

MITIGATION MONITORING AND REPORTING PROGRAM

Adopted Mitigation Measures	Responsibility for Implementation	Mitigation Schedule	Monitoring/Reporting Responsibility	Monitoring Schedule
Mitigation Measures Agreed to by San Francisco Public Works				
Air Quality				
<i>Mitigation Measure M-AQ-4: Best Available Control Technology for Diesel Generators at Pier 22½</i>				
<p>The project sponsor shall ensure that the backup diesel generator meets or exceeds one of the following emission standards for particulate matter: 1) Tier 4-certified engine; or 2) Tier 2- or Tier 3-certified engine that is equipped with a California Air Resources Board Level 3 Verified Diesel Emissions Control Strategy. A non-verified diesel emission control strategy may be used if the filter has the same particulate matter reduction as the identical California Air Resources Board-verified model and if the Bay Area Air Quality Management District approves of its use.</p> <p>The project sponsor shall submit documentation of compliance with the Bay Area Air Quality Management District New Source Review permitting process (Regulation 2, Rule 2, and Regulation 2, Rule 5) and the emission standard requirement of this mitigation measure to the Planning Department for review and approval prior to issuance of a permit for a backup diesel generator from any City agency.</p>	San Francisco Public Works/Port of San Francisco.	Prior to approval of a generator permit by the Port of San Francisco and New Source Review permit by the Bay Area Air Quality Management District.	San Francisco Public Works and Port of San Francisco. Anticipated location and engine specifications of a proposed diesel backup generator shall be submitted to San Francisco Public Works and the Port of San Francisco for review and approval prior to issuance of a generator permit; and to the Bay Area Air Quality Management District prior to New Source Review permit.	Considered complete upon review and approval by the Port of San Francisco and Bay Area Air Quality Management District.
Biological Resources				
<i>Mitigation Measure M-BI-1: Pile Driving</i>				
<p>The avoidance and minimization measures specific to pile driving activities, below, have been developed in accordance with the majority of the measures outlined in the 2013 NLAA Programmatic criteria, in order to reduce Project effects on sensitive resources. Avoidance and minimization measures that would reduce Project noise effects include the following:</p> <ul style="list-style-type: none"> All in-water pile driving shall be conducted within the established Bay area environmental work windows between June and November in order to avoid potential impacts to fish species for this area of San Francisco Bay. These windows were promulgated in a programmatic biological opinion (NMFS and CDFW) for the Long Term Management Strategy program for managing sediment within the San Francisco Bay. 	San Francisco Public Works/contractor(s)/ NMFS/NMFS-approved biological monitor.	During pile-driving activities.	San Francisco Public Works contractor(s).	Date Sound Monitoring Plan approved by NMFS: _____

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<i>Mitigation Measure M-BI-1: Pile Driving (cont.)</i>				
<ul style="list-style-type: none"> • San Francisco Public Works shall develop a NMFS-approved sound monitoring plan prior to the start of pile driving. This plan shall provide detail on the methods used to monitor and verify sound levels during pile driving activities. The sound monitoring results shall be made available to NMFS. • Vibratory pile drivers may be used for the installation of 36-inch diameter steel pilings. Vibratory pile driving shall be conducted following the USACE “Proposed Procedures for Permitting Projects that will Not Adversely Affect Selected Listed Species in California”. USFWS and NMFS completed section 7 consultation on this document which establishes general procedures for minimizing impacts to natural resources associated with projects in or adjacent to jurisdictional waters.¹ • A “soft start” technique to impact hammer pile driving shall be implemented, at the start of each work day or after a break in impact hammer driving of 30 minutes or more, to give fish and marine mammals an opportunity to vacate the area. • During the use of an impact hammer, a bubble curtain or other sound attenuation method may be utilized to reduce sound levels. If NMFS sound level criteria are still exceeded with the use of attenuation methods, the contractor shall revise sound attenuation methods as per the approved sound monitoring plan. A NMFS-approved biological monitor shall be available to conduct surveys before and during impact pile driving as specified by NMFS. The monitor shall inspect the established work zone and adjacent Bay waters and document the following during impact pile-driving: <ul style="list-style-type: none"> - Maintain the safety zones established in the sound monitoring plan around sound source, for the protection of marine mammals in association with sound monitoring station distances. - Halt work activities when a marine mammal enters the Level A² safety zone and resume only after the animal has been gone from the area for a minimum of 15 minutes. - Maintain sound levels below 90 dBA in air when pinnipeds (seals and sea lions) are present.³ 				

¹ National Oceanic and Atmospheric Administration (NOAA), 2007. Report on the Subtidal Habitats and Associated Biological Taxa in San Francisco Bay. August.

² Defined as any act of pursuit, torment, or annoyance which has the potential to injure a marine mammal or marine mammal stock in the wild.

³ NOAA, 2007. Report on the Subtidal Habitats and Associated Biological Taxa in San Francisco Bay. August.

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Improvement Measures				
<i>Improvement Measure I-NO-1, Stationary Equipment Noise Controls.</i>				
<p>Noise attenuation measures shall be incorporated into all stationary equipment (including HVAC equipment and emergency generators) installed on all buildings that include such stationary equipment as necessary to meet noise limits specified in Section 2909 of the Police Code. Interior noise limits shall be met under both existing and future noise conditions, accounting for foreseeable changes in noise conditions in the future (i.e., changes in onsite building configurations). Noise attenuation measures could include provision of sound enclosures/barriers, addition of roof parapets to block noise, increasing setback distances from sensitive receptors, provision of louvered vent openings, location of vent openings away from adjacent residential uses, and restriction of generator testing to the daytime hours.</p>	<p>San Francisco Public Works/Port of San Francisco/contractor(s).</p>	<p>Prior to issuance of building permit.</p>	<p>Analysis of anticipated stationary equipment noise generation and proposed noise attenuation measures.</p>	<p>Considered complete upon approval of building plans by Port of San Francisco.</p>