TABLE 1—REGULATIONS IMPLEMENTING THE HAZARDOUS AND SOLID WASTE AMENDMENTS OF 1984

Promulgation date	Title of regulation	Federal Register reference	Effective date
* * *	* * *	* * *	
June 13, 2011	Land Disposal Restrictions: Revision of the Treatment Standards for Carbamate Hazardous Wastes.	76 FR [Insert page number]	8/12/11.
* * *	* * *	* * *	

* * * * *

TABLE 2—SELF-IMPLEMENTING PROVISIONS OF THE HAZARDOUS AND SOLID WASTE AMENDMENTS OF 1984

Effective date	Self-implementing provision	RCRA citation	Federal Register reference
* * *	* * *	* * *	
August 12, 2011	Land Disposal Restrictions: Revision of the Treatment Standards for Carbamate Hazardous Wastes.	3004(m)	76 FR [Insert Page Numbers]
* * *	* * *	* * *	

* * * * *

[FR Doc. 2011–14594 Filed 6–10–11; 8:45 am]

BILLING CODE 6560–50–P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 217

[Docket No. 0808041026–1295–02]

RIN 0648–AX09

Taking and Importing Marine Mammals; Taking Marine Mammals Incidental to Operation and Maintenance of the Neptune Liquefied Natural Gas Facility off Massachusetts

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

ACTION: Final rule.

SUMMARY: NMFS, upon application from Neptune LNG LLC (Neptune), is issuing regulations pursuant to the Marine Mammal Protection Act (MMPA) to govern the unintentional taking of marine mammals, by harassment, incidental to port commissioning and operations, including maintenance and repair activities, at the Neptune Deepwater Port (the Port) in Massachusetts Bay for the period of July 2011 through July 2016. These regulations, which allow for the issuance of Letters of Authorization (LOAs) for the incidental take of marine mammals during the described activities and specified timeframes, prescribe the permissible methods of taking and other means of effecting the least practicable adverse impact on marine mammal species or stocks and their habitat, as well as requirements pertaining to the monitoring and reporting of such taking.

DATES: Effective from July 11, 2011, through August 10, 2016.

ADDRESSES: A copy of Neptune's application may be obtained by writing to Michael Payne, Chief, Permits, Conservation and Education Division, Office of Protected Resources, NMFS, 1315 East West Highway, Silver Spring, MD 20910, calling the contact listed under **FOR FURTHER INFORMATION CONTACT**, or visiting the Internet at: *http://www.nmfs.noaa.gov/pr/permits/incidental.htm.* Documents cited in this final rule may also be viewed, by appointment, during regular business hours at the above address.

The Final Environmental Impact Statement (Final EIS) on the Neptune Deepwater Port License Application authored by the Maritime Administration (MARAD) and U.S. Coast Guard (USCG) is available for viewing at *http://www.regulations.gov* by entering the search words "Neptune LNG."

FOR FURTHER INFORMATION CONTACT: Candace Nachman, Office of Protected Resources, NMFS, (301) 713–2289, ext 156.

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.

Authorization for incidental takings shall be granted if NMFS finds that the taking will have a negligible impact on the species or stock(s), will not have an unmitigable adverse impact on the availability of the species or stock(s) for subsistence uses (where relevant), and if 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."

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

On December 14, 2009, NMFS received an application from Neptune for the taking, by harassment, of marine mammals incidental to port commissioning and operations, including maintenance and repair activities, at its Neptune Deepwater Port (Port) facility in Massachusetts Bay. NMFS reviewed Neptune's application and identified a number of issues requiring further clarification. After addressing comments from NMFS, Neptune modified its application and submitted a revised application on March 11, 2010. The March 11, 2010, application was the one made available for public comment and considered by NMFS for these regulations.

Neptune submitted its first complete application to NMFS on December 27, 2007, for the take of small numbers of marine mammals, by harassment, incidental to the construction phase of the Neptune LNG Port Facility. In June 2008, NMFS issued a 1-year Incidental Harassment Authorization (IHA) to Neptune for the construction of the Port (73 FR 33400, June 12, 2008). This authorization expired on June 30, 2009. NMFS issued a second 1-year IHA to Neptune for the completion of construction and beginning of Port operations on June 26, 2009 (74 FR 31926, July 6, 2009), which expired on June 30, 2010.

On July 12, 2010, NMFS issued a third IHA to Neptune based on the request in its March 11, 2010, application (75 FR 41440, July 16, 2010). This latest IHA is effective through July 11, 2011. During the period of this third IHA, Neptune conducted limited port operations.

During the effective period of this final rule (July 2011–July 2016), Neptune intends to continue port operations (including commissioning of its second shuttle regasification vessel [SRV]) and conduct maintenance and repairs, as needed. The Neptune Port is located approximately 22 mi (35 km) northeast of Boston, Massachusetts, in Federal waters approximately 260 ft (79 m) in depth. The purpose of the Port is to import liquefied natural gas (LNG) into the New England region. Take of marine mammals may occur during port operations from thruster use during maneuvering of the SRVs while docking and undocking, occasional weathervaning (turning of a vessel at anchor from one direction to another under the influence of wind or currents) at the Port, and during thruster use of dynamic positioning (DP) maintenance vessels should a major repair be necessary. Neptune requested authorization to take 12 marine mammal species by Level B harassment. The species are: North Atlantic right whale; humpback whale; fin whale; sei whale; minke whale; long-finned pilot whale; Atlantic white-sided dolphin; harbor porpoise; common dolphin; Risso's dolphin; bottlenose dolphin; and harbor seal. In the 2009 and 2010 IHAs, NMFS also authorized take of killer whales and gray seals. NMFS has determined that it would be appropriate in this final rule to authorize take, by Level B harassment only, incidental to operations and maintenance activities of these two species as well. In this final rule, NMFS has authorized the take, by Level B harassment, of all 14 marine mammal species listed here.

Description of the Specified Activity

On March 23, 2007, Neptune received a license from MARAD to own, construct, and operate a deepwater port. The Port, which is located in Massachusetts Bay, consists of a submerged buoy system to dock specifically designed LNG carriers approximately 22 mi (35 km) northeast of Boston, Massachusetts, in Federal waters approximately 260 ft (79 m) in depth. The two buoys are separated from one another by a distance of approximately 2.1 mi (3.4 km). The locations of the Neptune Port and the associated pipeline are shown in Figure 2–1 in Neptune's application (see **ADDRESSES**).

All construction of the Neptune Port was completed in November 2009. The first SRV was commissioned in February–March 2010. Between July 2011 and July 2016, (the time period for these regulations), Neptune plans to continue Port operations (including commissioning of its second SRV) and also plans to conduct any necessary maintenance and repairs of the Port facility.

Neptune will be capable of mooring LNG SRVs with a capacity of approximately 183,113 cubic yards (yd^3; 140,000 cubic meters (m^3)) of LNG. Up to two SRVs will temporarily moor at the Port by means of a submerged unloading buoy system. Two separate buoys will allow natural gas to be delivered in a continuous flow, without interruption, by having a brief overlap between arriving and departing SRVs. The annual average throughput capacity will be around 500 million standard cubic feet per day (mmscfd) with an initial throughput of 400 mmscfd and a peak capacity of approximately 750 mmscfd of LNG.

The SRVs will be equipped to store, transport, and vaporize LNG and to odorize, meter and send out natural gas by means of two 16-in (40.6-cm) flexible risers and one 24-in (61-cm) subsea flowline. These risers and flowline will lead to a 24-in (61-cm) gas transmission pipeline connecting the deepwater port to the existing 30-in (76.2-cm) Algonquin Hubline^{SM} (Hubline^{SM}) located approximately 9 mi (14.5 km) west of the Neptune deepwater port location. The Port will have an expected operating life of approximately 25 years. Figure 1–1 of Neptune's application shows an isometric view of the Port (see **ADDRESSES**). A detailed overview of Port operations and maintenance and repair activities, as well as the types of sounds those activities produce, was provided in the proposed rule (75 FR 80260, December 21, 2010). No changes have been made to the proposed operations or maintenance and repair activities.

Description of Marine Mammals in the Area of the Specified Activity

Massachusetts Bay (as well as the entire Atlantic Ocean) hosts a diverse assemblage of marine mammals, including: The North Atlantic right whale; blue whale; fin whale; sei whale; minke whale; humpback whale; killer whale; long-finned pilot whale; sperm whale; Atlantic white-beaked dolphin; Atlantic white-sided dolphin; bottlenose dolphin; common dolphin; harbor porpoise; Risso's dolphin; striped dolphin; gray seal; harbor seal; harp seal; and hooded seal. Table 3–1 in Neptune's application outlines the marine mammal species that occur in Massachusetts Bay and the likelihood of occurrence of each species. Of the species listed here, the North Atlantic right, blue, fin, sei, humpback, and sperm whales are all listed as endangered under the Endangered Species Act (ESA) and as depleted under the MMPA. The northern coastal stock of bottlenose dolphins is considered depleted under the MMPA. Certain stocks or populations of killer whales are listed as endangered under the ESA or depleted under the MMPA; however, none of those stocks or populations occurs in the activity area.

Of these species, 14 are expected to occur in the area of Neptune's operations. These species include: The North Atlantic right, humpback, fin, sei, minke, killer, and long-finned pilot whales; Atlantic white-sided, common, Risso's, and bottlenose dolphins; harbor porpoise; and harbor and gray seals. Neptune used information from the Cetacean and Turtle Assessment Program (CETAP; 1982) and the U.S. Navy's Marine Resource Assessment (MRA) for the Northeast Operating Areas (DoN, 2005; available on the Internet at: *https://*

portal.navfac.navy.mil/portal/page/portal/navfac/navfac_ww_pp/navfac_hq_pp/navfac_environmental/mra) to estimate densities of the species in the area. Nonetheless, NMFS used the data on cetacean distribution within Massachusetts Bay, such as those published by NOAA's National Centers for Coastal Ocean Science (NCCOS; 2006), to determine density estimates of several species of marine mammals in the vicinity of the project area. The explanation for those derivations and the actual density estimates are described later in this document (see the "Estimated Take by Incidental Harassment" section).

The proposed rule contains a discussion of 17 marine mammal species that are not considered further in the analysis because of their rarity in the Massachusetts Bay area (blue whale, sperm whale, harp seal, hooded seal, ringed seal, northern bottlenose whale, Cuvier's beaked whale, Sowerby's beaked whale, Blainville's beaked whale, Gervais' beaked whale, True's beaked whale, beluga whale, pantropical spotted dolphin, false killer whale, pygmy sperm whale, striped dolphin, and Atlantic white-beaked dolphin). The proposed rule also contains brief summaries on several commonly sighted marine mammal species distribution and abundance in the vicinity of the action area. The "Description of Marine Mammals in the Area of the Specified Activity" has not changed from the proposed rule. Please refer to the proposed rule (75 FR 80260, December 21, 2010) for the complete discussion.

Additionally, information on those species that may be impacted by this activity is provided in Neptune's application and sections 3.2.3 and 3.2.5 in the MARAD/USCG Final EIS on the Neptune LNG proposal (see **ADDRESSES**). Please refer to those documents for more information on these species. Also, general information on these marine mammal species can also be found in the 2009 NMFS U.S. Atlantic and Gulf of Mexico Marine Mammal Stock Assessment Report (SAR; Waring *et al.,* 2009) and the 2010 Draft NMFS Atlantic and Gulf of Mexico Marine Mammal SAR (Waring *et al.,* in prep.), which are available on the Internet at: *http://www.nefsc.noaa.gov/publications/tm/tm213/* and *http://www.nmfs.noaa.gov/pr/sars/draft.htm,* respectively.

Brief Background on Marine Mammal Hearing

When considering the influence of various kinds of sound on the marine environment, it is necessary to understand that different kinds of marine life are sensitive to different frequencies of sound. Based on available behavioral data, audiograms derived using auditory evoked potential techniques, anatomical modeling, and other data, Southall *et al.* (2007) designate "functional hearing groups" for marine mammals and estimate the lower and upper frequencies of functional hearing of the groups. The functional groups and the associated frequencies are indicated below (though animals are less sensitive to sounds at the outer edge of their functional range and most sensitive to sounds of frequencies within a smaller range somewhere in the middle of their functional hearing range):

- Low frequency cetaceans (13 species of mysticetes): Functional hearing is estimated to occur between approximately 7 Hz and 22 kHz (however, a study by Au *et al.* (2006) of humpback whale songs indicate that the range may extend to at least 24 kHz);
- Mid-frequency cetaceans (32 species of dolphins, six species of larger toothed whales, and 19 species of beaked and bottlenose whales): functional hearing is estimated to occur between approximately 150 Hz and 160 kHz;
- High frequency cetaceans (eight species of true porpoises, six species of river dolphins, Kogia, the franciscana, and four species of cephalorhynchids): functional hearing is estimated to occur between approximately 200 Hz and 180 kHz; and
- Pinnipeds in Water: functional hearing is estimated to occur between approximately 75 Hz and 75 kHz, with the greatest sensitivity between approximately 700 Hz and 20 kHz.

As mentioned previously in this document, 14 marine mammal species (12 cetacean and two pinniped species) are likely to occur in the Neptune Port area. Of the 12 cetacean species likely to occur in Neptune's project area, five are classified as low frequency cetaceans (*i.e.,* North Atlantic right, humpback, fin, minke, and sei whales), six are classified as mid-frequency cetaceans (*i.e.,* killer and pilot whales and bottlenose, common, Risso's, and Atlantic white-sided dolphins), and one is classified as a high-frequency cetacean (*i.e.,* harbor porpoise) (Southall *et al.,* 2007).

