Letter of Authorization

The Alaska Gasline Development Corporation (AGDC) is hereby authorized under section 101(a)(5)(A) of the Marine Mammal Protection Act (MMPA; 16 U.S.C. 1371(a)(5)(A)) to take marine mammals incidental to the Alaska Liquefied Natural Gas (LNG) facilities construction activities in Cook Inlet, Alaska, subject to the provisions of the MMPA and the Regulations Governing Taking of Marine Mammals Incidental to AGDC’s Alaska LNG Project (50 CFR Part 217, Subpart E) (Regulations).

1. This Authorization is valid for the period January 1, 2021, through December 31, 2025.

2. This Authorization is valid only for take incidental to the specified LNG facilities construction activities in Cook Inlet, Alaska, and described in the preamble to the Regulations.

3. General Conditions

   (a) A copy of this LOA must be in the possession of AGDC, its designees, and work crew personnel operating under the authority of this LOA.

   (b) AGDC is hereby authorized to incidentally take marine mammals, by Level A and Level B harassment only, as specified in Table 1.

   (c) Taking of the species that exceeds the numbers and/or intensity indicated in 3(b) or any taking of any other species of marine mammal is prohibited and may result in the modification, suspension, or revocation of this LOA.

4. Mitigation – The Holder of this Authorization is required to implement the following mitigation measures:

   (a) Time and area restriction. AGDC must follow the following time and area restrictions.

      (1) In-water pile driving must occur only during daylight hours. Times for other construction activities, such as pipe laying, anchor handling, and dredging are not restricted.

      (2) Pile driving associated with the Mainline Material Offloading Facility (Mainline MOF) must not occur from June 1 to September 7 (pile driving can occur from September 8 to May 31).

      (3) Other than in-water sheet pile driving and pile removal, anchor handling, trenching, pipe laying, and vessel transits related to these activities, AGDC may
not engage in in-water sound-producing activities within 10 miles (16 km) of the mean higher high water (MHHW) line of the Susitna Delta (Beluga River to the Little Susitna River) between April 15 and October 15 which produce sound levels in excess of 120 dB rms re 1µPa @ 1 m.

(b) Establishment of monitoring and exclusion zones.

(1) For all relevant in-water construction activity, AGDC must designate Level A harassment zones with radial distances as identified in Table 2.

(2) For all relevant in-water construction activity, AGDC must designate Level B harassment zones with radial distances as identified in Table 2.

(3) For all in-water pile driving work, AGDC must implement an exclusion zone for each specific activity as identified in Table 3. If a marine mammal comes within or enters the exclusion zone, AGDC must cease all operations.

(4) A 2,900-m exclusion zone must be established for Cook Inlet beluga whale before pipe laying activity associated with anchor handling can occur.

(5) A minimum of 10-m exclusion zone must be established for in-water construction and heavy machinery not addressed elsewhere in this paragraph (b)(3).

(c) Monitoring of exclusion zones. Pile driving must only take place when the exclusion zones are visible and can be adequately monitored. If visibility degrades to where the entire exclusion zone cannot be effectively monitored during pile driving, AGDC may continue to drive the pile section that was being driven to its target depth, but may not drive additional sections of pile.

(d) Shutdown measures.

(1) AGDC must deploy protected species observers (PSOs) to monitor marine mammals during in-water pile driving and pipe laying activities.

(2) Monitoring must take place from 30 minutes prior to initiation of pile driving or pipe laying activities through 30 minutes post-completion of pile driving or pipe laying activities.

(i) For pile driving activity, pre-activity monitoring must be conducted for 30 minutes to confirm that the exclusion zone is clear of marine mammals, and pile driving may commence only if observers have declared the exclusion zone clear of marine mammals for that full duration of time. Monitoring must occur throughout the time required to drive a pile. A determination that the exclusion zone is clear must be made during a
period of good visibility (i.e., the entire exclusion zone and surrounding waters must be visible to the naked eye).

(ii) If marine mammals are found within the exclusion zone, pile driving of the segment must be delayed until they move out of the area. If a marine mammal is seen above water and then dives below, the contractor must wait 30 minutes for large cetaceans (humpback whale) and 15 minutes for small cetaceans (beluga and killer whales and harbor porpoise) and pinnipeds. If no marine mammals of that species are seen by the observer in that time it can be assumed that the animal has moved beyond the exclusion zone.

