

**CALIFORNIA STATE LANDS
COMMISSION**

100 Howe Avenue, Suite 100-South
Sacramento, CA 95825-8202



Established in 1938

JENNIFER LUCCHESI, Executive Officer

916.574.1800

TTY CA Relay Service: 711 or Phone **800.735.2922**
from Voice Phone **800.735.2929**
or for Spanish **800.855.3000**

Contact Phone: 916.574.1900

September 21, 2024

File Ref: SCH #2020080442

Sam Fielding, Coastal Program Analyst
San Francisco Bay Conservation and Development Commission
375 Beal Street, Suite 510
San Francisco, California 94105

VIA ELECTRONIC MAIL ONLY (sam.fielding@bcdc.ca.gov)

**Subject: Recirculated Draft Environmental Assessment (EA) for Cargill,
Incorporated Solar Salt System Maintenance and Operations Activities
Project, San Mateo and Alameda Counties.**

Dear Sam Fielding:

The California State Lands Commission (Commission) staff has reviewed the Recirculated Draft Environmental Assessment (EA) for the Cargill, Incorporated Solar Salt System Maintenance and Operations Activities Project (Project), which is being prepared by the San Francisco Bay Conservation and Development Commission (BCDC). BCDC, as the public agency with the greatest responsibility for supervising or approving the Project, is the lead agency under the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et seq.). BCDC implements a regulatory program that has been certified by the Secretary of Natural Resources as meeting the requirements of CEQA and has prepared the EA pursuant to its certified program. Cargill, Incorporated (Cargill) is applying for the permit and is proposing to carry out the Project. The Commission is a trustee agency for projects that could directly or indirectly affect State sovereign land and their accompanying Public Trust resources or uses. Additionally, because the Project could involve work on State sovereign land under the Commission's jurisdiction, the Commission will act as a responsible agency.

Commission Jurisdiction and Public Trust Lands

The Commission has jurisdiction and management authority over all ungranted tidelands, submerged lands, and the beds of navigable lakes and waterways. The Commission also has certain residual and review authority for tidelands and submerged lands legislatively granted in trust to local jurisdictions (Pub. Resources Code, §§ 6009, subd. (c); 6009.1; 6301; 6306). All tidelands and submerged lands, granted or ungranted, as well as navigable lakes and waterways, are subject to the protections of the common law Public Trust Doctrine.

As general background, the State of California acquired sovereign ownership of all tidelands and submerged lands and beds of navigable lakes and waterways upon its admission to the United States in 1850. The State holds these lands for the benefit of all people of the state for statewide Public Trust purposes, which include but are not limited to waterborne commerce, navigation, fisheries, water-related recreation, habitat preservation, and open space. On tidal waterways, the State's sovereign fee ownership extends landward to the mean high tide line, except for areas of fill or artificial accretion or where the boundary has been fixed by agreement or a court. Such boundaries may not be readily apparent from present day site inspections.

Based on the information provided and a review of in-house records, the proposed Project may extend onto State sovereign land within the Commission's jurisdiction. According to the Project Description, the proposed maintenance and operations activities, salt ponds, earthen berms, and associated infrastructure near Newark and Redwood City appear to be located within an area associated with General Lease 8596 issued to Cargill. This lease expires on November 30, 2029. Placement of new riprap or repair and replacement of existing riprap on the outboard side of berms, and placement of pilings and fish screens on intake pumps in Alameda Creek, among other Project activities, are not authorized under Lease 8596. At this time, staff does not have sufficient information to determine if the proposed activities and improvements currently extend or will extend onto lands under the Commission's jurisdiction. Commission staff requests that detailed Project plans showing existing and proposed improvements be submitted for further review when they become available. Should Commission staff determine at that time that any of the Project activities or improvements extend onto state-owned sovereign lands, an amendment to Lease 8596 will be required before the Project can commence.

Project Description

Cargill proposes the Project to meet its objectives and needs to allow:

- Continued operations to maintain the integrity and stability of earthen berms, water control structures, and other infrastructure to ensure continued viability of salt production activities.
- Implementation of sea level rise (SLR) adaptation efforts, including studies.
- Development and implementation of alternative maintenance methods, which may reduce impacts to the environment, improve efficiency, and adapt to changing climate conditions, as appropriate.

