



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southwest Region
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JUL 15 2008

U.S. Army Corps of Engineers
Los Angeles District
Regulatory Division
ATTN: CESPL-RG-2004-00917-SDM
P.O. Box 532711
Los Angeles, California 90053-2325

Dear Colonel Magness:

NOAA's National Marine Fisheries Service (NMFS) has reviewed the Draft Supplemental Environmental Impact Statement (SEIS) for the Port of Los Angeles's (POLA) Pacific L.A. Marine Terminal Pier 400, Berth 408 Project (Project). NMFS offers the following comments pursuant to section 305(b)(4)(A) of the Magnuson-Stevens Fishery Conservation and Management Act (MSA), Marine Mammal and Protection Act (MMPA), and the Fish and Wildlife Coordination Act.

Proposed Project

The proposed Project would include construction and operation of a new marine terminal at Berth 408 on Pier 400 (Marine Terminal), new tank farm facilities with a total of 4.0 million barrels of capacity, and pipelines connecting the Marine Terminal and the tank farms to local refineries.

Steel and concrete piles would be required to support in-water components of the berth platform. At the current design stage it is not certain whether the mooring dolphins would require steel or pre-stressed concrete piles. If steel piles are used for the mooring dolphins, proposed Project components would require approximately 150 piles in water (110 steel and 40 concrete). If concrete piles are used for the mooring dolphins, proposed Project components would require approximately 258 piles in water (74 steel and 184 concrete). The concrete piles would be 24-inch diameter, and the steel piles would be a combination of 48-inch and 54-inch diameter.

Magnuson-Stevens Fishery Conservation and Management Act Comments

Action Area

The proposed project occurs in essential fish habitat (EFH) for various federally managed fish species within the Pacific Groundfish and Coastal Pelagics Fishery Management Plans (FMPs). In addition, the project occurs within estuarine habitat, which is considered a habitat area of particular concern (HAPC) for various federally managed



fish species within the Pacific Groundfish FMP. HAPC are described in the regulations as subsets of EFH which are rare, particularly susceptible to human-induced degradation, especially ecologically important, or located in an environmentally stressed area. Designated HAPC are not afforded any additional regulatory protection under MSA; however, federally permitted projects with potential adverse impacts to HAPC will be more carefully scrutinized during the consultation process.

Effects of the Action

The construction activities associated with this project may generate significant underwater noise. For example, pile driving can generate intense underwater sound pressure waves that may adversely affect the ecological functioning of EFH. These pressure waves have been shown to injure and kill fish. Injuries associated directly with pile driving are poorly studied, but include rupture of the swimbladder and internal hemorrhaging. Sound pressure levels (SPL) 100 decibels (dB) above the threshold for hearing are thought to be sufficient to damage the auditory system in many fishes. Short-term exposure to peak SPL above 190 dB (re: 1 μ Pa) are thought to injure physical harm on fish. However, 155 dB (re: 1 μ Pa) may be sufficient to temporarily stun small fish. Of the reported fish kills associated with pile driving, all have occurred during use of an impact hammer on hollow steel piles. Of particular concern in this project is the driving of a large number of 48- to 54-inch steel piles. The SEIS concludes that sound pressure waves caused by the steel pile driving could affect fish near the piles with mortality of some individuals.

Potential impacts to EFH may also occur in the event of an accidental oil spill. If a project-related oil spill occurs and has the potential to enter the Pier 300 Shallow Water Habitat, booms are proposed to be deployed to prevent oil from entering this important habitat area.

EFH Conservation Recommendations

As described in the above effects analysis, NMFS has determined that the proposed action would adversely affect EFH for various federally managed fish species within the Coastal Pelagics Species and the Pacific Coast Groundfish FMPs. Therefore, pursuant to section 305(b)(4)(A) of the MSA, NMFS offers the following EFH conservation recommendations to avoid, minimize, mitigate, or otherwise offset the adverse effects to EFH.

1. The POLA should utilize a vibratory hammer when driving the steel piles. If an impact hammer is required for reasons of seismic stability or substrate type, it is recommended that the steel piles be driven as deep as possible with a vibratory hammer prior to use of the impact hammer. Driving hollow steel piles with impact hammers produce intense, sharp spikes of sound which can easily reach levels that injure fish. Vibratory hammers, on the other hand, produce sounds of lower intensity, with a rapid repetition rate. Thus, utilizing a vibratory hammer will minimize the adverse effects to EFH associated with underwater noise.

