DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 217

Docket No. 110801452-3176-04

RIN 0648-BB00

Taking and Importing Marine Mammals; Taking Marine Mammals Incidental to Construction and Operation of a Liquefied Natural Gas Deepwater Port in the Gulf of Mexico

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

ACTION: Final rule.

SUMMARY: NMFS, upon request of Port Dolphin Energy LLC (Port Dolphin), hereby issues regulations pursuant to the Marine Mammal Protection Act (MMPA) to govern the unintentional taking of marine mammals, by harassment, incidental to port construction and operations at its Port Dolphin Deepwater Port in the Gulf of Mexico, over the course of five years; approximately June 2013 through May 2018. These regulations, which allow for the issuance of Letters of Authorization 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 June 1, 2013 through May 31, 2018.

ADDRESSES: A copy of Port Dolphin’s application may be obtained by writing to Michael Payne, Chief, Permits and Conservation Division, Office of Protected Resources, NMFS, 1315
East-West Highway, Silver Spring, MD 20910, 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.

FOR FURTHER INFORMATION CONTACT: Ben Laws, Office of Protected Resources, NMFS, (301) 427-8401.

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 February 1, 2011, we received a complete application from Port Dolphin for the taking of marine mammals incidental to port construction and operations at its Port Dolphin Deepwater Port (DWP) facility in the Gulf of Mexico (GOM). During the effective period of this final rule (June 2013-May 2018), Port Dolphin plans to construct the DWP and related infrastructure, expected to occur over an approximately 11-month period, and will subsequently begin operations. The DWP will be an offshore liquefied natural gas (LNG) facility, located in the GOM approximately 45 km (28 mi) off the western coast of Florida, and approximately 68 km (42 mi) from Port Manatee, located in Manatee County, Florida, within Tampa Bay (see Figure S-1 in Port Dolphin’s application). The DWP will be in waters of the U.S. Exclusive Economic Zone (EEZ) approximately 31 m (100 ft) in depth and will consist principally of a permanently moored buoy system, designed for offloading of natural gas, leading to a single new natural gas transmission pipeline that will come ashore at Port Manatee and connect to existing infrastructure.

Take of marine mammals is expected to occur as a result of the introduction of sound into the marine environment during construction of the DWP and pipeline and during DWP operations, which will involve shuttle regasification vessel (SRV) maneuvering, docking, and debarkation, as well as regasification activity. Because the specified activities have the potential to take marine mammals present within the action area, Port Dolphin may be authorized to
incidentally take, by Level B harassment only, small numbers of bottlenose dolphin (*Tursiops truncatus*) and Atlantic spotted dolphin (*Stenella frontalis*).

Description of the Specified Activity

Port Dolphin’s proposed activities were described in detail in the Federal Register notice announcing the proposed rule (77 FR 55646; September 10, 2012); please see that document for more information. Port Dolphin plans to construct and operate a DWP in the U.S. EEZ of the GOM Outer Continental Shelf (OCS) approximately 45 km (28 mi) off the western coast of Florida to the southwest of Tampa Bay, in a water depth of approximately 31 m (100 ft). On March 29, 2007, Port Dolphin submitted an application to the U.S. Coast Guard (USCG) and the U.S. Maritime Administration (MARAD) for all federal authorizations required for a DWP license under the Deepwater Port Act of 1974 (DWPA). Port Dolphin received that license in October 2009. The Port will consist of a permanently moored unloading buoy system with two submersible buoys separated by a distance of approximately 5 km (3 mi). The buoys are designed to moor a specialized type of LNG carrier vessel (i.e., SRVs) and remain submerged when vessels are not present. Regasified natural gas is sent out through the unloading buoy to a 36-in (0.9 m) pipeline that will connect onshore at Port Manatee with the existing Gulfstream Natural Gas System and Tampa Electric Company (TECO) Bayside pipeline. The DWP will only serve SRVs. Construction of the DWP is expected to take 11 months. Port Dolphin DWP will be designed, constructed, and operated in accordance with applicable codes and standards and will have an expected operating life of approximately 25 years. The locations of the DWP and associated pipeline are shown in Figure S-1 in Port Dolphin’s application; Figure 1-1 of the same document depicts a conceptual site plan for the DWP.
Construction activities, expected to last a total of approximately 11 months, will include construction and installation of offshore buoys, mooring lines, and anchors (i.e., the DWP facilities) and laying the marine pipeline. Construction is expected to be continuous from mobilization to demobilization with no work stoppages due to weather or other issues. Please see Table 2-1 of Port Dolphin’s application for a graphical depiction of the complete timeline of proposed construction activities. The two unloading buoys, also known as submerged turret loading (STL) buoys, will each have eight mooring lines connected to impact-driven anchor points. When not connected to a SRV, STL buoys will be submerged 60 to 70 ft (18 to 21 m) below the sea surface. Offshore installation activities at the DWP will begin with installation of pipeline end manifolds (PLEMs) at both STL buoy locations (north and south), followed by placement of the buoy anchors, mooring lines, buoys, and risers. Installation activities at both STL buoy locations will require a cargo barge, supported by anchor-handling support vessels, a supply boat, a crew transfer boat, and a tug. Buoy anchors will be installed via impact pile driving.

The installation of the pipeline from the DWP to shore will include burial of the pipeline, selective placement of protective cover (either rock armoring or concrete mattresses) over the pipeline at several locations along the pipeline route where full burial is not possible, and the horizontal directional drilling (HDD) of three segments of the pipeline. The pipeline will be laid on the seafloor by a pipelaying barge and then buried, typically using a plowing technique. Other
techniques, such as dredging and HDD, are planned to be used in certain areas depending on the final geotechnical survey, engineering considerations, and equipment selection. At the western (seaward) end, the pipeline will consist of two 36-in (0.9-m) flowlines connected to the north and south PLEMs, which will connect at a Y-connection approximately 3.2 km (2 mi) away (see Figure 1-1 in Port Dolphin’s application). From the Y-connection a 36-in (0.9-m) gas transmission line will travel approximately 74 km (46 mi) to interconnections with the Gulfstream and TECO pipeline systems.

Pipeline trenching and burial requirements are governed by Department of the Interior regulations at 30 CFR part 250 subpart J, which requires pipelines and all related appurtenances to be protected by 3 ft (0.9 m) of cover for all portions in water depths less than 200 ft (61 m). Portions of the pipeline that travel through hard-bottom areas may not be able to be buried to the full 3 ft depth. In these areas, flexible concrete mattresses or other cover will be used to cover the pipeline. In places where the pipeline crosses shipping lanes, it will be buried 10 ft (3 m) deep if the sea floor permits plowing. Under the plowing method, the pipeline is lowered below seabed level by shearing a V-shaped ditch underneath it. The plow is towed along and underneath the pipeline by the burial barge. As the ditch is cut, sediment is removed and passively pushed to the side by specially shaped moldboards that are fitted to the main plowshare. The trench is then
backfilled with a subsequent pass of the plow (see Figure 1-2 in Port Dolphin’s application for a conceptual diagram of this process).

In areas that cannot be plowed (e.g., due to hard/live bottom) or complete burial cannot be achieved, the pipeline will be covered with an external cover (e.g., concrete mattresses or rock armoring). Although plowing is the preferred methodology for pipeline burial, other techniques such as dredging and HDD would be used where required. Figure 1-3 of Port Dolphin’s application uses color coding of the pipeline route to show where these various methodologies may be used, based on bottom structure and other barriers. The total length of the pipeline route is 74 km.

HDD will be employed for installation of the pipeline at three locations along the inshore portion of the route. The planned HDD locations include drilling from land to water at the Port Manatee shore approach and from water-to-water at two crossings of the existing Gulfstream pipeline. The eastern HDD crossing is 898 m (2,947 ft) in length, and the western HDD crossing is 407 m (1,335 ft) in length. Port Dolphin plans to install “goal post” support structures for pipe
materials at the two water-to-water HDD locations; this is likely to require vibratory pile driving.

At the shore-to-water transition HDD, Port Dolphin will need to install sheet piling to form a coffer dam, designed to contain the HDD exit pit so as to not impact nearby aquatic vegetation. Sheet pile segments will also be installed by vibratory means. Clamshell dredging may be required in certain areas, shown in Figure 1-3 of Port Dolphin’s application. Various barges, tugs, and the clamshell dredge will be mobilized for offshore pipe-laying activities. This equipment would be used where conventional installation methods are anticipated. An HDD spread, including multiple barges and tugs, would be used for the three planned HDD segments.
SRVs are specialized LNG carriers designed to regasify the LNG prior to off-loading for transport to shore. Each STL buoy will moor one SRV on location throughout the unloading cycle. An SRV will typically moor at the deepwater port for between 4 and 8 days, depending on vessel size and send-out rate. Unloading of natural gas (i.e., vaporization or regasification) will occur through a flexible riser connected to the STL buoy and into the PLEM for transportation to shore via the subsea pipeline. With two separate STL buoys, Port Dolphin may schedule an overlap between arriving and departing SRVs, thus allowing natural gas to be delivered in a continuous flow. For the duration of this rule, Port Dolphin is planning for an initial natural gas throughput of 400 million standard cubic feet per day (MMscfd). Based on a regasification cycle of approximately 8 days and initial throughput of 400 MMscfd, maximum vessel traffic during operations over the lifetime of this final rule is projected to consist of 46 SRV unloadings per year.

DWP operations will include SRV maneuvering/docking, regasification of LNG cargo, and debarkation. In the open ocean, the SRVs typically travel at speeds of up to 19.5 kn (36.1 km/hr), reducing to less than 14 kn (25.9 km/hr) while maintaining full maneuvering speed.
However, once approaching the vicinity of the DWP – within approximately 16 to 25 km (10-16 mi) of the DWP – the SRVs will begin approach by slowing to about half speed, and then to slow ahead. Inside of 5 km (3.1 km) from the DWP, the SRVs’ main engines will be placed in dead slow ahead and decreased upon approach to dead slow, with final positioning and docking to occur using thrusters. Expected SRV transit, approach, and maneuvering/docking characteristics are outlined in Table 1. Only the maneuvering/docking activities and their associated sound sources (i.e., thrusters) were considered in the proposed rulemaking; transit and approach maneuvers are considered part of routine vessel transit and are not included in this final rule.

Table 1. SRV speeds and thruster use during transit, approach, and maneuvering/docking operations at the DWP

<table>
<thead>
<tr>
<th>Zone</th>
<th>Speed limit</th>
<th>Thrusters in use?</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;33 km from DWP</td>
<td>Full service speed (19.5 kn)</td>
<td>No</td>
</tr>
<tr>
<td>25-33 km from DWP</td>
<td>Full maneuvering speed (&lt;14 kn)</td>
<td>No</td>
</tr>
<tr>
<td>16-25 km from DWP</td>
<td>Half ahead (&lt; 10 kn)</td>
<td>No</td>
</tr>
<tr>
<td>5-16 km from DWP</td>
<td>Slow ahead (&lt; 6 kn)</td>
<td>No</td>
</tr>
<tr>
<td>Inside 5 km from DWP</td>
<td>Dead slow ahead (&lt; 4.5 kn, decreasing to &lt; 3 kn)</td>
<td>Bow and stern thrusters</td>
</tr>
<tr>
<td>Docking</td>
<td>Dead slow</td>
<td>Two bow thrusters; possibly one or two stern thrusters</td>
</tr>
</tbody>
</table>

Method of Incidental Taking

Incidental take is anticipated to result from elevated levels of sound introduced into the marine environment by the construction and operation of the DWP, as described in preceding sections. Specifically, sound from pile driving, drilling, pipe laying and burial, and vessel operations during the construction and installation phase, and sound from SRV maneuvering, docking, and regasification during operations may result in the behavioral harassment of marine mammals present in the vicinity. Certain described activities (e.g., pipeline laying and burial) involve a suite of sound sources considered as a single modeled scenario, including vessel noise from tugboats as well as barges with equipment operating on them. The vessel noise component of these activities is not considered routine vessel transit here and so is analyzed in this rule as a
component of the overall activity scenario. The vessels considered as elements of these scenarios are in some cases engaged in non-transit activities, such as anchoring operations. However, we agreed with Port Dolphin’s overall approach to analyzing the effects of these proposed activities, which included modeling all sound-producing components. Table 2 shows these proposed activities by the time of year they are anticipated to occur.