From the Project Description, Commission staff understands that the Project would include the following components that have potential to affect State sovereign land:

- Installation, repair, and maintenance of riprap: Riprap would be placed to repair and maintain protective riprap on the outboard side of berms. In addition, 7,800 square feet of new riprap would be placed in areas not previously covered by riprap.
- Installation of fish screens on Alameda Creek: Fish screens, and their supporting facilities, would be installed on one or more intake pumps located on Alameda Creek. The construction methodology has not been selected and could involve either extensive pile driving or earth movement.
- SLR adaptation activities: Berms associated with Ponds P2-12 and P2-13 may be raised up to six inches to prevent overtopping from SLR. Raising the height of berms requires widening the base and may result in the toes of protective riprap extending further into Commission jurisdiction than they do at present.

Environmental Review

Commission staff requests that BCDC consider the following comments to ensure that impacts to State sovereign land are adequately analyzed for the Commission's use of the Final EA when considering a future lease application for the Project.

General Comments

1. Annual Work Plan: As indicated in the jurisdictional comments, above, various operations and maintenance activities contemplated in the recirculated draft EA are not authorized by Lease 8596. This includes any activities involving riprap installation, repair, and/or maintenance as well as the installation and maintenance of new fish screens. Please consider revising Section 2.10 Proposed Work (p. 2-30) to include the Commission in the EA's annual Work Plan notification list of pertinent agencies. Commission staff would like to express gratitude to Cargill for submitting annual Work Plans following our previous comment on this matter in the Draft EA in 2021.

Biological Resources

2. Special Status Species and Habitat: The placement of fish screens on intake pumps in Alameda Creek will prevent entrainment of both anadromous fish (e.g., salmon, steelhead) and longfin smelt. However, the installation and maintenance of fish screens, and their supporting infrastructure, will potentially impact special status species and wetland types serving as critical habitat and essential fish habitat (e.g., tidal marsh, open water, intertidal mudflat). The types of impacts to biological resources (e.g., construction noise, sediment disturbance and resuspension) are dependent on the type of construction method selected, as the use of piers may involve impact pile driving and the building of earthen berms will require significant soil placement. Since a design has not been selected at the time this document was published, best management practices and mitigation measures to avoid, minimize, and mitigate impacts to biological resources from both types of construction should be included in the Final EA and the mitigation monitoring program.

Staff understand that if pile driving is required for fish screen installation that Cargill will conduct an underwater noise impact assessment. Please note that if a Hydroacoustic Mitigation and Monitoring Plan is developed for the Project, then the Commission would require submission of the assessment and Plan for a required amendment to the existing lease and before any work could be completed on State lands.

3. Compensatory Mitigation: Mitigation Measure BIO-4 requires compensatory mitigation for loss of wetlands. To ensure effectiveness, Staff recommends that MM BIO-4 require restoration to occur as near to the lost wetlands as feasible. For example, Staff is aware of needed restoration at the "strip marsh" along Highway 37 and the west side of Mare Island within and adjacent to the San Pablo Bay National Wildlife Refuge.

Climate Change

4. Sea Level Rise: The Project area is increasingly vulnerable to SLR and extreme storms caused by climate change, with older infrastructure that needs to be maintained and, in some cases, fortified to minimize the risks from rising San Francisco Bay (Bay) waters and storm damage. The current barriers that protect the Bay and surrounding waterways (creeks, sloughs, and flood control channels) from the salt pond system are old, low-elevation earthen berms that use vegetation and riprap to prevent erosion. The Project proposes to fill gaps in the berms, and repair old riprap and install new riprap to both the inboard and outboard slopes. In addition, the Project will elevate two outboard berms along Ponds P2-12 and P2-13 by six inches to prevent overtopping from SLR and storms. These two ponds border the Bay and are

the primary storage reservoirs for high concentrations of excess mixed sea salts (MSS), including chloride, bromide, sulfate, sodium, potassium, and magnesium. While the components of the MSS are not inherently toxic, if they were to flow into the Bay before being blended with wastewater (e.g., if the berms were overtopped, damaged, or breached), they could create a temporary ionic imbalance and adversely impact aquatic organisms. The Project is proposing to explore alternative methods to enhance berm integrity including alternative materials or new technologies for erosion control, a study using vinyl sheet piling berm inserts to reduce overtopping potential, and nature-based solutions, if feasible, but specific methods have not been selected at this point.

