when practical, two PSVOs will monitor marine mammals near the seismic vessel during ongoing daytime operations and nighttime start ups of the airguns. Use of two simultaneous PSVOs will increase the effectiveness of detecting animals near the sound source. PSVOs will be on duty in shifts of duration no longer than four hours. L-DEO will also instruct other vessel crew to assist in detecting marine mammals and implementing mitigation requirements (if practical). Before the start of the seismic survey, L-DEO will give the crew additional instruction regarding how to accomplish this task.

The *Langseth* is a suitable platform for marine mammal and turtle observations. When stationed on the observation platform, the eye level will be approximately 21.5 m (70.5 ft) above sea level, and the observer will have a good view around the entire vessel. During daytime, the PSVOs will scan the area around the vessel systematically with reticle binoculars (e.g., 7 x 50 Fujinon), Big-eye binoculars (25 x 150), and with the naked eye. During darkness, night vision devices (NVDs) will be available (ITT F500 Series Generation 3 binocular-image intensifier or equivalent), when required. Laser range-finding binoculars (Leica LRF 1200 laser rangefinder or equivalent) will be available to assist with distance estimation. These devices are useful in training PSVOs to estimate distances visually, but are generally not useful in measuring distances to animals directly;

that is done primarily with the reticles in the binoculars' lenses.

Passive Acoustic Monitoring

Passive Acoustic Monitoring (PAM) will complement the visual monitoring program, when practicable. Visual monitoring typically is not effective during periods of poor visibility (e.g., bad weather) or at night. In instances of with good visibility, visual monitoring is unable to detect marine mammals when they are below the surface or beyond visual range. L-DEO can use acoustical monitoring in addition to visual observations to improve detection, identification, and localization of cetaceans. The acoustic monitoring will serve to alert visual observers (if on duty) when vocalizing cetaceans are detected. It is only useful when marine mammals call, but it can be effective either by day or by night, and does not depend on good visibility. It will be monitored in real time so that the visual observers can be advised when cetaceans are detected. When bearings (primary and mirror-image) to calling cetacean(s) are determined, the bearings will be relayed to the visual observer to help him/her sight the calling animal(s).

The PAM system consists of hardware (i.e., hydrophones) and software. The "wet end" of the system consists of a towed four-hydrophone array, two of which are monitored simultaneously; the active section of the array is approximately 30 m (98 ft) long. The array is attached to the vessel by a 250-m (820 ft) electromechanical lead-in cable and a 50-m (164 ft) long deck lead-in cable. However, not the entire length of lead-in cable is used; thus, the hydrophones are typically located 120 m (394 ft) behind the stern of the ship. The deck cable is connected from the array to a computer in the laboratory where signal conditioning and processing takes place. The digitized signal is then sent to the main laboratory, where the acoustic PSVO monitors the system. The hydrophone array is typically towed at depths less than 20 m (66 ft).

The towed hydrophones will ideally be monitored 24 hr/d while at the seismic survey area during airgun operations, and during most periods when the *Langseth* is underway while the airguns are not operating. One PSVO will monitor the acoustic detection system at any one time, by listening to the signals from two channels via headphones and/or speakers and watching the real-time spectrographic display for frequency ranges produced by cetaceans. PSVOs monitoring the acoustical data will be on shift for one

to six hours at a time. Besides the PSVO, an additional protected species observer (PSO) with primary responsibility for PAM will also be aboard. All PSVOs are expected to rotate through the PAM position, although the most experienced with acoustics will be on PAM duty more frequently.

When a vocalization is detected while visual observations are in progress, the acoustic PSO will contact the visual PSVO immediately, to alert him/her to the presence of cetaceans (if not already visually detected), and initiate a power down or shut down, if required. The information regarding the call will be entered into a database. The data to be entered include an acoustic encounter identification number, whether it was linked with a visual sighting, date, time when first and last heard and whenever any additional information was recorded, position and water depth when first detected, bearing if determinable, species or species group (e.g., unidentified dolphin, sperm whale), types and nature of sounds heard (e.g., clicks, continuous, sporadic, whistles, creaks, burst pulses, strength of signal, etc.), and any other notable information. The acoustic detection can also be recorded for further analysis.

