

San Francisco Bay Conservation and Development Commission

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Governor's Office of Planning & Research

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Via email: < jzipkin@ebda.org >

STATE CLEARINGHOUSE

SUBJECT: Draft Environmental Impact Report for the *Cargill Mixed Sea Salt Processing and Brine Discharge Project*, in San Lorenzo, an unincorporated community in Alameda County, City of Hayward, Union City, Fremont and Newark, Alameda County (BCDC Inquiry File No. MC.MC.7415.026; SCH # 2022050436)

Dear Ms. Zipkin:

Thank you for the opportunity to comment on the Draft Environmental Impact Report (DEIR) for the *Cargill Mixed Sea Salt Processing and Brine Discharge Project* (project). The Proposed Project is located along approximately 16 miles of San Francisco Bay shoreline in portions of the cities of San Lorenzo, an unincorporated community in Alameda County, City of Hayward, Union City, Fremont, and Newark in Alameda County. The project includes installation of additional infrastructure at the Cargill Solar Salt Facility and a new pipeline to transport the concentrated Mixed Sea Salts (MSS) brine currently stored in Ponds 12 and 13 to the East Bay Discharger Authority (EBDA) Oro Loma Sanitary District/Castro Valley Sanitary District Water Pollution Control Plant where it will be diluted, mixed with the effluent, and discharged to the Bay consistent with EBDA NPDES permit requirements. The Cargill Ponds 12 and 13 currently store approximately 6 million tons of MSS adjacent to the Bay and these ponds are facing a potential long-term threat of sea level rise from the Bay. The discharge of the MSS from these ponds via the pipeline is anticipated to take approximately 10-20 years based upon the estimated discharge rate. The project is intended to remove the MSS and reduce the potential for impacts from sea level rise.

The San Francisco Bay Conservation and Development Commission (Commission or BCDC) is a responsible agency for this project and will rely on the DEIR when it considers the project during permitting for any portions of the project occurring within the Commission's jurisdiction. Our staff has prepared comments outlining specific additional issues or comments on the alternatives that should be addressed in the DEIR or through the Commission permitting process as appropriate. The comments below are based on the McAteer-Petris Act and the Commission's San Francisco Bay Plan (Bay Plan).



The DEIR analyzed a number of alternatives including the following:

1. **No project** – This alternative includes no changes to the Cargill Solar Salt Facility or operations and the MSS would remain in Ponds 12 and 13. The ponds would continue to build up additional MSS during salt making operations. Over the next 20 to 50 years, the berms around the ponds become more at risk of overtopping that could result in a release of MSS brine into the Bay.
2. **Proposed Project** – The Proposed Project includes construction of a new approximately 15.6-mile pipeline mostly in existing roadway right-of-ways connecting from Cargill Ponds 12 and 13 to the Oro Loma facility. This alternative also includes the installation of three new pump stations, each containing approximately four pumps with varying power and size, in the salt ponds and adjacent waterways (Plummer Creek).
3. **Alternative 1 – In-Pipe Alternative** – This alternative includes a combination of new pipeline and existing EBDA pipeline, with a shorter MSS transport route and the new pipeline connecting downstream of EBDA's Alvarado Treatment Plant in Union City rather than directly to the Oro Loma facility. This alternative requires installation of 4 miles of liner in the current EBDA pipeline and new construction of approximately 7.5 miles of new pipeline, and three new pump stations, each containing approximately four pumps with varying power and size, in the salt ponds and adjacent waterways (Plummer Creek). This route would be mostly under existing roadway right-of-ways, except for work occurring on the existing EBDA pipeline.
4. **Alternative 2 – Bayside Parallel Pipe Alternative** – This alternative includes a new 17-mile pipeline route that travels along the edges of Cargill's salt ponds and existing berms rather than along the inland route in roadway right-of-ways and may require more work in environmentally sensitive areas. This alternative also includes the installation of three new pump stations, each containing approximately four pumps with varying power and size, in the salt ponds and adjacent waterways (Plummer Creek).

While Alternative 1 will have more impacts than the No Project alternative, the DEIR identifies Alternative 1 as the environmentally superior alternative because it accomplishes the objectives of the project to remove the MSS material from Ponds 12 and 13. However, Alternative 1 would have greater impacts in sensitive wetland habitat areas than the Proposed Project and would lead to more disruptions in the EBDA operations during the installation of the lining of the pipeline. Additionally, Alternative 1 only includes lining certain sections of the existing EBDA pipeline, which would also leave some areas susceptible to corrosion or additional maintenance or

replacement in the future. Alternative 2 would require more impacts in sensitive habitat areas and recreational areas than the Proposed Project. Therefore, it appears that EBDA has tentatively selected the Proposed Project as the alternative to move forward into design and permitting.

