San Francisco Bay Conservation and Development Commission
375 Beale Street, Suite 510, San Francisco, California 94105 tel 415 352 3600
State of California | Gavin Newsom – Governor | info@bcdc.ca.gov | www.bcdc.ca.gov

May 30, 2025

Staff Recommendation

Cargill Solar Sea Salt System Maintenance and Operations Project

(For Commission consideration on June 5, 2025)

Permit Application Number:	2021.003.00
Applicant:	Cargill, Incorporated
Project Description:	Continue operation of the salt ponds, by maintaining the existing earthen berms around the various ponds, pond intake and support structures, the salt ponds themselves, and the other various structures in the project area.
Location:	In Salt Ponds, the Bay, and within the 100-foot shoreline band, in approximately 12,100 acres in Alameda and San Mateo Counties.
Application Filed Complete:	May 1, 2025
Deadline for Commission Action:	July 30, 2025
Staff Contact:	Sam Fielding (415/352-3665; sam.fielding@bcdc.ca.gov)
Staff Recommendation:	APPROVAL WITH CONDITIONS

Basis for Staff Recommendation

The staff recommends approval of the application as conditioned in the recommended resolution, below. The project will consist of maintaining the existing earthen berms around the various ponds, pond intake and support structures, the salt ponds themselves, and the other various structures in the project area, Alameda and San Mateo Counties. The proposed use is not in conflict with any Priority Use Areas established by the San Francisco Bay Plan. Among other things, the recommended resolution includes special conditions requiring Cargill to:

- Limit placement of new riprap to 7,800 square feet over the 10-year life of the permit;
- Increase all berm heights of the mixed sea salts (MSS) ponds to a minimum elevation of 11.5 feet NAVD88 and the bayfront berm of Pond P2-12 to a minimum elevation of 12 feet NAVD88 by December 31, 2029;
- Prepare a Long-term Adaptative Management Plan (LAMP) to address berm adaptations necessary to address the risk of berm overtopping and wave erosion for sea level rise by January 1, 2030;

- Submit an update to the Sea Level Rise and Wave Runup Assessment for MSS Pond berms every 5 years following the adoption of updated State of California's sea level rise guidance;
- Limit pumping from the Coyote and Mowry Intakes to May 1 to October 31, annually, until required fish protection measures resulting from the Monitoring and Adapative Management Plan (MAMP) are defined and implemented; and,
- Pumping from any Bay intake after October 31, 2025 requires take coverage from the National Marine Fisheries Service (NMFS), United States Fish and Wildlife Service (USFWS), and California Department of Fish and Wildlife (CDFW) in the form of new BiOps from NMFS and USFWS, as well as an ITP from CDFW. In the event that new BiOps are not procured by October 31, 2025, the permittee shall provide proof that legal requirements with respect to federal take coverage with respect to both NMFS and USFWS are satisfied in the interim via documentation of any time extension of the existing 2010 U.S. Army Corps of Engineers (USACE) permit. The new BiOps once issued shall supersede the time extension of the 2010 USACE permit for purposes of compliance with this permit condition.

The project itself will result in the placement of up to approximately 7,800 square feet of new riprap on outboard berms in BCDC's Salt Ponds and/or Bay jurisdiction over the 10-year life of the permit. The permittee would also import soil and other materials to conduct berm maintenance, including approximately 950 cubic yards (CY) of soil per year for compacting the earthen cores of berm sections ("keying"), approximately 25,600 cubic yards of material to increase the elevations of the outboard MSS pond berms, and approximately 830 cubic yards for filling of berm gaps. The majority of this material would be placed within BCDC Salt Ponds jurisdiction—the top of the earthen berms, inboard of berms, and berms internal to the salt ponds—and therefore would not constitute Bay fill (Exhibit A). Additional activities that would be authorized in this permit are generally limited to replacement and maintenance activities which would result in insignificant net fill.