PSVO Data and Documentation

PSVOs will record data to estimate the numbers of marine mammals exposed to various received sound levels and to document apparent disturbance reactions or lack thereof. Data will be used to estimate numbers of animals potentially 'taken' by harassment (as defined in the MMPA). They will also provide information needed to order a power down or shut down of the airguns when a marine mammal is within or near the EZ.

When a sighting is made, the PSVO/L-DEO will record the following information about the sighting:

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 seismic vessel, sighting cue, apparent reaction to the airguns or vessel (e.g., none, avoidance, approach, paralleling, etc.), and behavioral pace.

2. Time, location, heading, speed, activity of the vessel, sea state, visibility, and sun glare.

The data listed under (2) will also be recorded at the start and end of each observation watch, and during a watch whenever there is a change in one or more of the variables.

All observations and power downs or shut downs will be recorded in a standardized format. Data will be

entered into an electronic database. The accuracy of the data entry will be verified by computerized data validity checks as the data are entered and by subsequent manual checking of the database. These procedures will allow initial summaries of data to be prepared during and shortly after the field program, and will facilitate transfer of the data to statistical, graphical, and other programs for further processing and archiving.

Results from the vessel-based observations will provide:

1. The basis for real-time mitigation (airgun power down or shut down).
2. Information needed to estimate the number of marine mammals potentially taken by harassment, which must be reported to NMFS.
3. Data on the occurrence, distribution, and activities of marine mammals and turtles in the area where the seismic study is conducted.
4. Information to compare the distance and distribution of marine mammals and turtles relative to the source vessel at times with and without seismic activity.
5. Data on the behavior and movement patterns of marine mammals and turtles seen at times with and without seismic activity.

L-DEO will submit a report to NMFS and NSF within 90 days after the end of the cruise. The report will describe the operations conducted and sightings of marine mammals and turtles near the operations. The report will provide full documentation of methods, results, and interpretation pertaining to all monitoring. The 90-day report will summarize the dates and locations of seismic operations, and all marine mammal sightings (dates, times, locations, activities, associated seismic survey activities). The report will also include estimates of the number and nature of exposures that could result in "takes" of marine mammals by harassment or in other ways.

L-DEO will report all injured or dead marine mammals (regardless of cause) to NMFS as soon as practicable. The report should include the species or description of the animal, the condition of the animal, location, time first found, observed behaviors (if alive) and photo or video, if available.

Estimated Take of Marine Mammals by Incidental 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].

Only take by Level B harassment is anticipated and authorized as a result of the marine geophysical survey at the Shatsky Rise. Acoustic stimuli (*i.e.*, increased underwater sound) generated during the operation of the seismic airgun array, may have the potential to cause marine mammals in the survey area to be exposed to sounds at or greater than 160 decibels (dB) or cause temporary, short-term changes in behavior. There is no evidence that the activities could result in injury or mortality within the specified geographic area for which L-DEO seeks the IHA. The required mitigation and monitoring measures are expected to minimize the possibility of takes by (Level A harassment), serious injury, or mortality.

NMFS included an in-depth discussion of the methods used to calculate the densities of the marine mammals in the area of the seismic survey in a previous notice for the proposed IHA (75 FR 28568, May 21, 2010). A summary is included here.

L-DEO's estimates are based on a consideration of the number of marine mammals that could be disturbed appreciably by operations with the 36-airgun array to be used during approximately 3,160 km of seismic surveys at the Shatsky Rise.