2. The POLA should monitor peak SPLs during pile driving to ensure that they do not exceed the 190 dB re: 1 μ Pa threshold for injury to fish. Results from this monitoring along with any observed fish kills should be reported to NMFS.

Statutory Response Requirement

Please be advised that regulations at section 305(b)(4)(B) of the MSA and 50 CFR 600.920(k) of the MSA require your office to provide a written response to this letter within 30 days of its receipt and at least 10 days prior to final approval of the action. A preliminary response is acceptable if final action cannot be completed within 30 days. Your final response must include a description of measures to be required to avoid, mitigate, or offset the adverse impacts of the activity. If your response is inconsistent with our EFH conservation recommendations, you must provide an explanation of the reasons for not implementing those recommendations. The reasons must include the scientific justification for any disagreements over the anticipated effects of the proposed action and the measures needed to avoid, minimize, mitigate, or offset such effects.

Supplemental Consultation

Pursuant to 50 CFR 600.920(l), the Corps must reinitiate EFH consultation with NMFS if the proposed action is substantially revised in a way that may adversely affect EFH, or if new information becomes available that affects the basis for NMFS' EFH conservation recommendations.

Marine Mammal Protection Act Comments

Marine mammals likely to be in the immediate project area are the California sea lion (*Zalophus californianus*) and the Pacific harbor seal (*Phoca vitulina richardii*). These species are protected under the MMPA. See 16 U.S.C. § 1361 *et seq.* Under the MMPA, it is generally illegal to "take" a marine mammal without prior authorization from NMFS. "Take" is defined as harassing, hunting, capturing, or killing, or attempting to harass, hunt, capture, or kill any marine mammal. Except with respect to military readiness activities and certain scientific research conducted by, or on behalf of, the Federal Government, "harassment" is defined as any act of pursuit, torment, or annoyance which has the potential to injure a marine mammal in the wild, or has the potential to disturb a marine mammal in the wild by causing disruption of behavioral patterns, including, but not limited to, migration, breathing, nursing, breeding, feeding, or sheltering.

The SEIS mentions possible impacts to marine mammals from underwater sound from pile-driving of steel piles. Specifically, the SEIS concludes that a few individual harbor seals could be affected, but the number would be low since few are present and the effect would be of short duration. NMFS recommends including more detailed information on possible impacts to marine mammals from underwater sound in the final EIS. Specifically, additional information related to underwater sound pressure levels

associated with construction and operation, the timing, and/or the duration of the activity should be provided.

Sounds introduced into the sea by man-made devices could have a deleterious effect on marine mammals by causing stress or injury, interfering with communication and predator/prey detection, and changing behavior. Acoustic exposure to loud sounds, such as those produced by pile-driving activities, may result in a temporary or permanent loss of hearing (termed a temporary (TTS) or permanent (PTS) threshold shift) depending upon the location of the marine mammal in relation to the source of the sound.

NMFS is currently in the process of determining safety criteria (*i.e.*, guidelines) for marine species exposed to underwater sound. However, pending adoption of these guidelines we have preliminarily determined, based on past projects, consultations with experts, and published studies, that 180 dB re 1 $\mu\text{Pa}_{\text{RMS}}$ (190 dB re 1 $\mu\text{Pa}_{\text{RMS}}$ for pinnipeds) is the impulse sound pressure level that can be received by marine mammals without injury. Marine mammals have shown behavioral changes when exposed to impulse sound pressure levels of 160 dB re 1 $\mu\text{Pa}_{\text{RMS}}$.

Based on the information provided in the SEIS, it may be necessary to receive authorization from NMFS under the MMPA for this proposed project. Most incidental take authorizations to date have involved the incidental harassment of marine mammals by noise.

Thank you for consideration of our comments. If you have any questions regarding our EFH comments, please contact Mr. Bryant Chesney at 562-980-4037 or Bryant.Chesney@noaa.gov. For questions related to our MMPA comments, please contact Monica DeAngelis at 562-980-3232 or Monica.DeAngelis@noaa.gov.

Sincerely,



for Robert S. Hoffman
Assistant Regional Administrator
for Habitat Conservation Division