The mission of DTSC is to protect California’s people and environment from harmful effects of toxic substances by restoring contaminated resources, enforcing hazardous waste laws, reducing hazardous waste generation, and encouraging the manufacture of chemically safer products.

Selby Slag Remediation Project

Draft Remedial Action Plan and Draft Environmental Impact Report

Available for Review

The California Department of Toxic Substances Control (DTSC) invites you to review and comment on a proposed cleanup plan, called a draft Remedial Action Plan (RAP), as well as a draft Environmental Impact Report (EIR) for the Selby Slag Site (Site). The draft RAP describes the alternatives considered and proposes a remedy, or cleanup, of the Site. In compliance with the California Environmental Quality Act (CEQA), DTSC has also prepared a draft EIR to consider the potential environmental effects from the cleanup. DTSC is overseeing the investigation and cleanup at the Site and encourages your participation in the decision-making process. The draft RAP and draft EIR public comment period began on January 11, 2018 and was originally scheduled to end on February 26, 2018. The comment period has been extended until April 12, 2018 due to request from the community.

Site Background

The approximately 66-acre Site is in Selby, an unincorporated area of Contra Costa County. The Site is adjacent to the southern shoreline of the San Pablo Bay and Carquinez Strait and is bordered to the south by Union Pacific Railroad (UPRR) tracks. The land use around the Site is primarily industrial.

The Site is the location of a former smelting facility. Smelting is the process of extracting metals, such as lead or copper, from rock through high-temperature melting. American Smelting and Refining Company, Inc. (ASARCO) operated a smelting facility at the Site from 1872 to 1971. Smelting produced a waste product called slag, which was deposited on the Site and adjacent tidelands. Due to decreasing business demand and increasing environmental regulations, smelter decommissioning began in 1971.

Construction of a sulfuric acid plant and liquid sulfur dioxide plant took place in the late 1930s and 1940s. A sewage oxidation pond accommodated wastes from the facility.

EXTENDED COMMENT PERIOD

January 11, 2018 - April 12, 2018

Public Meeting

Date: Tuesday April 3, 2018
Time: 6:00 pm-8:00 pm
Location
Cal Maritime Dining Center
Compass Room, Top Floor
200 Maritime Academy Dr.
Vallejo, California 94590

Directions
Follow Maritime Academy Drive until it dead ends and park (Parking Lot D). The Dining Center is the easternmost building. The Compass Room is located on the top floor of the building.

Send comments no later than April 12, 2018 to:
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HEARING IMPAIRED INDIVIDUALS may use the California Relay Service at 1-800-855-7100 or 711 (TTY).
and neighboring communities. The smelter, sulfuric acid plant, and liquid sulfur dioxide plant were demolished when the facility was decommissioned.

The California State Lands Commission (Commission) and C.S. Land, Inc. are the current owners of the Site. The prior owner (ASARCO) along with the current owners (Commission and C.S. Land, Inc.) share responsibility for environmental cleanup of the Site.

![Location of Selby Slag Site](image)

**Figure 1: Location of Selby Slag Site**

**Past Cleanup Activities**

Interim remedial measures (IRMs) are cleanup activities that protect public health and the environment during the development of long-term solutions. To reduce the mobility of the metals in the slag at the Site, DTSC prescribed the following IRMs from 1992 through 2006:

**IRM 1:** Approximately 100,000 cubic yards of soil from an acid-affected area in the eastern region of the Site (the former sulfur dioxide plant area) was excavated, treated with limestone to neutralize, and backfilled under a cap.

**IRM 2:** Approximately 98,000 cubic yards of offshore sediments (slag mixed with bay sediments) were dredged, deposited on-site, and incorporated under a cap.

**IRM 3:** After the placement of the dredged offshore sediments, the Site was graded, a storm water run-off drainage system was installed, and the Site was capped with 4 inches of asphalt topped with a slurry seal to prevent storm water infiltration.