Density data on 18 marine mammal species in the Shatsky Rise area are available from two sources using conventional line transect methods: Japanese sighting surveys conducted since the early 1980s, and fisheries observers in the high-seas driftnet fisheries during 1987–1990 (*see* Table 3 in L-DEO's application). For the 16 other marine mammal species that could be encountered in the survey area, data from the western North Pacific right whale are not available (*see* Table 3 in L-DEO's application). NMFS is not aware of any density estimates for three of those species—Hubb's, Stejneger's, and ginkgo-toothed beaked whales. For the remaining 13 species (*see* Table 3 in L-DEO's application), density estimates are available from other areas of the Pacific: 11 species from the offshore stratum of the 2002 Hawaiian Islands survey (Barlow, 2006) and two species from surveys of the California Current ecosystem off the U.S. west coast between 1991 and 2005 (Barlow and Forney, 2007). Those estimates are based on standard line-transect protocols developed by NMFS'

Southwest Fisheries Science Center (SWFSC).

Densities for 14 species are available from Japanese sighting surveys in the Shatsky Rise survey area. Miyashita (1993a) provided estimates for six dolphin species in this area that have been taken in the Japanese drive fisheries. The densities used here are Miyashita's (1993a) estimates for the 'Eastern offshore' survey area (30–42° N, 145°–180° E). Kato and Miyashita (1998) provided estimates for sperm whale densities from Japanese sightings data during 1982 to 1996 in the western North Pacific (20–50° N, 130°–180° E), and Hakamada *et al.* (2004) provided density estimates for sei whales during August through September in the JARPN II sub-areas 8 and 9 (35–50° N, 150–170° E excluding waters in the Exclusive Economic Zone of Russia) during 2002 and 2003. L-DEO used density estimates during 1994 through 2007 for minke whales at 35–40° N, 157–170° E from Hakamada *et al.* (2009), density estimates during 1998 through 2002 for Bryde's whales at 31–43° N, 145–165° E from Kitakado *et al.* (2008), and density estimates during 1994–2007 for blue, fin, humpback, and North Pacific right whales at 31–51° N, 140–170° E from Matsuoka *et al.* (2009).

For four species (northern fur seal, Dall's porpoise, Pacific white-sided dolphin (*Lagenorhynchus obliquidens*), northern right-whale dolphin (*Lissodelphis borealis*)), estimates of densities in the Shatsky Rise area are available from sightings data collected by observers in the high-seas driftnet fisheries during 1987 through 1990 (Buckland *et al.*, 1993). Those data were analyzed for 5° x 5° blocks, and the densities used here are from blocks for which available data overlap the survey area. In general, those data represent the average annual density in the northern half of the Shatsky Rise survey area (35–40° N).

The densities mentioned above had been corrected by the original authors for detectability bias and, with the exception of Kitakado *et al.* (2008) and Hakamada *et al.* (2009), for availability bias. Detectability bias is associated with diminishing sightability with increasing lateral distance from the track line [$f(0)$]. Availability bias refers to the fact that there is less than a 100 percent probability of sighting an animal that is present along the survey track line, and it is measured by $g(0)$.

There is some uncertainty about the accuracy of the density data from the Japanese Whale Research Program under Special Permit (JARPN/JARPN II). For example, densities in Miyashita (1993a) and Buckland *et al.* (1993) are

from the 1980s and represent the best available information for the Shatsky Rise area at this time. To provide some allowance for these uncertainties, particularly underestimates of densities present and numbers of marine mammals potentially affected have been derived; L-DEO's maximum estimates (precautionary estimates) are 1.5 times greater than the best estimates.

The estimated numbers of individuals potentially exposed are based on the 160-dB re 1 $\mu\text{Pa} \cdot \text{m}_{\text{rms}}$ criterion for all cetaceans (see Table 2 in this notice). It is assumed that marine mammals exposed to airgun sounds that strong might change their behavior sufficiently to be considered "taken by harassment."