Proposed Project Details

The following project details should be clarified in the DEIR:

1. **Project Timing.** Please clarify the timing in DEIR Section 2.6.8. There is a mention that construction is likely to begin in the summer of 2023, but to BCDC's knowledge Cargill has not applied to any agencies, including BCDC, for permits and it may not be realistic for all agency approvals to be obtained for construction to occur in the summer of 2023.
2. **Construction Phasing.** The DEIR mentions that the Pond 12 infrastructure is planned to be built in the first year, but the Pond 13 infrastructure is not planned to be built until 6 years later. There is no explanation for the need of this phasing. Additionally, Pond 13 to be larger and may contain more MSS that will take much longer to remove so this phasing appears to extend the anticipated total timeline for the removal of the MSS. Please clarify if it possible to construct the infrastructure for both ponds concurrently, to try and decrease the amount of time needed to remove the MSS from both ponds.
3. **Volume of MSS.** The DEIR reports that there are approximately 6 million tons of MSS that will need to be discharged, but there is not mention of the how the rate of removal and the time associated factors in the continued use and additional of new MSS to the ponds from ongoing salt making operations. Please include additional details on this in the DEIR.

Alternatives Analysis

1. **Proposed Project.** This alternative appears to be the most inland alternative that would include the least fill in the Commission's jurisdiction and minimize impacts to sensitive Bay resources.
2. **Alternative 1.** This alternative has the smallest overall footprint but would have a greater impact to Bay resources than the Proposed Project and would require more long-term maintenance in tidal wetlands than other alternatives. While Alternative 1 would have fewer overall impacts than the Proposed Project, it appears to have greater recreational impacts and greater disturbance in environmentally sensitive areas and would also have greater disruption to EBDA's existing system during the lining of portions of the existing EBDA pipeline and construction of access pits.
3. **Alternative 2.** Please clarify the description of Alternative 2 in Section 5.4.3 and provide additional details on where exactly the new pipeline would be located relative to the berms around the Cargill facility and roadways mentioned along the route. For example, will the new pipeline run along the interior of the salt ponds and be exposed, or will the pipeline be buried within the existing berms. Many of the existing berms around the Cargill facility are regularly maintained but are not engineered structures. Please provide more clarity on the proposed

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location for the pipeline in relation to these berms and analyze whether this may affect any of the berm integrity. Please also clarify whether any import of soils would be needed for this alternative or not. Please also quantify the potential fill for any staging areas that may be associated with this alternative, as it seems the staging areas have not currently been identified.

The DEIR mentions that the proposed facilities would be designed and constructed in accordance with the California Building Codes (CBC) and standard engineering practices, but it is not clear how or if the berms in Alternative 2 along the pipeline route would also be constructed to similar standards or need to be modified to ensure that the pipeline meets these standards.

Commission Jurisdiction

Within its jurisdiction, Commission permits are required for activities that involve placing fill, extracting materials, or making any substantial change in use of any water, land, or structure. Permits are issued if the Commission finds the activities to be consistent with the McAteer-Petris Act and the policies of the Bay Plan, including, but not limited to, that the project includes the minimum fill necessary for the project, that there is no alternative upland location for the fill, that the impacts to Bay resources are minimized, and that the fill be constructed in accordance with should safety standards and protection against unstable geologic or soil conditions or flood or storm waters.

Please note that in DEIR sections 1.4 and 2.6.9, BCDC is identified as a Regional or Local Agency, but BCDC is a State Agency and should be included with the list of other State Agencies and State laws. From the DEIR, it is not clear which portions of the project and associated impacts would be in the Commission's jurisdiction, but this should be more clearly defined in the DEIR and through the permitting of the project.

Priority Use Areas

The DEIR does not appear to analyze the priority use areas that were mentioned in the NOP comment letter, please include update the DEIR to include a section on the consistency of the project with the priority use areas identified in the Bay Plan that may occur along the various route alternatives.

Commission Law and Bay Plan Policies Relevant to the Project

Fill within the Bay and Salt Ponds

The amount of fill or project impacts within the Commission's jurisdiction was not specifically quantified in the DEIR for the Proposed Project or alternatives. This information will be needed during the permitting process. Additionally, there appears to be discussion of ways the project and alternative may minimize impacts to public access and recreation areas, but there is no mention of whether the project includes additional public access improvements or how the

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project meets maximum public access to the Bay consistent with the project. As mentioned previously, the project will need to meet the requirements of the McAteer-Petris Act and the San Francisco Bay Plan, including that there is no alternative upland location for the fill.

Public Access and Recreation

As mentioned, there are a few Commission-required public access areas that the proposed pipeline alternatives may run through, as well as some existing sections of the Bay Trail and recreational areas that appear to occur along some of the routes for the pipeline alternatives. However, there is no discussion of potential public access improvements that may be associated with the project, especially given that all alternatives, with the exception of the no-project alternative, will impact some amount of exiting public access or recreational areas.