Potential Effects of the Specified Activity on Marine Mammals

With respect to the MMPA, NMFS' effects assessment serves four primary purposes: (1) To prescribe the permissible methods of taking (*i.e.,* Level B Harassment, including an identification of the number and types of take that could occur by Level B harassment) and to prescribe other means of effecting the least practicable adverse impact on such species or stock and its habitat (*i.e.,* mitigation); (2) to determine whether the specified activity will have a negligible impact on the affected species or stocks of marine mammals (based on the likelihood that the activity will adversely affect the species or stock through effects on annual rates of recruitment or survival); (3) to determine whether the specified activity will have an unmitigable adverse impact on the availability of the species or stock(s) for subsistence uses (however, there are no subsistence communities that would be affected in the Massachusetts Bay area, so this determination is inapplicable for this rulemaking); and (4) to prescribe requirements pertaining to monitoring and reporting.

Potential effects of Neptune's proposed port operations and maintenance/repair activities would most likely be acoustic in nature. LNG port operations and maintenance/repair activities introduce sound into the marine environment. Potential acoustic effects on marine mammals relate to sound produced by thrusters during maneuvering of the SRVs while docking and undocking, occasional weathervaning at the port, and during thruster use of DP maintenance vessels should a major repair be necessary. The potential effects of sound from the activities associated with the Neptune Port might include one or more of the following: tolerance; masking of natural sounds; behavioral disturbance; non-auditory physical effects; and, at least in theory, temporary or permanent hearing impairment (Richardson *et al.,* 1995). However, for reasons discussed in the proposed rule, it is unlikely that there would be any cases of temporary, or especially permanent, hearing impairment resulting from these activities.

In the "Potential Effects of Specified Activities on Marine Mammals" section of the proposed rule, NMFS included a qualitative discussion of the different ways that port operations and repair and maintenance activities may potentially affect marine mammals. Marine mammals may experience masking and behavioral disturbance. The information contained in the "Potential Effects of Specified Activities on Marine Mammals" section from the proposed rule has not changed. Please refer to the proposed rule for the full discussion (75 FR 80260, December 21, 2010).

Anticipated Effects on Habitat

The primary potential impacts to marine mammals and other marine species are associated with elevated sound levels produced by the Port operations and maintenance/repair activities. However, other potential impacts from physical disturbance are also possible. Major repairs to the Neptune port and pipeline may affect marine mammal habitat in several ways: cause disturbance of the seafloor; increase turbidity slightly; and generate additional underwater sound in the area. These underwater sound levels will cause some species to temporarily disperse from or avoid repair areas, but they are expected to return shortly after the repair is completed. Operation of the Port will result in long-term, continued disturbance of the seafloor, regular withdrawal of seawater, and generation of underwater sound. The proposed rule contained a full discussion of the potential impacts to marine mammal habitat and prey species in the project area. No changes have been made to that discussion. Please refer to the proposed rule for the full discussion of potential impacts to marine mammal habitat (75 FR 80260, December 21, 2010). NMFS has determined that Neptune's proposed port operations and maintenance/repair activities are not expected to have any habitat-related effects that could cause significant or long-term consequences for individual marine mammals or on the food sources that they utilize.

Mitigation

In order to issue an incidental take authorization (ITA) under section 101(a)(5)(A) of the MMPA, NMFS must, where applicable, 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 on the availability of such species or stock for taking for certain subsistence uses (where relevant).

Neptune proposed several mitigation measures in the application (see **ADDRESSES**). After a review of these measures, NMFS determined that some additional measures should also be implemented in order to effect the least practicable adverse impact on the species or stock and its habitat. Both sets of measures are discussed next.

Mitigation Measures in Neptune's Application

Neptune submitted a "Marine Mammal Detection, Monitoring, and Response Plan for the Operations Phase" (the Plan) as part of its MMPA application (Appendix D of the application; see **ADDRESSES**). The measures, which include safety zones and vessel speed reductions, are fully described in the Plan and summarized here. Some slight changes have been made in this final rule (from what appears in the Plan) based on public comments or for clarification purposes. An explanation of the changes is contained in the "Comments and Responses" section found later in this document.

The 500-yd (457 m) safety zone for North Atlantic right whales is based on the approach regulation found at 50 CFR 224.103. The 100 yd (91 m) safety zone for other marine mammal species was taken from measures included in the 2007 Biological Opinion completed by NMFS' Northeast Regional Office. Any maintenance and/or repairs needed shall be scheduled in advance during the May 1 to November 30 seasonal window, whenever possible, so that disturbance to North Atlantic right whales will be largely avoided. If the repair cannot be scheduled during this time frame, additional mitigation measures are required in these regulations and described in part (2) of this section.

(1) Mitigation Measures for Major Repairs (May 1 to November 30)

(A) During repairs, if a marine mammal is detected within 0.6 mi (1 km) of the repair vessel (or acoustically), the vessel superintendent or on-deck supervisor will be notified immediately. The vessel's crew will be put on a heightened state of alert. The marine mammal will be monitored constantly to determine if it is moving toward the repair area.

(B) Repair vessels will cease any movement in the area if a marine mammal other than a right whale is sighted within or approaching to a distance of 100 yd (91 m) from the operating repair vessel. Repair vessels will cease any movement in the area if a right whale is sighted within or approaching to a distance of 500 yd (457 m) from the operating vessel. Vessels transiting the repair area, such as pipe haul barge tugs, will also be required to maintain these separation distances.

(C) Repair vessels will cease all sound emitting activities if a marine mammal other than a right whale is sighted within or approaching to a distance of 100 yd (91 m) or if a right whale is sighted within or approaching to a distance of 500 yd (457 m), from the operating repair vessel. The back-calculated source level, based on the most conservative cylindrical model of acoustic energy spreading, is estimated to be 139 dB re 1 μPa.

(D) Repair activities may resume after the marine mammal is positively reconfirmed outside the established zones (either 500 yd (457 m) or 100 yd (91 m), depending upon species) or if the marine mammal has not been re-sighted in the established zones for 30 minutes.

(E) While under way, all repair vessels will remain 500 yd (457 m) away from right whales and 100 yd (91 m) away from all other marine mammals, unless constrained by human safety concerns or navigational constraints.

(F) All repair vessels 300 gross tons or greater will maintain a speed of 10 knots (18.5 km/hr) or less. Vessels less than 300 gross tons carrying supplies or crew between the shore and the repair site will contact the Mandatory Ship Reporting System, the USCG, or the protected species observers (PSOs) at the repair site before leaving shore for reports of recent right whale sightings or active Dynamic Management Areas (DMAs) and, consistent with navigation safety, restrict speeds to 10 knots (18.5 km/hr) or less within 5 mi (8 km) of any recent sighting location and within any existing DMA.

(G) Vessels transiting through the Cape Cod Canal and Cape Cod Bay (CCB) between January 1 and May 15 will reduce speeds to 10 knots (18.5 km/hr) or less, follow the recommended routes charted by NOAA to reduce interactions between right whales and shipping traffic, and avoid aggregations of right whales in the eastern portion of CCB.

(2) Additional Port and Pipeline Major Repair Measures (December 1 to April 30)

If unplanned/emergency repair activities cannot be conducted between May 1 and November 30, Neptune is required to implement the following additional mitigation measures:

(A) If on-board PSOs do not have at least 0.6-mi (1-km) visibility, they shall call for a shutdown of repair activities. If dive operations are in progress, then they shall be halted and divers brought on board until visibility is adequate to see a 0.6-mi (1-km) range. At the time of shutdown, the use of thrusters must be minimized to the lowest level needed to maintain personnel safety. If there are potential safety problems due to the shutdown, the captain will decide what operations can safely be shut down and will document such activities in the data log.

(B) Prior to leaving the dock to begin transit, the barge will contact one of the

PSOs on watch to receive an update of sightings within the visual observation area (within 0.6 mi (1 km) of the Port). If the PSO has observed a North Atlantic right whale within 30 minutes of the transit start, the vessel will hold for 30 minutes and again seek clearance to leave from the PSOs on board. PSOs will assess whale activity and visual observation ability at the time of the transit request to clear the barge for release and will grant clearance if no North Atlantic right whales have been sighted in the last 30 minutes in the visual observation area. [Similar requirements from the acoustic monitoring system is required and discussed part (4) of this subsection.]

(C) Neptune or its contractor shall provide a half-day training course to designated crew members assigned to the transit barges and other support vessels who will have responsibilities for watching for marine mammals. This course shall cover topics including, but not limited to, descriptions of the marine mammals found in the area, mitigation and monitoring requirements contained in the LOA, sighting log requirements, and procedures for reporting injured or dead marine mammals. These designated crew members will be required to keep watch on the bridge and immediately notify the navigator of any whale sightings. All watch crew members will sign into a bridge log book upon the start and end of watch. Transit route, destination, sea conditions, and any protected species sightings/mitigation actions during watch will be recorded in the log book. Any whale sightings within 3,281 ft (1,000 m) of the vessel will result in a high alert and slow speed of 4 knots (7.4 km/hr) or less. A sighting within 2,461 ft (750 m) will result in idle speed and/or ceasing all movement.

(D) The material barges and tugs used for repair work shall transit from the operations dock to the work sites during daylight hours, when possible, provided the safety of the vessels is not compromised. Should transit at night be required, the maximum speed of the tug will be 5 knots (9.3 km/hr).

(E) Consistent with navigation safety, all repair vessels must maintain a speed of 10 knots (18.5 km/hr) or less during daylight hours. All vessels will operate at 5 knots (9.3 km/hr) or less at all times within 3.1 mi (5 km) of the repair area.

(3) Speed Restrictions in Seasonal Management Areas (SMAs)

Repair vessels and SRVs will transit at 10 knots (18.5 km/hr) or less in the following seasons and areas, which either correspond to or are more restrictive than the times and areas in NMFS' regulations at 50 CFR 224.105 that implement speed restrictions to reduce the likelihood and severity of ship strikes of right whales:

- CCB SMA from January 1 through May 15, which includes all waters in CCB, extending to all shorelines of the Bay, with a northern boundary of 42° 12′ N. latitude;
- Off Race Point SMA year round, which is bounded by straight lines connecting the following coordinates in the order stated: 42°30′ N. 69°45′ W.; thence to 42°30′ N. 70°30′ W.; thence to 42°12′ N. 70°30′ W.; thence to 42°12′ N. 70°12′ W.; thence to 42°04′56.5″ N. 70°12′ W.; thence along mean high water line and inshore limits of COLREGS limit to a latitude of 41°40′ N.; thence due east to 41°41′ N. 69°45′ W.; thence back to starting point; and
- Great South Channel (GSC) SMA from April 1 through July 31, which is bounded by straight lines connecting the following coordinates in the order stated:

42°30′ N. 69°45′ W.
41°40′ N. 69°45′ W.
41°00′ N. 69°05′ W.
42°09′ N. 67°08′24″ W.
42°30′ N. 67°27′ W.
42°30′ N. 69°45′ W.

(4) Additional Mitigation Measures

(A) When approaching and departing from the Neptune Port, SRVs shall use the Boston Traffic Separation Scheme (TSS) starting and ending at the entrance to the GSC. Upon entering the TSS, the SRV shall go into a "heightened awareness" mode of operation, which is outlined in great detail in the Plan (see Neptune's application).

(B) In the event that a whale is visually observed within 0.6 mi (1 km) of the Port or a confirmed acoustic detection is reported on either of the two auto-detection buoys (ABs; more information on the acoustic devices is contained in the "Monitoring and Reporting" section later in this document) closest to the Port, departing SRVs shall delay their departure from the Port, unless extraordinary circumstances, defined in the Plan, require that the departure is not delayed. The departure delay shall continue until either the observed whale has been visually (during daylight hours) confirmed as more than 0.6 mi (1 km) from the Port or 30 minutes have passed without another confirmed detection either acoustically within the acoustic detection range of the two ABs closest to the Port or visually within 0.6 mi (1 km) from Neptune.

(C) SRVs that are approaching or departing from the Port and are within the Area to be Avoided (ATBA) surrounding Neptune shall remain at least 0.6 mi (1 km) away from any visually detected right whales and at least 100 yd (91 m) away from all other visually detected whales unless extraordinary circumstances, as defined in Section 1.2 of the Plan in Neptune's application, require that the vessel stay its course. The ATBA is defined in 33 CFR 150.940. It is the largest area of the Port marked on nautical charts, and it is enforceable by the USCG in accordance with the 33 CFR 150.900 regulations. The Vessel Master shall designate at least one lookout to be exclusively and continuously monitoring for the presence of marine mammals at all times while the SRV is approaching or departing Neptune.

(D) Neptune will ensure that other vessels providing support to Neptune operations during regasification activities that are approaching or departing from the Port and are within the ATBA shall be operated so as to remain at least 0.6 mi (1 km) away from any visually detected right whales and at least 100 yd (91 m) from all other visually detected whales.

Additional Mitigation Measures Required by NMFS

In addition to the mitigation measures in Neptune's application, NMFS has required the following measures in these regulations in order to ensure the least practicable adverse impact on the affected species or stocks:

(1) Neptune must immediately suspend any repair and maintenance or operations activities if a dead or injured marine mammal is found in the vicinity of the project area, and the death or injury of the animal could be attributable to the LNG facility activities. Upon finding a dead or injured marine mammal, Neptune must contact NMFS, the Northeast Stranding and Disentanglement Program, and the USCG. NMFS will review the documentation submitted by the PSO and attempt to attribute a cause of death. Activities will not resume until review and approval has been given by NMFS.

(2) PSOs will direct a moving vessel to slow to idle if a baleen whale is seen less than 0.6 mi (1 km) from the vessel.

(3) Use of lights during repair or maintenance activities shall be limited to areas where work is actually occurring, and all other lights must be extinguished. Lights must be downshielded to illuminate the deck and shall not intentionally illuminate surrounding waters, so as not to attract whales or their prey to the area.

Mitigation Conclusions

NMFS has carefully evaluated the applicant's proposed mitigation measures and 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:

- The manner in which, and the degree to which, the successful implementation of the measure is expected to minimize adverse impacts to marine mammals;
- The proven or likely efficacy of the specific measure to minimize adverse impacts as planned; and
- The practicability of the measure for applicant implementation.

