Oakland Harbor Turning Basins Widening Project
Marine Mammal Protection Act Risk Assessment

SAN FRANCISCO DISTRICT
U.S. ARMY CORPS OF ENGINEERS
MMPA RISK ASSESSMENT
Oakland, California
January 11th, 2024

1) **ISSUE:** The San Francisco District (District) cannot achieve compliance with consultation requirements in the Marine Mammal Protection Act (MMPA) during the feasibility study phase due to the detailed nature of the information needed to support MMPA consultation. The District therefore seeks HQUSACE concurrence to conduct consultation during the Pre-Construction Design and Engineering phase when the necessary information will be available.

   a) Engineering Regulation (ER)-1105-2-100 Environmental Evaluation and Compliance, Appendix C, dated 01 April 2019, states "Coordination with Fish and Wildlife Service and National Marine Fisheries Service including the receipt of the incidental take authorization (ITA), where applicable, shall be completed prior to the decision document approval. For feasibility studies, where preconstruction engineering and design level of detail is needed to obtain an ITA, a project risk assessment will be conducted. With HQ concurrence, the National Environmental Policy Act (NEPA) decision may be finalized with a condition to complete the MMPA ITA in the next phase but prior to construction."
   b) None of the marine mammals with potential to occur in the study area are Endangered Species Act (ESA)-listed species. However, the marine mammal species with potential to occur in the project area are protected under the MMPA and therefore an incidental harassment authorization (IHA) in accordance with the requirements of the MMPA is likely to be required for the project. An incidental take authorization (ITA) which permits incidental, but not intentional take of marine mammals, can be obtained through preparation of an IHA analysis. A greater level of engineering detail than is available in the feasibility phase will be necessary to prepare an IHA, such as exact locations of underwater construction activities and duration, and numbers and methods (vibratory or impact) of piles being driven. This information will not be developed until the Pre-Construction Design and Engineering (PED) phase, which occurs after the feasibility phase, if a project is authorized and appropriated.
   c) ER-1105-2-100, Appendix C requires completion of consultation under Section 7 of the ESA prior to signing a NEPA decision document and submitting a final report package. In order to issue a Biological Opinion (BO) under Section 7, the United States Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS) (the Services) must first conclude that the take of any ESA-listed marine

mammals during project construction is authorized under the MMPA (16 U.S.C. § 1536(b)(4)(C)). However, as stated in item 1) b) above, none of the marine mammals with the potential to occur in the project area are listed under the ESA, and therefore there is no potential for MMPA compliance to inhibit completion of consultation under Section 7 of the ESA. The ESA consultations with the USFWS and NMFS were completed in June and August 2023 respectively, prior to the signing of the NEPA document.

d) The information required to comply with the MMPA would add an additional 12 to 24 months and $1M to the feasibility phase of this project.

2) DESIRED OUTCOME: Approve the District recommendation to obtain an MMPA IHA during the PED phase, following completion of the feasibility phase, but prior to initiation of construction.

3) PERTINENT BACKGROUND INFORMATION:

a) General.

(1) The information necessary to obtain an MMPA ITA, in the form of an IHA (effective up to 1 year) or Letter of Authorization (LOA) (effective up to 5 years), under the MMPA incudes very detailed construction information normally obtained during PED. Completing compliance with MMPA during the feasibility phase of a project would require obtaining the necessary construction information earlier in the study process than what is scoped, both in terms of approved budget and schedule.

(2) The proposed Oakland Harbor Turning Basins Widening project has the potential to harass three marine mammal species that fall under the purview of the MMPA, but not the ESA (see Table 1). For those three species, the District does not currently have the information necessary to obtain an MMPA ITA. If HQUSACE concurrence to complete MMPA consultation in PED is not obtained, the information necessary to support the consultation will need to be obtained in the feasibility phase, further delaying the submission of the Chief's Report outside of the timelines established by Section 1001 of WRRDA 2014 (3x3). On 16 June 23, the ASA(CW) approved a wavier for an extension of time from 36 to 48 months and an additional $1.1 Million dollars to complete the feasibility report. The waiver scope and schedule did not include provisions for obtaining the MMPA ITA during the feasibility phase. Preparation of this risk analysis as a component of the study and the overall waiver request was coordinated and approved by the vertical team.