Table 2. Summary of construction, installation, and operations activities, by season

<table>
<thead>
<tr>
<th>Activity</th>
<th>Season</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buoy installation</td>
<td>Summer 2013</td>
</tr>
<tr>
<td>Offshore impact hammering</td>
<td>Summer 2013</td>
</tr>
<tr>
<td>Pipelaying offshore</td>
<td>Late Summer 2013 through early Winter 2013-14</td>
</tr>
<tr>
<td>Pipelaying inshore</td>
<td>Late Summer 2013 through early Winter 2013-14</td>
</tr>
<tr>
<td>Offshore pipeline burial</td>
<td>Fall 2013 through Winter 2013-14</td>
</tr>
<tr>
<td>Inshore pipeline burial</td>
<td>Fall 2013 through Winter 2013-14</td>
</tr>
<tr>
<td>HDD</td>
<td>Summer 2013</td>
</tr>
<tr>
<td>HDD vibratory driving</td>
<td>Summer 2013</td>
</tr>
<tr>
<td>SRV maneuvering/docking</td>
<td>Year-round; maximum 46 visits per year</td>
</tr>
<tr>
<td>Regasification</td>
<td>Year-round; 8 days estimated per visit</td>
</tr>
</tbody>
</table>

During construction, underwater sound will be produced by machinery (e.g., pile driving and pipe laying equipment, trenching equipment, and goal post installation equipment at the HDD locations) and construction vessels (in certain scenarios, e.g., barges and tugboats used for pipe laying) operating either intermittently or continuously throughout the area during the construction period. Vessel sound considered under certain scenarios will be created by propulsion machinery, thrusters, generators, and hull vibrations and will vary with vessel and engine size. Machinery sound from underwater construction will be transmitted through water and will vary in duration and intensity. Port construction (i.e., field construction and installation operations) is expected to require approximately 11 months. While the main sound source during SRV transit and approach to the DWP will originate from the SRV main engines (i.e., predominantly in low frequencies), the primary sound source during maneuvering and docking will be the SRV thrusters.
Description of Sound Sources

An in-depth description of sound sources in general was provided in the FR notice (77 FR 55646; September 10, 2012). Significant sound-producing activities are described in the preceding sections. Known sound levels and frequency ranges associated with anthropogenic sources similar to those that would be used for this project are summarized in Table 3. Details of each of the sources are described in the following text.

Table 3. Anticipated source levels for construction/installation and operations at the Port Dolphin DWP

<table>
<thead>
<tr>
<th>Source</th>
<th>Activity</th>
<th>Location</th>
<th>Maximum broadband source level (re: 1 µPa)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barge</td>
<td>Anchor installation operations</td>
<td>STL buoys (DWP)</td>
<td>177 dB</td>
</tr>
<tr>
<td>Tug</td>
<td>Anchor installation operations</td>
<td>STL buoys (DWP)</td>
<td>205 dB</td>
</tr>
<tr>
<td>Impact hammer¹</td>
<td>Pile driving</td>
<td>STL buoys (DWP)</td>
<td>217 dB</td>
</tr>
<tr>
<td>Barge</td>
<td>Pipe laying</td>
<td>Pipeline corridor, DWP to shore</td>
<td>174 dB</td>
</tr>
<tr>
<td>Tug</td>
<td>Transit</td>
<td>Offshore/Inshore</td>
<td>191 dB</td>
</tr>
<tr>
<td>Dredge</td>
<td>Dredging</td>
<td>Likely inshore, offshore if necessary</td>
<td>188 dB</td>
</tr>
<tr>
<td>HDD</td>
<td>Drilling</td>
<td>Two locations in Tampa Bay</td>
<td>157 dB</td>
</tr>
<tr>
<td>Vibratory driving</td>
<td>Sheet pile installation</td>
<td>Two locations in Tampa Bay</td>
<td>186 dB</td>
</tr>
<tr>
<td>SRV</td>
<td>Maneuvering/docking, with thrusters</td>
<td>DWP</td>
<td>183 dB</td>
</tr>
<tr>
<td>SRV</td>
<td>Regasification</td>
<td>DWP</td>
<td>165 dB</td>
</tr>
</tbody>
</table>

Source: JASCO, 2008, 2010

¹ Source level for impact hammer estimated assuming pulse length of 100 ms.

The sounds produced by these activities fall into one of two sound types: pulsed and non-pulsed. Examples of non-pulse sounds include those produced by vessels, aircraft, machinery operations such as drilling or dredging, and vibratory pile driving. Many of the sounds produced by the project will be transient in nature (i.e., the source moves), such as during vessel docking. Regasification sounds are continuous (while the SRV is docked) and stationary. The positioning (maneuvering and docking) of SRVs using thrusters is intermittent (i.e., every 8 days) and of short duration (i.e., 10 to 30 minutes). For this project, the only pulvise sounds are associated with pile driving activities at the offshore Port location (i.e., associated with anchor installation activities). Sound levels can be greatly reduced during impact pile driving using sound attenuation devices. The information available suggests that bubble curtains, cushion blocks and
caps, and temporary sound attenuation piles offer comparable levels of sound attenuation for pile driving. Port Dolphin plans to implement one or more of these techniques during the pile driving activities needed to install components of the STL buoys and will make a final decision with regard to the technology to be used prior to beginning work.

Sound Thresholds

Since 1997, NMFS has used generic sound exposure thresholds to determine when an activity in the ocean that produces sound might result in impacts to a marine mammal such that a take by harassment or injury might occur. Current NMFS practice regarding exposure of marine mammals to high level sounds is that cetaceans exposed to impulsive sounds of 180 dB rms or above are considered to have been taken by Level A (i.e., injurious) harassment. Behavioral harassment (Level B) is considered to have occurred when marine mammals are exposed to sounds at or above 160 dB rms for impulse sounds (e.g., impact pile driving) and 120 dB rms for continuous sound (e.g., vessel sound, vibratory pile driving) but below injurious thresholds.

Distance to Sound Thresholds

Sound source modeling produced under contract by the applicant (JASCO, 2008, 2010) details the predicted distances to relevant regulatory sound thresholds for the specified activities, and was described in detail in the Federal Register notice announcing the proposed rule (77 FR 55646; September 10, 2012). We have determined that this information represents the best information available for project sound sources and used the information to develop mitigation measures and to estimate potential incidental take. The modeling scenarios considered all sound sources associated with the project and were developed to thoroughly characterize the various construction/installation and operation activities expected. The relevant information is summarized in Table 4. For each piece of equipment specified, proxy vessels were selected from
JASCO Research’s database of underwater sound measurements. The sound propagation model used several parameters, including expected water column sound speeds, bathymetry (water depth and shape of the ocean bottom), and bottom geoacoustic properties (which indicate how much sound is reflected off of the ocean bottom), to estimate the radii of sound impacts (JASCO, 2008). Modeling scenario locations are depicted in Figure 1-4 of Port Dolphin’s application. Please see Appendices C and D in Port Dolphin’s application for a detailed description of this sound source modeling.

Table 4. Representative scenarios modeled during the Port Dolphin sound source analysis and radial distance to thresholds

<table>
<thead>
<tr>
<th>Activity</th>
<th>Source</th>
<th>Modeled location</th>
<th>Distance to threshold</th>
<th>Approximate area encompassed by threshold</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>180 dB: &lt; 0.2 km</td>
<td>180 dB: &lt; 0.13 km²</td>
</tr>
<tr>
<td>Buoy installation</td>
<td>Crane vessel, cargo barge, support vessel</td>
<td>North STL buoy; offshore DWP site</td>
<td>120 dB: 3.9 km</td>
<td>120 dB: 48 km²</td>
</tr>
<tr>
<td>Impact hammering</td>
<td></td>
<td>Y-connector; offshore DWP site</td>
<td>180 dB: 0.18 km</td>
<td>120 dB: 0.10 km²</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>160 dB: 4.5 km</td>
<td>160 dB: 64 km²</td>
</tr>
<tr>
<td>Pipelaying, offshore</td>
<td>Barge, two anchor handling tugs, support tug</td>
<td>15-m isobath</td>
<td>180 dB: &lt; 0.2 km</td>
<td>180 dB: &lt; 0.13 km²</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>120 dB: 7.5 km</td>
<td>120 dB: 177 km²</td>
</tr>
<tr>
<td>Pipelaying, inshore</td>
<td>Barge, two anchor handling tugs, support tug</td>
<td>Tampa Bay</td>
<td>180 dB: &lt; 0.2 km</td>
<td>180 dB: &lt; 0.13 km²</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>120 dB: 6.0 km</td>
<td>120 dB: 113 km²</td>
</tr>
<tr>
<td>Pipeline burial, offshore</td>
<td>Plow system, two anchor handling tugs</td>
<td>Tampa Bay</td>
<td>180 dB: &lt; 0.2 km</td>
<td>180 dB: &lt; 0.13 km²</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>120 dB: 8.4 km</td>
<td>120 dB: 222 km²</td>
</tr>
<tr>
<td>Pipeline burial, inshore</td>
<td>Plow system, two anchor handling tugs</td>
<td>Tampa Bay</td>
<td>180 dB: &lt; 0.2 km</td>
<td>180 dB: &lt; 0.13 km²</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>120 dB: 6.7 km</td>
<td>120 dB: 141 km²</td>
</tr>
<tr>
<td>HDD</td>
<td>Floating spud barge, crane mounted drill, welding equipment, air compressor, generator</td>
<td>Tampa Bay</td>
<td>180 dB: &lt; 0.01 km</td>
<td>180 dB: &lt; 0.00 km²</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>120 dB: 0.24 km</td>
<td>120 dB: 0.2 km²</td>
</tr>
<tr>
<td>HDD vibratory driving</td>
<td>Floating spud barge, vibrator, welding equipment, air compressor, generator</td>
<td>Tampa Bay</td>
<td>180 dB: &lt; 0.01 km</td>
<td>180 dB: &lt; 0.00 km²</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>120 dB: 12.6 km</td>
<td>120 dB: 499 km²</td>
</tr>
<tr>
<td>Docking at buoy, dead slow, two bow thrusters and one stern thruster</td>
<td>SRV</td>
<td>STL buoy; offshore DWP site</td>
<td>180 dB: &lt; 0.01 km</td>
<td>180 dB: &lt; 0.00 km²</td>
</tr>
<tr>
<td>Regasification</td>
<td></td>
<td></td>
<td>120 dB: 3.6 km</td>
<td>120 dB: 41 km²</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>180 dB: &lt; 0.00 km²</td>
<td>120 dB: 0.09 km²</td>
</tr>
</tbody>
</table>

Source: JASCO, 2008, 2010

1 All distances are unweighted, 95th percentile radial distances.

2 For distances not given precisely (e.g., < 0.2 km) area of ensonification was modeled using a radial distance of 200 m. Although the distance to threshold would be less than 200 m, it is not possible to specifically calculate the distance because the scenarios involve multiple vessel components.
In many cases the scenarios listed in Table 4 involve multiple pieces of equipment. Although equipment spacing may vary during the course of operations, a single layout must be assumed for modeling purposes. As such, where multiple vessels were involved in the scenarios, it was assumed that the layout, or “spread,” would include the primary operational barge set in the middle of the group of vessels, with support vessels spaced at a range of 100 m (328 ft) from the center of the barge.

Although sounds created by construction equipment and vessels will be continuous during pipeline installation, activities will progress slowly along the pipeline route as the pipeline is laid and buried and the trench backfilled. Any one area will be subject to the maximum sound levels for only 1 to 2 days at a time as the construction activities pass that area. Sound modeling indicates that, overall, operational sound associated with the project is consistent with other man-made underwater sound sources in the area (e.g., commercial shipping and dredging).

Appendix E of Port Dolphin’s application presents Level B harassment sound field graphics for construction activities.

Comments and Responses

On September 10, 2012, we published a proposed rulemaking in the Federal Register (77 FR 55646) and requested comments and information from the public for 45 days. We received three sets of substantive comments, from the Marine Mammal Commission (Commission) and two private citizens. In addition, the U.S. Department of the Interior notified us that they
reviewed the proposed rulemaking and did not have any comments. The comments, and our
responses, are provided here. The Commission’s comments are addressed first.