L-DEO's estimates of exposures to various sound levels assume that the surveys will be completed. As is typical during offshore ship surveys, inclement weather and equipment malfunctions are likely to cause delays and may limit the number of useful line-kilometers of seismic operations that can be undertaken. Furthermore, any marine mammal sightings within or near the designated exclusion zones will result in the power down or shut down of seismic operations as a mitigation measure. Thus, the following estimates of the numbers of marine mammals potentially exposed to sound levels of 160 re 1 $\mu\text{Pa} \cdot \text{m}_{\text{rms}}$ are precautionary and probably overestimate the actual numbers of marine mammals that might be involved. These estimates also assume that there will be no weather, equipment, or mitigation delays, which is highly unlikely.

Table 2 in this notice shows the best and maximum estimated number of exposures and the number of different individuals potentially exposed during the seismic survey if no animals moved away from the survey vessel. The take authorization is based on the maximum estimates in Table 2 rather than the best estimates of the numbers of individuals exposed, because of uncertainties associated with applying density data from one area to another.

The number of different individuals that may be exposed to airgun sounds with received levels greater than or equal to 160 dB re 1 $\mu\text{Pa} \cdot \text{m}_{\text{rms}}$ on one or more occasions was estimated by considering the total marine area that would be within the 160-dB radius around the operating airgun array on at least one occasion. The number of possible exposures (including repeated exposures of the same individuals) can be estimated by considering the total marine area that would be within the 160-dB radius around the operating airguns, including areas of overlap. In the survey, the seismic lines are widely

spaced in the survey area, so an individual mammal would most likely not be exposed numerous times during the survey; the area including overlap is only 1.4 times the area excluding overlap. Moreover, it is unlikely that a particular animal would stay in the area during the entire survey. The number of different individuals potentially exposed to received levels greater than or equal to 160 re 1 $\mu\text{Pa} \cdot \text{m}_{\text{rms}}$ was calculated by multiplying:

- (1) The expected species density, either "mean" (*i.e.*, best estimate) or "maximum", times
- (2) the anticipated minimum area to be ensonified to that level during airgun operations including overlap (exposures), or
- (3) the anticipated area to be ensonified to that level during airgun operations excluding overlap (individuals).

The area expected to be ensonified was determined by entering the planned survey lines into a MapInfo Geographic Information System (GIS), using the GIS to identify the relevant areas by "drawing" the applicable 160-dB buffer (see Table 1) around each seismic line, and then calculating the total area within the buffers. Areas of overlap were included only once when estimating the number of individuals exposed.

Applying the approach described above, approximately 20,831 square kilometers (km^2) would be within the 160-dB isopleth on one or more occasions during the survey, whereas 22,614 km^2 is the area ensonified to greater than or equal to 160 dB when overlap is included. Thus, an average individual marine mammal would be exposed only once during the survey. Because this approach does not allow for turnover in the mammal populations in the study area during the course of the survey, the actual number of individuals exposed could be underestimated. However, the approach assumes that no cetaceans will move away from or toward the trackline as the *Langseth* approaches in response to increasing sound levels prior to the time the levels reach 160 dB, which will result in overestimates for those species known to avoid seismic vessels.

The 'maximum estimate' of the number of individual cetaceans that could be exposed to seismic sounds with received levels greater than or equal to 160 dB re: 1 μPa during the survey is 20,003. Most (96%) of the cetaceans potentially exposed are delphinids; short-beaked common, striped, pantropical spotted, and Pacific white-sided dolphins are estimated to be the most common species in the area,

with maximum estimates of 9,666 (0.3% of the regional population), 3,721 (0.7%), 2,200 (0.5%), and 1,137 (0.1%) exposed to levels greater than or equal to 160 dB re: 1 μ Pa, respectively.

TABLE 2—ESTIMATES OF THE POSSIBLE NUMBERS OF MARINE MAMMALS EXPOSED TO DIFFERENT SOUND LEVELS DURING L-DEO'S SEISMIC SURVEY AT SHATSKY RISE DURING JULY—SEPTEMBER, 2010.

