



EAST BAY DISCHARGERS AUTHORITY
NOTICE OF AVAILABILITY OF A DRAFT ENVIRONMENTAL IMPACT
REPORT (EIR) AND NOTICE OF PUBLIC MEETING TO PROVIDE
COMMENTS ON THE DRAFT EIR
FOR THE
CARGILL MIXED SEA SALTS PROCESSING AND BRINE DISCHARGE
PROJECT

Date: January 4, 2023

To: Responsible Agencies, Trustee Agencies, and Interested Persons

RE: Notice of Availability of a Draft Environmental Impact Report (EIR) and Notice of Public Meeting to Provide Comments on the Draft EIR for the Cargill Mixed Sea Salts Processing and Brine Discharge Project

The Draft Environmental Impact Report (EIR) (SCH # 2022050436) for the Cargill Mixed Sea Salts Processing and Brine Discharge Project is now available for review. Public review and comment on this document is invited for a 45-day period from January 4, 2023 through February 17, 2023.

PROPOSED PROJECT: Cargill Mixed Sea Salts Processing and Brine Discharge Project (SCH # 2022050436)

PROJECT BACKGROUND: The East Bay Dischargers Authority (EBDA) is a Joint Powers Public Agency (JPA) consisting of five local agencies (City of San Leandro, Oro Loma Sanitary District, Castro Valley Sanitary District, City of Hayward, and Union Sanitary District). EBDA owns and operates three effluent pump stations, a dechlorination facility, and combined effluent pipeline/force main and outfall system to manage treated effluent from its member agencies' wastewater treatment plants and discharge the effluent through its common outfall and diffuser into a deep-water portion of the central San Francisco Bay (Bay) under a National Pollutant Discharge Elimination System (NPDES) permit.

Cargill, Incorporated (Cargill) operates a solar sea salt production facility (Solar Salt Facility) in Newark, California. The Solar Salt Facility produces sodium chloride (NaCl, i.e., table salt) and liquid bittern (concentrated magnesium chloride brine) from Bay water. Bay water is evaporated in a series of salt ponds along the margin of the Bay, thereby concentrating the salts until they become saturated and precipitate from solution. The majority of the NaCl is crystallized and then processed and packaged to individual customer's specifications. The remaining brine is further evaporated through a series of ponds to achieve the concentrated magnesium chloride brine product also known as liquid bittern, which is harvested to produce additional commercial products used for road de-icing, dust suppression, animal feed, and other uses. The additional evaporation of the brine also results in crystallization of other salts in sea water, which are not marketed. These salts are referred to as mixed sea salts (MSS). The MSS are stored in ponds adjacent to the Bay at the Solar Salt Facility. Currently, there are approximately 6 million tons of MSS stored in these ponds. Facing the potential long-term threat of sea level rise from the Bay, Cargill is proposing to implement innovative technology to enhance extraction of additional salts from the MSS inventory and then dissolve residual MSS in Bay water to produce a brine that could be pumped into EBDA's combined effluent conveyance system. Once in EBDA's conveyance system, the brine would be blended with and further diluted by EBDA Member Agency effluent and then discharged back into the Bay in accordance with EBDA's NPDES permit. Through this process, the volume of brine and precipitated salts stored in ponds closest to the Bay at the Solar Salt Facility in Newark would be reduced. Therefore, with implementation of the proposed project, Cargill would be accelerating

and enhancing the recovery of commercial product from the MSS inventory and proactively addressing the threat of sea level rise at the same time.

PROJECT LOCATION: Proposed project features are located in the eastern San Francisco Bay Area, including portions of San Lorenzo, an unincorporated community in Alameda County, and portions of the Cities of Hayward, Union City, Fremont, and Newark. Specifically, project improvements would be constructed at Cargill's Solar Salt Facility, located at 7220 Central Avenue in Newark, California, and primarily within roadway rights-of-way between the Solar Salt Facility and the Oro Loma Sanitary District/Castro Valley Sanitary District Water Pollution Control Plant in San Lorenzo. The MSS are primarily situated in Ponds 12 and 13 of Cargill's Solar Salt Facility, which are located within the United States Fish and Wildlife Service's (USFWS) Don Edwards San Francisco Bay National Wildlife Refuge. In 1979, Cargill transferred this real property, along with additional acreage, through a condemnation process and retained perpetual rights to continue sea salt operations within 8,000 acres of the refuge, including Ponds 12 and 13. The project location and proposed features are shown in Figure 1.

PROJECT DESCRIPTION: The proposed project would enable the enhanced processing and removal of MSS in existing Cargill ponds by harvesting additional liquid bittern from the MSS matrices in these ponds as commercial product, dissolving the residual MSS solids in the ponds using Bay water, and transferring the resulting brine to EBDA's combined effluent pipeline for discharge into the Bay under EBDA's NPDES permit. Harvesting the liquid bittern and final disposition of the residual MSS brine would not require the use of any chemicals. It is anticipated that the MSS brine would be discharged to the EBDA system at a rate of up to 2.0 million gallons per day (MGD). Based on this estimated flow rate, the harvesting and discharge of the current inventory of MSS is projected to require a 10-year timeframe. Discharge of the MSS brine by Cargill to the EBDA system would be subject to an agreement between EBDA and Cargill. The EBDA JPA term expires on June 30, 2040. Therefore, the proposed project would either terminate on or before that date or could continue under a renegotiated agreement.

