



MARINE MAMMAL COMMISSION

6 October 2014

Ms. Jolie Harrison, Chief
Permits and Conservation Division
National Marine Fisheries Service
Office of Protected Resources
1315 East-West Highway
Silver Spring, MD 20910

Dear Ms. Harrison:

The Marine Mammal Commission (the Commission), in consultation with its Committee of Scientific Advisors on Marine Mammals, has reviewed the San Francisco Bay Area Water Emergency Transportation Authority's (SFBAWETA) application seeking authorization under section 101(a)(5)(D) of the Marine Mammal Protection Act to take marine mammals by harassment. The taking would be incidental to pile driving and removal in association with construction of its Central Bay Operations and Maintenance Facility in Alameda, California. The Commission also has reviewed the National Marine Fisheries Service's (NMFS) 17 September 2014 notice (79 Fed. Reg. 55749) announcing receipt of the application and proposing to issue the authorization, subject to certain conditions.

Background

SFBAWETA plans to remove and install piles during construction of its new operations and maintenance facility. Operators would remove up to 35 12-in concrete piles using a vibratory hammer or direct pull. They also would install up to 61 18- to 30-in steel piles using an impact hammer and 24 18-in plastic piles using a vibratory hammer. In-water activities would occur during a 12-day period from 1 August–30 November 2015 and would be limited to daylight hours.

NMFS preliminarily has determined that, at most, the proposed activities temporarily would modify the behavior of small numbers of harbor seals and California sea lions. It also anticipates that any impact on the affected species and stocks would be negligible. NMFS does not anticipate any take of marine mammals by death or serious injury and believes that the potential for temporary or permanent hearing impairment would be at the least practicable level because of the proposed mitigation and monitoring measures. Those measures include—

- conducting empirical in-water measurements of the impact driving of steel piles and the vibratory driving of plastic piles and adjusting the exclusion and disturbance zones (based on Level A and B harassment, respectively), if necessary;
- using a sound attenuation device (i.e., bubble curtain) during impact pile driving;
- using soft-start, delay, and shut-down procedures;
- using one land-based protected species observer to monitor the harassment zones for 30 minutes before, during, and for 30 minutes after pile-driving and -removal activities;

- reporting injured and dead marine mammals to NMFS and the local stranding network using NMFS's phased approach and suspending activities, if appropriate; and
- submitting weekly monitoring reports and a final report.

In-situ sound measurements and in-season zone adjustments

Accurate characterization of the sizes of the exclusion and disturbance zones is critical for implementing mitigation measures and estimating the numbers of marine mammals taken. In the past, the Commission has recommended a rapid analysis of the in-situ sound source verification data to ensure that exclusion zones are the appropriate size. However, in at least one instance, rapid turnaround has resulted in errors, as occurred with ION's measurements of source levels during its 2012 in-ice survey. In that case, the size of the exclusion zone was decreased from the modeled zone using erroneous field-report results. The error was not discovered until the end of the field season when it was determined that the in-season adjustments resulted in unauthorized Level A harassment takes of bowhead whales. In addition, for the proposed authorization, SFBAWETA would be conducting acoustic monitoring for only the first pile of each type/size (e.g., once for impact driving of the 30-in steel pile¹, once for vibratory driving of the 18-in plastic pile). Variability in the source levels produced by the same type/size of pile in the same environment can be quite large. Since the purpose of verification is to ensure protection of marine mammals and source level variability would not be determined because data for only one pile of each type/size would be collected for the proposed authorization, NMFS should allow only for in-season increases (not decreases) in the sizes of exclusion and/or disturbance zones. Therefore, the Commission recommends that NMFS only authorize in-season adjustments in the sizes of the exclusion and/or disturbance zones if the size(s) of the estimated zones are determined to be too small.

The Commission hopes its comments are useful. Please contact me if you have questions regarding the Commission's recommendation.

Sincerely,



Rebecca J. Lent, Ph.D.
Executive Director

¹ SFBAWETA may not conduct measurements for smaller size piles of the same type and, thus, will use the zone based on the larger pile size.