Species	Estimated number of individuals exposed to sound levels \geq 160 dB re: 1 μ Pa (Best)	Estimated number of individuals exposed to sound levels \geq 160 dB re: 1 μ Pa (Maximum)
North Pacific right whale	1	2
Humpback whale	15	22
Minke whale	57	85
Bryde's whale	11	16
Sei whale	37	56
Fin whale	22	34
Blue whale	12	18
Sperm whale	22	32
Pygmy sperm whale	66	100
Dwarf sperm whale	163	244
Cuvier's beaked whale	142	212
Baird's beaked whale	18	27
Longman's beaked whale	9	14
Blainville's beaked whale	27	40
<i>Mesoplodon</i> spp.	2	3
Rough-toothed dolphin	65	97
Bottlenose dolphin	500	750
Pantropical spotted dolphin	1,467	2,200
Spinner dolphin	17	26
Striped dolphin	2,480	3,721
Fraser's dolphin	95	143
Short-beaked common dolphin	6,444	9,666
Pacific white-sided dolphin	758	1,137
Northern right whale dolphin	9	13
Risso's dolphin	225	337
Melon-headed whale	27	41
Pygmy killer whale	0	0
False killer whale	43	64
Killer whale	3	5
Short-finned pilot whale	104	156
Dall's porpoise	457	686
Northern fur seal	37	56

Best and maximum estimates are based on Table 3 in L-DEO's application. N.A. means not available. *Mesoplodon* spp. could include ginkgo-toothed, Stejneger's, or Hubb's beaked whales; density (not available) is an arbitrary low value.

Negligible Impact and Small Numbers Analysis and Determination

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." In making a negligible impact determination, NMFS considers:

- (1) The number of anticipated mortalities;
- (2) the number and nature of anticipated injuries;
- (3) the number, nature, and intensity, and duration of Level B harassment; and
- (4) the context in which the takes occur.

As mentioned previously, NMFS estimates that 34 species of marine mammals could be potentially affected by Level B harassment over the course of the IHA. For each species, these

numbers are small (each, less than two percent) relative to the population size.

No takes by (Level A harassment), serious injury, or mortality are anticipated to occur as a result of the L-DEO's marine geophysical survey, and none are authorized. Only short-term behavioral disturbance is anticipated to occur due to the brief and sporadic duration of the survey activities. Due to the nature, degree, and context of the behavioral harassment anticipated, the activity is not expected to impact rates of recruitment or survival.

NMFS has determined, provided that the aforementioned mitigation and monitoring measures are implemented, that the impact of conducting a marine geophysical survey at the Shatsky Rise in the northwest Pacific Ocean, July through September 2010, may result, at worst, in a temporary modification in behavior and/or low-level physiological effects (Level B harassment) of small

numbers of certain species of marine mammals.

While behavioral modifications, including temporarily vacating the area during the operation of the airgun(s), may be made by these species to avoid the resultant acoustic disturbance, the availability of alternate areas within these areas and the short and sporadic duration of the research activities, have led NMFS to determine that this action will have a negligible impact on the species in the specified geographic region.

Based on the analysis contained herein of the likely effects of the specified activity on marine mammals and their habitat, and taking into consideration the implementation of the mitigation and monitoring measures, NMFS finds that L-DEO's planned research activities, will result in the incidental take of small numbers of marine mammals, by Level B

harassment only, and that the total taking from the marine geophysical survey will have a negligible impact on the affected species or stocks.

Impact on Availability of Affected Species or Stock for Taking for Subsistence Uses

There are no relevant subsistence uses of marine mammals implicated by this action.