The proposed project has an onsite component of pipelines and pumping facilities within the existing Solar Salt Facility and an offsite component that would involve construction of approximately 15.6 miles of new underground pipeline primarily within roadway rights-of-way to connect the Solar Salt Facility into EBDA's system just downstream of the Oro Loma Sanitary District/Castro Valley Sanitary District Water Pollution Control Plant in San Lorenzo.

The proposed project consists of the following components:

- ▶ **Dissolution Water Pond and Plummer Creek Pump Station.** A new pump station would be installed to pump water indirectly from Plummer Creek to a new dissolution water pond.
- ▶ **Dissolution Water Pump Station and Distribution System.** A new dissolution water pump station would be constructed as a cast-in-place slab-on-grade facility located at the dissolution water pond and connected to an onsite high-density polyethylene piping distribution system installed above grade along the internal slope of the existing berms to deliver dissolution water to micro-trenches excavated in the crystallized salt layer above the Bay mud in Ponds 12 and 13 for MSS processing.
- ▶ **Two MSS Brine Pump Stations.** New MSS brine pump stations would be constructed at Ponds 12 and 13 as cast-in-place slab-on-grade pump stations to pump the resultant brine out of the processing ponds and into the offsite brine discharge pipeline.
- ▶ **Liquid Bittern Recovery Pumps.** During the processing of Pond 12, sections of the pond would be temporarily isolated using vinyl sheet piling to enable liquid bittern recovery. Two new pipelines would be installed along the internal slope of the berm on the northern shore of Pond 12: (1) a 12-inch header pipe to deliver dissolution water to Pond 12; and (2) a 4-inch pipe to transfer liquid bittern from Pond 12 to Pond 13, where it would be further processed and harvested as commercial product. After Pond 12 processing is complete, MSS processing would be initiated in Pond 13, and Pond 12 would be converted back to liquid bittern harvesting. To facilitate Pond 13 processing, two new pipelines similar to the ones described for Pond 12 would be installed along the internal slope of the berm on the southern side of Pond 13 to transfer liquid bittern from Pond 13 to Pond 12.

- ▶ **Rainwater Decanting.** A new weir box structure, which includes a weir plate (barrier) to control the flow of water, and a pipe would be installed at the northeastern corner of Pond 13 to enable decanting of rainwater from the surface of Pond 13 to supplement dissolution water for Pond 12.
- ▶ **MSS Brine Transport Pipeline.** A 14-inch MSS brine transport pipeline would be constructed and extend north primarily along roadway rights-of-way for approximately 15.6 miles from the Solar Salt Facility to the Oro Loma Effluent Pump Station (OLEPS), located at the Oro Loma Sanitary District/Castro Valley Sanitary District Water Pollution Control Plant in San Lorenzo. Based on current design, the MSS brine transport pipeline would be located within portions of Thornton Avenue, Paseo Padre Parkway, Ardenwood Boulevard, Union City Boulevard, Hesperian Boulevard, Eden Shores Boulevard, Marina Drive, Industrial Boulevard, Baumberg Avenue, Arden Road, Corporate Avenue, Investment Boulevard, Production Avenue, Clawiter Road, West Winton Avenue, and Corsair Boulevard. The proposed MSS brine transport pipeline alignment is shown in Figure 1.
- ▶ **MSS Brine Discharge to the EBDA System.** The MSS brine transport pipeline would tie into EBDA's combined effluent conveyance system immediately downstream of the Oro Loma Sanitary District/Castro Valley Sanitary District Water Pollution Control Plant in San Lorenzo by connection to the pump discharge manhole approximately 75 feet north and downstream of the OLEPS. The MSS brine would then be combined with the treated wastewater effluents from the other agencies that discharge into the EBDA system before being discharged back to the Bay.

SIGNIFICANT ENVIRONMENTAL EFFECTS ANTICIPATED: The Draft EIR identified significant or potentially significant effects associated with air quality, biological resources, cultural and tribal cultural resources, hydrology and water quality, hazards and hazardous materials, noise, and recreation. Most of the significant or potentially significant impacts from the project can be reduced to a less-than-significant level through mitigation; however, the potential to expose existing receptors to short-term construction noise would remain significant and unavoidable.