Recommended Resolutions and Findings

The staff recommends the Commission adopt the following resolution:

I. Authorization

A. Authorized Project

In BCDC's Salt Ponds Jurisdiction:

1. Berm Maintenance
   Maintain earthen berms by placing material on the top and inboard slopes of berms to restore subsided areas and repair areas showing signs of erosion.

a. Making Berms Drivable
Grade approximately 0.25 miles per year of earthen berm tops to support vehicle and equipment traffic, using approximately 1,375 cubic yards of imported material per year;

b. Keying
Address potential indicators of seepage of earthen berms by partially removing, replacing, and compacting the earthen cores of berm sections ("berm keying"). Key up to two miles of earthen berms, involving:

i. Excavating an approximately 30-inch-wide section of the center of the berm to a depth of approximately 10 feet; backfilling the excavated core section with clean imported material with limited organic material; and placing the soil excavated from the core of the berm on the inboard side of the berm; and,

ii. Using an average of approximately 950 cubic yards of imported soil per year;

c. Preliminary Sea Level Rise Adaptation
Increase the height of the berms surrounding the two MSS ponds (P2-12 and P2-13), to the minimum heights provided in this section, by placing approximately 25,600 cubic yards of material, to the following specifications:

i. Increase all berm heights of the MSS ponds (Ponds P2-12 and P2-13) to a minimum elevation of 11.5 feet NAVD88; and,

ii. Increase the bayfront berm of Pond P2-12 to a minimum elevation of 12 feet NAVD88;

d. Filling Internal Berm Gaps
Fill approximately 3 internal 20 to 60-foot berm gaps over the life of the permit, using approximately 830 cubic yards of imported clean material;

e. Other Berm Maintenance
Place 41,250 cubic yards of clean material over the 10-year authorization period for contingency berm maintenance.

2. Alternative Methods Field Test
Initiate a field test of approximately 500 to 600 linear feet of vinyl sheet pile on the pond side of berms and monitor the effectiveness of this approach, to be removed if determined to be ineffective;

3. Operational infrastructure maintenance, repair, or replacement
   Maintain, repair, or replace in-kind, existing improvements and infrastructure, such as:
   a. Platforms, trestles, tide gates, bridges, bridge foundations, and abutments, walkways, and salt roads;
   b. Motors, pumps, pipelines, and culverts;
   c. Trash racks;
   d. Existing or temporary fences, vehicle gates, electrical distribution lines for service operations, crystallizer access ramps, and pumping donuts and cofferdams; and
   e. Siphons in non-tidal areas and of siphons that cross salt marsh, sloughs and channels.
4. Conduct minor, de minimis, fill and excavation activities, including:
   a. Replacing wood piles for docks or gate access structures, replacement of gates where the ground around a gate needs to be removed and replaced as the new gate is installed, and replacing the supporting retaining walls for these structures;
   b. Minor excavation to provide access to repair and replace existing facilities; and,
   c. Removing algae from ponds.
5. Invasive vegetation removal
   Remove invasive vegetation, such as invasive cordgrass, as needed.
6. Berm Maintenance Material Stockpile
   Store clean imported material in designated stockpile areas.

In BCDC's Bay, Salt Ponds, and Certain Waterway jurisdictions:

1. New riprap placement
   Install, use, and maintain new riprap on the outboard of exterior salt pond berms, along an average of approximately 39 linear feet per year of shoreline during the 10-year authorization period. A maximum of 7,800 square feet of new riprap may be placed during the 10-year authorization period;
2. Intake structure sediment removal
   Remove approximately 3,600 cubic yards of sediment from intake structures over the course of the 10-year permit period.

3. Portable Fish Screens
   Install, use, maintain, and remove if necessary, portable coarse fish screens on the suction ends of temporary pumps and on the Bittern Pond P2-12-13 Siphon Intake and Green Hornet #1 Intake.