Endangered Species Act

Of the 34 species of marine mammals that may occur in the survey area, six are listed as endangered under the ESA, including the north Pacific right, humpback, sei, fin, blue, and sperm whales. Under Section 7 of the ESA, NSF had initiated formal consultation with the NMFS, Office of Protected Resources, Endangered Species Division, on this seismic survey. NMFS' Office of Protected Resources, Permits, Conservation and Education Division, also initiated formal consultation under Section 7 of the ESA with NMFS' Office of Protected Resources, Endangered Species Division, to obtain a Biological Opinion (BiOp) evaluating the effects of issuing the IHA on threatened and endangered marine mammals and, if appropriate, authorizing incidental take. On July 16, 2010, NMFS concluded formal Section 7 consultation with itself and issued a BiOp which concluded that the proposed action and issuance of the IHA are not likely to jeopardize the continued existence of the north Pacific right, humpback, sei, fin, blue, and sperm whales and leatherback (*Dermochelys coriacea*), green (*Chelonia mydas*), loggerhead (*Caretta caretta*), hawksbill (*Eretmochelys imbricata*), and olive ridley (*Lepidochelys olivacea*) sea turtles. The BiOp also concluded that designated critical habitat for these species does not occur in the action area and would not be affected by the survey. L-DEO must comply with the Relevant Terms and Conditions of the Incidental Take Statement corresponding to NMFS' BiOp issued to both NSF and NMFS' Office of Protected Resources.

National Environmental Policy Act (NEPA)

To meet NMFS' National Environmental Policy Act (NEPA; 42 U.S.C. 4321 *et seq.*) requirements for the issuance of an IHA to L-DEO, NMFS has prepared an Environmental Assessment (EA) titled "*Issuance of an Incidental Harassment Authorization to the Lamont-Doherty Earth Observatory to Take Marine Mammals by Harassment Incidental to a Marine Geophysical Survey on the Shatsky Rise in the Northwest Pacific Ocean, July-*

September 2010." This EA incorporates the NSF's Environmental Analysis Pursuant To Executive Order 12114 (NSF, 2010) and an associated report (Report) prepared by LGL Limited Environmental Research Associates (LGL) for NSF, titled, "*Environmental Assessment of a Marine Geophysical Survey by the R/V Marcus G. Langseth on the Shatsky Rise in the Northwest Pacific Ocean, July–September, 2010, (LGL, 2010)*" by reference pursuant to 40 Code of Federal Regulations (CFR) 1502.21 and NOAA Administrative Order (NAO) 216–6 § 5.09(d). NMFS' EA analyzes the direct, indirect and cumulative environmental impacts of the specified activities on marine mammals including those listed as threatened or endangered under the ESA.

The NMFS has made a Finding of No Significant Impact (FONSI) and, therefore, it is not necessary to prepare an environmental impact statement for the issuance of an IHA to L-DEO for this activity. The EA and the NMFS FONSI for this activity are available upon request (*see ADDRESSES*).

Determinations

NMFS has determined that the impact of conducting the specific seismic survey activities described in this notice and the IHA request in the specific geographic region within the Shatsky Rise area in the northwest Pacific Ocean may result, at worst, in a temporary modification in behavior (Level B harassment) of small numbers of marine mammals. Further, this activity is expected to result in a negligible impact on the affected species or stocks of marine mammals. The provision requiring that the activity not have an unmitigable impact on the availability of the affected species or stock of marine mammals for subsistence uses is not implicated for this action.

For reasons stated previously, the specified activities associated with the survey are not likely to cause TTS, PTS or other non-auditory injury, serious injury, or death to affected marine mammals because:

(1) The likelihood that, given sufficient notice through relatively slow ship speed, marine mammals are expected to move away from a noise source that is annoying prior to its becoming potentially injurious;

(2) The fact that cetaceans would have to be closer than 940 m (0.61 mi) in deep water when the full array is in use at a 9 m (29.5 ft) tow depth from the vessel to be exposed to levels of sound believed to have even a minimal chance of causing PTS;

(3) The fact that marine mammals would have to be closer than 3,850 m (2.4 mi) in deep water when the full array is in use at a 9 m (29.5 ft) tow depth from the vessel to be exposed to levels of sound (160 dB) believed to have even a minimal chance at causing TTS; and