Based on our evaluation of the applicant's proposed measures, as well as other measures considered by NMFS or recommended by the public, NMFS has determined that the mitigation measures described above, including the adaptive management component (see the "Adaptive Management" section later in this document), provide the means of effecting the least practicable adverse impact 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)(A) of the MMPA states that NMFS must, where applicable, 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 ITAs 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.

Neptune proposed both visual and acoustic monitoring programs in the Plan contained in the application. Summaries of those plans, as well as the proposed reporting, are contained here.

Passive Acoustic Monitoring

Neptune LNG will deploy and maintain a passive acoustic detection network along a portion of the TSS and in the vicinity of Neptune. This network will consist of autonomous recording units (ARUs) and near-real-time ABs. To develop, implement, collect, and analyze the acoustic data obtained from deployment of the ARUs and ABs, as well as to prepare reports and maintain the passive acoustic detection network, Neptune LNG has engaged the Cornell University Bioacoustic Research Program (BRP) in Ithaca, New York, and the Woods Hole Oceanographic Institution (WHOI) in Woods Hole, Massachusetts.

During June 2008, an array of 19 passive seafloor ARUs was deployed by BRP for Neptune. The layout of the array centered on the terminal site and was used to monitor the noise environment in Massachusetts Bay in the vicinity of Neptune during construction of the Port and associated pipeline lateral. The ARUs were not designed to provide real-time or near-real-time information about vocalizing whales. Rather, archival noise data collected from the ARU array were used for the purpose of understanding the seasonal occurrences and overall distributions of whales (primarily North Atlantic right whales) within approximately 11.5 mi (18.5 km) of the Neptune Port. Neptune LNG will maintain these ARUs in the same configuration for a period of 5 years during operation of the Neptune Port in order to monitor the actual acoustic output of port operations and to alert NOAA to any unanticipated effects of port operations, such as large scale abandonment by marine mammals of the area. To further assist in evaluations of Neptune's acoustic output, source levels associated with DP of SRVs at the buoys will be estimated using empirical measurements collected from the passive detection network. If it is determined that this network is insufficient to collect the data, then source levels shall be collected from a platform as close as practicable to thrusters while in use.

In addition to the ARUs, Neptune LNG has deployed 10 ABs within the Separation Zone of the TSS for the operational life of the Port. The purpose of the AB array is to detect the presence of vocalizing North Atlantic right whales. Each AB has an average detection range of 5.8 mi (9.3 km) from the AB, although detection ranges will vary based on ambient underwater conditions. The AB system will be the primary detection mechanism that alerts the SRV Master to the occurrence of right whales in the TSS and triggers heightened SRV awareness. The configurations of the ARU array and AB network (see Figure 3 in the Plan in Neptune's application) were based upon configurations developed and recommended by NOAA personnel.

Each AB deployed in the TSS will continuously screen the low-frequency acoustic environment (less than 1,000 Hz) for right whale contact calls occurring within an approximately 5.8-mi (9.3-km) radius from each buoy (the ABs' detection range) and rank detections on a scale from 1 to 10. Each AB shall transmit up to 10 clips with ratings 6–10 in near-real-time via Iridium satellite link to the BRP server Web site every 20 minutes during periods of heightened awareness (otherwise AB detections are transmitted at a rate of 5 clips per 6 hours). This 20-minute transmission schedule was determined by consideration of a combination of factors including the tendency of right whale calls to occur in clusters (leading to a sampling logic of listening for other calls rather than transmitting immediately upon detection of a possible call) and the amount of battery power required to complete a satellite transmission. Additional details on the protocol can be found in Neptune's application.

Additional passive acoustic monitoring shall be required, on a case-by-case basis, during both planned and emergency repair activities in order to better detect right whales in the area of repair work and to collect additional data on the noise levels produced during repair and maintenance activities. Neptune shall work with NOAA (NMFS and SBNMS) to evaluate when to install real-time passive acoustic detection buoys to provide early warnings for potential occurrence of right whales in the vicinity of the repair area. The number of passive acoustic detection buoys installed around the activity site, if deemed necessary, shall be commensurate with the type and spatial extent of maintenance/repair work required but must be sufficient to detect vocalizing right whales within the 120-dB impact zone. In addition, Neptune shall provide NMFS with empirically measured source level data for all sources of noise associated with LNG port maintenance and repair activities. Measurements shall be carefully planned and coordinated with noise-producing activities and shall be collected from the passive detection network.

Visual Monitoring

(1) Maintenance and Repair Activities

During maintenance- and repair-related activities, Neptune LNG shall employ qualified PSOs on each vessel that has a DP system. All PSOs must

receive training and be approved in advance by NOAA after a review of their qualifications. Qualifications for these PSOs shall include direct field experience on a marine mammal observation vessel and/or aerial surveys in the Atlantic Ocean/Gulf of Mexico. Two PSOs are on-duty at all times. Each vessel typically has four PSOs on-board at all times. The PSOs (one primary and one secondary) are responsible for visually locating marine mammals at the ocean's surface and, to the extent possible, identifying the species. The primary PSO shall act as the identification specialist, and the secondary PSO will serve as data recorder and will assist with identification. Both PSOs shall have responsibility for monitoring for the presence of marine mammals.

The PSOs shall monitor the area where maintenance and repair work is conducted using the naked eye, hand-held binoculars, and/or power binoculars (*e.g,* Big Eyes). Two PSOs are on-duty 24 hours/day and switch between primary and secondary duties (as described in the previous paragraph) about every 40–60 minutes. During nighttime watches, PSOs are equipped with night vision devices. All sightings must be recorded on marine mammal field sighting logs.

(2) Operations

While an SRV is navigating within the designated TSS, three people have lookout duties on or near the bridge of the ship including the SRV Master, the Officer-of-the-Watch, and the Helmsman on watch. In addition to standard watch procedures, while the SRV is within the ATBA and/or while actively engaging in the use of thrusters, an additional lookout shall be designated to exclusively and continuously monitor for marine mammals. Once the SRV is moored and regasification activities have begun, the vessel is no longer considered to be in "heightened awareness" status. However, when regasification activities conclude and the SRV prepares to depart from Neptune, the Master shall once again ensure that the responsibilities as defined in the Plan are carried out. All sightings of marine mammals by the designated lookout, individuals posted to navigational lookout duties, and/or any other crew member while the SRV is within the TSS, in transit to the ATBA, within the ATBA, and/or when actively engaging in the use of thrusters shall be immediately reported to the Officer-of-the-Watch who shall then alert the Master.

Reporting Measures

Since the Neptune Port is within the Mandatory Ship Reporting Area (MSRA), all SRVs transiting to and from Neptune shall report their activities to the mandatory reporting section of the USCG to remain apprised of North Atlantic right whale movements within the area. All vessels entering and exiting the MSRA shall report their activities to WHALESNORTH. Vessel operators shall contact the USCG by standard procedures promulgated through the Notice to Mariner system.

For major repair work associated with the pipeline lateral or other port components, Neptune LNG shall notify the appropriate NOAA personnel as soon as practicable after it is determined that repair work must be conducted. During maintenance and repair of the pipeline lateral or other port components, weekly status reports must be provided to NOAA. The weekly report must include data collected for each distinct marine mammal species observed in the project area during the period of the repair activity. The weekly reports shall include the following:

- The location, time, and nature of the pipeline lateral repair activities;
- Whether the DP system was operated and, if so, the number of thrusters used and the time and duration of DP operation;
- Marine mammals observed in the area (number, species, age group, and initial behavior);
- The distance of observed marine mammals from the repair activities;
- Observed marine mammal behaviors during the sighting;
- Whether any mitigation measures were implemented;
- Weather conditions (sea state, wind speed, wind direction, ambient temperature, precipitation, and percent cloud cover, *etc.*);
- Condition of the marine mammal observation (visibility and glare); and
- Details of passive acoustic detections and any action taken in response to those detections.

For minor repairs and maintenance activities, the following protocols will be followed:

- All vessel crew members will be trained in marine mammal identification and avoidance procedures;
- Repair vessels will notify designated NOAA personnel when and where the repair/maintenance work is to take place along with a tentative schedule and description of the work, as soon as practicable after it is determined that repair work must be conducted;
- Vessel crews will record/document any marine mammal sighting(s) during the work period; and
- At the conclusion of the repair/maintenance work, a report will be delivered to designated NOAA personnel describing any marine mammal sightings, the type of work taking place when the sighting occurred, and any avoidance actions taken during the repair/maintenance work.

During all phases of project repair/maintenance activities and operation, sightings of any injured or dead marine mammals will be reported immediately to the USCG, NMFS, and the Northeast Stranding and Disentanglement Program, regardless of whether the injury or death is caused by project activities. Sightings of injured or dead marine mammals not associated with project activities can be reported to the USCG on VHF Channel 16 or to NMFS Stranding and Entanglement Hotline. In addition, if the injury or death was caused by a project vessel (*e.g.*, SRV, support vessel, or repair/maintenance vessel), USCG must be notified immediately, and a full report must be provided to NMFS, Northeast Regional Office, and NMFS, Office of Protected Resources. The report must include the following information: (1) The time, date, and location (latitude/longitude) of the incident; (2) the name and type of vessel involved; (3) the vessel's speed during the incident; (4) a description of the incident; (5) water depth; (6) environmental conditions (*e.g.*, wind speed and direction, sea state, cloud cover, and visibility); (7) the species identification or description of the animal; (8) the fate of the animal; and (9) photographs or video footage of the animal (if equipment is available). Activities will not resume until review and approval has been given by NMFS.

An annual report on marine mammal monitoring and mitigation will be submitted to NMFS, Office of Protected Resources, and NMFS, Northeast Regional Office, on August 1 of each year. The annual report shall cover the time period of January 1 through December 31 of the previous year for each year of activity. The weekly and annual reports shall include data collected for each distinct marine mammal species observed in the project area in Massachusetts Bay during the period of LNG facility operations and repair/maintenance activities. The annual report shall also include a description of marine mammal behavior, overall numbers of individuals observed, frequency of observation, and any behavioral changes and the context of the changes relative to operation and repair/maintenance

activities. Additional information that will be recorded by Neptune or its contractors during operation and repair/maintenance activities and contained in the reports include: results of empirical source level estimation for thrusters while in use and activities associated with maintenance and repair events, date and time of marine mammal detections (visually or acoustically), weather conditions, species identification, approximate distance from the source, activity of the vessel or at the repair site when a marine mammal is sighted, and whether thrusters were in use and, if so, how many at the time of the sighting.

In addition to annual reports, Neptune must submit a draft comprehensive final report to NMFS, Office of Protected Resources, and NMFS, Northeast Regional Office, 180 days prior to the expiration of these regulations. This comprehensive technical report shall provide full documentation of methods, results, and interpretation of all monitoring during the first 4.5 years of the LOA. A revised final comprehensive technical report, including all monitoring results during the entire period of the LOAs will be due 90 days after the end of the period of effectiveness of the regulations.

General Conclusions Drawn From Previous Monitoring Reports

Throughout the construction period (July 2008–November 2009 with work stoppages during peak right whale season), Neptune submitted weekly reports on marine mammal sightings in the area. While it is difficult to draw biological conclusions from these reports, NMFS can make some general conclusions. Data gathered by PSOs is generally useful to indicate the presence or absence of marine mammals (often to a species level) within the safety zones (and sometimes without) and to document the implementation of mitigation measures. Though it is by no means conclusory, it is worth noting that no instances of obvious behavioral disturbance as a result of Neptune's activities were observed by the PSOs. Of course, these observations only cover the animals that were at the surface and within the distance that the PSOs could see. Neptune has not yet conducted any repair or maintenance activities at the Port.

As described previously in this document, Neptune was required to maintain an acoustic array to monitor calling North Atlantic right whales (humpback and fin whale calls were also able to be detected). The ARUs log continuous acoustic data for up to 110 days per each deployment. At the end of each ARU recording cycle, the 19 units are recovered by BRP personnel. The data are analyzed based on seven objectives, which are as follows: (1) Determine daily presence of fin whale sounds; (2) determine daily presence of humpback whale sounds; (3) determine hourly presence of right whale sounds; (4) estimate locations and numbers of vocalizing right whales in the monitoring area each day; (5) estimate sound exposure for each locatable vocalizing whale; (6) assess noise conditions; and (7) improve analysis software applications.

Cornell BRP analyzed the data and submitted a report covering the initial construction phase of the project, which occurred in 2008. While acoustic data can only be collected if the animals are actively calling, the report indicates that humpback and fin whales were heard calling on at least some of the ARUs on all construction days, and right whale calls were heard only 28 percent of the time during active construction days. Background noise analysis revealed definite increases in acoustic noise in association with the different types of construction activities with increases highest in the right whale band and next highest in the humpback band. The report asserted that the influence of construction activities on the acoustic habitat that was monitored could not be adequately evaluated by simply counting the number of detected whales exposed to a received noise level above 120 dB.

The September 2010 ARU quarterly passive acoustic monitoring status report indicates that only a small portion of the 2010 data have been analyzed to date. The final *Marine Mammal Acoustic Monitoring and Analysis for the Operation of the Neptune Liquefied Natural Gas Terminal: 1 January–31 December 2010* will be submitted to NOAA, USGC, and MARAD by July 31, 2011.

The AB network has been deployed and operational in the Boston TSS since January 2010. Acoustic data from these buoys are sent to the BRP Cornell lab in near-real-time for analysis for the presence of North Atlantic right whales in the monitoring area. Positive North Atlantic right whale detections are relayed to SRVs during transit through the shipping lanes. The cycle of data analysis and information submission is a 24 hrs/day, 7 days/week operation when SRVs are in the monitoring area. To date, Cornell has prepared and submitted two reports for the AB system for 2010: January–June time period and July–September time period.