(3) At this stage of analysis, the District concludes a high likelihood of a marine mammal incidental take occurring. It is anticipated that the principal impact to marine mammals in the action area would occur from increases in under-

water noise levels. Pile driving, marine construction, and dredging generate underwater noise, which is likely to result in disturbance to marine mammals in the project area. These additional noise sources coupled with existing harbor noises could result in an elevation of the ambient underwater noise levels. However, the District currently does not have enough detailed and specific information about the construction methodology, particularly the quantity, location, and type of piles and the means of driving them, to support an application for an MMPA IHA during the feasibility phase of the study. The District needs to obtain more detailed data on the construction methodologies to satisfy the information requirements to obtain an MMPA IHA for impacts to marine mammals. However, in accordance with our standard processes for Civil Works studies and as described later in this document, the District determined that refining the details regarding construction methodologies until the PED phase is the most appropriate and realistic approach. Without the details regarding construction methodologies, the District is unable to prepare and apply for an IHA during the feasibility phase. Moreover, an IHA obtained during the study phase would only be applicable for one year and would require re-application during PED after the expiration of the initial IHA. Applying for the same permit multiple times would be inefficient. The same level of information, if not more, is required for an LOA. Therefore, an LOA would not be achievable at this stage either. Further, an LOA is intended for projects that require up to 5 years of coverage for impacts, whereas the entire construction timeline for this project is a little over 2 years. Obtaining the level of coverage provided by an LOA is not warranted.

b) Summary of Tentatively Selected Plan: The Tentative Selected Plan (Plan D-2) would modify the Inner Harbor Turning Basin and Outer Harbor Turning Basin. These improvements will allow vessels to operate within the Oakland Harbor more efficiently and allow large container vessels to call more frequently, but reduce total container vessel calls necessary overall to carry current and projected future levels of cargo, projections that would remain unchanged by the proposed action. Thus the increase in cargo per vessel call yields economic benefits by allowing for more efficient use of containerships.

Plan D-2 requires an estimated 2,380 linear feet of bulkhead and would impact approximately 6.0 acres of fast land at an Alameda site, no fast land at Schnitzer Steel, and 3.9 acres of fast land at Howard Terminal. In Alameda, four existing warehouse bays on a property would be impacted.

Plan D-2 requires the removal of approximately 2,400,000 cubic yards (cy) of aquatic dredged and terrestrial excavated material and placement of approximately 2.2 million cy of the material as beneficial use. Suitable dredged material is targeted for beneficial use as cover and foundation material for wetland restoration to keep

sediment in the system, accelerate wetland accretion, and create habitat for threatened and endangered species.

Additionally, the Port of Oakland requested the use of electric dredges in construction of the project to avoid air-pollutant emissions in adjacent environmental justice communities (which have experienced poor air quality). The use of electric dredges is incorporated as part of the tentatively selected plan and will be funded at a 100% nonfederal cost.

Consistent with current practice, the turning basins are anticipated to be maintained as part of federal Operation and Maintenance (O&M) dredging every year. It is estimated the implementation of this plan to widen both the inner and outer turning basins would require an additional 93,000 cy of material to be removed every year from the port during O&M of the turning basins.

c) Effects on Marine Mammals:
Three marine mammal species protected under the MMPA are likely to be found in the vicinity of the project area: Pacific harbor seal (*Phoca vitulina richardii*), California sea lion (*Zalophus californianus*), and harbor porpoise (*Phocoena phocoena*). There are several other species of marine mammals that uncommonly occur in the central portion of the San Francisco Bay Estuary, such as northern elephant seal (*Mirounga angustirostris*), common bottlenose dolphin (*Tursiops truncatus*), and gray whale (*Eschrichtius robustus*). These species are not federally- or state-listed as threatened or endangered; however, all marine mammals are protected under the MMPA.

Marine mammals most likely to occur in the project area is the Pacific harbor seal, which hauls out in several locations in the central portion of the Bay and may forage in the project area; and to a lesser extent, California sea lions, which may forage in the project area. Harbor porpoises are occasionally present in the project area.

Increased turbidity could temporarily reduce foraging opportunities for marine mammals in the project area. Turbidity minimization measures will be employed, and marine mammals can avoid areas of temporarily increased turbidity. Foraging habitat of equal or greater value is present throughout the Bay. Marine mammals would not be substantially affected by the turbidity generated during the dredging operations, because they forage over large areas of San Francisco Bay and the Pacific Ocean and can avoid areas of temporarily increased turbidity and dredging disturbance. Moreover, turbidity from dredging operations generally dissipates quickly, returning to ambient conditions.