(iii) If pile driving of a segment ceases for 30 minutes or more and a marine mammal is sighted within the designated exclusion zone prior to commencement of pile driving, the observer(s) must notify the pile driving operator (or other authorized individual) immediately and continue to monitor the exclusion zone. Operations may not resume until the marine mammal has exited the exclusion zone or 30 minutes have elapsed for large cetaceans or 15 minutes have elapsed for small cetaceans and pinnipeds since the last sighting.

(3) If a marine mammal authorized to be taken by Level B harassment enters or approaches the exclusion zone, if a marine mammal not specified in the LOAs enters the Level B harassment zone, or if the take of a marine mammal species or stock has reached the take limits specified in any LOA issued under §§ 216.106 of this chapter and 217.46 and enters the Level B harassment zone, AGDC must halt all construction activities at that location. If construction is halted or delayed due to the presence of a marine mammal, the activity may not commence or resume until either the animal has voluntarily left and been visually confirmed beyond the shutdown or Level B harassment zone, whichever applicable, or 30 minutes have passed without re-detection of the animal if it is a larger cetacean (humpback whale), or 15 minutes have passed without re-detection of the animal if it is a small cetacean (beluga and killer whales and porpoises) or pinniped.

(e) Soft start.

(1) AGDC must implement soft start techniques for impact pile driving. AGDC must conduct an initial set of three strikes from the impact hammer at 40 percent energy, followed by a 30-second waiting period, then two subsequent three strike sets with associated 30-seconds waiting periods at the reduced energy.

(2) Soft start must be required for any impact driving, including at the beginning of the day, and at any time following a cessation of impact pile driving of 30 minutes or longer.
(f) Noise attenuation device. For pile-driving at the Mainline MOF near the Beluga River, and on the east side of Cook Inlet near Nikiski associated with the liquefaction facility, AGDC must deploy air bubble curtains around piles. If the sound source verification (SSV) measurements indicate that the best-performing bubble curtain configuration provides less than a 2 dB reduction in in-water sound beyond the bubble curtain, use of the bubble curtain may be discontinued.

(g) Vessel transit.

(1) Operators of vessels must, at all times, avoid approaching within 100 yards of marine mammals. Operators must observe direction of travel of marine mammals and attempt to maintain a distance of 100 yards or greater between the animal and the vessel by working to alter vessel course or velocity.

(2) The vessel operator must avoid placing the vessel between members of a group of marine mammals in a way that may cause separation of individuals in the group from other individuals in that group. A group is defined as being three or more whales observed within 500-m of one-another and displaying behaviors of directed or coordinated activity (e.g., migration or group feeding).

(3) If the vessel approaches within 1.6 km (1 mi) of one or more whales, the vessel operator must take reasonable precautions to avoid potential interaction with the whales by taking one or more of the following actions, as appropriate:

   (i) Steering to the rear of whale(s) to avoid causing changes in their direction of travel.

   (ii) Maintaining vessel speed of 10 knots (19 km/hr) or less when transiting to minimize the likelihood of lethal vessel strikes.

   (iii) Reducing vessel speed to less than 5 knots (9 km/hour) within 274 m (300 yards) of the whale(s).

(4) Project vessels must remain a minimum of 2.8 km (1.5 nm) seaward of the mean lower low water (MLLW) line between the Little Susitna River and -150.80 degrees west longitude to minimize the impacts of vessel sound and avoid strikes on Cook Inlet beluga whales between June 1 and September 7. The Susitna Delta Exclusion Zone is defined as the union of the areas defined by:

   (i) A 16-km (10-mile) buffer of the Beluga River thalweg seaward of the mean lower low water (MLLW) line;

   (ii) A 16-km (10-mile) buffer of the Little Susitna River thalweg seaward of the MLLW line;
(iii) A 16-km (10-mile) seaward buffer of the MLLW line between the Beluga River and Little Susitna River; and.

(iv) The buffer extends landward along the thalweg to include intertidal waters within rivers and streams up to their mean higher high water line (MHHW). The seaward boundary has been simplified so that it is defined by lines connecting readily discernable landmarks.