There are two monitoring conditions that dictate the tasks performed by analysts at BRP: "normal" monitoring conditions and "heightened watch" monitoring conditions. During "normal" monitoring conditions (*i.e.,* no SRVs are present in the monitoring area), analysts at BRP monitor and report on North Atlantic right whale activity twice a day. During "heightened watch" monitoring conditions (*i.e.,* when a SRV is 24 hours from the TSS AB coverage area, traveling through the Boston Shipping Lanes or transiting to the Neptune Port from the Boston Shipping Lanes) analysts at BRP monitor and report on North Atlantic right whale acoustic activity in near-real-time. Table 1 in this document outlines the detections and data that were recorded on the ABs from January–September 2010. The highest number of detections was recorded in March and the lowest number recorded in June. During the period January–September 2010, there were two SRV visits to the Port. This resulted in "heightened watch" monitoring conditions of the AB array for 2 days in February, 2 days in March, 7 days in April, 1 day in May, 1 day in July, and 7 days in August. The passive acoustic arrays will remain deployed during the effective period of these regulations in order to obtain information during the operational phase of the Port facility.

TABLE 1—INFORMATION ON NORTH ATLANTIC RIGHT WHALE CALL DATA COLLECTED FROM THE AB ARRAY DEPLOYED NEAR THE NEPTUNE PORT FROM JANUARY THROUGH SEPTEMBER 2010

	January	February	March	April	May	June	July	August	September
Number of ABs with a detection	8	10	10	10	10	5	8	8	8
Total number of detections for all ABs	328	573	3,874	2,786	1,538	34	64	112	189
Highest number of detections on a single day	58 (Jan. 14)	103 (Feb. 25)	1,059 (Mar. 25)	255 (Apr. 24)	186 (May 1)	8 (Jun. 15)	26 (Jul. 3)	35 (Aug. 14)	43 (Sep. 18)
Number of days with no recorded detections	5	2	0	0	1	14	16	9	11

Adaptive Management

NMFS has included an adaptive management component in the regulations governing the take of marine mammals incidental to operation and repair/maintenance activities at the Neptune Port. In accordance with 50 CFR 216.105(c), regulations for the proposed activity must be based on the best available information. As new information is developed, through monitoring, reporting, or research, the regulations may be modified, in whole or in part, after notice and opportunity for public review and comment. The use of adaptive management will allow NMFS to consider new information from different sources to determine if mitigation or monitoring measures should be modified (including additions or deletions) if new data suggest that such modifications are appropriate for subsequent LOAs.

The following are some of the possible sources of applicable data:

- Results from Neptune's monitoring from the previous year;
- Results from general marine mammal and sound research; or
- Any information which reveals that marine mammals may have been taken in a manner, extent or number not authorized by these regulations or subsequent LOAs.

If, during the effective period of the regulations, new information is presented from monitoring, reporting, or research, these regulations may be modified, in whole, or in part after notice and opportunity for public review and comment, as allowed for in 50 CFR 216.105(c). In addition, LOAs shall be withdrawn or suspended if, after notice and opportunity for public comment, the Assistant Administrator finds, among other things, that the regulations are not being substantially complied with or the taking allowed is having more than a negligible impact on the species or stock, as allowed for in 50 CFR 216.106(e). That is, should substantial changes in marine mammal populations in the project area occur or monitoring and reporting show that the Port operations are having more than a negligible impact on marine mammals, then NMFS reserves the right to modify the regulations and/or withdraw or suspend LOAs after public review and comment.

Comments and Responses

On December 21, 2010 (75 FR 80260), NMFS published a proposed rule in response to Neptune's request to take marine mammals incidental to port commissioning and operations, including maintenance and repair activities, at its Deepwater Port in Massachusetts Bay and requested comments, information, and suggestions concerning the request. During the 45-day public comment period, NMFS received comments from two private individuals and the Marine Mammal Commission (MMC). NMFS has responded to these comments here.

Comment 1: One of the private citizen letters noted the continual harassment and stress sustained by marine mammals from human activities, and, therefore, urged that the regulations be denied.

Response: NMFS considered the potential for harassment from these activities in its impacts analysis in the proposed rule (75 FR 80260, December 21, 2010). Authorization for incidental takings shall be granted if NMFS finds that the taking will have a negligible impact on the species or stock(s), will not have an unmitigable adverse impact on the availability of the species or stock(s) for subsistence uses (where relevant), and if the permissible methods of taking and requirements pertaining to the mitigation, monitoring and reporting of such takings are set forth. Based on the assessment in the proposed rule and contained later in this document, NMFS determined that the level of harassment from these activities would take only small numbers of marine mammals and would not have more than a negligible impact on the affected species or stocks. There are no relevant subsistence uses of marine mammals implicated by this action. Therefore, NMFS has determined that the total taking of affected species or stocks would not have an unmitigable adverse impact on the availability of such species or stocks for taking for subsistence purposes. The permissible methods of taking and the required mitigation, monitoring, and reporting measures are laid out in this final rule.

Comment 2: The second private citizen letter expressed contradicting points of view. It stated on the one hand that NMFS should not stop LNG operations, as it would force increased prices for the public. However, the letter also stated that NMFS should take positive steps to protect marine mammals.

Response: NMFS is not the agency with regulatory authority over offshore deepwater LNG ports. That authority falls to the USCG and MARAD. Therefore, those are the agencies that either allow or deny LNG port construction and operation. NMFS authorizes the take of marine mammals incidental to a specified activity if certain findings are made. Those findings are described in the "Background" section found earlier in this document. The final rule and associated LOA contain mitigation and monitoring measures to ensure the least practicable adverse impact on marine mammal species and stocks in the Port area.

Comment 3: The MMC expressed three concerns with the information in the proposed rule as to the derivation of take estimates. First, the MMC expressed concern about the 120-dB zones that were used as they were smaller than those derived from in-situ measurements and incorporated into models in appendices in Neptune's application. This resulted in an underestimation of the zones of exposure. Second, the hypothetical strip width that was used by NMFS was much smaller than the strip width used during the surveys, thus producing overestimates of marine mammal densities in the area. Lastly, NMFS only estimated take from repair and maintenance activities and DP but not weathervaning.

The MMC is concerned that the presence of these errors and omissions in the proposed rule may have compromised the public's opportunity to comment meaningfully on the proposed authorization. Without seeing the new analyses, it is difficult to know whether the final rule will differ significantly enough from the proposed rule that an additional opportunity for public review and comment should be provided. Therefore, the MMC recommends that NMFS allow for an additional opportunity for public review and comment before publication of a final rule if the recalculated takes or zones in which takes might occur are significantly greater than those described in the proposed rule. If NMFS determines that additional notice and opportunity to comment are not needed, the MMC recommends that NMFS ensure that the revised estimates of the zones of exposure and anticipated takes for each of the three proposed activities are provided in the final rule, together with the rationale for not providing an additional opportunity for public review and comment.

Response: NMFS has revised the take estimates in this final rule from those contained in the proposed rule. A summary of the revisions is provided here, and more details can be found in the "Estimated Take by Incidental Harassment" section found later in this document.

As noted by the MMC, NMFS inadvertently did not estimate takes from weathervaning in the proposed rule. Takes from this activity (in

addition to DP use and repair/maintenance activities) have now been calculated and added to the total annual take estimate for each species. NMFS estimated that Neptune would require up to 8 days/year to conduct weathervaning to maintain position at the Port. This is based on information contained in their application and associated appendices. Including this activity only added a very small number of individuals of each species to the overall take totals for each species.

In December 2009, LGL Limited completed a Second Supplementary Biological Effects Report titled *Assessment of the Effects of Underwater Noise from Thrusters to be Used on the Neptune LNG Project* (LGL, 2009). This report incorporated measurements of the SRVs conducted by Samsung and new transmission loss modeling by JASCO Applied Sciences. This report presents zones of influence (ZOIs; *e.g.,* the area ensonified by the 120-dB contour) for DP during thruster use for docking and undocking, weathervaning (to maintain position on the mooring), and repair and maintenance activities. For each of these three activities that have the potential to result in take of marine mammals, LGL presented a range for the radius of the 120-dB isopleth. NMFS took the average (or mean) value for each of these three radii to determine the ZOIs for each activity and the amount of take for each species. NMFS used the following radii (and ZOIs) in its take calculations:

- DP during thruster use for docking and undocking: Radius of 2.33 mi (3.75 km) and an area of 17.06 mi^2 (44.18 km^2);
- Weathervaning: Radius of 3.2 mi (5.15 km) and an area of 32.17 mi^2 (83.32 km^2); and
- Repair and maintenance activities: Radius of 4.38 mi (7.05 km) and an area of 60.29 mi^2 (156.14 km^2).

The radius for DP increased only slightly between the proposed and final rules from 1.9 mi (3 km) to 2.33 mi (3.75 km). The increase in radius (and therefore ZOI) from repair and maintenance activities had a more dramatic increase between the proposed and final rules: 2.4 mi (3.9 km) to 4.38 mi (7.05 km). However, the radius for repair and maintenance activities assumes that all such activities would be similar to construction activities. Activities during construction were noisier and required more vessels on site at the same time than what would be expected for most repair or maintenance type activities. Therefore, this radius and associated ZOI are likely overestimates, as many of the activities would not occur on this large of a scale.

As noted by the MMC, NMFS used an extremely conservative hypothetical strip width in the proposed rule to derive density estimates. By doing so, the density estimates were severely inflated. NMFS has reviewed the 2006 NCCOS report from which data were used to determine species densities. Some of the data used a strip-transect survey method. The value for this was 2.3 mi (3.7 km). In order to convert a strip-transect value to a line transect for the strip width, one must divide the strip transect width by 2. Therefore, in this final rule, NMFS has used a strip width of 1.15 mi (1.85 km) to derive density estimates for the seven species discussed in the NCCOS (2006) report. This value is more realistic of actual field conditions than the original value used in the proposed rule. By using this larger strip width, the take estimates dropped dramatically (especially for DP thruster use), even with the larger ZOIs. The take estimates for DP thruster use with the lower density estimates and larger ensonified areas decreased by nearly three times the values in the proposed rule.

NMFS has determined that there does not need to be another opportunity for public comment on this rule based merely on the fact that the take estimates have been revised. When all of the recommended modifications to the take estimates were made (*i.e.,* inclusion of weathervaning, increasing ZOIs, and increasing strip width), the end result was that in all cases, the take estimates decreased slightly for the species described in the 2006 NCCOS report. Additionally, the public's opportunity to comment meaningfully was not compromised. Besides the MMC, only two other people submitted comment letters. Neither of these letters discussed the issue of take estimates or how the values were calculated in the proposed rule. NMFS has provided ample explanation for how the estimates were derived in this final rule and where changes in derivation were made from the proposed rule.

Comment 4: The MMC recommends that NMFS adopt a consistent requirement that mitigation zones be clear of all species of marine mammals for 30 minutes before initiation or resumption of activities.

Response: NMFS has changed the requirement that repair and maintenance activities not resume until the marine mammal has been positively confirmed to have left the mitigation zone to also state that if the animal has not been re-sighted for 30 minutes in the appropriate mitigation zone that activities may resume. This change is consistent with requirements and conditions contained in other MMPA ITAs.

Comment 5: The MMC notes that the proposed rule uses a 0.6-mi (1-km) radius of the area that must be visible for certain activities and a 0.5-mi (0.8-km) radius for repair and maintenance activities. The basis for allowing lower visibility for certain activities is not clear. The MMC recommends that NMFS require that visibility also be at least 0.6 mi (1 km) before maintenance and repair activities can proceed or provide a reasoned basis for allowing these activities under poorer visibility.

Response: NMFS has changed the visibility requirement for repair and maintenance activities in the final rule to be consistent with that of other activities for which mitigation is required in the rule. NMFS agrees with the MMC that there is no reason for the discrepancy in the visibility distances and therefore has made the requested change. The mitigation requirements for such activities now state that a zone of 0.6 mi (1 km) must be visible.

Comment 6: The MMC also questions whether the planned visual monitoring is adequate for mitigation purposes. The proposed rule specifies that PSOs would conduct visual monitoring for 40 minutes each hour, beginning at daybreak. With that 20-minute break each hour, if the Port operates 24 hours/day, then in a season with 12 hours of daily sunlight, observers would be on watch for a total of 8 hours only—that is, during one-third of operations. In essence, NMFS' approach implies that visual monitoring is necessary for mitigation purposes only at certain times, and the MMC does not see the basis for that conclusion. To address that concern, the MMC recommends that NMFS (1) require that PSOs monitor continuously for the presence of marine mammals when activities occur during daylight hours and (2) either prohibit nighttime operations or adopt measures that it can demonstrate to be reliable for detecting all marine mammals within the specified mitigation zones under nighttime conditions.

Response: The information contained in the proposed rule about the procedures used by PSOs during repair and maintenance activities at the Neptune Port was not described clearly. Additional information has been added to the "Monitoring and Reporting" section of this document to add clarity.

PSOs are on-duty continuously to monitor for the presence of marine mammals. This includes work done during nighttime hours. Two PSOs are on-watch at all times and take turns during the shift between being the

primary observer watching for marine mammals and the secondary observer who records sightings in the log book and watches for marine mammals when not entering data. Should repair and maintenance activities occur during nighttime hours, PSOs are equipped with night vision devices. These devices have proven to be useful within the small distances that are encompassed by the mitigation zones for this project.

Comment 7: The MMC believes that NMFS' determination under the MMPA that these activities will have a negligible impact on marine mammal species or stocks needs to take into account possible cumulative effects, even if cumulative effects analyses have been conducted under the National Environmental Policy Act (NEPA). Unless such an analysis is done, NMFS could continue indefinitely to grant ITAs for individual activities that, by themselves, have a negligible impact even though the combined total of all impacts might significantly impede a species' recovery or contribute to its further decline. With that concern in mind, the MMC recommends that NMFS include in its final rule an analysis evaluating the impact of the proposed operations together with the cumulative impacts of all the other pertinent risk factors affecting right whales and other marine mammals that occur in the Port area and explain why it believes that the combined impacts would be negligible.