Noise from dredging activities and construction vessels proposed under the tentatively selected plan is comparable to ambient noise from shipping vessels and therefore is not expected to cause harassment of marine mammals. However,

underwater noise generated during pile removal and installation in the Inner Harbor Turning Basin would have the potential to impact marine mammals.

The NMFS has established thresholds regarding the exposure of marine mammals to high-intensity noise that may be considered a take under the MMPA (NMFS 2018). The injury (Level A Harassment) threshold for such continuous noise is specific to the species hearing group (i.e., high-frequency cetaceans [harbor porpoise] and low-frequency phocids [Pacific harbor seal] and otariids [California sea lion]). The behavioral harassment (Level B; non-injurious) threshold is 160 db for impulse noise (e.g., impact pile driving) and 120 dB for continuous noise (e.g., vibratory pile extraction and driving) is for all marine mammals.

With vibratory extraction, and vibratory and impact pile driving, exposure to noise above the Level B thresholds could result in temporary, short-term changes in the typical behavior of marine mammals and/or avoidance of the affected area.

Avoidance and minimization measures that would be implemented as part of the Proposed Action to reduce impacts on marine mammals are presented in the Integrated Feasibility Report and Environmental Assessment, section Special Status Species and Protected Habitat and the Coastal Zone Management Act Consistency Determination Appendix. These include use of vibratory driving for in-water pile installation to the extent feasible, sound attenuation measures to minimize acoustic disturbance if in-water impact pile-driving is required, and hydroacoustic and biological monitoring. With the implementation of these measures, no injuries or permanent impacts to marine mammals are expected to occur. To date, the District has determined that the proposed project may affect marine mammals, however the effects would be less than significant with implementation of measures to reduce impacts from pile installation and removal activities and reduce construction related turbidity.

d) Marine Mammal Injury and Behavioral Disruption Thresholds for Underwater Noise

Table 1. Marine Mammal Injury and Behavioral Disruption Thresholds for Underwater Noise

Hearing Group and species considered	**Underwater Continuous Noise Thresholds** *(e.g., Vibratory Pile-Driving)*		**Underwater Impulse Noise Thresholds** *(e.g., Impact Pile-Driving)*		
	Level A cSEL	**Level B RMS**	**Level A Peak[1]**	**Level A cSEL[1]**	**Level B RMS**
Phocids (Pacific harbor seal)	201 dB	120 dB	218 dB	185 dB	160 dB
Otariids (California sea lion)	219 dB	120 dB	232 dB	203 dB	160 dB
Phocoenid (harbor porpoise)	173 dB	120 dB	202 dB	155 dB	160 dB

Notes:
[1] Level A threshold for impulse noise is a duel criterion based on peak pressure and cSEL. Thresholds are based on the NMFS Technical Guidance for Assessing the Effects of Anthropogenic Sound on Marine Mammal Hearing.
cSEL = cumulative sound exposure level
dB = decibel
RMS = root mean square

Table 2. Expected Pile-Driving Noise Source Levels and Distances of Maine Mammal Level A and B Threshold Exceedance

Description of Work	Pile Type	Source Levels (dB RMS)*	Distance to Level B Threshold (meters/feet)		Distance to Level A Threshold[1,2] (meters/feet)		
			120 dB RMS threshold (vibratory driving)	160 dB RMS threshold (impact driving)	High-Frequency Cetaceans	Phocid Pinnipeds	Otariid Pinnipeds
Extraction of steel sheet piles at the Alameda site	12 or 24-inch-wide steel sheet piles	162 dB RMS	6,310/20,695	NA	17/54	7/22	1/2
Extraction of steel pipe piles at the Alameda site	24-inch-diameter steel pipe piles	157 dB RMS	2,929/9,606	NA	12/40	5/16	<1/1
Extraction of concrete piles at the Howard Terminal site	24-inch-diameter concrete piles	157 dB RMS	2,929/9,606	NA	12/40	5/16	<1/1
Installation of steel sheet piles at the Alameda site, in-water near Schnitzer Site, and at Howard Terminal	24-inch-wide steel sheet piles	162 dB RMS	6,310/20,695	NA	39/129	16/53	1/3
Installation of steel pipe batter piles at the Alameda site, in-water near Schnitzer Steel, and at Howard Terminal	24-inch-diameter steel pipe piles	185 dB RMS / 173 dB SEL	NA	74/241	213/698	96/313	7/23