(5) For vessels operating in the Susitna Delta Exclusion Zone, the following must be implemented:

(i) All project vessels operating within the designated Susitna Delta area must maintain a speed over ground below 4 knots. PSOs must note the numbers, date, time, coordinates, and proximity to vessels of all belugas observed during operations, and report these observations to NMFS in monthly PSO reports.

(ii) Vessel crew must be trained to monitor for Endangered Species Act (ESA)-listed species prior to and during all vessel movements within the Susitna Delta Exclusion Zone. The vessel crew must report sightings to the PSO team for inclusion in the overall sighting database and reports.

(iii) Vessel operators must not move their vessels when they are unable to adequately observe the 100-m zone around vessels under power (in gear) due to darkness, fog, or other conditions, unless necessary for ensuring human safety.

5. Monitoring and Reporting – The holder of this Authorization is required to implement the following monitoring and reporting requirements:

(a) Marine mammal visual monitoring.

(1) Protected species observers. AGDC must employ trained protected species observers (PSO) to conduct marine mammal monitoring for its LNG facilities construction projects.

(i) The PSOs must observe and collect data on marine mammals in and around the project area for 30 minutes before, during, and for 30 minutes after all construction work. PSOs must have no other assigned tasks during monitoring periods, and must be placed at appropriate and safe vantage point(s) practicable to monitor for marine mammals and implement shutdown or delay procedures, when applicable, through communication with the equipment operator.

(2) Protected species observer qualifications. AGDC must adhere to the following observer qualifications:
(i) Independent PSOs (i.e., not construction personnel) who have no other assigned tasks during monitoring periods must be used;

(ii) If a team of three or more PSOs are on duty, a lead observer or monitoring coordinator must be designated. The lead observer must have prior experience working as a marine mammal observer during construction;

(iii) Other PSOs may substitute education (degree in biological science or related field) or training for experience;

(iv) AGDC must submit PSO CVs for approval by NMFS prior to the onset of pile driving;

(v) The PSOs must have the ability to conduct field observations and collect data according to assigned protocols;

(vi) The PSOs must have the experience or training in the field identification of marine mammals, including the identification of behaviors;

(vii) The PSOs must have sufficient training, orientation, or experience with the construction operation to provide for personal safety during observations;

(viii) The PSOs must have 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, times, and reason for implementation of mitigation (or why mitigation was not implemented when required); and marine mammal behavior; and

(ix) The PSOs must have the 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.

(3) Marine mammal monitoring protocols. AGDC must adhere to the following marine mammal monitoring protocols:

(i) For pile driving activities, a minimum of two PSOs must be on duty at all times;

(ii) For pile driving activities, PSOs must be stationed on a bluff with minimum height 500 feet above sea level immediately above the construction site;
(iii) For marine mammal monitoring during pipe laying activities, at least one PSO must be on the barge and on watch;

(iv) PSOs may not exceed 4 consecutive watch hours; must have a minimum two-hour break between watches; and may not exceed a combined watch schedule of more than 12 hours in a 24-hour period;

(v) PSOs must have no other construction-related tasks while conducting monitoring;

(vi) Monitoring must be conducted from 30 minutes prior to commencement of pile driving, throughout the time required to drive a pile, and for 30 minutes following the conclusion of pile driving;

(vii) Monitoring must be conducted from 30 minutes prior to commencement of pipe laying activity, throughout the time of pipe laying, and for 30 minutes following the conclusion of pipe laying for the segment;

(viii) During all observation periods, PSOs must use high-magnification (25X), as well as standard handheld (7X) binoculars, and the naked eye to search continuously for marine mammals;

(ix) Monitoring distances must be measured with range finders. Distances to animals must be based on the best estimate of the PSO, relative to known distances to objects in the vicinity of the PSO; and

(x) Bearings to animals must be determined using a compass.