Response: NMFS considered the cumulative effects analysis contained in the USCG's and MARAD's 2006 Final EIS and other relevant data to inform its MMPA determination here. NMFS was a cooperating agency in the development of both the Draft and Final EISs for this project. Pursuant to NEPA, those documents contained a cumulative impacts assessment, as well as an assessment of the impacts of the proposed Neptune Port construction, operation, and abandonment on marine mammals and other protected resources.

Section 101(a)(5)(A) of the MMPA and its implementing regulations require NMFS to consider a request for the taking of marine mammals incidental to a specified activity within a specified geographical region and, assuming certain findings can be made, to authorize the taking of small numbers of marine mammals while engaged in that activity. NMFS has defined "specified activity" in 50 CFR 216.103 as "any activity, other than commercial fishing, that takes place in a specified geographical region and potentially involves the taking of small numbers of marine mammals." When making a negligible impact determination, NMFS considers the total impact during each 5-year period resulting from the specified activity only and supports its determination by relying on factors such as: (1) The number of anticipated mortalities from the activity; (2) the number and nature of anticipated injuries from the activity; (3) the number, nature, intensity, and duration of Level B harassment resulting from the activity; and (4) the context in which the takes occur.

NMFS considered the impacts analyses (*i.e.,* direct, indirect, and cumulative) contained in the 2006 EIS in reaching its conclusion that any marine mammals exposed to the low level sounds produced by operations or repair/maintenance activities at the Neptune Port would be disturbed for only a short period of time and would not be harmed or killed. Furthermore, the required mitigation and monitoring measures are expected to reduce the likelihood or severity of any impacts to marine mammals over the course of these activities.

Moreover, NMFS gave careful consideration to a number of other issues and sources of information. In particular, NMFS relied upon a number of scientific reports, including the 2009 and 2010 U.S. Atlantic and Gulf of Mexico Marine Mammal SARs to support its findings. The SARs contain a description of each marine mammal stock, its geographic range, a minimum population estimate, current population trends, current and maximum net productivity rates, optimum sustainable population levels and allowable removal levels, and estimates of annual human-caused mortality and serious injury through interactions with commercial fisheries. NMFS also used data from the 2006 NCCOS report to determine density levels of several of the marine mammal species in the proposed activity area.

After careful consideration of the proposed activities, the context in which Neptune's proposed activities would occur, the best available scientific information, and all effects analyses (including cumulative effects), NMFS has determined that the taking from the specified activities: (1) Would not result in more than the behavioral harassment (*i.e.,* Level B harassment) of small numbers of marine mammal species or stocks; (2) would not result in more than a negligible impact on affected species or stocks; and (3) would not have an unmitigable adverse impact on the availability of such species or stocks for taking for subsistence uses. Therefore NMFS has decided to issue regulations and associated LOA(s) to Neptune to take, by no more than Level B harassment, small numbers of marine mammals incidental to operation and repair/maintenance activities at the Neptune Port off Massachusetts.

Estimated Take 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 as a result of Neptune's operational and repair/maintenance activities. Anticipated take of marine mammals is associated with thruster sound during maneuvering of the SRVs while docking and undocking, occasional weathervaning at the Port, and during thruster use of DP maintenance vessels should a major repair be necessary. The regasification process itself is an activity that does not rise to the level of taking, as the modeled source level for this activity is 110 dB (rms). Certain species may have a behavioral reaction to the sound emitted during the activities; however, hearing impairment as a result of these activities is not anticipated. Additionally, vessel strikes are not anticipated, especially because of the required speed restriction measures that were described earlier in this document.

For continuous sounds, such as those produced by Neptune's activities, NMFS uses a received level of 120-dB (rms) to indicate the onset of Level B harassment. The basis for Neptune's "take" estimate is the number of marine mammals that potentially could be exposed to sound levels in excess of 120 dB. This has been determined by applying the modeled ZOI to the seasonal use (density) of the area by marine mammals and correcting for seasonal duration of sound-generating activities and estimated duration of individual activities when the maximum sound-generating activities are intermittent to occasional. Nearly all of the required information is readily available in the MARAD/USCG Final EIS, with the exception of marine mammal density estimates for the project area. In the case of data gaps, a conservative approach was used to ensure that the potential number of takes is not underestimated, as described next.

Based on comments received from the MMC, NMFS has reevaluated the take estimates. The following factors for developing the take estimates have been taken into account in this final rule, which were not considered in the proposed rule:

- Takes from weathervaning were also estimated (in addition to takes from thruster use during DP and repair and maintenance activities, which were estimated in the proposed rule);
- The ZOIs for each of the three activities listed here are taken from Appendix C3 in Neptune's application, which are taken from in-situ measurements and incorporated into models in Neptune's application instead of the ZOIs from earlier reports, which were used in the proposed rule; and
- Density estimates were derived using a strip width of 1.15 mi (1.85 km) instead of the overly conservative strip width of 0.25 mi (0.4 km) used in the proposed rule.

In December 2009, LGL Limited completed a Second Supplementary Biological Effects Report titled *Assessment of the Effects of Underwater Noise from Thrusters to be Used on the Neptune LNG Project* (LGL, 2009). This report incorporated measurements of the SRVs conducted by Samsung and new transmission loss modeling by JASCO Applied Sciences. This report presents ZOIs for DP during thruster use for docking and undocking, weathervaning (to maintain position on the mooring), and repair and maintenance activities. For each of these three activities that have the potential to result in take of marine mammals, LGL presented a range for the radius of the 120-dB isopleth and also for the 120-dB ensonified area. NMFS took the average (or mean) value for each of these three radii to determine the ZOIs for each activity and the amount of take for each species from the three activities. Therefore, NMFS used the following radii (and ZOIs) in its take calculations:

- DP during thruster use for docking and undocking: Radius of 2.33 mi (3.75 km) and an area of 17.06 mi^2 (44.18 km^2);
- Weathervaning: Radius of 3.2 mi (5.15 km) and an area of 32.17 mi^2 (83.32 km^2); and
- Repair and maintenance activities: Radius of 4.38 mi (7.05 km) and an area of 60.29 mi^2 (156.14 km^2).

Additionally, in the calculation of take from repair and maintenance activities, the proposed rule determined that such activities may only need to occur for 14 days each year. However, after a reevaluation, NMFS has determined that it would be more appropriate to assume 28 days per year for repair and maintenance activities. While some repairs may take 3–4 weeks in any given year, there is also the possibility that some years may not have any repair or maintenance activities occur.

NMFS recognizes that baleen whale species other than North Atlantic right whales have been sighted in the project area from May to November. However, the occurrence and abundance of fin, humpback, and minke whales is not well documented within the project area. Nonetheless, NMFS used the data on cetacean distribution within Massachusetts Bay, such as those published by the NCCOS (2006), to determine potential takes of marine mammals in the vicinity of the project area. Neptune presented density estimates using the CETAP (1982) and U.S. Navy MRA (2005) data. The NCCOS (2006) report uses information from these sources; however, it also includes information from some other studies. Therefore, NMFS used density information for the species that are included in the NCCOS (2006) report. These species include: North Atlantic right, fin, humpback, minke, pilot, and sei whales and Atlantic white-sided dolphins.

The NCCOS study used cetacean sightings from two sources: (1) The North Atlantic Right Whale Consortium (NARWC) sightings database held at the University of Rhode Island (Kenney, 2001); and (2) the Manomet Bird Observatory (MBO) database, held at NMFS' Northeast Fisheries Science Center (NEFSC). The NARWC data contained survey efforts and sightings data from ship and aerial surveys and opportunistic sources between 1970 and 2005. The main data contributors included: The CETAP, the Canadian Department of Fisheries and Oceans, the Provincetown Center for Coastal Studies, International Fund for Animal Welfare, NEFSC, New England Aquarium, WHOI, and the University of Rhode Island. A total of 406,293 mi (653,725 km) of survey track and 34,589 cetacean observations were provisionally selected for the NCCOS study in order to minimize bias from uneven allocation of survey effort in both time and space. The sightings-per-unit-effort (SPUE) was calculated for all cetacean species by month covering the southern Gulf of Maine study area, which also includes the project area (NCCOS, 2006).

The MBO's Cetacean and Seabird Assessment Program (CSAP) was contracted from 1980 to 1988 by NEFSC to provide an assessment of the relative abundance and distribution of cetaceans, seabirds, and marine turtles in the shelf waters of the northeastern U.S. (MBO, 1987). The CSAP program was designed to be completely compatible with NEFSC databases so that marine mammal data could be compared directly with fisheries data throughout the time series during which both types of information were gathered. A total of 8,383 mi (5,210 km) of survey distance and 636 cetacean observations from the MBO data were included in the NCCOS analysis. Combined valid survey effort for the NCCOS studies included 913,840 mi (567,955 km) of survey track for small cetaceans (dolphins and porpoises) and 1,060,226 mi (658,935 km) for large cetaceans (whales) in the southern Gulf of Maine. The NCCOS study then combined these two data sets by extracting cetacean sighting records, updating database field names to match the NARWC database, creating geometry to represent survey tracklines and applying a set of data selection criteria designed to minimize uncertainty and bias in the data used.

Based on the comprehensiveness and total coverage of the NCCOS cetacean distribution and abundance study, NMFS calculated the estimated take number of marine mammals based on the most recent NCCOS report published in December, 2006. A summary of seasonal cetacean distribution and abundance in the project area was provided in the proposed rule, in the "Description of Marine Mammals in the Area of the Specified Activity" section (75 FR 80260, December 21, 2010). For a detailed description and calculation of the cetacean abundance data and SPUE, refer to the NCCOS study (NCCOS, 2006). SPUE for all four seasons were analyzed, and the highest value SPUE for the season with the highest abundance of each species was used to determine relative abundance. Based on the data, the relative abundance of North Atlantic right, fin, humpback, minke, sei, and pilot whales and Atlantic white-sided dolphins, as calculated by SPUE in number of animals per square kilometer, is 0.0082, 0.0097, 0.0265, 0.0059, 0.0084, 0.0407, and 0.1314 n/km, respectively. Table 2 in this document outlines the density, abundance, take estimates, and percent of population for the 14 species for which NMFS is authorizing Level B harassment.

In calculating the area density of these species from these linear density data, NMFS used 1.15 mi (1.85 km) as the strip width (W). This is larger than the extremely conservative hypothetical strip width of 0.25 mi (0.4 km) that was used in the proposed rule. This revised strip width is based on the distance of

visibility used in the NARWC data that was part of the NCCOS (2006) study. However, those surveys used a strip transect instead of a line transect methodology. Therefore, in order to obtain a strip width, one must divide the visibility or transect value in half. Since the visibility value used in the NARWC data was 2.3 mi (3.7 km), it thus gives a strip width of 1.15 mi (1.85 km). Based on this information, the area density (D) of these species in the project area can be obtained by the following formula:

$D = SPUE/2W$.

Based on the calculation, the estimated take numbers by Level B harassment on an annual basis for North Atlantic right, fin, humpback, minke, sei, and pilot whales and Atlantic white-sided dolphins, within the 120-dB ensonified area during DP of thrusters for docking and undocking of approximately 17.06 mi^2 (44.18 km^2) maximum ZOI, corrected for 50 percent underwater, are 7, 9, 24, 5, 2, 36, and 118, respectively. This estimate is based on an estimated 50 SRV trips annually (for all of these species except for sei whales) that will produce sounds of 120 dB or greater. This estimate is based on an estimated 12.5 SRV trips annually that will produce sounds of 120 dB or greater for sei whales. Sei whales only occur in the area in the spring. Therefore, shipments during the other three seasons will not result in the take of sei whales. For this reason, take from shipment operations has only been calculated at a quarter of the rate of the other species for sei whales. With the revised strip width and ZOI, the take estimates for these seven species from DP during thruster use is about one-third the estimates in the proposed rule (75 FR 80260, December 21, 2010).

Based on the same calculation method described above for DP thruster use (but using the 120-dB ZOI of approximately 60.29 mi^2 (156.14 km^2)), the estimated take numbers by Level B harassment on an annual basis for North Atlantic right, fin, humpback, minke, sei, and pilot whales and Atlantic white-sided dolphins incidental to Port maintenance and repair activities, corrected for 50 percent underwater, are 15, 17, 47, 11, 7, 72, and 233, respectively. These numbers are based on 28 days of repair and maintenance activities occurring annually (for all of these species except for sei whales). As mentioned previously, sei whales only occur in the area in spring. Since most repair work is to be scheduled for the spring and summer seasons, the take estimate for sei whales was calculated based on 14 days or repair and maintenance activities annually. It is unlikely that this much repair and maintenance work would be required each year. With the revised strip width and ZOI, the take estimates for these seven species from maintenance and repair activities increased only slightly (*i.e.,* no more than 9 individuals for any endangered whale species) from the proposed rule (75 FR 80260, December 21, 2010).

The third activity that has the potential to take marine mammals is weathervaning in order to maintain position at the Port. This activity is not anticipated to occur for more than 8 days in any given year. Therefore, the take estimates are based on the possibility of weathervaning occurring for up to 8 days for all species except sei whales. Again, since sei whales only occur in the area in spring, the estimate for this species was calculated at one-quarter the rate (*i.e.,* 2 days of weathervaning per year). Using a ZOI of 32.17 mi^2 (83.32 km^2), the estimated take numbers by Level B harassment on an annual basis for North Atlantic right, fin, humpback, minke, sei, and pilot whales and Atlantic white-sided dolphins incidental to weathervaning, corrected for 50 percent underwater, are 2, 3, 7, 2, 1, 11, 36, respectively.