(4) The likelihood that marine mammal detection ability by trained observers is high at that short distance from the vessel;

(5) The use of PAM, which is effective out to tens of kilometers, will assist in the detection of vocalizing marine mammals at greater distances from the vessel;

(6) The incorporation of other required mitigation measures (*i.e.*, ramp-up, power-down, shut-down, temporal and spatial avoidance, special measures for species of particular concern, and additional mitigation measures); and

(7) The relatively limited duration and geographically widespread distances of the seismic survey in the Shatsky Rise study area (approximately 17 days).

As a result, no take by injury, serious injury, or death is anticipated or authorized, and the potential for temporary or permanent hearing impairment is very low and will be avoided through the incorporation of the monitoring and mitigation measures.

While the number of marine mammals potentially incidentally harassed will depend on the distribution and abundance of marine mammals in the vicinity of the survey activity, the number of potential Level B incidental harassment takings (*see* Table 2) is estimated to be small, equal to or less than two percent of any of the estimated population sizes based on the data disclosed in Table 2 of this notice, and has been mitigated to the lowest level practicable through incorporation of the monitoring and mitigation measures mentioned previously in this document. Also, there are no known important reproductive or feeding areas in the action area.

Authorization

As a result of these determinations, NMFS proposes to issue an IHA to L-DEO for conducting a marine geophysical survey at the Shatsky Rise area in the northwest Pacific Ocean, provided the previously mentioned mitigation, monitoring, and reporting requirements are incorporated. The duration of the IHA would not exceed one year from the date of its issuance.

Dated: July 26, 2010.

James H. Lecky,

*Director, Office of Protected Resources,
National Marine Fisheries Service.*

[FR Doc. 2010-18660 Filed 7-28-10; 8:45 am]

BILLING CODE 3510-22-P

COMMODITY FUTURES TRADING COMMISSION

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34-62552; File No. 265-26]

Joint CFTC-SEC Advisory Committee on Emerging Regulatory Issues

AGENCY: Commodity Futures Trading Commission ("CFTC") and Securities and Exchange Commission ("SEC").

ACTION: Notice of Meeting of Joint CFTC-SEC Advisory Committee on Emerging Regulatory Issues.

SUMMARY: The Joint CFTC-SEC Advisory Committee on Emerging Regulatory Issues will hold a public meeting on August 11, 2010, from 9 a.m. to 1 p.m., at the CFTC's Washington, DC headquarters. At the meeting, the committee will continue its examination of the market events of May 6, 2010.

DATES: The meeting will be held on August 11, 2010 from 9 a.m. to 1 p.m. Members of the public who wish to submit written statements in connection with the meeting should submit them by August 10, 2010.

ADDRESSES: The meeting will take place in the first floor hearing room at the CFTC's headquarters, Three Lafayette Centre, 1155 21st Street, NW., Washington, DC 20581.

Written statements may be submitted to either the CFTC or the SEC; all submissions will be reviewed jointly by the two agencies. Please use the title "Joint CFTC-SEC Advisory Committee" in any written statement you may submit. Statements may be submitted to any of the addresses listed below. Please submit your statement to only one address.

E-mail:

*Jointcommittee@cftc.gov; or
rule-comments@sec.gov. If e-mailing
to this address, please refer to "File
No. 265-26" on the subject line.*

SEC's Internet Submission Form:

*[http://www.sec.gov/rules/
other.shtml](http://www.sec.gov/rules/other.shtml).*

Regular Mail:

*Commodity Futures Trading
Commission, Three Lafayette
Centre, 1155 21st Street, NW.,
Washington, DC 20581, attention
Office of the Secretary; or*

*Elizabeth M. Murphy, Secretary,
Securities and Exchange
Commission, 100 F St., NE.,
Washington, DC 20549. Comments
mailed to this address should be
submitted in triplicate and should
refer to File No. 265-26.*

Fax: (202) 418-5521.