(4) Marine mammal monitoring data collection. PSOs must collect the following information during marine mammal monitoring:

(i) Date and time that monitored activity begins and ends for each day conducted (monitoring period);

(ii) Construction activities occurring during each daily observation period, including how many and what type of piles driven and distances covered during pipe laying;

(iii) Deviation from initial proposal in pile numbers, pile types, average driving times, and pipe laying distances, etc.;

(iv) Weather parameters in each monitoring period (e.g., wind speed, percent cloud cover, visibility);
(v) Water conditions in each monitoring period (e.g., sea state, tide state);

(vi) For each marine mammal sighting:

(A) Species, numbers, and, if possible, sex and age class of marine mammals;

(B) Description of any observable marine mammal behavior patterns, including bearing and direction of travel and distance from pile driving and pipe laying activities, and notable changes in patterns;

(C) Location and distance from pile driving and pipe laying activities to marine mammals and distance from the marine mammals to the observation point; and

(D) Estimated amount of time that the animals remained in the Level A and/or Level B harassment zones;

(vii) Description of implementation of mitigation measures within each monitoring period (e.g., shutdown or delay); and

(viii) Other human activity in the area within each monitoring period.

(b) Acoustic monitoring. AGDC must conduct a sound source verification (SSV) in accordance with the Sound Source Verification Plan, dated February 2020, at the beginning of the pile driving to characterize the sound levels associated with different pile and hammer types, as well as to establish the marine mammal monitoring and mitigation zones.

(1) A minimum of 2 piles of each type and size must be measured.

(2) The following data, at minimum, shall be collected during acoustic monitoring and reported:

(i) Hydrophone equipment and methods: recording device, sampling rate, distance from the pile where recordings were made; depth of recording device(s);

(ii) Type of pile being driven and method of driving during recordings; and

(iii) Mean, median, and maximum sound levels (dB re: 1µPa): cumulative sound exposure level (SELCum), peak sound pressure level (SPLPeak), root mean square sound pressure level (SPLrms), and single-strike sound exposure level (SELS-s).
(3) An SSV report must be submitted to NMFS within 72 hours after field measurements for approval of the results.

(4) The results of the SSV report may be used to adjust the extent of Level A and Level B harassment zones in-water pile driving after receiving approval from NMFS.

(c) Reporting measures

(1) Notification. AGDC must notify NMFS 48 hours prior to the start of each activity in Cook Inlet that may cause harassment of marine mammals. If there is a delay in activity, AGDC must also notify NMFS as soon as practicable.

(2) Monthly report. AGDC must submit monthly reports via email to NMFS Office of Protected Resources (OPR) and Alaska Regional Office (AKRO) for all months with project activities by the 15th of the month following the monthly reporting period. The monthly report must contain and summarize the following information:

   (i) Dates, times, locations, heading, speed, weather, sea conditions (including Beaufort sea state and wind force), and a list of all in-water sound-producing activities occurring concurrent with marine mammal observations;

   (ii) Species, number, location, distance from the vessel, and behavior of all observed marine mammals, as well as associated project activity (e.g., number of power-downs and shutdowns), observed throughout all monitoring activities;

   (iii) Observation data in paragraphs (a) and (b) of this section must be provided in digital spreadsheet format that can be queried;

   (iv) An estimate of the number of animals (by species) exposed to sound at received levels greater than or equal to either the Level A or Level B harassment thresholds, with a discussion the time spent above those received levels and of any specific behaviors those individuals exhibited;

   (v) If the extent of Level B harassment zone is beyond visual observation, AGDC must also include an appropriate adjustment to estimate the total numbers of marine mammals taken based on the portion of the areas that are monitored; and

   (vi) A description of the implementation and effectiveness of the terms and conditions of the Biological Opinion’s Incidental Take Statement and mitigation and monitoring measures of the LOA.
(3) Marine mammal tally numbers.

(i) AGDC must keep a tally of the number of marine mammals observed within the applicable harassment zones, and alert NMFS when the authorized annual take limit is close to met, specifically when observed annual take of any species or stock reaches 90% of the authorized annual take under this LOA; and

(ii) AGDC must keep a tally of the number of marine mammal that are sighted during the pile driving and pipe laying activities, regardless of whether the animals are within the harassment zone.

(4) Beluga whale takes. AGDC must immediately notify NMFS if the number of Cook Inlet beluga observed with the harassment zones reaches 80% of the authorized takes in any given calendar year during which take is authorized.

(5) Annual report.