The total estimated annual take of each of these species as a result of all three activities with the potential to incidentally take marine mammals (*i.e.,* DP thruster use, repair and maintenance activities, and weathervaning) at the Neptune Port facility is: 24 North Atlantic right whales; 29 fin whales; 78 humpback whales; 18 minke whales; 12 sei whales; 119 long-finned pilot whales; and 387 Atlantic white-sided dolphins. These numbers represent a maximum of 7, 1.3, 9.2, 0.5, 3.1, 0.9, and 0.6 percent of the populations for these species or stocks in the western North Atlantic, respectively. The revised take estimates for these seven species are lower than the take estimates presented in the proposed rule (75 FR 80260, December 21, 2010). It is likely that individual animals will be "taken" by harassment multiple times (because certain individuals may occur in the area more than once while other individuals of the population or stock may not enter the project area). Additionally, the highest value SPUE for the season with the highest abundance of each species was used to determine relative abundance. Moreover, it is not expected that Neptune will have 50 SRV transits and LNG deliveries in the first year or two of operations. Therefore, these percentages represent the upper boundary of the animal population that could be affected. Thus, the actual number of individual animals being exposed or taken is expected to be far less, especially in the first couple of years of operation.

In addition, bottlenose dolphins, common dolphins, Risso's dolphins, killer whales, harbor porpoises, harbor seals, and gray seals could also be taken by Level B harassment as a result of the deepwater LNG port project. Because these species are less likely to occur in the area, and there are no density estimates specific to this particular area, NMFS based the take estimates on one or two encounters with typical group size. Therefore, NMFS estimates that up to approximately 10 bottlenose dolphins, 20 common dolphins, 20 Risso's dolphins, 20 killer whales, 5 harbor porpoises, 15 harbor seals, and 15 gray seals could be exposed to continuous noise at or above 120 dB re 1 μPa rms incidental to operations (*i.e.,* DP thruster use and weathervaning) and repair and maintenance activities annually, respectively. The take estimates for these seven species have not changed from the proposed rule.

Because Massachusetts Bay represents only a small fraction of the western North Atlantic basin where these animals occur, NMFS has determined that only small numbers of the marine mammal species or stocks in the area would be potentially affected by the Neptune LNG deepwater project. The take estimates presented in this section of the document do not take into consideration the mitigation and monitoring measures required in the regulations.

TABLE 2—DENSITY ESTIMATES, POPULATION ABUNDANCE ESTIMATES, TOTAL ANNUAL AUTHORIZED TAKE (WHEN COMBINE TAKES FROM DP THRUSTER USE, MAINTENANCE/REPAIR ACTIVITIES, AND WEATHERVANING), AND PERCENTAGE OF POPULATION THAT MAY BE TAKEN FOR THE POTENTIALLY AFFECTED SPECIES

Species	Density	Abundance [1]	Abundance [2]	Total annual authorized take	Percentage of stock or population
North Atlantic right whale	0.0022	345	361	24	6.6–7
Fin whale	0.0026	2,269	3,985	29	0.7–1.3
Humpback whale	0.0072	847	847	78	9.2
Minke whale	0.0016	3,312	8,987	18	0.2–0.5
Sei whale	0.0023	386	386	12	3.1
Long-finned pilot whale	0.011	31,139	12,619	119	0.4–0.9
Atlantic white-sided dolphin	0.0355	63,368	63,368	387	0.6
Bottlenose dolphin	NA	7,489	9,604	10	0.1
Common dolphin	NA	120,743	120,743	20	0.02
Risso's dolphin	NA	20,479	20,479	20	0.1
Killer whale	NA	NA	NA	20	NA
Harbor porpoise	NA	89,054	89,054	5	0.01
Harbor seal	NA	99,340	NA	15	0.02
Gray seal	NA	125,541–169,064	125,541–169,064	15	0.01

[1] Abundance estimates in 2009 NMFS Atlantic and Gulf of Mexico SAR;
[2] Abundance estimates in 2010 Draft NMFS Atlantic and Gulf of Mexico SAR; NA=Not Available.

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 a variety of factors, including but not limited to: (1) The number of anticipated mortalities; (2) the number and nature of anticipated injuries; (3) the number, nature, intensity, and duration of Level B harassment; and (4) the context in which the takes occur.

No injuries or mortalities are anticipated to occur as a result of Neptune's port operation and maintenance and repair activities, and none are authorized by NMFS. Additionally, animals in the area are not anticipated to incur any hearing impairment (*i.e.,* TTS, a Level B harassment, or PTS, a Level A [injury] harassment), as the modeling results for the SRV indicate a source level of 180 dB (rms), which is below the threshold used by NMFS for acoustic injury to marine mammals. All takes are anticipated to be by Level B behavioral harassment only. Certain species may have a behavioral reaction (*e.g.,* increased swim speed, avoidance of the area, *etc.*) to the sound emitted during the operations and maintenance activities. Table 2 in this document outlines the number of Level B harassment takes that are anticipated as a result of the activities. These takes are anticipated to be of low intensity due to the low level of sound emitted by the activities themselves. The activities could occur year-round. However, operations are not anticipated to occur on successive days. Should repair or maintenance work be required, this could occur on successive days but likely only for 1–2 weeks but no more than 3–4 weeks. The activities do not occur in any critical habitat for the affected species, although there is some nearby for North Atlantic right whales. Maintenance and repair activities will be conducted to avoid times of year when that species is most likely to be in the area.

While some of the species occur in the project area year-round, some species only occur in the area during certain seasons. For example, sei whales are only anticipated in the area during the spring. Therefore, if shipments and/or maintenance/repair activities occur in other seasons, the likelihood of sei whales being affected is quite low. Additionally, any repairs that can be scheduled in advance will be scheduled to avoid the peak time that North Atlantic right whales occur in the area, which usually is during the early spring. North Atlantic right, humpback, and minke whales are not expected in the project area in the winter. During the winter, a large portion of the North Atlantic right whale population occurs in the southeastern U.S. calving grounds (*i.e.,* South Carolina, Georgia, and northern Florida). The fact that certain activities will occur during times when certain species are not commonly found in the area will help reduce the amount of Level B harassment for these species.

Many animals perform vital functions, such as feeding, resting, traveling, and socializing, on a diel cycle (24-hr cycle). Behavioral reactions to noise exposure (such as disruption of critical life functions, displacement, or avoidance of important habitat) are more likely to be significant if they last more than one diel cycle or recur on subsequent days (Southall *et al.,* 2007). Consequently, a behavioral response lasting less than one day and not recurring on subsequent days is not considered particularly severe unless it could directly affect reproduction or survival (Southall *et al.,* 2007). Operational activities (*i.e.,* DP and weathervaning) are not anticipated to occur at the Port on consecutive days. Once Neptune is at full operations, SRV shipments would occur every 4–8 days, with thruster use needed for a couple of hours during each shipment. Weathervaning is anticipated to be needed during only a small portion of the shipments. Therefore, Neptune will not be creating increased sound levels in the marine environment for several days at a time.

Of the 14 marine mammal species likely to occur in the area, four are listed as endangered under the ESA: North Atlantic right, humpback, fin, and sei whales. These four species, as well as the northern coastal stock of bottlenose dolphin, are also considered depleted under the MMPA. The affected humpback and North Atlantic right whale populations have been increasing in recent years. However, there is insufficient data to determine population trends for the other depleted species in the project area. There are several well known North Atlantic right

whale feeding grounds in the CCB and GSC. However, they are outside of the area of the Port. As mentioned previously, to the greatest extent practicable, all maintenance/repair work will be scheduled during the May 1 to November 30 time frame to avoid peak right whale feeding in these areas, which occur close to the Neptune Port. Additionally, to protect North Atlantic right whales (and other marine mammals in the project area), Neptune must cease sound emitting activities and/or reduce vessel speed if animals enter into the designated zones. No mortality or injury is expected to occur and due to the nature, degree, and context of the Level B harassment anticipated, the activity is not expected to impact rates of recruitment or survival.

The population estimates for the species that may be taken by harassment from the most recent U.S. Atlantic SARs were provided in Table 2 in this document. From the most conservative estimates of both marine mammal densities in the project area and the size of the 120-dB ZOI, the maximum calculated number of individual marine mammals for each species that could potentially be harassed annually is small relative to the overall population sizes (9.2 percent for humpback whales, 6.6–7 percent for North Atlantic right whales, and no more than 3.1 percent of any other species).

As stated previously, NMFS' practice has been to apply the 120 dB re 1 μPa (rms) received level threshold for underwater continuous sound levels to determine whether take by Level B harassment occurs. However, not all animals react to sounds at this low level, and many will not show strong reactions (and in some cases any reaction) until sounds are much stronger. Southall *et al.* (2007) provide a severity scale for ranking observed behavioral responses of both free-ranging marine mammals and laboratory subjects to various types of anthropogenic sound (see Table 4 in Southall *et al.* (2007)). Tables 15, 17, 19, and 21 in Southall *et al.* (2007) outline the numbers of low-frequency, mid-frequency, and high-frequency cetaceans and pinnipeds in water, respectively, reported as having behavioral responses to non-pulses in 10-dB received level increments. These tables illustrate, especially for cetaceans, that more intense observed behavioral responses did not occur until sounds were higher than 120 dB (rms). Many of the animals had no observable response at all when exposed to anthropogenic sound at levels of 120 dB (rms) or even higher.

The take estimates presented in this document are likely an overestimate of the actual number of animals that may be taken by Level B harassment in any given year. First, NMFS used the highest value SPUE for the season with the highest abundance of each species to determine relative abundance from the NCCOS (2006) report. However, the SPUE quantiles used in that report had very large ranges. For example, for humpback whales, NMFS used the SPUE quantile with a value of 0.1–11.8 but used 11.8 as the SPUE to determine density. In most cases, the highest value SPUE in any given quantile is many magnitudes larger than the minimum value in that particular quantile. Second, the estimates assume that repairs will be required every year, which may not be the case. For the reasons discussed in this section of the document (and elsewhere), the take estimates presented by NMFS are likely an overestimate.

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 operation, including repair and maintenance activities, of the Neptune Port will result in the incidental take of small numbers of marine mammals, by Level B harassment only, and that the total taking from Neptune's activities 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. Therefore, NMFS has determined that the total taking of affected species or stocks would not have an unmitigable adverse impact on the availability of such species or stocks for taking for subsistence purposes.

Endangered Species Act (ESA)

On January 12, 2007, NMFS concluded consultation with MARAD and USCG under section 7 of the ESA on the proposed construction and operation of the Neptune LNG facility and issued a Biological Opinion. The finding of that consultation was that the construction and operation of the Neptune LNG terminal may adversely affect, but is not likely to jeopardize, the continued existence of northern right, humpback, and fin whales, and is not likely to adversely affect sperm, sei, or blue whales and Kemp's ridley, loggerhead, green, or leatherback sea turtles.

On March 2, 2010, MARAD and USCG sent a letter to NMFS requesting reinitiation of the ESA section 7 consultation. MARAD and USCG determined that certain routine planned operations and maintenance activities, inspections, surveys, and unplanned repair work on the Neptune Deepwater Port pipelines and flowlines, as well as any other Neptune Deepwater Port component (including buoys, risers/umbilicals, mooring systems, and sub-sea manifolds), may constitute a modification not previously considered in the 2007 Biological Opinion. Construction of the Port facility has been completed, and, therefore, is no longer part of the proposed action. On July 12, 2010, NMFS' Northeast Regional Office issued a Biological Opinion, which concludes that the operation of the Neptune LNG deepwater port, including required maintenance and repair work, is likely to adversely affect, but is not likely to jeopardize the continued existence of the North Atlantic right, humpback, fin, and sei whales. NMFS reached this conclusion after reviewing the best available information on the status of endangered and threatened species under NMFS jurisdiction, the environmental baseline for the action area, the effects of the action, and the cumulative effects in the action area. Although MARAD served as the lead Federal agency for the section 7 consultation, the Biological Opinion also considered the effects of permits issued by the Army Corps of Engineers, the Federal Energy Regulatory Commission, and the Environmental Protection Agency for various portions of the maintenance and operation of the Port and associated pipeline, as well as NMFS' issuance of authorizations to Neptune under the MMPA for the take of marine mammals incidental to Port operations and maintenance/repairs. NMFS has determined that issuance of these regulations and subsequent LOAs will not have any impacts beyond those analyzed in the 2010 Biological Opinion. NMFS' Northeast Regional Office will issue an Incidental Take Statement upon issuance of the LOA.

National Environmental Policy Act (NEPA)

MARAD and the USCG released a Final EIS/Environmental Impact Report (EIR) for the proposed Neptune LNG Deepwater Port (see **ADDRESSES**). A notice of availability of the Final EIS/EIR was published by MARAD on November 2, 2006 (71 FR 64606). The Final EIS/EIR provides detailed

information on the proposed project facilities, construction methods, and analysis of potential impacts on marine mammals.

NMFS was a cooperating agency in the preparation of the Draft and Final EISs based on a Memorandum of Understanding related to the Licensing of Deepwater Ports entered into by the U.S. Department of Commerce along with 10 other government agencies. On June 3, 2008, NMFS adopted the USCG and MARAD FEIS and issued a separate Record of Decision for issuance of authorizations pursuant to sections 101(a)(5)(A) and (D) of the MMPA for the construction and operation of the Neptune LNG Port facility. NMFS reviewed the FEIS to ensure that the analysis contained in that document accurately describes and analyzes the impacts to the human environment of NMFS' action of issuing an MMPA authorization for the operation and repair and maintenance of the Neptune Port. NMFS has determined that the FEIS sufficiently covers the activities considered in this final rule.

Classification

The Office of Management and Budget (OMB) has determined that this final rule is not significant for purposes of Executive Order 12866.

At the proposed rule stage, the Chief Counsel for Regulation of the Department of Commerce certified to the Chief Counsel for Advocacy of the Small Business Administration that this rule, if adopted, would not have a significant economic impact on a substantial number of small entities. Neptune LNG LLC is the only entity that would be subject to the requirements in these regulations. Neptune is one of several companies at GDF SUEZ Energy North America (GSENA), which itself is a business division of GDF SUEZ Energy Europe & International. GSENA has more than 2,000 employees in North America alone. Therefore, it is not a small governmental jurisdiction, small organization, or small business, as defined by the Regulatory Flexibility Act. Because of this certification, a regulatory flexibility analysis is not required and none has been prepared.