The EA states that the berms were not designed as flood control structures and do not meet Federal Emergency Management Agency (FEMA) or United States Army Corps of Engineer's flood-protection standards. The salt ponds are within the FEMA 100-year flood plain, and the analysis in Section 3, *Hydrology and Water Quality*, shows that the berms would be overtopped during a 100-year storm at both existing heights and with six inches added to the tops of the berms at Ponds P2-12 and P2-13. This is concerning, particularly because contamination risks from the salt ponds overflowing into the Bay are considerably higher when factoring in precipitation and runoff volumes during severe storms. The EA briefly mentions a rain management system but does not provide details, analysis, or the condition and sufficiency of the pumps, diversion system, and storage capacity of the system. The ponds could fill rapidly, and adjacent flood channels and creeks could overflow, adding to the risk of overtopped berms from all directions.

When Cargill conducts a separate project to develop strategies and methods for Long-term SLR Adaptation and Management for the ponds, Commission staff recommends a comprehensive evaluation of the rain management system and risk reduction measures (such as pursuing the mentioned future project to relocate the MSS ponds further inland) that, combined, could lower SLR vulnerability and reduce the need for hard armoring along the Bay shoreline. Commission staff also recommends that the long-term SLR study (or project) consider the full range of benefits and impacts of hard armoring versus nature-based solutions as SLR adaptation strategies when analyzing feasibility. This would include a cost-benefits analysis that considers the full life span of the salt pond system, lower costs associated with installing and maintaining nature-based solutions over time, and non-market benefits like lower greenhouse gas emissions, carbon sequestration, and water and habitat quality enhancement that are produced from solutions like native vegetation erosion control and living shorelines or ecotone levees.

As BCDC's Shoreline Protection Policy 6 states (pg. 3-147), shoreline adaptation strategies that use nature-based features can also be more cost-effective because they are self-mitigating or require less mitigation than traditional hard armoring like riprap and seawalls. The Commission has adopted the [Shoreline Adaptation and the Public Trust](#) report (2023) and recommends that Cargill incorporate the information from the report on the advantages and disadvantages of different management strategies, and how to minimize and mitigate any adverse impacts to Public Trust lands, uses, resources, and values, to the greatest extent feasible in the development of future projects.

Cultural Resources

4. Title to Resources Within Commission Jurisdiction: The installation of fish screens on intake pumps in Alameda Creek may require excavation in the creek or in adjacent side sloughs that could inadvertently disturb cultural resources. The Final EA should state that the title to all archaeological sites and historic or cultural resources on or in the tide and submerged lands of California is vested in the State and under the jurisdiction of the California State Lands Commission (Pub. Resources Code, § 6313).

Staff requests that the following statement be included in the Final EA's Mitigation Measure Cul-1: Inadvertent Encounter of Undiscovered Archaeological Resources: "The final disposition of archaeological, historical, and paleontological resources recovered on State lands under the jurisdiction of the California State Lands Commission must be approved by the California State Lands Commission."

Thank you for the opportunity to comment on the recirculated draft EA for the Project. As a trustee and potential responsible agency, the Commission may need to rely on the Final EA for issuing an amended lease. Staff requests that you consider these comments before approving the Final EA.

Please send electronic copies of the Final EA, Mitigation Monitoring Program, Notice of Determination, and approving resolution when they are final. Please note that federal and state laws require all government entities to improve accessibility of information technology and content by complying with established accessibility requirements. (29 U.S.C. § 794d; 36 C.F.R. § 1194.1 et seq.; Gov. Code, § 7405.) California State law prohibits State agencies from publishing on their websites content that does not comply with accessibility requirements. (Gov. Code, § 115467.) Therefore, any documents submitted to Commission staff during the processing of a lease or permit that will be posted online, including relevant CEQA documentation, must meet accessibility requirements for Commission staff to place the application on the Commission agenda.

Refer questions concerning environmental review to Robin Tuohy, Environmental Scientist, at Robin.Tuohy@slc.ca.gov. For questions concerning Commission leasing jurisdiction, please contact Marlene Schroeder, Public Land Management Specialist IV, at Marlene.Schroeder@slc.ca.gov.

Sincerely,

A handwritten signature in black ink that reads "Nicole Dobroski". The signature is written in a cursive, flowing style.

Nicole Dobroski, Chief
Division of Environmental Science,
Planning, and Management

cc: Office of Planning and Research
R. Tuohy, Commission
M. Schroeder, Commission