The Commission stated that, with some exceptions, our proposed suite of mitigation and
monitoring measures is thorough and appropriate for the activities being considered. However,
the Commission also recommended that we require implementation of several additional
measures, all of which are similar to requirements NMFS has imposed on other applicants in
significantly different contexts. Important differences exist between those projects and the action
considered here, and we have determined that some of the Commission’s recommendations are
not appropriate for the Port Dolphin project. In addition, the MMPA requires that we weigh
practicability of a measure, as well as conservation benefit, when considering what measures are
warranted. Additional recommendations indicate some need for clarification, which we will
provide below.

The Commission recommends that we require Port Dolphin to submit the preliminary
results of its in-situ sound source measurements and adjust the size of the Level A and B
harassment zones, as necessary, within 5 days after it initiates construction activities. The
Commission’s recommendations are similar to requirements we have imposed on the oil and gas
industry for seismic exploration in the Arctic waters of Alaska. We agree that quickly making
any necessary adjustments to mitigation zones following in-situ verification of modeled sound
sources is appropriate for high-impact activities conducted in sensitive environments and
affecting vulnerable species (e.g., Arctic seismic surveys and impacts to endangered bowhead
whales [Balaena mysticetus]). In addition, this measure has been required in the Arctic to address
concerns related to the availability of marine mammals for subsistence hunting. However, we do
not believe such a measure is warranted or necessary for Port Dolphin’s relatively low-impact
activities, which will not affect sensitive species, and do not have the potential to affect subsistence users as none are present in the Gulf of Mexico.

The Commission also recommends that we require Port Dolphin to monitor the full extent of the Level A and B harassment zones to detect the presence and characterize the behavior of marine mammals during all construction activities. We agree with the Commission that the full extent of any Level A harassment zone should be monitored. The Level A mitigation zone for impact pile driving, for example, extends to 250 m from the source and can be confidently monitored to detect the presence of marine mammals and implement any necessary shutdown. Beyond this distance, monitoring is conducted for the purpose of gathering information about the level of taking or impacts to the population. However, we have concluded that it is not necessary to monitor the full extent of the Level B harassment zones (which range up to 500 km²). These zones will be observed as far as line of sight (e.g., up to approximately 1,000 m, depending on weather and sea state conditions). The presence of and observable effects to marine mammals within this portion of the zone will be recorded, and these observations are expected to provide sufficient information. Underwater noise generated by the activity attenuates with distance from the source; therefore, it is unlikely that animals at greater distance would display adverse reactions unlike, or of greater magnitude, than those within the observed zone. Moreover, our modeling and analyses have already predicted the anticipated level of take in the Level B zone, and we have assessed, through our negligible impact determination, the potential impacts on the affected species. Finally, we do not believe a more extensive and costlier monitoring program, e.g., vessel-based or aerial-based observers, will yield added conservation value or produce any greater information about the potential effects on delphinids.
The Commission recommends that we require Port Dolphin to install and maintain a long-term passive acoustic monitoring array at the proposed port to (1) determine ambient (pre-construction), construction, and operational (post-construction) sound levels and (2) monitor the occurrence of marine mammals in the vicinity of the port. We agree with the Commission that acoustic monitoring can improve our understanding of ambient sound levels and marine mammal presence in the vicinity of the port and, as described in the proposed rule and carried forward here, we are requiring Port Dolphin to make such measurements. In addition, trained marine mammal observers will be required during the construction phase of the project and should be able to collect additional information as recommended by the Commission.

We have determined that longer-term monitoring of occurrence and habitat use of marine mammals during port operations is not warranted in this case. This type of monitoring would be most beneficial during operation of the port. However, we have determined that port operation is a low-impact activity, consisting of ocean-going cargo vessels calling on the deepwater port every eight days and producing relatively low levels of non-pulsed noise (see our Negligible Impact Determination, later in this document). This level of activity is small (estimated at 46 vessels calling on the port per year) relative to existing vessel traffic in the eastern Gulf of Mexico and is unlikely to appreciably impact marine mammals’ fitness. In addition, the long-term maintenance of a larger array would require different technical specifications and configuration than what is necessary for the focused task of measuring sound associated with the project. Such an array was developed in Massachusetts waters, in collaboration with Stellwagen Bank National Marine Sanctuary and Cornell University, in order to characterize vessel noise and monitor the presence of large, endangered whales (including the North Atlantic right whale [Eubalaena glacialis]). The array was used in a regulatory context in order to alert large vessels
to the presence of whales and avoid ship strikes. The need for such an undertaking is lacking here, as there are no large whales or other sensitive species or habitat present in the vicinity of the port, and there is no partnership necessary to successfully deploy, maintain, and analyze data from such an array.

The Commission also recommends we require that any data collected by Port Dolphin should be shared with the Gulf of Mexico Coastal Ocean Observing System for integration with other oceanographic data. We agree with this recommendation and may, as appropriate, share any non-privileged data with the network.

Additional Commission recommendations require some clarification. The Commission recommends that we base our negligible impact determinations on (1) the estimated mean number of individuals of each species in the area that may be taken plus some measure of uncertainty for each species or (2) the estimated maximum number of each species in the project area that may be taken. The best available scientific information does not allow us to pursue the Commission’s analytical approach. Instead, we are confident that the information presently available is sufficient to support our negligible impact determination. The density information we used is from a U.S. Navy review of available marine mammal survey data for the eastern Gulf of Mexico (USDON, 2003). Those analyses do not quantify a single measure of variability for the density estimates provided. The Navy did, however, qualitatively assess certainty related to the derived density estimates using a decision-tree process, and the information used for our current assessment had the highest degree of certainty (i.e., was derived directly from line-transect survey data). See USDON, 2003 for more information.

The Commission also recommended that we require Port Dolphin to expand the size of the Level A harassment zone for buoy installation, pipeline burial, and pipe laying activities to at
least 200 m. The Commission notes a 91-m Level A harassment zone in their rationale for this recommendation, but no shutdown zone related to underwater noise is planned for these activities. The 100-yd (91-m) shutdown zone referenced by the Commission is not a mitigation zone for sound, but relates to ship strike avoidance measures recommended for all vessels. These activity scenarios involve a modeled configuration of multiple working vessels, and it was not feasible to define fixed zones of ensonification within 200 m of the assumed scenario. Regardless, these activities produce relatively low levels of non-pulsed noise, and the risk of injury from these sounds is considered minimal, thereby allowing us to conclude that a shutdown zone for these types of activities is unnecessary. Further, a true shutdown zone is not practicable, as it is unlikely that these activities – involving multiple tugs and barges moving slowly while either laying or burying pipeline or anchoring the buoys, and thus essentially tethered to the bottom – could be quickly shut down in a way that would provide any benefit to marine mammals, who can move away from a potentially injurious sound source much more quickly than these activities could safely be shut down. See descriptions of these scenarios under Sound Thresholds, earlier in this document, and an analysis of potential impacts associated with these activities in the Negligible Impact and Small Numbers Analysis and Determination, later in this document.

Additional Comments and Responses

Comment 1:  One commenter encourages us to consider including temporal restrictions (both seasonal and diurnal) in the mitigation strategy to further ensure that the activity results in negligible impact on the affected marine mammal stocks and populations.

Response: We agree that considerations of the temporal distribution of animals and activities important to their life history are helpful in informing a mitigation strategy. As the
commenter notes, Port Dolphin has already set up their construction timeline in part to avoid seasons when more animals will be present. However, we do not plan to restrict Port Dolphin’s specific activities through binding measures, as the commenter suggests. As with any construction project, there is the possibility of delays beyond the control of the action proponent. While a shift in seasonality of certain activities could potentially result in higher levels of incidental take than anticipated, we prescribe monitoring so that we are aware of how much take is occurring and can thereby adaptively manage the action accordingly.

Comment 2: Another commenter states that incidental take should be estimated separately for the bay, sound, and estuarine stocks of bottlenose dolphins (hereafter referred to as “bay dolphins”) due to increased vulnerability and unique characteristics found in these stocks compared to the coastal stocks.

Response: While we agree that this would be preferred, we do not believe that we have sufficient information to separately estimate incidental take for bay dolphin communities and for the coastal stock. Instead, we described what we know about the degree to which the specified activities might affect bay dolphins versus coastal dolphins, as well as discussing reasons why the anticipated effects would be expected to result in a negligible impact on bay dolphins in particular. That discussion is found on pages 55674-55675 of the proposed rulemaking.

The commenter feels that because we presented an abundance estimate for bay dolphins we should be able to specify how many of the anticipated incidences of incidental take might accrue to those particular dolphins. This abundance estimate was presented for reference only, as it cannot be considered current and is an aggregate estimate for the Tampa Bay and Sarasota Bay dolphin communities (which are considered separate). However, the primary problem is not in
the lack of a current abundance estimate but in the fact that there is no dividing line beyond which we can say specifically which dolphins would be affected. Mixing is known to occur amongst bay dolphin communities (St. Joseph Sound-Clearwater Harbor, Tampa Bay, and Sarasota Bay-Little Sarasota Bay in this case, at minimum) and between those communities and coastal dolphins. Therefore, while we can say with certainty that the offshore activities will not affect bay dolphins, we have no information for inshore activities to indicate how many incidences of take may accrue to bay dolphins (and from which population) versus coastal dolphins.

The commenter appears to dispute that mixing occurs, noting that various bay dolphin populations have been demonstrated to be genetically distinct from each other and from coastal dolphins and that there are differences in reproductive seasonality between the various stocks. These points are valid but do not imply that mixing does not occur, as mixing does not imply interbreeding. Interactions of dolphins between neighboring areas are not uncommon, yet these groups are genetically distinct, as described in Sellas et al. (2005). Group sightings of resident Sarasota Bay dolphins have included non-resident dolphins, while the reverse is also true (i.e., group sightings of coastal dolphins have included Sarasota Bay dolphins). Mixed groups containing Sarasota Bay and Tampa Bay dolphins, and mixed groups containing Tampa Bay and coastal dolphins, are also commonly observed (Weigle, 1990; Wells, 1991).

The commenter takes further issue with our statement that bottlenose dolphins occurring in Tampa Bay are somewhat acclimated to disturbance and would not be expected to experience significant disruption to behavioral patterns on the basis of short-term and low-intensity disturbance. We agree that it is possible for animals in an environment with heavy human use to nevertheless be disturbed by industrial activity. However, in an environment where ambient
sound levels may already be relatively high and significant industrial and recreational vessel traffic occurs (which produce continuous, non-pulsed sound), additional non-pulsed sound at relatively low levels and over short durations is unlikely to result in behavioral disturbance sufficient to negatively impact functions important to dolphins’ life history. Behavioral disturbance is often related to context, and if there is some overriding contextual element (e.g., foraging opportunity) it is likely that dolphins will either avoid the area over only short durations or will simply continue feeding, for example. Also of concern was our statement that any takes are likely to represent repeated takes of individuals using the area where the activity is occurring, rather than each take being of a new individual. We do feel that this is an important factor to consider when making a negligible impact determination, as the activity is limited in both spatial extent and duration. A more pervasive activity, when resulting in behavioral disturbance only, could be of greater concern to the population as a whole. The commenter quotes a document from NMFS’ Southeast Regional Office, which states that “…human and/or natural impacts are often localized in certain areas creating more potential impacts on the health of that particular stock or smaller community rather than on the larger population.” However, this quote (taken out of context) refers to dolphin mortalities, which are not expected to occur as a result of the specified activity and which are not authorized.

Comment 3: The commenter offers comment and requests clarification regarding certain monitoring and shutdown protocols.

Response: First, the commenter believes that in-water operations should be halted in conditions of inclement weather, when the observer would have sole responsibility for determining whether observations could continue, or at night, correctly noting that the measure cannot be implemented if the animal cannot be observed. In poor visibility, either the
effectiveness of the measure is compromised or the applicant’s ability to conduct the activity is restricted, requiring us to weigh the nature of the activity and its likely impact against the cost of the measure. For Port Dolphin, we have stipulated that impact pile driving, which we consider a potentially higher-impact activity, cannot occur at night and may not be initiated during other periods when visibility is poor (but may continue if already initiated). For the other activities, there are no such restrictions. We believe that these activities, which produce non-pulsed sound at lower levels, have little to no risk of injury and consequently nighttime shutdowns, which carry a significant cost for the applicant, are not warranted. Additional considerations include (1) that these sound sources are effectively continuous, meaning that marine mammals in the vicinity cannot be caught unawares by the advent of loud sound and would have full opportunity to avoid the sound, (2) that we would expect an animal to stay away from a sound-producing activity if the sound is negatively affecting the animal, and (3) nighttime shutdowns would significantly extend the overall temporal footprint of the project. As a result the commenter’s approach could reduce incidences of take, but it would likely increase the overall number of individuals taken.