Notes:
* As measured 10 meters/33 feet from the source.
[1] Level A thresholds are based on the NMFS 2018 Technical Guidance for Assessing the Effects of Anthropogenic Sound on Marine Mammal Hearing; cSEL threshold distances are shown.
[2] All distances to the peak Level A thresholds are less than 10 meters/33 feet.
Distances are rounded to the nearest foot or to "<1.0 (0)" for values less than 1 foot.
cSEL = cumulative sound exposure level
dB = decibels
SEL = sound exposure level
RMS=Root Mean Square

e) MMPA Legal Requirements:

(1) The MMPA prohibits the taking, defined as "harass, hunt, capture, or kill, or attempt to harass, hunt, capture or kill," of marine mammals, except when authorized by NMFS. 16 U.S.C. § 1372(13) and 16 U.S.C. § 1371(a)(5). The construction activities proposed in the Oakland Harbor Turning Basins Widening project may affect marine mammals in a way that amounts to a "taking" under the MMPA. Therefore, the District is required to seek an incidental take authorization under the MMPA.

(a) Pursuant to 16 U.S.C. § 1371(a)(5)(D) NMFS may authorize an IHA, "for a period not greater than 1 year, the incidental, but not intentional, taking by harassment of small numbers of marine mammals" while engaging in an activity found to have (I) "negligible impact" and (II) "will not have an unmitigable adverse impact" on the species. IHAs are available for activities that result in only harassment and whose impacts are expected to occur within a single year. NMFS may issue a one-time, one-year renewal.

(b) Pursuant to 16 U.S.C. § 1371(a)(5)(A) NMFS may issue a LOA, "for a period of not more than five consecutive years each, the incidental, but not intentional, taking … of a small number of marine mammals" after notice and public comment if the taking (I) "will have a negligible impact …and will not have an unmitigable adverse impact on the availability" of the species. LOAs are required for projects that will result in impacts over multiple years and may result in harassment and serious injury to marine mammals.

(c) Either request requires submission of information detailing: (1) description of the activity; (2) dates and duration and specific geographical region; (3) species and numbers of marine mammals; (4) status, distribution of those animals; (5) type and method of taking; (6) age, sex, and reproductive condition, number of species; (7) impact of the activity on species and stock; (8) impact on availability of species or stocks of marine mammals for subsistence uses; (9) impact on habitat; (10) impact to species from impacts to habitat; (11)availability and feasibility of equipment, methods, and manner to limit impacts on the species; (12) impacts on Artic subsistence uses; (13) monitoring and reporting of the species to increase knowledge; (14) suggest means to encourage more research on the species to reduce incidental take. 50 C.F.R. § 216.104(a).

(2) At the feasibility stage, the exact locations of underwater construction activities and duration, and numbers and methods (vibratory or impact) of piles being driven is not known. Therefore, the District could not meet the requirements of 50 C.F.R. § 216.104(a) since a complete description and timeframe for the project cannot be provided at this time. This level of detail can be achieved at the PED stage.

(3) The Proposed Action qualifies for an IHA because construction activities that impact marine mammals would occur only in the Inner Harbor footprint and

would be complete within a year. Though the exact time frame of the project is unknown, construction for the entire project is expected to take a little over two years. The pile driving at the Inner Harbor subject to the anticipated IHA should be complete within a year and it not, within two years. While it should not be necessary, if needed, the District could seek a one-time, one-year renewal of the IHA. Impacts from the Proposed Action would not rise to the level of causing serious injury to marine mammals. Further, LOAs require rulemaking, necessitating applicants to apply 15 months in advance of construction. This process requires significantly more resources from both NMFS and USACE. In contrast, an IHA is sought roughly 5-8 months before construction. Since the LOA level of coverage is not required, it would not be prudent to expend those federal resources and an IHA is preferred.

f) Corps Draft Policy Considerations: The NEPA process is intended to help public officials make decisions that are based on the understanding of environmental consequences, and take actions that protect, restore, and enhance the environment. ER-1105-2-100, Appendix C, dated 01 April 2019, states:

(1) "Compliance with all environmental statutory requirements shall be completed prior to the final [NEPA] decision unless otherwise approved by the ASA(CW)." (C-2.d.);
(2) For the MMPA, "[c]oordination with FWS and NMFS, including the receipt of the incidental take authorization, where applicable, shall be completed prior to the decision document approval. For feasibility studies, where preconstruction engineering and design level of detail is needed to obtain an ITA, a project risk assessment will be conducted. With HQ concurrence, the NEPA decision may be finalized with a condition to complete the MMPA ITA in the next phase but prior to construction." (C-3.j.(4)).

g) Congressional Interest: Includes 12th District, Representative Barbara Lee and Senators Laphonza Butler and Alex Padilla.