4. Lock use and Maintenance
   Use and maintain the existing 14 locks in order to maintain existing salt ponds, involving on average approximately 1.25 lock access events per year (approximately 12.5 total over the 10-year authorization), and consisting of the following actions:

   a. Dig an access channel about 40 to 50 feet wide through salt marsh vegetation and/or mudflats from a slough to the outboard side of the lock berm and cut an opening into the outboard lock berm;

   b. Place the material on the berm. For any remaining portion of the access channel, the excavated material would be sidecast onto a pre-approved stockpile area near the access cut;

   c. Remove approximately 200 to 400 cubic yards of the outboard lock berm and place the material in a designated stockpile area on the top of berm adjacent to the access location;

   d. Place dry stockpile material from past lock entries in the berm cut area to reseal the outboard lock berm to enclose the lock;

   e. Remove sediment that has accumulated within the lock. A maximum of 2,000 cubic yards of sediment within the lock basin would be placed on the inside and top of the lock berms, on a nearby salt pond berm, or into a nearby salt pond;

   f. Cut an opening into the adjacent salt pond to allow the excavator barge to enter the salt pond. The excavator would remove approximately 400 to 1,000 cubic yards of material and place it on the inside and top of the lock berms, on a nearby salt pond berm, or into a nearby salt pond;

   g. Seal the opening in the lock berm using salt pond material and/or previously stockpiled material; and

   h. Use material placed in the temporary placement areas along the access cut to fill the access cut so that pre-existing marsh elevations are restored.

5. Brine Channel Excavation
   Remove approximately 60,000 cubic yards of accumulated sediment from the brine channels and internal donuts during the 10-year authorization period.

6. Invasive Vegetation Removal
   Remove invasive vegetation, such as invasive cordgrass, as needed.

7. Monitoring and Adapative Management Plan
   Prepare and implement a Monitoring and Adaptive Management Plan (MAMP) to evaluate the potential for special-status fish species to be present at Bay water intakes, and, in alignment with CDFW, USFWS, and NMFS, define and prioritize any additional fish protection measures that may be required by CDFW, USFWS, and NMFS, based upon information collected through MAMP implementation.

B. **Permit Application Date**

This authority is generally pursuant to and limited by the application dated September 8, 2021, including all accompanying and subsequently submitted correspondence and exhibits, subject to the modifications required by conditions hereto.

C. **Deadlines for Commencing and Completing Authorized Work**

Work is authorized herein will commence following issuance of the permit. Work authorized herein will occur until July 1, 2035, unless an extension of time is granted by amendment of this permit.

II. **Special Conditions**

The authorization made herein shall be subject to the following special conditions, in addition to the standard conditions in Part IV:

A. **Annual Work Plan**

Individual maintenance activities conducted under the authorization of this permit shall be reviewed as required by the terms of this permit by BCDC staff prior to implementation. The permittee shall submit an Annual Work Plan of the proposed maintenance activities and lock use for the upcoming annual maintenance period, which runs from June 1 to May 31. The first Annual Work Plan is due March 1, 2026, and subsequent Annual Work Plans are due March 1 of each year, prior to the permittee's next June 1 to May 31 maintenance period, for the duration of the 10-year authorization of this permit.

Any supplemental individual maintenance activity not included as part of a submitted Annual Work Plan must be submitted for review on an ad hoc basis, as per Special Condition II.B. ("Supplemental Work").

De minimis activities are defined as those within any BCDC jurisdiction that constitute routine maintenance and repairs, minor modification of structures, and component replacement and removal activities, and which do not involve any substantial enlargement or change in use of an existing structure, do not involve in-water work, and would not cause any temporary or permanent adverse effects to the environment or

public access. De minimis activities do not need to be included in the Annual Work Plan, and do not need to be reviewed by BCDC, but they must be documented in the Annual Completion Report, outlined in Special Condition II.C.