The commenter was also confused by our description of shutdowns for activities involving “spreads” of vessels. Please refer to our response under Comment 2 for an explanation. Finally, the commenter expressed concern over the shutdown exception for animals that voluntarily approach vessels. We believe that delphinids are sufficiently mobile to avoid strike by extremely slow-moving construction barges and support tugs and that the animals have the opportunity to avoid the area if the sound is disturbing.

Description of Marine Mammals in the Area of the Specified Activity

Twenty-nine marine mammals (28 cetaceans and the Florida manatee [Trichechus manatus]) have documented occurrences in the GOM (Wursig et al., 2000). The manatee is
under the jurisdiction of the U.S. Fish and Wildlife Service. Of the 28 cetaceans, the majority do not regularly occur in the nearshore depth stratum (0 to 37 m) where the specified activities are planned to occur. Only Atlantic spotted dolphins and bottlenose dolphins commonly occur in these areas and are expected to be affected by the specified activities. Detailed accounts for these species were provided in the Federal Register notice announcing the proposed rule (77 FR 55646; September 10, 2012); please see that document for more information.

The area of actual construction and operations for Port Dolphin is entirely contained within the nearshore depth stratum. Maximum depth at the DWP is approximately 31 m, while the pipeline route transits increasingly shallower waters until entering Tampa Bay and subsequently making landfall. However, while the actual construction activities will be entirely contained within the nearshore stratum, the sound field produced by offshore pipelaying activity, which would occur only from late summer 2013 through early winter 2013-14, extends into the mid-shelf depth stratum (37 to 91 m). The Level B sound field for this activity would be 99.9 percent contained within the nearshore stratum, with 0.1 percent potentially entering the mid-shelf stratum. Dwarf and pygmy sperm whales and rough-toothed dolphins may be expected to occur in the mid-shelf stratum on a seasonal basis but are not expected to experience incidental
harassment from project activities based on the small amount of the sound field expected to overlap the stratum and the low seasonal densities in that stratum for these species.

Potential Effects of the Specified Activity on Marine Mammals

We have determined that the specified activities, as outlined in the project description, have the potential to result in behavioral harassment of marine mammals that may be present in the project vicinity while the activities are being conducted. The September 10, 2012, Proposed Rule (77 FR 55646) provided a detailed description of marine mammal hearing and of the potential effects of these activities on marine mammals.

Anticipated Effects on Habitat

The specified activities could have some impacts on marine mammal habitat, primarily by producing temporary disturbances through elevated levels of underwater sound, and to a lesser extent, temporarily reduced water quality and temporary and permanent physical habitat alteration. These impacts are not expected to have tangible direct effects to marine mammals, but could result in minor effects to fish or other elements of the marine mammal prey base. Elevated levels of sound may be considered to affect the habitat of marine mammals through impacts to acoustic space or via impacts to prey species. The direct loss of habitat available during construction due to sound impacts is expected to be minimal. The FR notice (77 FR 55646; September 10, 2012) describes these potential impacts in greater detail.

Mitigation

In order to issue an incidental take authorization under section 101(a)(5)(A) of the MMPA, we 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 their 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). NMFS and Port Dolphin worked to devise a number of mitigation measures designed to minimize impacts to marine mammals to the level of least practicable adverse impact, described in the following and in Port Dolphin’s Marine Protected Species Management Plan; please see Appendix B of Port Dolphin’s application to review that plan in detail.

In addition to the measures described later, Port Dolphin will employ the following standard mitigation measures:

- All work will be performed according to the requirements and conditions of the regulatory permits issued by federal, state, and local governments.

- Briefings will be conducted between the Port Dolphin project construction supervisors and the crew, protected species observer(s) (PSO), and acoustical monitoring team (when present) prior to the start of all discrete construction activities, and when new personnel join the work, to explain responsibilities, communication procedures, marine mammal monitoring protocol, and operational procedures.

- Port Dolphin will comply with all applicable equipment sound standards and ensure that all construction equipment has sound control devices no less effective than those provided on the original equipment. In addition, vessel crew and contractors will be required to minimize sound to the extent possible. Equipment and/or procedures used may include the use of enclosures and mufflers on equipment, minimizing the use of thrusters, and turning off engines and equipment when not in use.

Best Management Practices developed by NMFS and other agencies to reduce the potential for impacts related to line and cable entanglement and marine debris, as well as to
reduce potential impacts to habitat, were discussed in detail in the preamble to the proposed rulemaking and are not discussed here. Additional mitigation measures, which are discussed in greater detail below, include a visual monitoring program (marine mammal watch) and vessel strike avoidance measures.

**Monitoring and Shutdown**

The modeling results for acoustic zones of influence (ZOIs; described in following sections) were used to develop mitigation measures for the proposed activities. Those zones will initially be set at the distances derived through modeling (or be larger than those distances), but may be adjusted as necessary on the basis of acoustic monitoring conducted by Port Dolphin in order to verify source levels and local acoustic propagation characteristics (see Monitoring and Reporting, later in this document). The ZOIs effectively represent the mitigation zone that will be established around each activity to prevent Level A harassment and to monitor authorized Level B harassment of marine mammals.

Shutdown zones (to include areas where SPLs equal or exceed 180 dB rms) and disturbance zones (defined as where SPLs equal or exceed 120 dB or 160 dB rms for non-pulsed or pulsed sound sources, respectively) were described in detail in the Federal Register notice announcing the proposed rule (77 FR 55646; September 10, 2012). Such zones will be established for each specified activity, with certain exceptions. In response to comments, the exceptions are clarified. Certain activities are not discrete, but rather involve the combination of multiple vessels and pieces of equipment modeled in concert and spread over variable distances as the activity moves along the pipeline route, for example. These activities, including buoy installation (which does not include impact pile diving of buoy anchors) and pipeline laying and burial, do not have an associated shutdown zone for Level A harassment resulting from sound.
These activities must adhere to ship strike avoidance measures, but the Level A harassment shutdown zone is not practicable, for reasons described in our response to Comment 2, above. In addition, no shutdown zone for Level A harassment will be required for port operations (i.e., SRV maneuvering at the DWP). Similar to the construction activities described above, SRV maneuvering is expected to produce continuous, non-pulsed sound that does not carry the significant potential for Level A harassment and which allows marine mammals ample time to move away from the stimulus. Implementation of this shutdown zones for operations is not practicable for a variety of reasons, nor does it carry meaningful conservation value.

Level B harassment zones for all construction activities and Level A harassment zones for discrete construction activities (impact and vibratory pile driving, HDD) will initially conform to those distances specified in Table 4, with the exception that the shutdown zone for impact pile driving shall be 250 m. Radial distances to shutdown zones for HDD activities were predicted to be less than 10 m. In most cases, the disturbance zone is of sufficient size to make comprehensive monitoring impracticable (the largest radial distance of 12.6 km), although PSOs will be aware of the size and location of the modeled zone and will record any observations made within the zone as takes.

**Monitoring Protocols**

The established zones will be monitored by qualified PSOs for mitigation purposes, as described here. Port Dolphin’s marine mammal monitoring plan (see Appendix B of Port Dolphin’s application) will be implemented, requiring collection of sighting data for each marine mammal observed during the specified construction activities described in this document.

At least two PSOs will conduct monitoring of shutdown and disturbance zones for all concurrent specified construction activities during daylight hours (civil dawn to civil dusk).
PSOs will have no other duties for the duration of the watch. Shutdown and disturbance zones will be monitored from an appropriate vantage point that affords the PSOs an optimal view of the sea surface while not interfering with operation of the vessel or in-water activities. Full observation of the shutdown zone will occur for the duration of the activity.

Monitoring will occur before, during, and after the activity, beginning 30 minutes prior to initiation and concluding 30 minutes after the activity ends. If marine mammals are present within the shutdown zone prior to initiation, the start will be delayed until the animals leave the shutdown zone of their own volition, or until 30 minutes elapse without resighting the animal(s).

PSOs will be on watch at all times during daylight hours when in-water operations are being conducted, unless conditions (e.g., fog, rain, darkness) make observations impossible (as determined by the lead PSO). If conditions deteriorate during daylight hours such that the sea surface observations are halted, visual observations must resume as soon as conditions permit. While activities will be permitted during low-visibility conditions, they (1) must have been initiated following proper clearance of the ZOI under acceptable observation conditions; and (2) must be restarted, if halted for any reason, using the appropriate ZOI clearance procedures.
If a marine mammal is observed approaching or entering the shutdown zone, the PSO will call for the immediate shutdown of in-water operations. The equipment operator must comply with the shutdown order unless human safety is at risk. Any disagreement must be resolved after the shutdown takes place. Construction operations will be discontinued until the animal has moved outside of the shutdown zone. The animal will be determined to have moved outside the shutdown zone through visual confirmation by a qualified PSO or after 15 minutes have elapsed since the last sighting of the animal within the shutdown zone. The following additional measures will apply to visual monitoring:

- Monitoring will be conducted using binoculars and the unaided eye. The limits of the designated ZOI will be determined using binocular reticle or other equipment (e.g., electronic rangefinder, range stick). A GPS unit or range finder will be used for determining the observation location and distance to marine mammals and sound sources.

- Each PSO will have a dedicated two-way radio for contact with the other PSO or field operations manager.

Whenever a marine mammal species is observed, the PSO will note and monitor the position (including relative bearing and estimated distance to the animal) until the animal dives or moves out of visual range of the PSO. The PSO will continue to observe for additional animals that may surface in the area. Often, there are numerous animals that may surface at varying time intervals. Records will be maintained of all marine mammal species sightings in the
area, including date and time, weather conditions, species identification, approximate distance from the activity, direction and heading in relation to the activity, and behavioral correlation to the activity. For animals observed in the shutdown zone, additional information regarding actions taken, such as duration of the shutdown, behavior of the animal, and time spent in the shutdown zone will be recorded. During pile driving activities, data regarding the type of pile driven (e.g., material construction and pile dimensions), type and power of the hammer used, number of cold starts, strikes per minute, and duration of the pile driving activities will be recorded.

Monitoring will be conducted by qualified PSOs. In order to be considered qualified, PSOs must meet the following criteria:

- Visual acuity in both eyes (correction is permissible) sufficient for discernment of moving targets at the water’s surface with ability to estimate target size and distance; use of binoculars may be necessary to correctly identify the target.

- Advanced education in biological science, wildlife management, mammalogy, or related fields (bachelor’s degree or higher is required).

- Experience and ability to conduct field observations and collect data according to assigned protocols (this may include academic experience).

- Experience or training in the field identification of marine mammals, including the identification of behaviors.

- Sufficient training, orientation, or experience with the construction operation to provide for personal safety during observations.

- Writing skills sufficient to prepare a report of observations, including, but not limited to, the number and species of marine mammals observed; dates and times when in-water construction activities were conducted; dates and times when in-water construction activities
were suspended to avoid potential incidental injury from construction sound of marine mammals observed within a defined shutdown zone; and marine mammal behavior.

- Ability to communicate orally, by radio or in person, with project personnel to provide real-time information on marine mammals observed in the area as necessary.

Pile Driving

Mitigation measures specific to pile driving will include use of (1) a sound attenuation device and (2) ramp-up procedures. In addition, the power of impact hammers will be reduced to minimum energy levels required to drive a pile, thus reducing the amount of sound produced in the marine environment. As for other construction activities, vibratory pile driving may continue into nighttime hours/low-visibility conditions only if ramp-up protocols have been conducted under acceptable observation conditions. Impact pile driving may occur only during daylight hours of good visibility (such that the full shutdown zone is visible). In the event of a shutdown during low-visibility conditions, the pile driving cannot resume until visual monitoring activities are resumed under acceptable observation conditions. The minimum shutdown zone for impact pile driving will be established conservatively at 250 m.

One or more sound attenuation device(s) will be utilized during all impact pile driving activities needed to install components of the STL buoys at the deepwater port. The sound attenuation device(s) will be selected and designed by the marine construction and design
contractor(s), but will likely be either a bubble curtain or a temporary sound attenuation pile (TNAP), potentially used in conjunction with cushion block.