Notwithstanding any other provision of law, no person is required to respond to nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act (PRA) unless that collection of information displays a currently valid OMB control number. This final rule contains collection-of-information requirements subject to the provisions of the PRA. These requirements have been approved by OMB under control number 0648–0151 and include applications for regulations, subsequent LOAs, and reports.

List of Subjects in 50 CFR Part 217

Exports, Fish, Imports, Indians, Labeling, Marine mammals, Penalties, Reporting and recordkeeping requirements, Seafood, Transportation.

Dated: June 7, 2011.

Samuel D. Rauch III,

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

For reasons set forth in the preamble, 50 CFR part 217 is amended as follows:

PART 217—REGULATIONS GOVERNING THE TAKE OF MARINE MAMMALS INCIDENTAL TO SPECIFIED ACTIVITIES

■ 1. The authority citation for part 217 continues to read as follows:

Authority: 16 U.S.C. 1361 *et seq.*

■ 2. Subpart R is added to part 217 to read as follows:

Subpart R—Taking of Marine Mammals Incidental to Operation and Maintenance of the Neptune Liquefied Natural Gas Facility Off Massachusetts

Sec.

217.170 Specified activity and specified geographical region.
217.171 Effective dates.
217.172 Permissible methods of taking.
217.173 Prohibitions.
217.174 Mitigation.
217.175 Requirements for monitoring and reporting.
217.176 Applications for Letters of Authorization.
217.177 Letters of Authorization.
217.178 Renewal of Letters of Authorization and adaptive management.
217.179 Modifications of Letters of Authorization.

Subpart R—Taking of Marine Mammals Incidental to Operation and Maintenance of a Liquefied Natural Gas Facility Off Massachusetts

§ 217.170 Specified activity and specified geographical region.

(a) Regulations in this subpart apply only to Neptune LNG LLC (Neptune) and those persons it authorizes to conduct activities on its behalf for the taking of marine mammals that occurs in the area outlined in paragraph (b) of this section and that occur incidental to commissioning and operation, including maintenance and repair activities, at the Neptune Deepwater Port (Port).

(b) The taking of marine mammals by Neptune may be authorized in a Letter of Authorization only if it occurs at the Neptune Deepwater Port within Outer Continental Shelf blocks NK 19–04 6525 and NK 19–04 6575, which are located at approximately 42°28′09″ N. lat and 70°36′22″ W. long.

§ 217.171 Effective dates.

Regulations in this subpart are effective from July 11, 2011, through August 10, 2016.

§ 217.172 Permissible methods of taking.

(a) Under Letters of Authorization issued pursuant to §§ 216.106 and 217.177 of this chapter, the Holder of the Letter of Authorization (hereinafter "Neptune") may incidentally, but not intentionally, take marine mammals within the area described in § 217.170(b), provided the activity is in compliance with all terms, conditions, and requirements of the regulations in this subpart and the appropriate Letter of Authorization.

(b) The incidental take of marine mammals under the activities identified in § 217.170(a) is limited to the following species and is limited to Level B Harassment:

(1) Mysticetes:

(i) North Atlantic right whale (*Eubalaena glacialis*)—120 (an average of 24 annually).

(ii) Fin whale (*Balaenoptera physalus*)—145 (an average of 29 annually).

(iii) Humpback whale (*Megaptera novaeangliae*)—390 (an average of 78 annually).

(iv) Minke whale (*Balaenoptera acutorostrata*)—90 (an average of 18 annually).

(v) Sei whale (*Balaenoptera borealis*)—60 (an average of 12 annually).

(2) Odontocetes:

(i) Long-finned pilot whale (*Globicephala melas*)—595 (an average of 119 annually).

(ii) Atlantic white-sided dolphin (*Lagenorhynchus acutus*)—1,935 (an average of 387 annually).

(iii) Bottlenose dolphin (*Tursiops truncatus*)—50 (an average of 10 annually).

(iv) Common dolphin (*Delphinus delphis*)—100 (an average of 20 annually).

(v) Risso's dolphin (*Grampus griseus*)—100 (an average of 20 annually).

(vi) Killer whale (*Orcinus orca*)—100 (an average of 20 annually).

(vii) Harbor porpoise (*Phocoena phocoena*)—25 (an average of 5 annually).

(3) Pinnipeds:

(i) Harbor seal (*Phoca vitulina*)—75 (an average of 15 annually).

(ii) Gray seal (*Halichoerus grypus*)—75 (an average of 15 annually).

§ 217.173 Prohibitions.

Notwithstanding takings contemplated in § 217.170 and authorized by a Letter of Authorization issued under §§ 216.106 and 217.177 of this chapter, no person in connection with the activities described in § 217.170 may:

(a) Take any marine mammal not specified in § 217.172(b);

(b) Take any marine mammal specified in § 217.172(b) other than by incidental, unintentional Level B Harassment;

(c) Take a marine mammal specified in § 217.172(b) if such taking results in more than a negligible impact on the species or stocks of such marine mammal; or

(d) Violate, or fail to comply with, the terms, conditions, and requirements of this subpart or a Letter of Authorization issued under §§ 216.106 and 217.177 of this chapter.

§ 217.174 Mitigation.

(a) When conducting the activities identified in § 217.170(a), the mitigation measures contained in the Letter of Authorization issued under §§ 216.106 and 217.177 must be implemented. These mitigation measures include but are not limited to:

(1) Major Repairs (May 1–November 30):

(i) During repairs, if a marine mammal is detected within 0.6 mi (1 km) of the repair vessel (or acoustically), the vessel superintendent or on-deck supervisor shall be notified immediately. The vessel's crew will be put on a heightened state of alert. The marine mammal will be monitored constantly to determine if it is moving toward the repair area.

(ii) Repair vessels shall cease any movement in the area if a marine mammal other than a right whale is sighted within or approaching to a distance of 100 yd (91 m) from the operating repair vessel. Repair vessels shall cease any movement in the construction area if a right whale is sighted within or approaching to a distance of 500 yd (457 m) from the operating vessel. Vessels transiting the repair area, such as pipe haul barge tugs, shall also be required to maintain these separation distances.

(iii) Repair vessels shall cease all sound emitting activities if a marine mammal other than a right whale is sighted within or approaching to a distance of 100 yd (91 m) or if a right whale is sighted within or approaching to a distance of 500 yd (457 m), from the operating repair vessel. The back-calculated source level, based on the most conservative cylindrical model of acoustic energy spreading, is estimated to be 139 dB re 1 μPa.

(iv) Repair activities may resume after the marine mammal is positively reconfirmed outside the established zones (either 500 yd (457 m) or 100 yd (91 m), depending upon species) or if the marine mammal has not been re-sighted in the established zones for 30 minutes.

(v) While under way, all repair vessels shall remain 500 yd (457 m) away from right whales and 100 yd (91 m) away from all other marine mammals, unless constrained by human safety concerns or navigational constraints.

(vi) All repair vessels 300 gross tons or greater must maintain a speed of 10 knots (18.5 km/hr) or less. Vessels less than 300 gross tons carrying supplies or crew between the shore and the repair site must contact the Mandatory Ship Reporting System, the U.S. Coast Guard (USCG), or the protected species observers (PSOs) at the repair site before leaving shore for reports of recent right whale sightings or active Dynamic Management Areas (DMAs) and, consistent with navigation safety, restrict speeds to 10 knots (18.5 km/hr) or less within 5 mi (8 km) of any recent sighting location and within any existing DMA.

(vii) Vessels transiting through the Cape Cod Canal and Cape Cod Bay (CCB) between January 1 and May 15 must reduce speeds to 10 knots (18.5 km/hr) or less, follow the recommended routes charted by NOAA to reduce interactions between right whales and shipping traffic, and avoid aggregations of right whales in the eastern portion of CCB.

(2) Major Repairs (December 1–April 30): If unplanned/emergency repair activities cannot be conducted between May 1 and November 30, then Neptune shall implement the following mitigation measures in addition to those listed in § 217.174(a)(1)(i) through (vii):

(i) If on-board PSOs do not have at least 0.6-mi (1-km) visibility, they shall call for a shutdown of repair activities. If dive operations are in progress, then they shall be halted and divers brought on board until visibility is adequate to see a 0.6-mi (1-km) range. At the time of shutdown, the use of thrusters must be minimized to the lowest level needed to maintain personnel safety. If there are potential safety problems due to the shutdown, the captain must decide what operations can safely be shut down and shall document such activities in the data log.

(ii) Prior to leaving the dock to begin transit, the barge must contact one of the PSOs on watch to receive an update of sightings within the visual observation area. If the PSO has observed a North Atlantic right whale within 30 minutes of the transit start, the vessel shall hold for 30 minutes and again seek clearance to leave from the PSOs on board. PSOs will assess whale activity and visual observation ability at the time of the transit request to clear the barge for release and will grant clearance if no North Atlantic right whales have been sighted in the last 30 minutes in the visual observation area.

(iii) Neptune or its contractor shall provide a half-day training course to designated crew members assigned to the transit barges and other support vessels who will have responsibilities for watching for marine mammals. This course shall cover topics including, but not limited to, descriptions of the marine mammals found in the area, mitigation and monitoring requirements contained in the Letter of Authorization, sighting log requirements, and procedures for reporting injured or dead marine mammals. These designated crew members shall be required to keep watch on the bridge and immediately notify the navigator of any whale sightings. All watch crew members shall sign into a bridge log book upon start and end of watch. Transit route, destination, sea conditions, and any protected species sightings/mitigation actions during watch shall be recorded in the log book. Any whale sightings within 3,281 ft (1,000 m) of the vessel shall result in a high alert and slow speed of 4 knots (7.4 km/hr) or less. A sighting within 2,461 ft (750 m) shall result in idle speed and/or ceasing all movement.

(iv) The material barges and tugs used for repair work shall transit from the operations dock to the work sites during daylight hours, when possible, provided the safety of the vessels is not compromised. Should transit at night be required, the maximum speed of the tug shall be 5 knots (9.3 km/hr).

(v) Consistent with navigation safety, all repair vessels must maintain a speed of 10 knots (18.5 km/hr) or less during daylight hours. All vessels shall operate at 5 knots (9.3 km/hr) or less at all times within 3.1 mi (5 km) of the repair area.

(3) Speed Restrictions in Seasonal Management Areas (SMAs): Repair vessels and shuttle regasification vessels (SRVs) shall transit at 10 knots (18.5 km/hr) or less in the following seasons and areas, which either correspond to or are more restrictive than the times and areas in NMFS' regulations at 50 CFR 224.105 that implement speed

restrictions to reduce the likelihood and severity of ship strikes of right whales:

(i) CCB SMA from January 1 through May 15, which includes all waters in CCB, extending to all shorelines of the Bay, with a northern boundary of 42° 12′ N. latitude;

(ii) Off Race Point SMA year round, which is bounded by straight lines connecting the following coordinates in the order stated: 42°30′ N. 69°45′ W.; thence to 42°30′ N. 70°30′ W.; thence to 42°12′ N. 70°30′ W.; thence to 42°12′ N. 70°12′ W.; thence to 42°04′ 56.5″ N. 70°12′ W.; thence along mean high water line and inshore limits of COLREGS limit to a latitude of 41°40′ N.; thence due east to 41°41′ N. 69°45′ W.; thence back to starting point; and

(iii) Great South Channel (GSC) SMA from April 1 through July 31, which is bounded by straight lines connecting the following coordinates in the order stated:

(A) 42°30′ N. 69°45′ W.
(B) 41°40′ N. 69°45′ W.
(C) 41°00′ N. 69°05′ W.
(D) 42°09′ N. 67°08′ 24″ W.
(E) 42°30′ N. 67°27′ W.
(F) 42°30′ N. 69°45′ W.

(4) Additional Mitigation Measures:

(i) When approaching and departing from the Neptune Port, SRVs shall use the Boston Traffic Separation Scheme (TSS) starting and ending at the entrance to the GSC. Upon entering the TSS, the SRV shall go into a "heightened awareness" mode of operation.

(ii) In the event that a whale is visually observed within 0.6 mi (1 km) of the Port or a confirmed acoustic detection is reported on either of the two auto-detection buoys (ABs) closest to the Port, departing SRVs shall delay their departure from the Port, unless extraordinary circumstances, defined in the Marine Mammal Detection, Monitoring, and Response Plan (the Plan), require that the departure is not delayed. The departure delay shall continue until either the observed whale has been visually (during daylight hours) confirmed as more than 0.6 mi (1 km) from the Port or 30 minutes have passed without another confirmed detection either acoustically within the acoustic detection range of the two ABs closest to the Port or visually within 0.6 mi (1 km) from Neptune.

(iii) SRVs that are approaching or departing from the Port and are within the Area to be Avoided (ATBA) surrounding Neptune shall remain at least 0.6 mi (1 km) away from any visually detected right whales and at least 100 yd (91 m) away from all other visually detected whales unless extraordinary circumstances, as defined in Section 1.2 of the Plan, require that the vessel stay its course. The ATBA is defined in 33 CFR 150.940. It is the largest area of the Port marked on nautical charts, and it is enforceable by the USCG in accordance with the 33 CFR 150.900 regulations. The Vessel Master shall designate at least one lookout to be exclusively and continuously monitoring for the presence of marine mammals at all times while the SRV is approaching or departing Neptune.

(iv) Neptune shall ensure that other vessels providing support to Port operations during regasification activities that are approaching or departing from the Port and are within the ATBA shall be operated so as to remain at least 0.6 mi (1 km) away from any visually detected right whales and at least 100 yd (91 m) from all other visually detected whales.

(v) PSOs shall direct a moving vessel to slow to idle if a baleen whale is seen less than 0.6 mi (1 km) from the vessel.