(i) AGDC must submit a comprehensive annual report to NMFS within 90 calendar days of the cessation of in-water work each year for review. The report must synthesize all sighting data and effort during each activity for each year.

(ii) NMFS will provide comments within 30 days after receiving annual reports, and AGDC must address the comments and submit revisions within 30 days after receiving NMFS comments.

(iii) If no comments are received from the NMFS within 30 days, the annual report is considered completed.

(iv) The report must include the following information:

(A) Summaries of monitoring effort including total hours, observation rate by species and marine mammal distribution through the study period, accounting for sea state and other factors affecting visibility and detectability of marine mammals.

(B) Analyses of the effects of various factors that may have influenced detectability of marine mammals (e.g., sea state, number of observers, fog/glare, and other factors as determined by the PSOs).

(C) Species composition, occurrence, and distribution of marine mammal sightings, including date, water depth, numbers,
age/size/gender categories (if determinable), group sizes, and ice cover.

(D) Marine mammal observation data with a digital record of observation data provided in digital spreadsheet format that can be queried.

(E) Summary of implemented mitigation measures (i.e., shutdowns and delays).

(F) Number of marine mammals during periods with and without project activities (and other variables that could affect detectability), such as:

1. Initial sighting distances versus project activity at the time of sighting;
2. Closest point of approach versus project activity;
3. Observed behaviors and types of movements versus project activity;
4. Numbers of sightings/individuals seen versus project activity;
5. Distribution around the source vessels versus project activity; and
6. Numbers of animals detected in the exclusion zone.

(G) Analyses of the effects of project activities on listed marine mammals.

(6) Final report.

(i) AGDC must provide NMFS, within 90 days of project completion at the end of the five-year period, a report of all parameters listed in the monthly and annual report requirements in paragraph (c) of this section, noting also all operational shutdowns or delays necessitated due to the proximity of marine mammals, and a summary of overall impact assessment over the course of the five-year period.

(ii) NMFS will provide comments within 30 days after receiving this report, and AGDC must address the comments and submit revisions within 30 days after receiving NMFS comments.
(iii) If no comments are received from the NMFS within 30 days, the final report is considered as final.

(iv) The final report must include the summary of all SSV measurements conducted over the course of the five-year period, with all parameters listed in paragraph (b) of this section.

(7) Reporting of injured or dead marine mammals.

(i) In the unanticipated event that the construction or demolition activities clearly cause the take of a marine mammal in a prohibited manner, such as an injury, serious injury, or mortality, AGDC must immediately cease operations with the potential to impact marine mammals in the vicinity and immediately report the incident to the NMFS Office of Protected Resources, NMFS Alaska Regional Office, and the Alaska Region Stranding Coordinators. The report must include the following information:

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

(B) Description of the incident;

(C) Status of all sound source use in the 24 hours preceding the incident;

(D) Environmental conditions (e.g., wind speed and direction, sea state, cloud cover, visibility, and water depth);

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

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

(G) The fate of the animal(s); and

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

(ii) Activities must not resume until NMFS is able to review the circumstances of the prohibited take. NMFS must work with AGDC to determine what is necessary to minimize the likelihood of further prohibited take and ensure Marine Mammal Protection Act (MMPA) compliance. AGDC may not resume its activities until notified by NMFS via letter, email, or telephone.
(iii) In the event that AGDC 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 (i.e., in less than a moderate state of decomposition as described in paragraph (c)(7)(iv) of this section), AGDC must immediately report the incident to the NMFS Office of Protected Resources, NMFS Alaska Regional Office, and the Alaska Regional Stranding Coordinators. The report must include the same information identified in paragraph (b)(3)(i) of this section. Activities may continue while NMFS reviews the circumstances of the incident. NMFS will work with AGDC to determine whether modifications in the activities are appropriate.

(iv) In the event that AGDC 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), AGDC must report the incident to the NMFS Office of Protected Resources, NMFS Alaska Regional Office, and the Alaska Regional Stranding Coordinators, within 48 hours of the discovery. AGDC must provide photographs or video footage (if available) or other documentation of the stranded animal sighting to NMFS and the Marine Mammal Stranding Network. AGDC may continue its operations under such a case.