The objective of a ramp-up is to alert any animals close to the activity and allow them time to move away, which is expected to expose fewer animals to loud sounds. This procedure also ensures that any marine mammals missed during shutdown zone monitoring will move away from the activity and not be injured. The following ramp-up procedures will be used for in-water pile installation:

- To allow any marine mammals that may be in the immediate area to leave before pile driving reaches full energy, a ramp-up technique will be used at the beginning of each day’s in-water pile driving activities or if pile driving has ceased for more than 1 hour.
- If a vibratory driver is used, contractors will be required to initiate sound from vibratory hammers for 15 seconds at reduced energy followed by a 1-minute waiting period. The procedure will be repeated two additional times before full energy may be achieved.
- If a non-diesel impact hammer is used, contractors will be required to provide an initial set of strikes from the impact hammer at reduced energy, followed by a 1-minute waiting period, then two subsequent sets.
- If a diesel impact hammer is used, contractors will be required to turn on the sound attenuation device (e.g., bubble curtain or other approved sound attenuation device) for 15 seconds prior to initiating pile driving to flush marine mammals from the area.

**Vessel Strike Avoidance**

Several construction and support vessels will be used during construction activities. Vessel activities, including transits, may not be subject to the shutdown protocols and/or visual monitoring described previously in this section. Consequently, there is the possibility for vessel
strikes of protected species to occur within the project area. Port Dolphin will inform all personnel associated with the project of the potential presence of protected species. All vessel crew members and contractors will participate in training for protected species presence and emergency procedures in the unlikely event a protected species is struck by a vessel. Construction and support vessels will follow the NMFS Vessel Strike Avoidance Measures and Reporting for Mariners. Standard measures will be implemented to reduce the risk associated with vessel strikes.

The following vessel strike mitigation measures for cetaceans for active construction/installation vessel operations will be implemented during project activities:

- Vessel operators and crews must maintain a vigilant watch for marine mammals and slow down or stop their vessels, to the extent possible as dictated by safety concerns, to avoid striking sighted protected species.
- Construction or support vessels, while underway, will remain 100 yd (91 m) from all marine mammals to the extent possible.
- If a marine mammal is within 15 m of a construction or support vessel underway, all operations will cease until it is > 100 yd from the vessel. If the marine mammal is observed within 100 yd of an active construction or support vessel underway, the vessel will cease power to the propellers as long as sea conditions permit for safety. After the marine mammal leaves the area the vessel will proceed with caution, following the guidelines below:
  - Resume vessel at slow speeds while avoiding abrupt changes in direction,
  - Stay on parallel course with the marine mammal, following behind or next to at an equal or lesser speed,
  - Do not cross the path of the animal,
Do not attempt to steer or direct the marine mammal away,

If a marine mammal exhibits evasive or defensive behavior, stop the vessel until the marine mammal has left the immediate area, and

Do not allow the vessel to come between a mother and her calf.

Cetaceans can surface in unpredictable locations or approach slowly moving vessels. When an animal is sighted in the vessel’s path or in close proximity to a moving vessel, the Master will reduce speed and shift the engine to neutral and will not engage the engines until the animals are clear of the area.

If a sighted marine mammal is believed to be a North Atlantic right whale, federal regulation requires a minimum distance of 500 yd (457 m) from the animal be maintained (50 CFR 224.103 (c)).

Practical speeds will be maintained to the extent possible. Guidelines for speeds include the following:

Reduce vessel speed to 10 kn or less when mother/calf pairs, pods, or large assemblages of cetaceans are observed near an underway vessel, when safety permits. A single cetacean at the surface can indicate the presence of submerged animals in the vicinity of the vessel; therefore, prudent precautionary measures should always be exercised.

No wake/idle speeds where the draft of the vessel provides less than a 4-ft (1.2-m) clearance from the bottom. All vessels will follow deep-water routes whenever possible.

All construction vessels transiting to and from the port from shore will not exceed 14 kn during regular operations.

Avoid sudden changes in speed and direction.

Speeds approaching and departing the buoys will be reduced to 10 kn maximum.
- Speeds during installation will be well under 14 kn; vessels may be stationary during certain phases of installation.
  - If a collision seems likely, emergency collision procedures will be followed.
  - Members of the vessel crew will be encouraged to undergo NMFS training prior to activity, including instruction in reporting procedures, collision emergency procedures, and marine mammal presence detection (surfacing near wake).
  - During construction of the facility, an Environmental Coordinator will be on site and responsible for communicating with NMFS and other relevant agencies, as appropriate.
  - During construction/installation, transiting vessels will have lookouts required to scan for surfacing marine mammals and report sightings to the Master, who will notify the Environmental Coordinator.
  - Offshore vessel activities not required to implement visual monitoring protocols described previously in this document will be temporarily terminated if marine mammals were observed in the area and there is the potential for harm of an individual. The Environmental Coordinator will be called in to determine the appropriate course of action.

Lighting – Measures will be implemented to minimize the attraction of marine mammals to the project area and prevent potential impacts to protected species from nighttime lighting.

Lighting will be down-shielded to prevent unnecessary upward illumination while illuminating the vessel decks only. To the extent possible, they will not illuminate surrounding waters.
Lighting used during all activities will be regulated according to USCG requirements, without using excessive wattage or quality of lights. Once an activity is completed, all lights used only for that activity will be extinguished.

Conclusions

We have carefully evaluated these mitigation measures and considered a range of other measures in the context of ensuring that we prescribe 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 potential measures, we have determined that these mitigation measures 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

Section 101(a)(5)(A) of the MMPA states that in order to issue an incidental take authorization (ITA) for an activity, we 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 proposed action area.

Port Dolphin provided a protected species monitoring plan in their application (see Appendix B of Port Dolphin’s application), and all monitoring methods identified herein have been developed through coordination between NMFS and Port Dolphin. The methods are based on the parties’ professional judgment supported by their collective knowledge of marine mammal behavior, site conditions, and proposed project activities. Any modifications to this protocol will be coordinated with NMFS. A summary of the plan, as well as the proposed reporting requirements, is contained here.

The intent of the monitoring plan is to:

• Comply with the requirements of the MMPA Letter of Authorization as well as the ESA section 7 consultation;
• Avoid injury to marine mammals through visual monitoring of identified shutdown zones; and
• To the extent possible, record the number, species, and behavior of marine mammals in disturbance zones for the proposed activities.

Monitoring for marine mammals will be conducted in specific zones established to avoid or minimize effects of elevated levels of sound created by the specified activities. Initial shutdown and disturbance zones will largely be based on the applicant’s modeled values. Non-stationary activities will conform to NMFS Vessel Strike Avoidance Measures and Reporting for Mariners (i.e., 100 yd) – a distance much larger than actual areas ensonified to 180 dB rms or greater. However, avoidance requirements will not be triggered upon voluntary approach by
small marine mammals (i.e., delphinids). The actual zone monitored for disturbance will be based upon logistical considerations, as described previously in this document, as the full disturbance zones will be so large as to make monitoring impracticable. Zones may be modified on the basis of actual recorded SPLs from acoustic monitoring.

In cooperation with NMFS, Port Dolphin has supplemented the visual monitoring program with an acoustic monitoring program that will be conducted primarily to verify the sound source levels and local acoustic propagation characteristics that were assumed in the acoustic modeling.

**Acoustic Monitoring**

Port Dolphin will implement an acoustic monitoring program during construction and operation of the deepwater port and appurtenant marine facilities. Please see Port Dolphin’s Sound Level Verification Plan (see Supplemental Information) for more detail. The objectives of this program are to: (1) empirically measure the sound source levels associated with project activities and verify estimated source levels used in modelling, and (2) empirically determine ranges to relevant threshold levels, verifying the accuracy of the acoustic propagation model that was used to predict the size of sound fields generated by construction and operation of the port. Ambient sound levels will also be measured when no project activities are occurring. The acoustic monitoring program was described in detail in the proposed rule (77 FR 55646; September 10, 2012); please see that document for more information.

**Visual Monitoring**

Visual monitoring of relevant zones will be conducted as described previously (see ‘Mitigation’). Shutdown or delay of activities will occur as appropriate. The monitoring biologists will document all marine mammals observed in the monitoring area. Data collection
will include a count of all marine mammals observed by species, sex, age class, their location within the zone, and their reaction (if any) to construction activities, including direction of movement, and type of construction that is occurring, time that activity begins and ends, any acoustic or visual disturbance, and time of the observation. Environmental conditions such as wind speed, wind direction, visibility, and temperature will also be recorded. No monitoring will be conducted during inclement weather that creates potentially hazardous conditions, as determined by the PSO(s). No monitoring will be conducted when visibility is significantly limited, such as during heavy rain or fog. During these times of inclement weather, in-water work that may produce sound levels in excess of 180 dB rms may continue, but may not be started. Impact pile driving shall not occur when visibility is significantly limited.

All monitoring personnel must have appropriate qualifications as identified previously. These qualifications include education and experience identifying marine mammals and the ability to understand and document marine mammal behavior. All monitoring personnel will meet at least once for a training session provided by Port Dolphin, and Port Dolphin will be responsible for verifying to NMFS that PSOs meet the minimum qualifications described previously. Topics will include, at minimum, implementation of the monitoring protocol, identification of marine mammals, and reporting requirements. All monitoring personnel will be provided a copy of the LOA. Monitoring personnel must read and understand the contents of the LOA as they relate to coordination, communication, and identifying and reporting incidental harassment of marine mammals. All sightings must be recorded on approved marine mammal field sighting logs.

Monitoring will occur for construction operations only. There is no feasible mechanism for placing qualified observers aboard the SRVs, which will be arriving from the high seas and
which will not require a harbor pilot because the port is in deep water. Therefore, the only monitoring and reporting for operations will be for acoustic data and for any ship strike reporting.

**Reporting**

Reports of data collected during monitoring will be submitted to NMFS weekly. In addition, a final report summarizing all marine mammal monitoring and construction activities will be submitted to NMFS annually. The report will include:

- All data described previously under monitoring, including observation dates, times, and conditions; and
- Correlations of observed behavior with activity type and received levels of sound, to the extent possible.

Port Dolphin will also submit a report(s), as necessary, concerning the results of all acoustic monitoring. The final report for acoustic monitoring of construction activities will be provided at the completion of all marine construction activities. Reporting for acoustic monitoring of operational activities will be provided at the completion of the commissioning period for each new SRV servicing the port. Port Dolphin will submit these reports to NMFS within 60 working days of the completion of each monitoring event.

Acoustic monitoring reports will include:

- A detailed description of the monitoring protocol;
- A description of the sound monitoring equipment;
- Documentation of calibration activities;
- The depth of water at the hydrophone locations and the depth of the hydrophones;
- The background SPL reported as the 50 percent cumulative density function;
• A summary of the data recorded during monitoring; and
• Analysis of the recorded data and conclusions.

Analysis of the data should include the frequency spectrum, ranges and means including the standard deviation/error for the peak and rms SPLs, and an estimation of the distance at which rms values reach the relevant marine mammal thresholds and background sound levels. Vibratory driving results will include the maximum and overall average rms calculated from 30-s rms values during driving of the pile. In addition, for pile driving, the report will include:

• Size and type of any piles driven, correlated with SPLs;
• A detailed description of any sound attenuation device used, including design specifications;
• The impact hammer energy rating used to drive the piles, make and model of the hammer(s), and description of the vibratory hammer;
• The physical characteristics of the bottom substrate into which the piles were driven; and
• The total number of strikes to drive each pile.

During all phases of construction activities and operation, sightings of any injured or dead marine mammals will be reported immediately (except as described later in this section) to the NMFS Southeast Region Marine Mammal Stranding Network, regardless of whether the injury or death is caused by project activities. In addition, if a marine mammal is struck by a project vessel (e.g., SRV, support vessel), or in the unanticipated event that project activity clearly resulted in the injury, serious injury, or death (e.g., gear interaction, and/or entanglement) of a marine mammal, USCG and NMFS must be notified immediately, and a full report must be provided to NMFS, Southeast 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, if applicable; (3) the vessel’s speed during and leading up to the incident, if applicable; (4) a description of the incident; (5) water depth; (6) environmental conditions (e.g., wind speed and direction, sea state, cloud cover, visibility); (7) the species identification or description of the animal(s) involved; (8) the fate of the animal(s); and (9) photographs or video footage of the animal (if equipment is available). Following such an incident, activities must cease until we are able to review the circumstances of the incident. We will work with Port Dolphin to determine what is necessary to minimize the likelihood of further prohibited take and ensure MMPA compliance. Port Dolphin may not resume activity until notified to do so by NMFS. If a prohibited take should occur, the NMFS Office of Law Enforcement and the Florida Fish and Wildlife Conservation Commission law enforcement will be notified.