Please note that for any work occurring within BCDC's jurisdiction or an a BCDC required public access area, BCDC will need to review and approve any detour plans associated with the construction of the project. Please be sure that BCDC is added to the Mitigation Measure for Impact 3.10-1 as an agency that needs to be consulted on such review and the development of any detour plans for facilities in the Commission's jurisdiction and required by the Commission. The precise extent of any public access or recreation impact was not quantified in the DEIR and will need to be evaluated during the permitting process for the project. Please also note that any detours should also be made ADA-accessible throughout the project, and this should be included in the DEIR.

We noted that the DEIR mentioned that Alternative 2 appears may have more permanently impacts to some recreational facilities. BCDC encourages looking for a route that minimizes permanent and temporary impacts to public access and recreational facilities. Any temporarily impacted areas, should also be restored following the construction.

Fish, Other Aquatic Organisms and Wildlife

The Proposed Project mostly includes construction in upland habitats and terrestrial areas; however, it does include the construction of intake pumps in Plummer Creek. The DEIR mentions the various habitat areas that may be impacted by the Proposed Project and each of the alternatives but does not specifically quantify the area of impact. The Proposed Project and all alternatives would include increased diversions from Plummer Creek and Mowry Slough for the intake pumps, but there is no mention of whether there was consideration of including fish screens on the intakes as a mitigation measure to reduce potential direct impacts to special-status and native fish that may occur in Plummer Creek. This should be addressed in the DEIR.

Tidal Marshes and Tidal Flats

From the DEIR, it is not clear to what extent tidal wetlands would be impacted. It appears that both trenching and directional drilling methods of pipeline construction are considered for use with the various project alternatives, but the impacts associated with each are not quantified. BCDC's permit process will require that any potential impacts be minimized and avoided and then mitigated if there are unavoidable impacts to these habitat areas.

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Water Quality

The DEIR briefly mentions that if the Proposed Project does not occur and the MSS is not removed, that there is a risk of potential release of MSS into the Bay. However, there is no further discussion on the potential affects of such a release on Bay habitats and species and this should be further detailed in the DEIR discussion of the baseline condition that existing today.

Mitigation

Some of the alternatives considered in the DEIR are likely to have more impacts to natural resources within the Commission's jurisdiction than others, but at this time it is not clear the exact extent of such impacts. Please note the unavoidable impacts to species and their habitat may require mitigation from BCDC, in addition to the other agencies that are mentioned in the Executive Summary on page ES-20 regarding Impact 3.3-3. During the permitting, it is likely that BCDC will also require compensatory mitigation for such impacts and coordinate these requirements with the other agency staff. BCDC will also need to review the Compensatory Mitigation Plan for any impacts occurring within the Commission's jurisdiction. Generally, the Mitigation Policies in the Bay Plan direct that mitigation should be provided onsite and in-kind first prior to providing an in-lieu fee or purchasing mitigation credits. The DEIR should provide additional information on whether onsite and in-kind mitigation options for the impacts were considered or why these were not feasible.

Safety of Fills and Climate Change

The DEIR mentions that there is a long-term threat of sea level rise from the Bay in the project area and to the Solar Salt Facility. The Bay Plan Map No. 7 contains a note on subsidence for this area of the Bay that says "[a]rea subject to possible subsidence. Construction in or near Bay should be carefully planned, taking into account effects of future subsidence and sea level rise." We understand that AECOM also prepared a memo in 2021 that discusses the sea level rise and flooding vulnerability of different ponds within Cargill facilities. However, this memo does not appear to address the issue of subsidence or the seismic stability of the current berms protecting the ponds. The Bay Plan has several policies relevant for the project related to climate change, sea level rise, and safety of fills. Climate Change Policy No. 2 requires, in part, that "a risk assessment should be prepared by a qualified engineer,...based on the estimated 100-year flood elevation that takes into account the best estimates of future sea level rise and current flood protection and planned flood protection....A range of sea level rise projections for mid-century and end of century based on the best scientific data available should be used...[the] assessment should identify all types of potential flooding, degrees of uncertainty, consequences of defense failure, and risks to existing habitat from proposed flood protection devices." Policy No. 3 states that where such risk assessments show vulnerability to public safety, projects should be designed to be resilient to a mid-century sea level rise projection, and an adaptive management plan should be developed to address sea level rise impacts beyond mid-century through the life of the project.

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In addition, Policy No. 4 in the Bay Plan Safety of Fills section states that structures on fill or near the shoreline should have adequate flood protection, including consideration of future relative sea level rise as determined by engineers. The policy states that, “adequate measure should be provided to prevent damage from sea level rise and storm activity that may occur on fill or near the shoreline over the expected life of a project...New projects on fill or near the shoreline should either be set back from the edge of the shore so that the project will not be subject to dynamic wave energy, ...be specifically designed to tolerate periodic flooding, or employ other effective means of addressing the impacts of future sea level rise and storm activity.”

