



INCIDENTAL HARASSMENT AUTHORIZATION

The City and County of San Francisco is hereby authorized under section 101(a)(5)(D) of the Marine Mammal Protection Act (MMPA; 16 U.S.C. 1371(a)(5)(D)) to harass marine mammals incidental to the Treasure Island Ferry Dock Project in San Francisco, CA, when adhering to the following terms and conditions.

1. This Incidental Harassment Authorization (IHA) is valid from for one year from July 15, 2021 through July 14, 2022.
2. This IHA is valid only for in water construction activities associated with the Treasure Island Ferry Dock Project in San Francisco, CA.
3. General Conditions
 - (a) A copy of this IHA must be in the possession of the city and county of San Francisco, its designees, work crew personnel, and Protected Species Observers (PSOs) operating under the authority of this IHA.
 - (b) The species authorized for taking are harbor seals (*Phoca vitulina*), California sea lions (*Zalophus californianus*), harbor porpoises (*Phocoena phocoena*), gray whales (*Eschrichtius robustus*), bottlenose dolphins (*Tursiops truncatus*), elephant seals (*Mirounga angustirostris*), and Northern fur seals (*Callorhinus ursinus*).
 - (c) The taking, by Level B harassment, is limited to the species listed in condition 3(b). Table 1 provides the authorized number of takes per species and stock.
 - (d) The taking, by Level A harassment, serious injury, or death of any of species listed in condition 3(b) of this IHA is prohibited.
 - (e) The taking, by Level A harassment, Level B harassment, serious injury, or death, of marine mammal species not identified in condition 3(b) is prohibited.
4. Mitigation Measures

The holder of this IHA is required to implement the following mitigation measures:

 - (a) For in-water construction, heavy machinery activities other than pile removal (e.g., use of barge-mounted excavators, or dredging), if a marine mammal comes



within 10 m, San Francisco must cease operations and reduce vessel speed to the minimum level required to maintain steerage and safe working conditions.

- (b) San Francisco is required to conduct briefings for construction supervisors and crews, the monitoring team, and San Francisco staff prior to the start of all pile removal activity, and when new personnel join the work, in order to explain responsibilities, communication procedures, the marine mammal monitoring protocol, and operational procedures.
- (c) San Francisco is required to employ up to 2 PSOs per the Monitoring Measures described in section 5 of this IHA and the Monitoring Section of the application.
- (d) Marine mammal monitoring within the zones identified in Table 2 must take place from 30 minutes prior to initiation of pile removal activity through 30 minutes post-completion of pile removal activity. Pile removal may commence when observers have declared the shutdown zone (Table 3) clear of marine mammals. In the event of a delay or shutdown of activity resulting from marine mammals in the shutdown zone (Table 3), their behavior must be monitored and documented until they leave of their own volition, at which point the activity may begin.
- (e) If a marine mammal is entering or is observed within an established shutdown zone (Table 3), pile removal must be halted or delayed. Pile removal may not commence or resume until either the animal has voluntarily left and been visually confirmed beyond the shutdown zone or 15 minutes have passed without subsequent detections of marine mammals.
- (f) Should environmental conditions deteriorate such that marine mammals within the entire shutdown zone would not be visible (e.g., fog, heavy rain), pile removal must be delayed until the PSO is confident marine mammals within the shutdown zone could be detected.
- (g) If a species for which authorization has not been granted, or a species for which authorization has been granted but the authorized takes are met, is observed approaching or within the monitoring zone (Table 2), pile removal activities must shut down immediately using delay and shut-down procedures. Activities must not resume until the animal has been confirmed to have left the area or the observation time period, as indicated in condition 4(b) above, has elapsed.
- (h) Pile removal activities must only be conducted during daylight hours.

5. Monitoring Measures

The holder of this IHA is required to abide by the following marine mammal and acoustic monitoring measures:

- (a) Marine mammal monitoring must be conducted in accordance with the Monitoring Measures described in this section of the IHA and the Monitoring Section of the application.
- (b) Marine mammal monitoring during pile removal must be conducted by NMFS-approved PSOs in a manner consistent with the following:
 - i. Independent PSOs (*i.e.*, not construction personnel) who have no other assigned tasks during monitoring periods must be used.
 - ii. Other PSOs may substitute education (degree in biological science or related field) or training for experience.
 - iii. San Francisco must submit PSO CVs for approval by NMFS prior to the onset of pile driving.
 - iv. PSO locations are at: (1) the pile driving site(s) or best vantage point practicable to monitor the shutdown zones; and (2) for the large Level B harassment zone associated with the 36-inch pipe piles, a second PSO will be placed near Pier 33 in San Francisco.

6. Reporting

The holder of this IHA is required to:

- (a) Submit a draft report on all marine mammal monitoring conducted under the IHA within ninety calendar days of the completion of marine mammal and acoustic monitoring or sixty days prior to the issuance of any subsequent IHA for this project, whichever comes first. A final report shall be prepared and submitted within thirty days following resolution of comments on the draft report from NMFS.
- (b) The marine mammal report must contain the informational elements described in the Monitoring Measures described in section 5 of this IHA, including, but not limited to:
 - i. Dates and times (begin and end) of all marine mammal monitoring.
 - ii. Construction activities occurring during each daily observation period, including how many and what type of piles were removed and by what method (*i.e.*, vibratory).
 - iii. Weather parameters and water conditions during each monitoring period (*e.g.*, wind speed, percent cover, visibility, sea state).