In the event that an injured or dead marine mammal is discovered, and the lead PSO determines that the cause of the injury or death is unknown and the death is relatively recent (i.e., in less than a moderate state of decomposition as described in the next paragraph), Port Dolphin will immediately report the incident to NMFS, Office of Protected Resources. The report must include the same information identified in the preceding paragraph. However, activity may continue while we review the circumstances of the incident, and we will work with Port Dolphin to determine whether modifications to the activities are appropriate. If the lead PSO determines that the discovered animal is not associated with or related to project activities (e.g., previously wounded animal, carcass with moderate to advanced decomposition, scavenger damage), Port Dolphin will report the incident to NMFS, Office of Protected Resources, within 24 hours of the discovery. Port Dolphin should provide photographs or video footage (if available) or other
documentation of the sighting. Activities may continue while we review the circumstances of the incident.

An annual report on marine mammal monitoring and mitigation will be submitted to NMFS, Office of Protected Resources, and NMFS, Southeast Regional Office, each year. The weekly and annual reports will include data collected for each distinct marine mammal species observed in the project area. 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 activities will also be included in the annual reports. Additional information that will be recorded during activities and contained in the reports include: date and time of marine mammal detections, weather conditions, species identification, approximate distance from the source, and activity at the construction site when a marine mammal is sighted. In addition to annual reports, Port Dolphin will submit a draft comprehensive final report to NMFS, Office of Protected Resources, and NMFS, Southeast Regional Office, 180 days prior to the expiration of the regulations. This comprehensive technical report will provide full documentation of methods, results, and interpretation of all monitoring during the first 4.5 years of the regulations. A revised final comprehensive technical report, including all monitoring results during the entire period of the regulations will be due 90 days after the end of the period of effectiveness of the regulations.

Adaptive Management

The final regulations governing the take of marine mammals incidental to the specified activities at Port Dolphin contains an adaptive management component. In accordance with 50 CFR 216.105(c), these regulations are 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. The use of adaptive management will allow us 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 Port Dolphin’s monitoring from the previous year;
- Results from general marine mammal and acoustics 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 dates 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 of public review, as allowed for in 50 CFR 216.105(c). In addition, LOAs will be withdrawn or suspended if, after notice and opportunity for public comment, the NOAA’s Assistant Administrator for Fisheries finds, among other things, that the regulations are not being substantially complied with or that 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 Port Dolphin actions are having more than a negligible impact on marine mammals, then we reserve the right to modify the regulations and/or withdraw or suspend LOAs after public review.

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].” Take by Level B harassment only is anticipated as a result of Port Dolphin’s specified activities. Take of marine mammals is anticipated to occur as a result of elevated levels of sound from the previously described activities associated with construction and installation of the port and from port operations. No take by injury, serious injury, or death is anticipated or authorized. Estimation of incidental take was described in greater detail in the Federal Register notice announcing the proposed rule (77 FR 55646; September 10, 2012); please see that document for more information.

As described previously in the “Distance to Sound Thresholds” section of this document, JASCO Research modeled a series of scenarios that thoroughly characterize the various construction/installation and operation activities expected. JASCO used proxy sound sources selected from a database of underwater sound measurements. The selected proxy sound sources were input to a sound propagation model with multiple parameters, including expected water column sound speeds, bathymetry, and bottom geoacoustic properties, to estimate the radii of sound impacts (JASCO, 2008, 2010). Note that for some scenarios, 180-dB threshold values only occur in the immediate vicinity of individual pieces of equipment that combine to form a construction “spread,” or modeled scenario, with little or no overlap of the sound fields from neighboring vessels. These scenarios are for transient activities – for example, pipelaying and burial activities require a spread of vessels and equipment (e.g., barges, tugs) rather than a single point source of sound. These modeled scenarios combine the sound output from multiple vessels/pieces of equipment. The overall radius depends primarily on the spacing between the
vessels, and a single scenario-specific radius for the 180-dB threshold cannot accurately be
defined. Please see Appendices C and D in Port Dolphin’s application for a detailed description
of this sound source modeling and Appendix E for a graphical depiction of the sound fields from
various activities.

Density of marine mammals in the project area was derived from a U.S. Navy review of
available marine mammal survey data for the eastern Gulf of Mexico which summarized species
presence and distribution on a seasonal basis (USDON, 2003). As described previously, marine
mammal densities are determined on the basis of both seasonality and depth stratum. Densities
for marine mammals that are expected to be affected by the specified activities are presented in
Table 5.

Table 5. Density estimates for marine mammals in the nearshore depth stratum, eastern GOM

<table>
<thead>
<tr>
<th>Species</th>
<th>Density (Individuals/100 km² (39 mi²))</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Winter</td>
</tr>
<tr>
<td>Atlantic spotted dolphin</td>
<td>2.243</td>
</tr>
</tbody>
</table>

¹No density estimate is available for Atlantic spotted dolphins in fall in the nearshore depth stratum. The largest estimate (spring) is conservatively used as a proxy.

Source: USDON, 2003

Incidental take estimates are calculated based on: (1) the number of marine mammals,

using species- and season-specific density estimates; (2) the areal extent of Level A and Level B

sound fields, by sound source; and (3) the time or distance component of the activity. Areas of

ensonification, by appropriate threshold, are presented in Table 4. With regard to the fourth

component (time/distance), there are two types of construction activities: stationary and transient. Stationary activities will occur near specific sites (e.g., locations for buoy installation), while transient activities will occur while traveling along a pre-determined trackline (i.e., the pipeline route). Incidental take associated with stationary activities is determined by considering the estimated number of days of effect. Buoy installation, impact pile driving, and vibratory pile driving activities are expected to take 6, 32, and 8 days, respectively. The pre-determined pipeline route along which the pipelaying and burial activities will occur is approximately 72 km long (37 km offshore, 35 km inshore). For these transient activities, the overall area of effect (i.e., distance x width of ensonified area) is used in calculating estimated incidental take.

For stationary activities, season-specific estimated take was determined by first multiplying the modeled ZOI (i.e., the area ensonified using the appropriate thresholds) and the appropriate species-specific seasonal densities. These results were then rounded to the nearest whole number and multiplied by the estimated number of days of effect to provide an estimate of take.

For transient activities, season-specific estimated take was determined by multiplying the overall area of effect for offshore and inshore portions, respectively, by the appropriate density and, because some of these activities are expected to occur during multiple seasons, by the proportion of trackline expected to be completed during a given season. For offshore pipelaying, approximately 43 percent of effort is expected to occur during summer and 57 percent during
fall. The inshore portion would occur entirely during fall. For offshore pipe burial, approximately 12 percent of effort is expected to occur during fall with 88 percent occurring during winter. The inshore portion would occur entirely during winter. The results of take estimation calculations for bottlenose dolphins and spotted dolphins for construction activities are shown in Table 6.

Table 6. Estimated incidental take, construction activities

<table>
<thead>
<tr>
<th>Activity</th>
<th>Season</th>
<th>Atlantic spotted dolphin</th>
<th>Bottlenose dolphin</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buoy installation</td>
<td>Summer</td>
<td>6</td>
<td>24</td>
</tr>
<tr>
<td>Impact pile driving</td>
<td>Summer</td>
<td>64</td>
<td>160</td>
</tr>
<tr>
<td>Pipelaying – Offshore</td>
<td>Summer</td>
<td>6</td>
<td>20</td>
</tr>
<tr>
<td>Pipelaying – Inshore</td>
<td>Fall</td>
<td>34</td>
<td>85</td>
</tr>
<tr>
<td></td>
<td>Fall</td>
<td>45</td>
<td>112</td>
</tr>
<tr>
<td>Pipeline burial – Offshore</td>
<td>Fall</td>
<td>8</td>
<td>20</td>
</tr>
<tr>
<td>Pipeline burial – Inshore</td>
<td>Winter</td>
<td>12</td>
<td>60</td>
</tr>
<tr>
<td>Pipelaying</td>
<td>Winter</td>
<td>11</td>
<td>51</td>
</tr>
<tr>
<td>Pipelaying</td>
<td>Summer</td>
<td>104</td>
<td>328</td>
</tr>
<tr>
<td>Total, by species</td>
<td></td>
<td>290</td>
<td>860</td>
</tr>
</tbody>
</table>

When the Port reaches operational status, an estimated 46 SRV visits will occur per year. Visits will be equally distributed across seasons, with 12 visits expected during winter and summer seasons and 11 visits per season during spring and fall. Each visit includes arrival and departure of the SRV, so 46 visits would result in 92 episodes that may result in incidental take. The results of take estimation calculations for operational activities, for a given year, are shown in Table 7.

Table 7. Estimated yearly incidental take, Port operations

<table>
<thead>
<tr>
<th>Activity</th>
<th>Season</th>
<th>Trips</th>
<th>Atlantic spotted dolphin</th>
<th>Bottlenose dolphin</th>
</tr>
</thead>
<tbody>
<tr>
<td>SRV maneuvering</td>
<td>Summer</td>
<td>12</td>
<td>2</td>
<td>24</td>
</tr>
<tr>
<td></td>
<td>Fall</td>
<td>11</td>
<td>9</td>
<td>99</td>
</tr>
<tr>
<td></td>
<td>Winter</td>
<td>12</td>
<td>2</td>
<td>24</td>
</tr>
<tr>
<td></td>
<td>Spring</td>
<td>11</td>
<td>9</td>
<td>99</td>
</tr>
<tr>
<td>Totals1</td>
<td></td>
<td>46</td>
<td>246</td>
<td>632</td>
</tr>
</tbody>
</table>

1 Single-visit take calculated by multiplying appropriate density and appropriate area, then doubling the result to account for arrival and departure of the SRV in a single trip.

2 Total represents the single visit take multiplied by the total number of trips.
Given that this rule will be in effect during 1 year of construction and 4 years of operations, the total estimated taking, by Level B harassment only, is 1,274 Atlantic spotted dolphins and 3,388 bottlenose dolphins.

Negligible Impact and Small Numbers Analysis and Determination

NMFS has defined “negligible impact” in 50 CFR 216 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, we consider 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.

Incidental take, in the form of Level B harassment only, is likely to occur primarily as a result of marine mammal exposure to elevated levels of sound resulting from the specified activities. No take by injury, serious injury, or death is anticipated or authorized. The expected impacts from this activity would be Level B harassment in the form of behavioral disturbance resulting in, for example, changed direction or speed, or temporary avoidance of an area. Anticipated behavioral disturbance is likely to be of low intensity due to the sound source characteristics – the majority of activities considered here would produce low source levels of non-pulsed sound that would be either intermittent or transient – and relatively short in duration associated with the specified activities. For the same reasons, no individual marine mammals are expected to incur any hearing impairment, whether temporary or permanent in nature. That is, non-pulsed sound does not produce the rapid rise times that are more likely to produce hearing impairment in marine mammals, and the low intensity of the sources would result in Level A
isopleths within a short distance. Several activities would produce source levels below those considered capable of causing hearing impairment, even in close proximity to marine mammals. The shutdown zone monitoring planned as mitigation, and the small size of the zones in which injury may occur, further reduces the potential for any injury of marine mammals, making the possibility of hearing impairment extremely unlikely and therefore discountable.

For the greater portion of the life of this proposed rule (i.e., 4 years remaining after the first year of construction), only port operations would occur. Each episode of SRV arrival/departure (requiring thruster use for a period of several hours) would be separated by approximately 8 days of regasification, an activity not expected to result in incidental take. The likely effects of behavioral disturbance from port operations are minor, as many animals perform vital functions, such as feeding, resting, traveling, and socializing, on a diel (24-hour) cycle. Behavioral reactions to sound 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). Operational activities would occur on a single day (i.e., arrival or departure of a SRV), would not recur for a period of 8 days, and, as for the majority of construction activities, would produce only low levels of non-pulsed sound. NMFS’ current criterion for Level B harassment from non-pulsed, underwater sound levels (the vast majority of sound produced by the proposed activities) is 120 dB rms. However, not all marine mammals 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.