**IRM 4:** The sewage oxidation pond was filled with soil and closed in 2006 after sewer lines were constructed to transport sewage to the Rodeo Sanitary District Wastewater Treatment Plant.
Why Cleanup is Required

Seven metals have been identified as chemicals of potential concern (COPCs) at the Site: antimony, arsenic, cadmium, copper, lead, nickel, and zinc. Currently, slag at the Site poses no risk to human health because it is covered by asphalt. Groundwater at the Site is not used for drinking. However, slag can impact the bay by the following methods:

- As groundwater moves through slag at the Site, it picks up metals and discharges to the bay.
- Metals leach to the bay as the tides moves in and out of the capped slag on-site.
- Exposed shoreline slag erodes into the bay due to waves.
- Slag in the tidal and shoreline areas leaches metals to the bay.
- Porewater (water trapped in bay sediments) is also contaminated with metals.

To address above issues, the following remedial action objectives were developed for groundwater, slag in the bay, and slag at the Site:

- Groundwater: Prevent drinking and contact with groundwater, and prevent discharge of groundwater with metals exceeding water quality standards.
- Slag in the bay: Preserve aquatic habitats by preventing leaching of metals exceeding water quality standards.
- Slag at the Site: Prevent human exposure to slag, erosion of slag into the bay, and prevent leaching of metals from slag into groundwater.

Proposed Cleanup Plan

The draft RAP summarizes previous studies and describes the possible cleanup alternatives. The proposed remedy is a combination of several alternatives described in the draft RAP and consists of the following actions (see Figure 2 - Proposed Remedy on last page):

- **Install a shoreline wall**
  The shoreline wall would be embedded into underlying bedrock to prevent discharge of contaminated groundwater into the bay and tidal water leaching of contaminants from the Site. Final design of the wall would consider anticipated sea level rise and design code requirements. The shoreline wall would be installed using pile driving equipment, drill rigs, and excavators. It would consist of steel sheet piles, or posts, that have interlocking edges. The finished shoreline wall would be flush with the elevation of the Site.

- **Dredge/excavate slag from the bay (and place on-site)**
  Slag from the outside, or bayside, of the wall would be removed and placed on-site. Following the slag removal from the bay, the dredged area would be filled with clean material and rock, where necessary, to prevent erosion of the shoreline. Water-based equipment (such as tugboats and transport barges) and land-based equipment (such as excavators) would be used to dredge/excavate slag from the bay and transport it to the Site.

- **Asphalt capping**
  The Site is currently covered by an asphalt cap. Capping involves placing a cover over contaminated material to keep it in place. The existing cap would be temporarily removed from portions of the Site to allow placement of the dredged slag from the bay. The opened cap area would be regraded and repaved with new asphalt.

- **Groundwater management system (upgradient)**
  Install a groundwater management system consisting of groundwater pumping wells located outside the Site (upgradient) and a containment wall near the western end of the Site to prevent groundwater from entering the...
Site. The pumped groundwater would be discharged to a local storm water system.

- **Groundwater collection and disposal (interior)**
  Install a groundwater collection system consisting of pumping wells located interior of the Site to keep contaminants from entering the bay. The treatment system would clean groundwater before discharging to the local storm water system. Waste generated from the treatment processes would be transported to a permitted landfill.

- **Institutional controls**
  A land use covenant would be recorded for the portion of the Site owned by C.S. Land, Inc. and a consent agreement between the Commission and DTSC would be executed for the portion of the Site owned by the Commission. This would prevent sensitive uses such as residences, schools for persons under age 18, hospitals, and daycare centers. A land use covenant is a legal document that restricts certain land uses on a property. Future land use would be determined by the property owners.

- **Long-term operation and maintenance**
  Ongoing maintenance of shoreline walls, the upgradient groundwater extraction system, the on-site groundwater extraction and treatment system, and the asphalt cap would continue long-term. The project is designed for a 100-year life span.

**Safety Measures**
The following safety measures would help ensure that public health and the environment are protected during cleanup activities:

- Install air and dust monitoring equipment upwind and downwind of the Site.
- Water trucks would spray water during grading activities to control dust.
- Plastic sheeting would cover stockpiled material.
- Trucks would be covered and tires cleaned prior to leaving the Site.
- Truck idling times would be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes.
- Streets would be swept to remove dirt tracked out into roadways using wet power vacuum sweepers.

