
INVITATION FOR PUBLIC COMMENT OF THE DRAFT FEASIBILITY STUDY/REMEDIAL ACTION PLAN FOR THE PIER 39 TO PIER 45 SEDIMENT INVESTIGATION AREA IN SAN FRANCISCO, CALIFORNIA

INTRODUCTION

The California Regional Water Quality Control Board, San Francisco Bay Region (Water Board), is announcing a 30-day public comment period on the Draft Feasibility Study / Remedial Action Plan (FS/RAP) for the Pier 39 to Pier 45 Sediment Investigation Area (the Site). **The public comment period is from October 20 to November 19, 2021.**

The Site encompasses approximately 47 acres in the San Francisco Bay (the Bay), consisting of submerged lands between Pier 39 and Pier 45 and extending approximately 1,000 feet offshore. The Site is the area within the dashed line on Figure 1. The FS/RAP (referred to herein as the “Draft Cleanup Plan”) details the work that Pacific Gas and Electric Company (PG&E) will perform, which is focused on cleanup of offshore Bay sediments. The Water Board is the lead agency overseeing the environmental investigation and cleanup of the Site.

The Water Board invites you to review and comment on the Draft Cleanup Plan. The California Environmental Quality Act (CEQA) Initial Study (IS) and Mitigated Negative Declaration (MND) for the project are also open for comment. Information below explains where you can access documents and provide comments on documents. This fact sheet will inform you about the following:

- Site History and Background
- Environmental Investigation Studies
- Draft Feasibility Study / Remedial Action Plan (Draft Cleanup Plan)
- California Environmental Quality Act (IS/MND)
- Next Steps
- Electronic Document Availability
- Comment Submission Process

SITE HISTORY AND BACKGROUND

The Site is located on the northeastern waterfront of San Francisco in a densely developed tourist area (see Figure 1, Site Vicinity Map below). The adjacent upland areas were used for industrial activities since the mid-1800s with PG&E and its predecessors operating the former Beach Street Manufactured Gas Plant (MGP) nearby, between 1900 and 1931. In the mid-1950s, the MGP property was sold, and the gas holder and oil tanks were subsequently dismantled before the block was redeveloped for commercial use.

In general, the upland shoreline area and piers within the Site vicinity are zoned for, and have a high concentration of, maritime and visitor-related commercial operations, including shops and other visitor attractions. Bay scenic cruise boats and ferry terminals and their supporting infrastructure are located on three piers within the Site. In addition, the Pier 39 marina can accommodate up to 300 boats.



Site Vicinity Map (Figure 1)

ENVIRONMENTAL INVESTIGATION STUDIES

Since 2016, PG&E has investigated the nature, distribution, and extent of sediment contamination within the Site boundaries. Some sediments contain high concentrations of polycyclic aromatic hydrocarbons (PAHs), which are chemicals found in petroleum and in byproduct waste formed from MGP operations. Impacts associated with high concentrations of PAHs, most likely associated with historical MGP operations, occur close to the shoreline and extend bayward in five areas within the Site. Figure 2 illustrates the areas with high PAH concentrations. These investigations are described in the January 2020 Remedial Investigation (RI) Report (https://documents.geotracker.waterboards.ca.gov/esi/uploads/geo_report/4785320580/T10000007367.PDF).

The RI assessed the risk from direct exposure to PAHs to human and ecological receptors, including recreational swimmers, commercial/dock workers, sediment invertebrates (i.e., organisms in the sediment such as clams and worms), fish, and mammals. The RI concluded there is a low probability of adverse effects to human and ecological receptors from direct exposure. In addition to direct exposure, the risk to

human and ecological receptors from potential bioaccumulation of PAHs was assessed. Bioaccumulation is the process by which organism living in the sediment can uptake PAHs from sediment into their bodies at a rate faster than they can remove them. Laboratory tests performed to support the RI demonstrated that bioaccumulation occurred when test organisms (clams and marine worms) were exposed to Site sediments with high PAH concentrations. If bioaccumulation is high enough, it could result in adverse effects to sediment invertebrates at the Site, as well as to humans and animals (e.g., fish, birds, and marine mammals) that consume them through the food web. Therefore, the risks from PAH exposure through the food web to humans and animals were additionally assessed. The RI concluded there is potential risk to organisms that feed directly on sediment invertebrates that may bioaccumulate high concentrations of PAHs, or through the food web. A PAH concentration to protect against bioaccumulation was developed to preliminarily identify areas of sediment to be considered for remediation for planning purposes. The Site and nearby areas are not used for commercial fishing and do not supply seafood to local restaurants.

DRAFT FEASIBILITY STUDY/REMEDIAL ACTION PLAN (DRAFT CLEANUP PLAN)

The Draft Cleanup Plan addresses sediments located in five portions of the Site within Pier 39 to Pier 43½ (Areas A through E noted on Figure 2 below). The Draft Cleanup Plan evaluated three different alternatives against remedial screening criteria. The three alternatives are described below:

Alternative 1 – No Action. The No Action alternative is carried through the evaluation as the baseline condition against which the performance of the other remedial alternatives is evaluated. Under this alternative, no activities would be implemented to remove, treat, contain, or monitor sediment impacts.