Neither the bottlenose dolphin nor spotted dolphin is listed under the ESA. However, we consider each bay, sound, and estuary stock of bottlenose dolphins (including those in Tampa Bay/Sarasota Bay) to be strategic under the MMPA. NMFS is in the process of writing
individual stock assessment reports for each of the 32 bay, sound and estuary stocks of bottlenose dolphins, but none has been completed for the Tampa Bay/Sarasota Bay populations. There is insufficient data to determine population trends or status of the relevant stocks relative to optimum sustainable population. The specified activities will not take place in any known areas of significance for the impacted species (i.e., the activities should not have any specific impact on the animals’ feeding or breeding).

The maximum estimated take per year of Atlantic spotted dolphins (290) would be small relative to the stock size (37,611; 0.1 percent); this would decline for subsequent years of operations. As a result, only small numbers of Atlantic spotted dolphins would be taken. For bottlenose dolphins, the maximum estimated total take per year for all bottlenose dolphins (860) is small relative to the coastal stock size (7,702; 11 percent); this would decline for subsequent years of operations. As a result, only small numbers of bottlenose dolphins from the coastal stock could be taken. However, it is difficult to partition potential takings between the coastal stock and the smaller bay stocks (for which current abundance estimates are not available) because the possibility for mixing of the stocks precludes any quantitative understanding of how the total estimated taking might be apportioned between stocks. An unknown, but possibly large, number of coastal stock dolphins may be mixing in inshore waters at any given time. However, we can qualitatively assess the estimated incidental take in relative terms and have been able to determine that the number is small compared to the overall population. Only a portion of the estimated incidental takes can potentially accrue to bay dolphins, because much of the project will occur in offshore waters and, because individuals from all stocks in the area (coastal stock; Tampa Bay, Sarasota Bay-Little Sarasota Bay, and Clearwater Harbor-St. Joseph Sound stocks) are present in the action area, only a portion of dolphins affected by inshore activities would be
expected to be from the Tampa Bay stock. In addition, the Tampa Bay stock of dolphins is likely to be comprised of five discrete communities (Urian et al., 2009), one of which does not occur in the portion of the Bay affected by the specified activities thereby further limiting the number of Tampa Bay dolphins that are likely to be exposed to project activities.

Next, we compared the area in which the various bay dolphin stocks may occur to the area affected by project activities. The total area in which the bay dolphins are likely to occur is approximately 1,638 km², including waters of the Tampa Bay, Sarasota Bay and St. Joseph Sound estuaries, as well as coastal waters out to 2 km from shore. Pipe laying/pipe burial would ensonify a maximum of approximately 27 km² within the 2 km from shore (inside of Tampa Bay any sound produced by these activities would overlap with sound produced by vibratory driving). Vibratory driving, which will occur entirely within Tampa Bay, is predicted to produce sound that would attenuate to less than 120 dB rms at 12.6 km from the activity. However, that distance cannot be attained in all directions from the planned activity locations due to shoreline topography. Therefore, the actual area of ensonification would be significantly less than is implied by the modeled distance, a maximum of approximately 300 km². The total area that may be affected by project activities is thus approximately 20 percent of the area in which bay dolphins are known to occur. Using this qualitative approach, the proportion of animals taken may then be reasonably considered to be small relative to the size of the population.

Separately, we believe that the potential effects of the specified activities represent a negligible impact for bay dolphins. Only a subset of the specified activities has the potential to affect bay dolphins. Buoy installation and impact pile driving, as well as the entire offshore portion of pipelaying and burial, would occur offshore and would not have the potential to affect the bay dolphin populations. Vibratory pile driving would occur entirely within Tampa Bay, as
would a portion of inshore pipelaying and burial, and could impact the bay populations. Vibratory pile driving would occur for only 8 days (at two piles per day), meaning that any harassment experienced by bay dolphins from this activity would be of very short duration. In addition, Tampa Bay is significantly industrialized and urbanized and is heavily used by recreational boaters. Bottlenose dolphins occurring in Tampa Bay are somewhat acclimated to disturbance and would not be expected to experience significant disruption to behavioral patterns on the basis of short-term and low intensity disturbance, such as is expected for this project. The specified activities would not take place in areas known to be of special significance for feeding or breeding.

In summary, we believe that potential impacts to bay dolphins represent a negligible impact for the following reasons: (1) only a subset of project activities have the potential to affect bay dolphins; (2) any takes would be of low intensity (resulting from exposure to low levels of non-pulsed sound over a limited duration) and likely would not result in significant alteration of dolphin behavior in the heavily urbanized/industrialized area where the activity would occur; and (3) any takes are likely to represent repeated takes of individuals using the area where the activity is occurring, rather than each take being of a new individual. Finally, following the initial year of construction, all operations would occur offshore, and there would be no potential for incidental take of bay dolphins.

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, we find that construction and operation of Port Dolphin will result in the incidental take of small numbers of marine mammals, by Level B harassment only,
and that the total taking from Port Dolphin’s specified 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.

Endangered Species Act (ESA)

On August 4, 2009, NMFS concluded consultation with MARAD and USCG under section 7 of the ESA on the proposed construction and operation of the Port Dolphin LNG facility. The result of that consultation was NMFS’ concurrence with Port Dolphin’s determination that the proposed activities may affect, but are not likely to adversely affect, listed species under NMFS’ jurisdiction. We are not authorizing incidental take of any ESA-listed marine mammal species. No listed species will be impacted by the specified activities.

National Environmental Policy Act (NEPA)

The USCG and the MARAD initiated the public scoping process in July 2007, with the publication of a Notice of Intent (NOI) to prepare an Environmental Impact Statement (EIS) in the Federal Register. The NOI included information on public meetings and informational open houses; requested public comments on the scope of the EIS; and provided information on how the public could submit comments. A Notice of Availability for the Draft EIS was published in the Federal Register in April 2008. Subsequently, a final EIS was published in July 2009. MarAd issued a Record of Decision (ROD) approving, with conditions, the Port Dolphin Energy Deepwater Port License application on October 26, 2009.

Because NMFS was a cooperating agency in the development of the Port Dolphin EIS, NMFS has adopted the EIS and issued its own ROD, signed on December 4, 2012, for issuance
of authorizations pursuant to section 101(a)(5)(A) of the MMPA for the activities proposed by Port Dolphin.

Classification

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

Pursuant to section 605(b) of the Regulatory Flexibility Act (RFA), the Chief Counsel for Regulation of the Department of Commerce certified to the Chief Counsel for Advocacy of the Small Business Administration at the proposed rule stage that this rule would not have a significant economic impact on a substantial number of small entities. Port Dolphin is owned by the Norway-based shipping company Höegh LNG AS, which is itself held by Leif Höegh & Co, a global shipping company. Therefore, it is not a small governmental jurisdiction, small organization, or small business, as defined by the RFA. Port Dolphin Energy LLC is the only entity that is subject to the requirements in the regulations. Because this rule impacts only the activities of Port Dolphin, which is not considered to be a small entity within SBA’s definition, the Chief Counsel for Regulation certified that this rule will not have a significant economic impact on a substantial number of small entities. No comments were received on this certification. As a result, 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 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.


________________________________
Alan D. Risenhoover,
Director, Office of Sustainable Fisheries,
performing the functions and duties of the 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 P is added to part 217 to read as follows:

Subpart P – Taking Marine Mammals Incidental to Construction and Operation of a Liquefied Natural Gas Deepwater Port in the Gulf of Mexico

Sec.

217.151 Specified activity and specified geographical region.

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Subpart P – Taking Marine Mammals Incidental to Construction and Operation of a Liquefied Natural Gas Deepwater Port in the Gulf of Mexico

Specified activity and specified geographical region.

(a) Regulations in this subpart apply only to Port Dolphin Energy LLC (Port Dolphin) 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 construction and operation of the Port Dolphin Deepwater Port (Port).

(b) The taking of marine mammals by Port Dolphin may be authorized in a Letter of Authorization (LOA) only if it occurs in the vicinity of the Port Dolphin Deepwater Port in the eastern Gulf of Mexico or along the associated pipeline route.

Effective dates.

Regulations in this subpart are effective from June 1, 2013, through May 31, 2018.

Permissible methods of taking.

(a) Under LOAs issued pursuant to §§ 216.106 and 217.157 of this chapter, the Holder of the LOA (hereinafter “Port Dolphin”) may incidentally, but not intentionally, take marine mammals within the area described in § 217.151(b) of this chapter, provided the activity is in compliance with all terms, conditions, and requirements of the regulations in this subpart and the appropriate LOA.
(b) The incidental take of marine mammals under the activities identified in § 217.151(a) of this chapter is limited to the following species and is limited to Level B Harassment:

(1) Bottlenose dolphin (Tursiops truncatus) – 3,388 (860 the first year and an average of 632 annually thereafter)

(2) Atlantic spotted dolphin (Stenella frontalis) – 1,274 (290 the first year and an average of 246 annually thereafter)

§ 217.154 Prohibitions.

Notwithstanding takings contemplated in § 217.151 of this chapter and authorized by a LOA issued under §§ 216.106 and 217.157 of this chapter, no person in connection with the activities described in § 217.151 of this chapter may:

(a) Take any marine mammal not specified in § 217.153(b) of this chapter;

(b) Take any marine mammal specified in § 217.153(b) of this chapter other than by incidental, unintentional Level B Harassment;

(c) Take a marine mammal specified in § 217.153(b) of this chapter 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 LOA issued under §§ 216.106 and 217.157 of this chapter.

§ 217.155 Mitigation.

(a) When conducting the activities identified in § 217.151(a) of this chapter, the mitigation measures contained in any LOA issued under §§ 216.106 and 217.157 of this chapter must be implemented. These mitigation measures include but are not limited to:

(1) General Conditions:
(i) Briefings shall be conducted between the Port Dolphin project construction supervisors and the crew, protected species observer(s) (PSO), and acoustic monitoring team prior to the start of all construction activity, and when new personnel join the work, to explain responsibilities, communication procedures, protected species monitoring protocol, and operational procedures.

(ii) Port Dolphin shall comply with all applicable equipment sound standards and ensure that all construction equipment has sound control devices no less effective than those provided on the original equipment. Vessel crew and contractors shall minimize the production of underwater sound to the extent possible. Equipment and/or procedures used may include the use of enclosures and mufflers on equipment, minimizing the use of thrusters, and turning off engines and equipment when not in use.

(iii) All vessels associated with Port Dolphin construction and operations shall comply with NMFS Vessel Strike Avoidance Measures and Reporting for Mariners and applicable regulations. All vessels associated with Port Dolphin construction and operations shall remain 500 yd (457 m) away from North Atlantic right whales (Eubalaena glacialis) and 100 yd (91 m) away from all other marine mammals, except in cases where small marine mammals (i.e., delphinids) voluntarily approach within 100 yd or unless constrained by human safety concerns or navigational constraints.

(2) Shutdown and Monitoring:

(i) Shutdown zone: For all stationary activities, shutdown zones shall be established. These zones shall include all areas where underwater sound pressure levels (SPLs) are anticipated to equal or exceed 180 dB re: 1 µPa rms, as determined by modeled scenarios approved by NMFS for each specific activity. The actual size of these zones shall be empirically
determined and reported by Port Dolphin. For all non-stationary activities (e.g., pipeline burial, shuttle regasification vessel (SRV) maneuvering), Port Dolphin shall adhere to Vessel Strike Avoidance Measures described in § 217.155(a)(1)(iii) of this chapter, but shall not otherwise be required to establish shutdown zones.

(ii) Disturbance zone: For all construction activities, disturbance zones shall be established. For impact pile driving, these zones shall include all areas where underwater SPLs are anticipated to equal or exceed 160 dB re: 1 µPa rms. For all other activities these zones shall include all areas where underwater SPLs are anticipated to equal or exceed 120 dB re: 1 µPa rms. These zones shall be established on the basis of modeled scenarios approved by NMFS for each specific activity. The actual size of disturbance zones shall be empirically determined and reported by Port Dolphin, and on-site PSOs shall be aware of the size of these zones. However, because of the large size of these zones, monitoring of the zone is required only to maximum line-of-sight distance from established monitoring locations.

(iii) Visual monitoring shall occur for all construction activities. The following measures shall apply:

(A) Zones shall be monitored from the appropriate vessel or work platform, or other suitable vantage point. Port Dolphin shall at all times employ, at minimum, two PSOs in association with each concurrent specified construction activity.