- iv. The number of marine mammals observed, by species, relative to the pile location and if pile removal was occurring at time of sighting.
- v. Age and sex class, if possible, of all marine mammals observed.
- vi. PSO locations during marine mammal monitoring.
- vii. Distances and bearings of each marine mammal observed to the pile being removed for each sighting (if pile removal was occurring at time of sighting).
- viii. Description of any marine mammal behavior patterns during observation, including direction of travel and estimated time spent within the Level A and Level B harassment zones while the source was active.
- ix. Number of individuals of each species (differentiated by month as appropriate) detected within the monitoring zone, and estimates of number of marine mammals taken, by species (a correction factor may be applied to total take numbers, as appropriate).
- x. Detailed information about any implementation of any mitigation triggered (e.g., shutdowns and delays), a description of specific actions that ensued, and resulting behavior of the animal, if any.
- xi. Description of attempts to distinguish between the number of individual animals taken and the number of incidences of take, such as ability to track groups or individuals.
- xii. An extrapolation of the estimated takes by Level B harassment based on the number of observed exposures within the Level B harassment zone and the percentage of the Level B harassment zone that was not visible.
- xiii. Submit all PSO datasheets and/or raw sighting data (in a separate file from the Final Report referenced immediately above).

(c) Reporting Injured or Dead Marine Mammals

In the event that personnel involved in the construction activities discover an injured or dead marine mammal, the IHA-holder shall report the incident to the Office of Protected Resources (OPR) (301-427-8401), NMFS and to the West Coast regional stranding coordinator (562-980-3264) as soon as feasible. If the death or injury was clearly caused by the specified activity, the IHA-holder must immediately cease the specified activities until NMFS is able to review the circumstances of the incident and determine what, if any, additional measures are appropriate to ensure compliance with the terms of the IHA. The IHA-holder must not resume their activities until notified by NMFS.

The report must include the following information:

- i. Time, date, and location (latitude/longitude) of the first discovery (and updated location information if known and applicable);
 - ii. Species identification (if known) or description of the animal(s) involved;
 - iii. Condition of the animal(s) (including carcass condition if the animal is dead);
 - iv. Observed behaviors of the animal(s), if alive;
 - v. If available, photographs or video footage of the animal(s); and
 - vi. General circumstances under which the animal was discovered.
7. This Authorization may be modified, suspended or withdrawn if the holder fails to abide by the conditions prescribed herein, or if NMFS determines the authorized taking is having more than a negligible impact on the species or stock of affected marine mammals.
8. Renewals

On a case-by-case basis, NMFS may issue a one-time, one-year Renewal IHA following notice to the public providing an additional 15 days for public comments when (1) up to another year of identical, or nearly identical, activities are planned or (2) the specified activities would not be completed by the time this IHA expires and a Renewal would allow for completion of the activities, provided all of the following conditions are met:

- (a) A request for renewal is received no later than 60 days prior to the needed Renewal IHA effective date (the Renewal IHA expiration date cannot extend beyond one year from expiration of this IHA).
- (b) The request for renewal must include the following:
 - i. An explanation that the activities to be conducted under the requested Renewal IHA are identical to the activities analyzed for this IHA, are a subset of the activities, or include changes so minor (e.g., reduction in pile size) that the changes do not affect the previous analyses, mitigation and monitoring requirements, or take estimates (with the exception of reducing the type or amount of take).

- ii. A preliminary monitoring report showing the results of the required monitoring to date and an explanation showing that the monitoring results do not indicate impacts of a scale or nature not previously analyzed or authorized.

- (c) Upon review of the request for Renewal, the status of the affected species or stocks, and any other pertinent information, NMFS determines that there are no more than minor changes in the activities, the mitigation and monitoring measures will remain the same and appropriate, and the findings made in support of this IHA remain valid.

Catherine Marzin,
Acting Director, Office of Protected Resources
National Marine Fisheries Service

Date

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Table 1. Authorized Amount of Taking, by Level A harassment and Level B harassment, by species and stock.

Species	Authorized Take	
	Level B	Level A
Harbor seal (<i>Phoca vitulina</i>) California Stock	1,062	0
Harbor porpoise (<i>Phocoena phocoena</i>) San Francisco – Russian River Stock	46	0
California sea lion (<i>Zalophus californianus</i>) U.S. Stock	43	0
Gray whale (<i>Eschrichtius robustus</i>) Eastern North Pacific Stock	4	0
Common bottlenose dolphin (<i>Tursiops truncatus</i>) California Coastal Stock	9	0
Northern elephant seal (<i>Mirounga angustirostris</i>) California breeding Stock	4	0
Northern fur seal (<i>Callorhinus ursinus</i>) California and Eastern North Pacific Stocks	2	0

Table 2. Level B Harassment Zones by Pile Driving Scenario.

Pile Type	Level B distance in meters
14-inch H	1000
36-inch Steel	21,545

Table 3. Shut-down Zones (in meters) by Marine Mammal Hearing Group and Pile Driving Scenario.

Pile Type	Low-Frequency Cetaceans	Mid-Frequency Cetaceans	High-Frequency Cetaceans	Phocid Pinnipeds	Otariid Pinnipeds
14-inch H	10	10	10	10	10
36-inch Steel	20	10	20	10	10