ALTERNATIVES: The State CEQA Guidelines require that an EIR evaluate a range of reasonable alternatives to the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project. Consideration of a "no project" alternative is also required. The Draft EIR includes a comparative analysis of the alternatives. In addition to the proposed project, the Draft EIR includes analysis of the following three alternatives:

- ▶ **No Project–No Development Alternative** assumes no changes to existing facilities and operations at Cargill's Solar Salt Facility. The project site would remain in its current condition and Cargill would continue to produce salt products consistent with existing operations. The approximately 6 million tons of existing residual MSS would continue to be stored in Ponds 12 and 13 and more would accumulate. Over the next 20 to 50 years, rising sea levels would increase the risk of Bay water overtopping the containment berms and releasing MSS brine into the Bay.
- ▶ **Alternative 1: In-Pipe Alternative** uses a combination of new pipeline and the existing EBDA pipeline. It assumes a shorter route for the MSS brine transport pipeline (7.5 miles) compared to the project (15.6 miles), because the pipeline would connect to EBDA's system just downstream of the Alvarado Treatment Plant in Union City, rather than downstream of the Oro Loma Sanitary District/Castro Valley Sanitary District Water Pollution Control Plant in San Lorenzo. This alternative would require the installation of 4 miles of liner within EBDA's existing combined effluent pipeline to prevent corrosion in EBDA's system.
- ▶ **Alternative 2: Bayside Parallel Pipe Alternative** assumes an approximately 17-mile route for the MSS brine transport pipeline that travels along the edges of Cargill's salt ponds, instead of the approximately 15.6-mile route along roadway rights-of-way under the project.

HAZARDOUS MATERIALS/WASTE DISCLOSURE: The project area contains numerous sites meeting the Cortese List requirements (California Government Code Section 65962.5). Within the proposed areas of ground disturbance for the project, there are two clean-up sites listed on the Department of Toxic Substances Control's (DTSC's) EnviroStor Database:

- ▶ Arden Road Property: This property is located at the intersection of Arden Road and Dante Court in the City of Hayward, California. Past site investigations at the property revealed soil and shallow groundwater contamination from halogenated solvents, oxygenated solvents, and other unspecified solvent mixtures. The cleanup status is listed as "Refer: RWQCB as of 7/29/1994."
- ▶ Patterson Ranch: This property is located at the intersection of Patterson Ranch Road and Paseo Padre Parkway in the City of Fremont, California. The site was previously used for agriculture and onsite soils were found to be potentially contaminated with herbicides, pesticides, and metals. The cleanup status is listed as "Inactive – Needs Evaluation as of 5/22/2015."

Additionally, there are three cleanup program sites and three leaking underground storage tank (LUST) cleanup sites listed on DTSC's EnviroStor Database within the proposed area of ground disturbance for the project. Cleanup for each of these sites has been completed and the cases have all been closed. Lastly, there is one permitted underground storage tank listed on the EnviroStor Database within the proposed area of ground disturbance for the project.

WHERE DRAFT EIR MAY BE OBTAINED: A hard-copy of the Draft EIR is available for public review at:

East Bay Dischargers Authority
2651 Grant Avenue
San Lorenzo, CA 94580

The Draft EIR is also available for download and public review online at: <https://ebda.org/projects/cargill-partnership/>

PUBLIC REVIEW AND COMMENT PERIOD: Public review and comment on the Draft EIR is invited for a 45-day period from January 4, 2023 through February 17, 2023.

PUBLIC MEETING: EBDA will conduct a public meeting to present the findings from and receive comments on the Draft EIR. The public meeting will be hosted online via Zoom, starting at 6:00 p.m. on Tuesday, January 24, 2023; presentation will begin at 6:05 p.m.

Participants must register in advance at the following link:

https://us06web.zoom.us/webinar/register/WN_AdmKAvFFQb2sZ1QukFxxgw. After registering, participants will receive an email confirmation with the meeting link to log into the webinar on January 24, 2023.

The meeting will be offered in English. To request other language interpretation or other accommodation, please submit your request at least 7 business days before the meeting (by January 17, 2023) by contacting Juanita Villaseñor at (510) 278-5910.

SUBMITTING COMMENTS ON THE DEIR: Agencies and interested parties are encouraged to provide comments on the Draft EIR. Because of time limits mandated by State law, comments must be received by **5:00 p.m. on February 17, 2023**. Please send all comments on the Draft EIR by mail or email to:

East Bay Dischargers Authority
2651 Grant Avenue
San Lorenzo, CA 94580

Attn: Jacqueline Zipkin, General Manager
Phone: (510) 278-5910
E-mail: jzipkin@ebda.org

Comments provided by email should include "Cargill MSS Processing and Brine Discharge Project Draft EIR Comment" in the subject line, and the name and physical address of the commenter in the body of the email. If you are from an agency that will need to consider the EIR when deciding whether to issue permits or other approvals for the project, please provide the name of a contact person.

All comments on environmental issues received during the public comment period will be considered and addressed in the Final EIR, which is anticipated to be available for public review in spring 2023.



Source: Data received from AECOM and Jacobs in 2021 and 2022; adapted by Environmental in 2022.

Figure 1 Project Location and Proposed Project Features