(B) Shutdown zones shall be monitored for the presence of marine mammals before, during, and after construction activity. For all activities, the shutdown zone shall be monitored for 30 minutes prior to initiating the start of activity and for 30 minutes following the completion of activity. If marine mammals are present within the shutdown zone prior to initiating activity, the start shall be delayed until the animals leave the shutdown zone of their own volition or until
15 minutes has elapsed without observing the animal. If a marine mammal is observed within or approaching the shutdown zone, activity shall be halted as soon as it is safe to do so, until the animal is observed exiting the shutdown zone or 15 minutes has elapsed. If a marine mammal is observed within the disturbance zone, a take shall be recorded and behaviors documented.

(C) PSOs shall be on watch at all times during daylight hours when in-water operations are being conducted, unless conditions (e.g., fog, rain, darkness) make observations impossible. The lead PSO on duty shall make this determination. If conditions deteriorate during daylight hours such that the sea surface observations are halted, visual observations must resume as soon as conditions permit. While activities will be permitted to continue during low-visibility conditions, they must have been initiated following proper clearance of the shutdown zone under acceptable observation conditions and must be restarted, if halted for any reason, using the appropriate shutdown zone clearance procedures as described in § 217.155(a)(2)(iii)(B) of this chapter.

(3) Pile driving:

(i) A minimum shutdown zone of 250 m radius shall be established around all impact pile driving activity.

(ii) Contractors shall reduce the power of impact hammers to minimum energy levels required to drive a pile.
(iii) Port Dolphin shall use a sound attenuation measure for impact driving of pilings. Prior to beginning construction, Port Dolphin must provide information to NMFS about the device to be used, including technical specifications. NMFS must approve use of the device before construction may begin. If a bubble curtain or similar measure is used, it shall distribute small air bubbles around 100 percent of the piling perimeter for the full depth of the water column. Any other attenuation measure (e.g., temporary sound attenuation pile) must provide 100 percent coverage in the water column for the full depth of the pile. Prior to any impact pile driving, a performance test of the sound attenuation device must be conducted in accordance with a NMFS-approved acoustic monitoring plan. If a bubble curtain or similar measure is utilized, the performance test shall confirm the calculated pressures and flow rates at each manifold ring.

(iv) Ramp-up:

(A) A ramp-up technique shall be used at the beginning of each day’s in-water pile driving activities and if pile driving resumes after it has ceased for more than 1 hour.

(B) If a vibratory driver is used, contractors shall be required to initiate sound from vibratory hammers for 15 seconds at reduced energy followed by a 1-minute waiting period. The procedure shall be repeated two additional times before full energy may be achieved.

(C) If a non-diesel impact hammer is used, contractors shall be required to provide an initial set of strikes from the impact hammer at reduced energy, followed by a 1-minute waiting period, then two subsequent sets.

(D) If a diesel impact hammer is used, contractors shall be required to turn on the sound attenuation device for 15 seconds prior to initiating pile driving.
(v) No impact pile driving shall occur when visibility in the shutdown zone is significantly limited, such as during heavy rain or fog.

(4) Additional mitigation measures:

(i) Use of lights during construction activities shall be limited to areas where work is actually occurring, and all other lights must be extinguished. Lights must be shielded such that they illuminate the deck and do not intentionally illuminate surrounding waters, to the extent possible.

(ii) Additional mitigation measures as contained in a LOA issued under §§ 216.106 and 217.157 of this chapter.

(b) [Reserved]

§ 217.156 Requirements for monitoring and reporting.

(a) Visual monitoring program:

(1) Port Dolphin shall employ, at minimum, two qualified PSOs during specified construction-related activities at each site where such activities are occurring. All PSOs must be selected in conformance with NMFS’ minimum qualifications, as described in the preamble to this rule, and must receive training sponsored by Port Dolphin, with topics to include, at minimum, implementation of the monitoring protocol, identification of marine mammals, and reporting requirements. The PSOs shall be responsible for visually locating marine mammals in the shutdown and disturbance zones and, to the extent possible, identifying the species. PSOs shall record, at minimum, the following information:

(i) A count of all marine mammals observed by species, sex, and age class, when possible.
(ii) Their location within the shutdown or disturbance zone, and their reaction (if any) to construction activities, including direction of movement.

(iii) Activity that is occurring at the time of observation, including time that activity begins and ends, any acoustic or visual disturbance, and time of the observation.

(iv) Environmental conditions, including wind speed, wind direction, visibility, and temperature.

(2) Port Dolphin shall sponsor a training course to designated crew members assigned to vessels associated with construction activities or support of operations 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 a LOA, sighting log requirements, provisions of NMFS Vessel Strike Avoidance Measures and Reporting for Mariners, and procedures for reporting injured or dead marine mammals.

(3) Monitoring shall be conducted using appropriate binoculars, such as 8x50 marine binoculars. When possible, digital video or still cameras shall also be used to document the behavior and response of marine mammals to construction activities or other disturbances.

(4) Each PSO shall have two-way communication capability for contact with other PSOs or work crews. PSOs shall implement shut-down or delay procedures when applicable by calling for the shut-down to the equipment/vessel operator.

(5) A GPS unit and/or appropriate range finding device shall be used for determining the observation location and distance to marine mammals, vessels, and construction equipment.

(b) Acoustic monitoring program:
(1) Acoustic monitoring must be conducted in accordance with the NMFS-approved acoustic monitoring plan.

(2) Port Dolphin shall provide NMFS with empirically measured source level data for designated sources of sound associated with Port construction and operation activities and shall verify distances to relevant sound thresholds. Measurements shall be carefully coordinated with sound-producing activities.

(3) [Reserved]

(c) Reporting – Port Dolphin must implement the following reporting requirements:

(1) A report of data collected during monitoring shall be submitted to NMFS following conclusion of construction activities. Subsequent reports concerning Port operations shall be submitted annually. The reports shall include:

   (i) All data required to be collected during monitoring, as described under § 217.156(a) of this chapter, including observation dates, times, and conditions;

   (ii) Correlations of observed behavior with activity type and received levels of sound, to the extent possible; and

   (iii) Estimations of total incidental take of marine mammals, extrapolated from observed incidental take.

(2) Port Dolphin shall also submit a report(s) concerning the results of all acoustic monitoring. Acoustic monitoring reports shall include information as described in a NMFS-approved acoustic monitoring plan.

(3) Reporting injured or dead marine mammals:

   (i) In the unanticipated event that the specified activity clearly causes the take of a marine mammal in a manner prohibited by a LOA (if issued), such as an injury (Level A harassment),
serious injury, or mortality, Port Dolphin shall immediately cease the specified activities and report the incident to the Chief of the Permits and Conservation Division, Office of Protected Resources, NMFS, and the Southeast Regional Stranding Coordinator, NMFS. The report must include the following information:

(A) Time and date of the incident;

(B) Description of the incident;

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

(D) Description of all marine mammal observations in the 24 hours preceding the incident;

(E) Species identification or description of the animal(s) involved;

(F) Fate of the animal(s); and

(G) Photographs or video footage of the animal(s).

Activities shall not resume until NMFS is able to review the circumstances of the prohibited take. NMFS will work with Port Dolphin to determine what measures are necessary to minimize the likelihood of further prohibited take and ensure MMPA compliance. Port Dolphin may not resume their activities until notified by NMFS.

(ii) In the event that Port Dolphin discovers an injured or dead marine mammal, and the lead PSO determines that the cause of the injury or death is unknown and the death is relatively recent (e.g., in less than a moderate state of decomposition), Port Dolphin shall immediately report the incident to the Chief of the Permits and Conservation Division, Office of Protected Resources, NMFS, and the Southeast Regional Stranding Coordinator, NMFS. The report must include the same information identified in § 217.156(b)(3)(i) of this chapter. Activities may
continue while NMFS reviews the circumstances of the incident. NMFS will work with Port Dolphin to determine whether additional mitigation measures or modifications to the activities are appropriate.

(iii) In the event that Port Dolphin discovers an injured or dead marine mammal, and the lead PSO determines that the injury or death is not associated with or related to the activities authorized in the LOA (e.g., previously wounded animal, carcass with moderate to advanced decomposition, or scavenger damage), Port Dolphin shall report the incident to the Chief of the Permits and Conservation Division, Office of Protected Resources, NMFS, and the Southeast Regional Stranding Coordinator, NMFS, within 24 hours of the discovery. Port Dolphin shall provide photographs or video footage or other documentation of the stranded animal sighting to NMFS.

(4) Annual reports. (i) A report summarizing all marine mammal monitoring and construction activities shall be submitted to NMFS, Office of Protected Resources, and NMFS, Southeast Regional Office (specific contact information to be provided in LOA) following the conclusion of construction activities. Thereafter, Port Dolphin shall submit annual reports summarizing operations activities.

(ii) The annual reports shall include data collected for each marine mammal species observed in the project area. 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 activities shall also be included in the reports. Additional information that shall be recorded during activities and contained in the reports include: date and time of marine mammal detections, weather conditions, species identification, approximate distance from the
source, and activity at the construction site when a marine mammal is sighted. Port Dolphin shall extrapolate observed incidences of take to provide an estimate of actual incidences of take.

(5) Five-year comprehensive report. (i) Port Dolphin shall submit a draft comprehensive final report to NMFS, Office of Protected Resources, and NMFS, Southeast Regional Office (specific contact information to be provided in LOA) 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 4.5 years of the activities conducted under the regulations in this subpart.

(ii) Port Dolphin 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, Southeast Regional Office (specific contact information to be provided in LOA).


(a) To incidentally take marine mammals pursuant to these regulations, Port Dolphin must apply for and obtain a LOA.

(b) A LOA, unless suspended or revoked, may be effective for a period of time not to exceed the expiration date of these regulations.

(c) If an LOA expires prior to the expiration date of these regulations, Port Dolphin must apply for and obtain a renewal of the LOA.

(d) In the event of projected changes to the activity or to mitigation and monitoring measures required by an LOA, Port Dolphin must apply for and obtain a modification of the LOA as described in § 217.158 of this chapter.

(e) The LOA shall set forth:
(1) Permissible methods of incidental taking;

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

(3) Requirements for monitoring and reporting.

(f) Issuance of the LOA shall be based on a determination that the level of taking will be consistent with the findings made for the total taking allowable under these regulations.

(g) Notice of issuance or denial of a LOA shall be published in the Federal Register within 30 days of a determination.

§ 217.158 Renewals and modifications of Letters of Authorization.

(a) A LOA issued under §§ 216.106 and 217.157 of this chapter for the activity identified in § 217.151(a) of this chapter shall be renewed or modified upon request by the applicant, provided that:

(1) The proposed specified activity and mitigation, monitoring, and reporting measures, as well as the anticipated impacts, are the same as those described and analyzed for these regulations (excluding changes made pursuant to the adaptive management provision in § 217.158(c)(1) of this chapter).

(2) NMFS determines that the mitigation, monitoring, and reporting measures required by the previous LOA under these regulations were implemented.

(b) For LOA modification or renewal requests by the applicant that include changes to the activity or the mitigation, monitoring, or reporting (excluding changes made pursuant to the adaptive management provision in § 217.158(c)(1) of this chapter) that do not change the findings made for the regulations or result in no more than a minor change in the total estimated number of takes (or distribution by species or years), NMFS may publish a notice of proposed
LOA in the Federal Register, including the associated analysis of the change, and solicit public comment before issuing the LOA.

(c) A LOA issued under §§ 216.106 and 217.157 of this chapter for the activity identified in § 217.151(a) of this chapter may be modified by NMFS under the following circumstances:

(1) Adaptive Management – NMFS may modify (including augment) the existing mitigation, monitoring, or reporting measures (after consulting with Port Dolphin regarding the practicability of the modifications) if doing so creates a reasonable likelihood of more effectively accomplishing the goals of the mitigation and monitoring set forth in the preamble for these regulations.

(i) Possible sources of data that could contribute to the decision to modify the mitigation, monitoring, or reporting measures in an LOA:

(A) Results from Port Dolphin’s monitoring from the previous year(s).

(B) Results from other marine mammal and/or sound research or studies.

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

(ii) If, through adaptive management, the modifications to the mitigation, monitoring, or reporting measures are substantial, NMFS will publish a notice of proposed LOA in the Federal Register and solicit public comment.

(2) Emergencies - If NMFS determines that an emergency exists that poses a significant risk to the well-being of the species or stocks of marine mammals specified in § 217.153(b) of this chapter, an LOA may be modified without prior notice or opportunity for public comment. Notice would be published in the Federal Register within 30 days of the action.