6. This Authorization may be modified, suspended, or withdrawn if the Holder fails to abide by the conditions prescribed herein or if NMFS determines that the authorized taking is having more than a negligible impact on the species or stock of affected marine mammals.
Table 1. Authorized numbers of take by Level A and Level B harassment.

<table>
<thead>
<tr>
<th>Year</th>
<th>Species</th>
<th>Level A harassment</th>
<th>Level B harassment</th>
<th>Total authorized take</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Humpback whale</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Killer whale</td>
<td>0</td>
<td>4</td>
<td>4</td>
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<tr>
<td></td>
<td>Beluga whale</td>
<td>0</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>Harbor porpoise</td>
<td>0</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Harbor seal</td>
<td>1</td>
<td>316</td>
<td>317</td>
</tr>
<tr>
<td>2</td>
<td>Humpback whale</td>
<td>0</td>
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<td>4</td>
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<tr>
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<td>4</td>
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<td></td>
<td>Beluga whale</td>
<td>0</td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>Harbor porpoise</td>
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<td>12</td>
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<td>1084</td>
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<td>Beluga whale</td>
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<td>12</td>
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<td>Harbor porpoise</td>
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<td>Harbor porpoise</td>
<td>5</td>
<td>5</td>
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<tr>
<td></td>
<td>Harbor seal</td>
<td>45</td>
<td>190</td>
<td>235</td>
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Table 2. Level A and Level B harassment distances.

<table>
<thead>
<tr>
<th>Activity Description</th>
<th>Level A harassment distance (m)</th>
<th>Level B harassment distance (m)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>LF*</td>
<td>MF*</td>
</tr>
<tr>
<td>Impact drive of 48-inch pipe piles at PLF</td>
<td>3,175</td>
<td>211</td>
</tr>
<tr>
<td>Impact drive of 60-inch pipe piles at PLF</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vibratory drive of sheet piles at temporary MOF</td>
<td>238</td>
<td>NA</td>
</tr>
<tr>
<td>Impact drive of 24-inch pipe piles at temporary MOF</td>
<td>1,639</td>
<td>238</td>
</tr>
<tr>
<td>Impact drive of 48-inch pipe piles at temporary MOF</td>
<td>3,239</td>
<td>238</td>
</tr>
</tbody>
</table>
Vibratory drive of all size pipe piles at temporary MOF  |  285  |  NA  |  NA  |  246  |  5,584  
Vibratory drive of sheet piles at Mainline MOF  |  244  |  NA  |  NA  |  212  |  3,179  
Impact drive of sheet piles at Mainline MOF  |  1,161 |  248 |  896 |  617  |  764   
Anchor handling location 1  |  NA  |  NA  |  NA  |  NA  |  1,896   
Anchor handling location 2  |  NA  |  NA  |  NA  |  NA  |  2,855   
Anchor handling location 3  |  NA  |  NA  |  NA  |  NA  |  2,446   
Anchor handling location 4  |  NA  |  NA  |  NA  |  NA  |  2,349   
Anchor handling location 5  |  NA  |  NA  |  NA  |  NA  |  2,195   

*LF: low-frequency cetacean; MF: mid-frequency cetacean; HF: high-frequency cetacean; PW: phocid pinniped.

Table 3. Marine mammal exclusion zones.

<table>
<thead>
<tr>
<th>Pile driving activities</th>
<th>Exclusion distances (m)</th>
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<tbody>
<tr>
<td></td>
<td>Humpback whale</td>
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<tr>
<td>Impact pile driving of 48- and 60-inch piles at PLF</td>
<td>3,200</td>
</tr>
<tr>
<td>Impact pile driving of 24- and 48-inch piles at temporary MOF</td>
<td>3,300</td>
</tr>
<tr>
<td>Vibratory pile driving of all types and sizes of piles at temporary MOF</td>
<td>300</td>
</tr>
<tr>
<td>Vibratory pile driving of sheet piles at Mainline MOF</td>
<td>300</td>
</tr>
<tr>
<td>Impact pile driving of sheet piles at Mainline MOF</td>
<td>1,200</td>
</tr>
<tr>
<td>Anchor handling</td>
<td>NA</td>
</tr>
</tbody>
</table>