Alternative 2 – Focused Dredging, Capping, Armoring, Monitoring, and Institutional Controls. This alternative proposes dredging to remove contaminated sediment and capping to prevent exposure to sediments that might pose risk through bioaccumulation. Residuals management would involve placing sand on post dredge surfaces to stabilize fine-grained sediments. Some areas with limited access, for example under Pier 41½, would be capped in place with sand or similar materials to provide physical/chemical isolation from contaminated sediment. The placement of a layer of rock (armoring) where necessary would protect installed caps or existing sediment from scour or disturbance that might expose sediment with high PAH concentrations. Post construction monitoring would be used to verify cap effectiveness and stability. Institutional controls are administrative or legal measures used to reduce disturbance to remediated areas and contamination remaining in place. Institutional controls would be used to identify areas that have been capped, where existing sediment provides stable isolation from contaminated sediment, and prescribe measures to prevent exposure of sediment that might pose risk.

Alternative 3 – Full Dredging, Residuals Management, and Limited Capping, Monitoring, and Institutional Controls. This alternative proposes dredging to remove the full extent of sediment with PAH concentrations that might pose risk if exposed. Residuals management would involve placing sand on post-dredge surfaces to stabilize fine sediments below dredge prisms. Some areas with limited access, for example under Pier 41½, would be capped in place to provide physical/chemical isolation from contaminated sediment. Post construction monitoring would be used to verify dredging effectiveness and cap stability. Institutional controls would identify areas where inaccessible contaminated sediment has been left in place and prescribe measures to prevent exposure of sediment that might pose future risk.



Offshore Sediment Response Areas (Figure 2)

RECOMMENDED REMEDIAL ALTERNATIVE

Based on the Feasibility Study, Alternative 2 – Focused Dredging, Capping, Armoring, Monitoring, and Institutional Controls is the recommended remedial alternative for the Site. Although both Alternative 2 and Alternative 3 provide the opportunity to achieve the remedial action objective (RAO), the short-term effectiveness is more favorable for Alternative 2 because this alternative would generate a more manageable sediment removal volume and would be completed sooner with fewer and lesser construction impacts, and fewer short-term-related impacts on the workers, community, and environment. Alternative 2 is recommended because it achieves the RAO, is implementable, likely results in the greatest sustainable benefit for the cost to implement and complies with applicable and relevant laws and regulations.

Dredged sediment will be placed in and transported by barge to Pier 96 on the southern San Francisco waterfront. Pier 96 is where the project Material Handling Facility (MHF) will offload and dry sediment for transportation to a licensed landfill. Additionally, clean capping materials (e.g., sand, rock) will be transported and staged at the MHF until it is barged to the Site when needed.

CALIFORNIA ENVIRONMENTAL QUALITY ACT (INITIAL STUDY)

As part of a California Law, referred to as CEQA, the Water Board is required to prepare an Initial Study to evaluate the potential environmental impacts that may result from the proposed cleanup activities prior to approving the project. The Water Board has completed the Initial Study / Mitigated Negative Declaration (IS/MND) for remediation of offshore sediment (the Project) at Piers 39 to 43½ (the Project Area), within the Port of San Francisco, in accordance with the requirements of CEQA (California Public Resources Code, Division 13, Section 2100 et seq.) and CEQA Guidelines (Title 14, California Code of Regulations, Chapter 3, Section 15000 et seq.). The IS/MND concluded that the planned cleanup, as described in the Draft Cleanup Plan, with proposed mitigation measures, will not have a significant impact on the environment. You are invited to review and comment on the IS/MND. This document is available online as indicated below.

NEXT STEPS

The public is encouraged to submit comments on the Draft Cleanup Plan and the IS/MND documents. **The public comment period is from October 20 to November 19, 2021.** The Water Board will review and consider all comments. Prior to final approval of the draft Cleanup Plan, the Water Board will respond in writing to public comments received and revise the document, if warranted. The Water Board will then, at a formal Water Board meeting, consider for approval the Cleanup Plan and the IS/MND.

ELECTRONIC DOCUMENT AVAILABILITY

An electronic copy of the Draft FS/RAP, the Draft IS/MND, and other documents for the Site are available on the GeoTracker website at: <https://geotracker.waterboards.ca.gov>. Under "Tools", click on "Advanced Search" and enter **Case ID number: T10000007367**, then click on "Site Maps/Documents."

COMMENT SUBMISSION PROCESS

You may submit comments orally or in writing. Please send your comments by **November 19, 2021**, to:

Ross Steenson
California Regional Water Quality Control Board
San Francisco Bay Region
1515 Clay Street, Suite 1400
Oakland, California 94612
(510) 622-2445
ross.steenson@waterboards.ca.gov