Any statements submitted in connection with the committee meeting will be made available to the public.

FOR FURTHER INFORMATION CONTACT:

Martin White, Committee Management Officer, at (202) 418-5129, Commodity Futures Trading Commission, Three Lafayette Centre, 1155 21st Street, NW., Washington, DC 20581; Ronesha Butler, Special Counsel, at (202) 551-5629, Division of Trading and Markets, Securities and Exchange Commission, 100 F St., NE., Washington, DC 20549; or Elizabeth M. Murphy, Committee Management Officer, at (202) 551-5400, Securities and Exchange Commission, 100 F St., NE., Washington, DC 20549.

SUPPLEMENTARY INFORMATION: The agenda for the meeting will include (1) committee organizational matters and (2) hearing two industry panels presenting views and information regarding the market events of May 6, 2010.

The meeting will be webcast on the CFTC's Web site, www.cftc.gov. Members of the public also can listen to the meeting by telephone. The public access call-in numbers will be announced at a later date.

Authority: 5 U.S.C. app. 2 § 10(a)(2).

Dated: July 23, 2010.

By the Commodity Futures Trading Commission.

Martin White,

Committee Management Officer.

By the Securities and Exchange Commission.

Elizabeth M. Murphy,

Committee Management Officer.

[FR Doc. 2010-18584 Filed 7-28-10; 8:45 am]

BILLING CODE P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

[Docket No. IC10-582-000]

Commission Information Collection Activities (FERC-582); Comment Request; Extension

July 22, 2010.

AGENCY: Federal Energy Regulatory Commission.

ACTION: Notice of proposed information collection and request for comments.

SUMMARY: In compliance with the requirements of section 3506(c)(2)(A) of the Paperwork Reduction Act of 1995, 44 U.S.C. 3506(c)(2)(A) (2006), (Pub. L. 104-13), the Federal Energy Regulatory Commission (Commission or FERC) is soliciting public comment on the proposed information collection described below.

DATES: Comments in consideration of the collection of information are due 60 days after publication of this Notice in the **Federal Register**.

ADDRESSES: Comments may be filed either electronically (eFiled) or in paper format, and should refer to Docket No. IC10-582-000. Documents must be prepared in an acceptable filing format and in compliance with Commission submission guidelines at <http://www.ferc.gov/help/submission-guide.asp>. eFiling instructions are available at: <http://www.ferc.gov/docs-filing/efiling.asp>. First time users must follow eRegister instructions at: <http://www.ferc.gov/docs-filing/eregistration.asp>, to establish a user name and password before eFiling. The Commission will send an automatic acknowledgement to the sender's e-mail address upon receipt of eFiled comments. Commenters making an eFiling should not make a paper filing. Commenters that are not able to file electronically must send an original and two (2) paper copies of their comments to: Federal Energy Regulatory Commission, Secretary of the Commission, 888 First Street, NE., Washington, DC 20426.

Users interested in receiving automatic notification of activity in this docket may do so through eSubscription at <http://www.ferc.gov/docs-filing/esubscription.asp>. In addition, all comments and FERC issuances may be viewed, printed or downloaded remotely through FERC's eLibrary at: <http://www.ferc.gov/docs-filing/elibrary.asp>, by searching on Docket No. IC10-582. For user assistance, contact FERC Online Support by e-mail at ferconlinesupport@ferc.gov, or by phone at (866) 208-3676 (toll-free), or (202) 502-8659 for TTY.

FOR FURTHER INFORMATION CONTACT:

Ellen Brown may be reached by: e-mail at DataClearance@FERC.gov, telephone at (202) 502-8663, and fax at (202) 273-0873.

SUPPLEMENTARY INFORMATION: The information required by FERC-582, ("Electric Fees; Annual Charges; Waivers; and Exemptions;" OMB Control No. 1902-0132) covers the filing