4) DISTRICT'S PROPOSED COURSES OF ACTION (COA):

a) **COA 1: Obtain HQ concurrence to complete compliance with the MMPA during PED:**

(1) **Legal Considerations:** Informal consultation with the FWS resulted in a Letter of Concurrence (LOC) with our may affect but not likely to adversely affect determination, received on July 16, 2023. Consultation with the NMFS was completed August 24, 2023 resulting in a LOC with our Biological Assessment.
(2) **Risk that the Recommended Plan will Change:** VERY LOW RISK - the District has received no indication during informal consultation with the Services that the results of the ESA consultation or the IHA process could impact the recommended plan.
(3) **Risk that Total Project Costs will Increase:** LOW RISK- The draft BA was based distribution of known marine mammals in the area. Changed conditions are

not expected. It is not expected any additional project costs beyond those already anticipated to support the consultation will be incurred as a result of MMPA ITA consultation. Note that the project as currently designed incorporates measures designed to minimize effects on marine mammals.

(4) **Risk that Additional Mitigation will be Required:** VERY LOW RISK - none of the marine mammals potentially impacted by the project are ESA listed, therefore Section 7 consultation would not be affected by MMPA consultation.

(5) **Risk that Renewal of MMPA ITA will be Required:** LOW RISK (if pursued in PED) – The District plans to pursue an IHA, which is valid for one year after issue, and the District will request issuance under this COA at the end of PED. Construction is expected to take three years, but pile driving and removal associated with the inner harbor is expected to occur within a single year, so the risk is low that the IHA will require renewal to complete construction.

(6) **Risk to Potential Implementation (i.e., if the Corps does not implement would someone else)?** HIGH RISK – Without concurrence, additional resources would be necessary to achieve MMPA compliance requiring a longer study process. This extension may jeopardize the completion of the study. It is unlikely that another single entity could take on this project, and continued costs associated with delays in deliveries due to navigation inefficiencies will continue.

(7) **Congressional Interest:** HIGH for the City of Oakland and State of California.

(8) **Risk of Controversy (local, regional, national, congressional):** LOW RISK – The District has worked closely with the NMFS to analyze potential impacts and include local input.

b) **COA 2: A second 3x3 Exemption Request**. Complete MMPA compliance during an enlarged feasibility phase, by means of an additional WRRDA 2014, Sec. 1001 exemption. This COA would require an additional 12 to 24 months and $1M to complete during the feasibility study.

(1) **Legal Considerations:** It is possible other environmental permits obtained would need to be reinitiated due to the delay in time. There is no guarantee a second exemption will be approved by USACE Headquarters (for money) and the ASA(CW) (for time) which puts the study at risk for termination.

(2) **Risk that the Recommended Plan will Change:** VERY LOW RISK - the District has received no indication during informal consultation with the Services that the results of the ESA consultation or IHA process could impact the recommended plan.

(3) **Risk that Total Project Costs will Increase:** MEDIUM RISK – delays in time will possibly result in a higher total project cost share (TPCS) as construction costs are currently increasing.

(4) **Risk that Additional Mitigation will be Required:** LOW RISK - none of the marine mammals potentially impacted by the project are ESA listed,

therefore Section 7 consultation would not be affected by MMPA compliance.

(5) **Risk that Renewal of MMPA ITA will be Required:** LOW RISK – The District would pursue a LOA, which is valid for five years after issue, and is expected to be issued under this COA one year before the end of PED. Construction is expected to take three years, so the risk is low that the LOA will require renewal to complete construction.

(6) **Risk to Potential Implementation (i.e., if the Corps does not implement would someone else)?** HIGH RISK– It is unlikely that another single entity could take on this project, and continued costs associated with delays in deliveries due to navigation inefficiencies will continue.

(7) **Congressional Interest:** HIGH for the City of Oakland and State of California.

(8) **Risk of Controversy (local, regional, national, congressional):** HIGH RISK – The study is a high priority for the Port of Oakland, the City of Oakland, and the State of California. The non-Federal sponsors (Port of Oakland) have invested over $2M into this study and will be contributing another $100K through the planned conclusion of the study. Not making submission of the final report into WRDA 2024 will result in continued economic, environmental, and operational inefficiencies at the Port of Oakland due to the constrained conditions. Delaying completion of the study would delay an opportunity for the recommended project to be incorporated in WRDA 2024 which could delay construction.

c) COA 3: Terminate the study.