The DEIR mentions that the project would be built to CBC or other engineering standards. However, there is little discussion about the expected life of the project and how the various alternatives will perform during future sea level rise and with any potential groundwater flooding or during any seismic events. There was also little discussion about potential subsidence and the contribution that this may have on potential flooding. There was also little discussion about the resilience of the infrastructure to future flooding and any adaptive capacity. The DEIR should indicate whether the infrastructure for the new pipeline could be raised in the future if needed, taking into account spatial constraints, whether the underlying soils would support additional fill, and other limitations. We also recommend again that the DEIR discuss the seismic stability of the berms around Ponds 12 and 13 and how they will remain intact over the life of the project to ensure there will not be spilling of the MSS into the Bay following a strong earthquake. In addition, the DEIR should include a discussion of groundwater at the site, how it is expected to impact the MSS ponds and the pipeline infrastructure both during construction and with future sea level rise, and how any risks from groundwater rise would be addressed.

As mentioned previously, the project may need to go before the Commission’s Engineering Criteria Review Board (ECRB), which reviews projects “for the adequacy of their specific safety provisions, and make[s] recommendations concerning these provisions [and] prescribe[s] an inspection system to assure placement and maintenance of fill according to approved designs.” Our staff will work with the project proponent to determine whether ECRB review and early guidance is necessary.

Shoreline Protection

The DEIR should further detail the risk from rising sea levels, subsidence, and potential seismic safety of the existing, unengineered berms surrounding Ponds 12 and 13 and include details of any project elements, such as shoreline protection, that may be included around these ponds to ensure that there is no release of the MSS to the Bay over the life of this project. We recommend that Cargill consider design options for the Ponds 12 and 13 berms that can increase the stability of the berms against a strong earthquake that may occur over the life of the project. It appears that for some project alternatives, additional shoreline protection may be necessary. The DEIR should describe in detail all existing and proposed shoreline protection features at the site, including an analysis of their potential to adversely impact natural resources and public access,

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and how the impacts would be avoided, minimized, or mitigated for. In any areas where shoreline protection may be needed as part of the project, the DEIR should describe and analyze the feasibility of using natural or nature-based alternatives as described in the policies above.

The DEIR briefly analyzes the potential for sea level rise and groundwater rise impacts on the Proposed Project and the alternatives with 16 inches of sea level rise by 2050 but does not include any analysis of sea level rise beyond that time. Given that the life of the pipeline project appears to be longer than this, please include potential sea level rise inundation and analysis for the life of the project and discuss any potential impacts to the pipeline from sea level and groundwater rise for the Proposed Project and the alternative alignments that are closer to the Bay. This discussion should be further improved in the Flood Hazard sections of the DEIR.

Please also note that in section 3.8, there is reference to the California Coastal Commission and their guidelines for sea level rise in Local Coastal Programs. Please note that this project does not occur within the California Coastal Commission jurisdiction but is within BCDC's jurisdiction. BCDC currently considers the Ocean Protection Council's 2018 Sea Level Rise Guidance as the best available science and planning guidance for sea level rise impacts on a project. BCDC also has published the San Francisco Bay Plan Climate Change Policy Guidance that may also provide useful information for the sea level and groundwater rise section.

Environmental Justice and Social Equity

In our NOP letter, we mentioned that the DEIR should provide an assessment of any vulnerable communities adjacent to the project and also describe how there would be meaningful community engagement throughout the project planning, design, and permitting and this information should be included in the DEIR. If you need additional assistance on this topic, please contact BCDC and we can provide some additional guidance and resources for this analysis.

Public Trust

It does not appear that the DEIR has identified those portions of the project that may be subject to the public trust and how the project is consistent with the public trust. Please update the DEIR to include this information. The Bay Plan policies on public trust lands states, in part, that when taking actions on such land, the Commission "should assure that the action is consistent with the public trust needs for the area and, in the case of lands subject to legislative grants, would also assure that the terms of the grant are satisfied and the project is in furtherance of statewide purposes."


Thank you for providing the staff with an opportunity to review the DEIR for the *Cargill Mixed Sea Salt Processing and Brine Discharge Project*. We recognize the importance and scope of this project to protect the Bay and habitats from the MSS brine and hope these comments aid you in finalizing the DEIR. We look forward to working with you and the project sponsors through the planning and permitting of the project.

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If you have any questions regarding this letter or the Commission's policies and permitting process, please do not hesitate to contact me at 415-352-3624 or anniken.lydon@bcdc.ca.gov.

Sincerely,

DocuSigned by:

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ANNIKEN LYDON

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