(vi) Use of lights during repair or maintenance activities shall be limited to areas where work is actually occurring, and all other lights must be extinguished. Lights must be downshielded to illuminate the deck and shall not intentionally illuminate surrounding waters, so as not to attract whales or their prey to the area.

(vii) Neptune must immediately suspend any repair and maintenance or operations activities if a dead or injured marine mammal is found in the vicinity of the project area, and the death or injury of the animal could be attributable to the Port facility activities. Upon finding a dead or injured marine mammal, Neptune must contact NMFS, the Northeast Stranding and Disentanglement Program, and the USCG. NMFS will review the documentation submitted by the PSO and attempt to attribute a cause of death. Activities shall not resume until review and approval has been given by NMFS.

(5) Additional mitigation measures as contained in a Letter of Authorization issued under §§ 216.106 and 217.177 of this chapter.

(b) [Reserved]

§ 217.175 Requirements for monitoring and reporting.

(a) Visual Monitoring Program:

(1) Neptune shall employ PSOs during maintenance- and repair-related activities on each vessel that has a dynamic positioning system. Two (2) PSOs shall be on-duty at all times. All PSOs must receive NMFS-approved PSO training and be approved in advance by NMFS after a review of their qualifications.

(2) Qualifications for these PSOs shall include direct field experience on a marine mammal observation vessel and/or aerial surveys in the Atlantic Ocean/Gulf of Mexico.

(3) The PSOs (one primary and one secondary) are responsible for visually locating marine mammals at the ocean's surface and, to the extent possible, identifying the species. The primary PSO shall act as the identification specialist, and the secondary PSO shall serve as data recorder and also assist with identification. Both PSOs shall have responsibility for monitoring for the presence of marine mammals.

(4) The PSOs shall monitor the maintenance/repair area using the naked eye, hand-held binoculars, and/or power binoculars.

(5) The PSOs shall scan the ocean surface during maintenance- and repair-related activities and record all sightings in marine mammal field sighting logs. Observations of marine mammals shall be identified to the species or the lowest taxonomic level possible, and their relative position in relation to the vessel shall be recorded.

(6) While a SRV is navigating within the designated TSS, three people have lookout duties on or near the bridge of the ship including the SRV Master, the Officer-of-the-Watch, and the Helmsman on watch.

(7) In addition to standard watch procedures, while the SRV is within the ATBA and/or while actively engaging in the use of thrusters, an additional lookout shall be designated to exclusively and continuously monitor for marine mammals. Once the SRV is moored and regasification activities have begun, the vessel is no longer considered in "heightened awareness" status.

(8) At the conclusion of regasification activities, when the SRV is prepared to depart from the Port, the Master shall once again ensure that the responsibilities as defined in the Plan are carried out. All sightings of marine mammals by the designated lookout, individuals posted to navigational lookout duties, and/or any other crew member while the SRV is within the TSS, in transit to the ATBA, within the ATBA, and/or when actively engaging in the use of thrusters shall be immediately reported to the Officer-of-the-Watch who shall then alert the Master.

(b) Passive Acoustic Monitoring (PAM) Program:

(1) Neptune shall work with NMFS, Stellwagen Bank National Marine Sanctuary (SBNMS), and other scientists

to install and monitor an array of passive acoustic detection buoys in the Boston TSS that meets the criteria specified in the recommendations developed by NOAA through consultation with the USCG under the National Marine Sanctuary Act (NMSA). The system shall provide near real-time information on the presence of vocalizing whales in the shipping lanes.

(2) Neptune shall work with NMFS, SBNMS, and other scientists to monitor the archival array of acoustic recording units (ARUs), or "pop-ups," around the Port that meets the criteria specified in the program developed by NOAA in consultation with the USCG under the NMSA. The ARUs shall remain in place for 5 years following initiation of operations to monitor the actual acoustic output of port operations and alert NOAA to any unanticipated adverse effects of port operations, such as large-scale abandonment of the area or greater acoustic impacts than predicted through modeling.

(3) Passive acoustic devices shall be actively monitored for detections by a NMFS-approved bioacoustic technician.

(4) Repair Activity PAM Measures: PAM, in addition to that required in this section of these regulations, shall be required, on a case-by-case basis, during both planned and emergency repair activities in order to better detect right whales in the area of repair work and to collect additional data on the noise levels produced during repair and maintenance activities.

(i) Neptune shall work with NOAA (NMFS and SBNMS) to evaluate when to install and maintain an array of real-time passive acoustic detection buoys to provide early warnings for potential occurrence of right whales in the vicinity of the repair area. The number of passive acoustic detection buoys installed around the activity site, if deemed necessary, shall be commensurate with the type and spatial extent of maintenance/repair work required, but must be sufficient to detect vocalizing right whales within the 120-dB impact zone.

(ii) Neptune shall provide NMFS with empirically measured source level data for all sources of noise associated with Port maintenance and repair activities. Measurements shall be carefully planned and coordinated with noise-producing activities and shall be collected from the passive detection network.

(5) SRV Regasification PAM Measures: Source levels associated with dynamic positioning of SRVs at the buoys shall be estimated using empirical measurements collected from a platform positioned as close as practicable to thrusters while in use.

(c) Neptune must implement the following reporting requirements:

(1) Because the Port is within the Mandatory Ship Reporting Area (MSRA), all SRVs transiting to and from the Port must report their activities to the mandatory reporting section of the USCG to remain apprised of North Atlantic right whale movements within the area. All vessels entering and exiting the MSRA must report their activities to WHALESNORTH. Any North Atlantic right whale sightings must be reported to the NMFS Sighting Advisory System.

(2) *Repair Work Reports.* (i) For major repair work associated with the pipeline lateral or other port components, Neptune shall notify the appropriate NOAA personnel as soon as practicable after it is determined that repair work must be conducted.

(ii) During maintenance and repair of the pipeline lateral or other port components, weekly status reports must be provided to NOAA. The weekly report must include data collected for each distinct marine mammal species observed in the project area during the period of the repair activity. The weekly reports shall include the following:

(A) The location, time, and nature of the pipeline lateral activities;

(B) Whether the dynamic position (DP) system was operated and, if so, the number of thrusters used and the time and duration of DP operation;

(C) Marine mammals observed in the area (number, species, age group, and initial behavior);

(D) The distance of observed marine mammals from the repair activities;

(E) Observed marine mammal behaviors during the sighting;

(F) Whether any mitigation measures were implemented;

(G) Weather conditions (sea state, wind speed, wind direction, ambient temperature, precipitation, and percent cloud cover, *etc.*);

(H) Condition of the marine mammal observation (visibility and glare); and

(I) Details of passive acoustic detections and any action taken in response to those detections.

(iii) For all minor repair work, Neptune must notify NOAA regarding when and where the repair/maintenance work is to take place along with a tentative schedule and description of the work, as soon as practicable after it is determined that repair work must be conducted. Vessel crews shall record/document any marine mammal sightings during the work period.

(iv) At the conclusion of all minor repair work, Neptune shall provide NOAA with a report describing any marine mammal sightings, the type of work taking place when the sighting occurred, and any avoidance actions taken during the repair/maintenance work.

(3) *Incident Reports.* During all phases of project repair/maintenance activities and operation, sightings of any injured or dead marine mammals must be reported immediately to the Chief, Permits, Conservation and Education Division or staff member and the Northeast Stranding and Disentanglement Program, regardless of whether the injury or death is caused by project activities. If the injury or death was caused by a project vessel (*e.g.*, SRV, support vessel, or construction vessel), the USCG must be notified immediately, and a full report must be provided to NMFS. Activities will not resume until review and approval has been given by NMFS. The report must include the following information:

(i) Time, date, and location (latitude/longitude) of the incident;

(ii) The name and type of vessel involved;

(iii) The vessel's speed during the incident;

(iv) Description of the incident;

(v) Water depth;

(vi) Environmental conditions (*e.g.,* wind speed and direction, sea state, cloud cover, and visibility);

(vii) Species identification or description of the animal;

(viii) The fate of the animal; and

(ix) Photographs or video footage of the animal (if equipment is available).

(4) *Annual Reports.* (i) An annual report on marine mammal monitoring and mitigation shall be submitted to NMFS, Office of Protected Resources, and NMFS, Northeast Regional Office (specific contact information to be provided in Letter of Authorization), on August 1 of each year. The annual report shall cover the time period of January 1 through December 31 of each year of activity.

(ii) The annual report shall include data collected for each distinct marine mammal species observed in the project area in the Massachusetts Bay during the period of Port operations and repair/maintenance activities. The annual report shall also include a description of marine mammal behavior, overall numbers of individuals observed, frequency of observation, and any behavioral changes and the context of the changes relative to operation and repair/maintenance activities. Additional information that shall be recorded by Neptune or its contractor during operations and repair/maintenance activities and contained in the reports include: results of empirical

source level estimation for thrusters while in use and activities associated with maintenance and repair events, date and time of marine mammal detections (visually or acoustically), weather conditions, species identification, approximate distance from the source, activity of the vessel when a marine mammal is sighted, and whether thrusters were in use and, if so, how many at the time of the sighting.

(5) *Five-year Comprehensive Report.* (i) Neptune shall submit a draft comprehensive final report to NMFS, Office of Protected Resources, and NMFS, Northeast Regional Office (specific contact information to be provided in Letter of Authorization), 180 days prior to the expiration of the regulations. This comprehensive technical report shall provide full documentation of methods, results, and interpretation of all monitoring during the first four and a half years of the LOA.

(ii) Neptune shall submit a revised final comprehensive technical report, including all monitoring results during the entire period of the LOAs, 90 days after the end of the period of effectiveness of the regulations to NMFS, Office of Protected Resources, and NMFS, Northeast Regional Office (specific contact information to be provided in Letter of Authorization).

§ 217.176 Applications for Letters of Authorization.

(a) To incidentally take marine mammals pursuant to these regulations, the U.S. Citizen (as defined by § 216.103) conducting the activity identified in § 217.170(a) (*i.e.,* Neptune) must apply for and obtain either an initial Letter of Authorization in accordance with § 217.177 or a renewal under § 217.178.

(b) [Reserved]

§ 217.177 Letters of Authorization.

(a) A Letter of Authorization, unless suspended or revoked, shall be valid for a period of time not to exceed the period of validity of this subpart.

(b) The Letter of Authorization shall set forth:

(1) Permissible methods of incidental taking;

(2) Means of effecting the least practicable adverse impact on the species, its habitat, and on the availability of the species for subsistence uses (*i.e.,* mitigation); and

(3) Requirements for mitigation, monitoring and reporting.

(c) Issuance and renewal of the Letter of Authorization shall be based on a determination that the total number of marine mammals taken by the activity as a whole will have no more than a negligible impact on the affected species or stock of marine mammal(s).

§ 217.178 Renewal of Letters of Authorization and adaptive management.

(a) A Letter of Authorization issued under § 216.106 and § 217.177 of this chapter for the activity identified in § 217.170(a) shall be renewed upon request by the applicant or determination by NMFS and the applicant that modifications are appropriate pursuant to the adaptive management component of these regulations, provided that:

(1) NMFS is notified that the activity described in the application submitted under § 217.176 will be undertaken and that there will not be a substantial modification to the described work, mitigation or monitoring undertaken during the upcoming 12 months;

(2) NMFS recieves the monitoring reports required under § 217.175(c)(1)–(4); and

(3) NMFS determines that the mitigation, monitoring and reporting measures required under §§ 217.174 and 217.175 and the Letter of Authorization issued under §§ 216.106 and 217.177 of this chapter were undertaken and will be undertaken during the upcoming annual period of validity of a renewed Letter of Authorization.

(b) If either a request for a renewal of a Letter of Authorization issued under §§ 216.106 and 217.178 or a determination by NMFS and the applicant that modifications are appropriate pursuant to the adaptive management component of these regulations indicates that a substantial modification, as determined by NMFS, to the described work, mitigation or monitoring undertaken during the upcoming season will occur, NMFS will provide the public a period of 30 days for review and comment on the request. Review and comment on renewals of Letters of Authorization are restricted to:

(1) New cited information and data indicating that the determinations made in this document are in need of reconsideration, and

(2) Proposed substantive changes to the mitigation and monitoring requirements contained in these regulations or in the current Letter of Authorization.

(c) A notice of issuance or denial of a renewal of a Letter of Authorization will be published in the **Federal Register**.

(d) Adaptive Management—NMFS may modify or augment the existing mitigation or monitoring measures (after consulting with Neptune regarding the practicability of the modifications) if doing so creates a reasonable likelihood of more effectively accomplishing the goals of mitigation and monitoring set forth in the preamble of these regulations. Below are some of the possible sources of new data that could contribute to the decision to modify the mitigation or monitoring measures:

(1) Results from Neptune's monitoring from the previous year;

(2) Results from general marine mammal and sound research; or

(3) Any information which reveals that marine mammals may have been taken in a manner, extent or number not authorized by these regulations or subsequent LOAs.

§ 217.179 Modifications of Letters of Authorization.

(a) Except as provided in paragraph (b) of this section, no substantive modification (including withdrawal or suspension) to the Letter of Authorization issued by NMFS, pursuant to §§ 216.106 and 217.177 of this chapter and subject to the provisions of this subpart shall be made until after notification and an opportunity for public comment has been provided. For purposes of this paragraph, a renewal of a Letter of Authorization under § 217.178, without modification (except for the period of validity), is not considered a substantive modification.

(b) If the Assistant Administrator determines that an emergency exists that poses a significant risk to the well-being of the species or stocks of marine mammals specified in § 217.172(b), a Letter of Authorization issued pursuant to §§ 216.106 and 217.177 of this chapter may be substantively modified without prior notification and an opportunity for public comment. Notification will be published in the **Federal Register** within 30 days subsequent to the action.

[FR Doc. 2011–14614 Filed 6–10–11; 8:45 am]

BILLING CODE 3510–22–P