(1) **Legal Considerations:** Termination would require no NEPA or completed consultation.

(2) **Risk that the Recommended Plan will Change:** N/A - no plan will be recommended.

(3) **Risk that Total Project Costs will Increase:** N/A - No cost estimate will be made.

(4) **Risk that Additional Mitigation will be Required:** N/A - No mitigation will be required.

(5) **Risk that Renewal of MMPA ITA will be Required:** N/A - No ITA will be required.

(6) **Risk to Potential Implementation (i.e., if the Corps does not implement would someone else)?** HIGH RISK – It is unlikely that another single entity could take on this project, and continued costs associated with delays in deliveries due to navigation inefficiencies will continue.

(7) **Congressional Interest:** HIGH – Sensitive and high for the State of California. Terminating the project could result in extensive congressional attention and concern.

(8) **Risk of Controversy (local, regional, national, congressional):** HIGH RISK – The study is a high priority for the Port of Oakland, the City of Oakland, and the State of California. The non-Federal sponsors (Port of Oakland) have

invested over $2M into this study and will be contributing another $100K through the planned conclusion of the study. Terminating the study will result in immense political backlash and severe damage to the Corps' reputation in the San Francisco Bay Area.

5) **RECOMMENDED COURSE OF ACTION:** The District recommends Course of Action 1, that HQ concurrence should be granted to allow for compliance with MMPA during the PED phase of the Oakland Harbor Turning Basins Widening project. Under this COA, ESA compliance will still be completed during the feasibility phase and prior to the NEPA decision. The District has determined that there is low risk to following this course of action, particularly because ESA consultation will be completed in feasibility phase, given that none of the marine mammal species in question are ESA listed. The MMPA consultation will be completed during PED when requisite analyses regarding specific project impacts and species distribution have been conducted in order to obtain the MMPA ITA. Please approve the District recommendation to obtain an MMPA IHA during the PED phase, prior to initiation of construction.

From: Jolie Harrison - NOAA Federal <jolie.harrison@noaa.gov>
Sent: Friday, March 8, 2024 1:47 PM
To: Covington, Ellie L CIV USARMY CESPN (USA) <Ellie.L.Covington@usace.army.mil>
Cc: pr.itp.apliations@noaa.gov; Cara Hotchkin - NOAA Federal <cara.hotchkin@noaa.gov>
Subject: [Non-DoD Source] Re: MMPA Oakland Harbor Turning Basins Widening Study

Ms. Covington,

Thank you for your email and letter of February 27, 2024. We have reviewed the letter and risk assessment for the Oakland Harbor Turning Basins Widening Project, and concur with your conclusion that an Incidental Harassment Authorization (IHA) should be applied for during the preconstruction, engineering, and design (PED) phase of the project, rather than during the feasibility study. As described on our website, the process for obtaining an IHA takes approximately 5 to 9 months to complete. Our analysis will begin once an application has been formally submitted to pr.itp.applications@noaa.gov.

NMFS has reviewed the attached risk assessment, and appreciates the inclusion of best management practices. A complete IHA application will require a marine mammal monitoring plan detailing the potential locations and procedures to be used by NMFS-approved Protected Species Observers (PSOs), and a description of mitigations to be employed. Use of standard mitigation measures such as soft start for impact pile driving will be required unless there is a specific reason for exemption detailed in the application.

The risk assessment species list consists of four pinniped (harbor seal, California sea lion, Steller sea lion, and Northern elephant seal) and three cetacean species (harbor porpoise, bottlenose dolphin, and gray whale) known to occur in the San Francisco Bay. None of the species under consideration are listed under the Endangered Species Act. NMFS concurs with this species list, with the caveat that the best available science will be consulted at the time of application; new data may necessitate the inclusion of additional species at that time.

Additionally, NMFS has reviewed the acoustic analysis within the risk assessment. We concur with the methodology and the use of the attached User Spreadsheet (NMFS, 2018) calculator for evaluation of the potential for Level A harassment. Please be advised that between now and the time of your formal IHA submission, the best available science regarding thresholds and proxy source values for pile driving used in the risk assessment may change. NMFS will analyze the IHA application using the thresholds and recommended proxy values available at the time of application submission.

Please contact Cara or me if you have any further questions.