After approval of the RAP, it would take about two years to complete the design plans, select contractors, and obtain necessary permits. The work would start in late 2020 and take about two and a half years to complete. DTSC would distribute a Work Notice to the community prior to the start of work. Minimal impacts are expected to neighboring communities. Another meeting will be scheduled when the design plan is ready, prior to work beginning.

**The California Environmental Quality Act (CEQA)**
CEQA is a state law that requires a project’s lead agency to consider and disclose potential adverse environmental impacts of its proposed actions before approving them. As the lead agency for the cleanup project, DTSC has prepared a draft EIR to assess the potential environmental effects and solicit public input. The draft EIR describes the Site’s existing conditions; analyzes potential adverse impacts; and identifies measures to avoid, reduce, or mitigate adverse impacts of the remedial process, as available and feasible.
The following steps in the EIR process have been completed:

- Notice of Preparation (NOP) for the draft EIR
  The NOP was available for a 30-day public review period from July 28, 2016 to August 26, 2016.

- Public Scoping Meeting for the NOP
  A public scoping meeting was held during the NOP public review period. The meeting took place on August 10, 2016 from 6:00-8:00 at the Crockett Community Center located at 850 Pomona Street in Crockett, California.

- Prepare the draft EIR
  DTSC issued the Notice of Availability (NOA) for the draft EIR. The NOA solicited comments from the public on the content of the environmental information included in the draft EIR. The draft EIR and the Notice of Completion were submitted to the State Clearinghouse for State agency review.

- Public Meeting for the draft RAP and draft EIR
  A public meeting was held during the public review period. The meeting took place on February 1, 2018 from 6:00-8:00 at the Crockett Community Center located at 850 Pomona Street in Crockett, California.

The draft EIR identifies potential significant impacts to air quality and aquatic biological resources from the cleanup project. To mitigate for air quality, emission control technologies would be incorporated when feasible for construction-related air emissions. During construction of the shoreline wall, pile driving equipment would cause unavoidable short-term stress to fish in the bay. To reduce noise impacts to fish, cushions would be used between the pile and hammer. A hydro-acoustic monitoring plan would be in place during pile driving. An additional measure to reduce noise impacts to fish would be to pre-drill holes to reduce the amount of pile driving. This work would be done in accordance with a permit from the California Department of Fish and Wildlife. The long-term benefits of the cleanup would outweigh these short-term impacts to air quality and aquatic biological resources.

Subsequent steps DTSC will take after the public review period of the draft EIR include the following:

- Prepare and consider certification of the final EIR, which will include written responses to comments received during the public review period.
- Prepare a Mitigation Monitoring and Reporting Program (MMRP) to ensure mitigation measures and project design features are implemented during final remedy cleanup activities.
- Decide and approve the final remedy and file the Notice of Determination (NOD) with the State Clearinghouse.

Next Steps
DTSC will review and consider all public comments before making a final decision on the RAP and EIR. At the end of the public comment period, we will evaluate comments received and make any necessary changes to the RAP and EIR. We will send a Response to Comments document to all those who comment, and make it available in the information repositories listed below.

Information Repositories
The draft RAP and draft EIR are available to review at the following locations:
Information about the Site can also be found on DTSC’s EnviroStor website: http://www.envirostor.dtsc.ca.gov/public. Click on the “Site/Facility Search” link, type Selby Slag in the “Site/Facility Name” field, and click on the “Get Report” button. Click on the “Report” link on the left side of the screen.

If you would like DTSC to notify you via email when new EnviroStor documents are available online, click on the “Sign Up for Email Alerts” link on the upper right side of the screen. To learn more about DTSC, please visit our website at www.dtsc.ca.gov.

Contact Information
For more information about the cleanup process or Site-related documents, contact:

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Figure 2: Proposed Remedy for Selby Slag Site