1. Annual Work Plan Contents
   Individual maintenance activities submitted as part of the Annual Work Plan shall include the following information:

   a. Work Plan Table
      i. Activity description, including whether any ground disturbance will occur;
      ii. Location description, including where the activity will take place:
         a) salt pond and/or intake number;
         b) outboard berm, inboard berms, top of berm; and,
         c) in Bay jurisdiction, in the water, in tidal marsh.
      iii. Approximate dimensions of the activity in length and/or area (linear and/or square feet) and volume (cubic yards); and
      iv. Biological surveys requirements.
   b. Work Plan Map
      i. The location of all proposed activities described in the submitted Annual Work Plan;
      ii. The outline of the extent of all tidal marsh habitat at the project site; and
      iii. Previously identified locations of special status species and harbor seal haul outs during biological surveys and monitoring, as noted in previous Completion Reports, and as per Special Condition II.F.3 (“Endangered or Threatened Species Observed”) of this permit. Pond ID numbers, intakes with their numbers, and names of sloughs and creeks.

   c. Other Activity-Specific Documents
      i. Least Environmentally Damaging Practicable Alternative (LEDPA) Memo for new proposed placement of outboard shoreline protection (i.e., in areas where rip rap has not existed previously) (Special Condition II.K.2, “Riprap”).

2. Review Process
   The permittee shall submit an Annual Work Plan by March 1 of each year beginning March 1, 2026 to BCDC and obtain approval from BCDC prior to undertaking any work proposed in the Annual Work Plan. Individual maintenance activities submitted as part of the Annual Work Plan shall include all necessary details as required by the terms of this permit. BCDC staff shall review activities submitted as part of the

Annual Work Plan for completeness, consistency with permit authorizations, and to ensure that the proposed avoidance and minimization measures (if applicable) are identified on the approved Best Management Practices (BMPs) list (Exhibit B) or are substantially similar to such identified BMPs. De minimis activities do not need to be included in the Annual Work Plan but must be documented in the Annual Completion Report. BCDC staff will respond in writing within 45 days of the submittal of the Annual Work Plan after reviewing the proposed work with other relevant public agencies. The Executive Director may withhold approval of one or more items of the proposed work if he or she determines that the activity does not include adequate avoidance and minimization measures, or restoration measures (if applicable) as identified on the approved BMPs List (Exhibit B). A separate permit application may be required by the permittee for any proposed work that has not been approved by the Executive Director.

B. Supplemental and Emergency Work

1. Supplemental work

   Supplemental work that was not included in the Annual Work Plan submittal and is not an emergency may be considered on an ad hoc basis by submitting a Supplemental Work Request to BCDC for review and approval. The Supplemental Work Request shall follow all requirements in Special Condition II.A.1 ("Annual Work Plan Contents"). All supplemental maintenance activities must be pursuant to the authorization limits as specified in the Section I.A ("Authorized Project") and shall be reported in the Annual Completion Report (Special Condition II.C). Supplemental work that qualifies as a de minimis activity does not require the submittal of a Supplemental Work Request. If BCDC staff do not respond to a Supplemental Work Request within 45 days, the proposed activity may be conducted according to the information submitted.

2. Emergency Work

   Work that qualifies as an emergency as defined by 14 CCR section 10120 of BCDC's regulations shall be submitted and considered via BCDC's emergency permit application process by submitting an emergency request in writing.[1] Cargill shall provide notification to the USACE prior to undertaking any such authorized emergency work in USACE jurisdiction, including the location and reason for the work.

[1] Reference Subchapter 2, Chapter 6, Division 5, Title 14 of the California Code of Regulations, codified at 14 CCR §§ 10640-60.) An application shall describe the nature of the emergency, the location of the emergency, and the work proposed. The amount of information needed to describe these aspects of the emergency shall be consistent with the time the emergency allows.

C. Annual Completion Report

The permittee shall submit an Annual Completion Report by August 1 of each year for the duration of the authorization of this permit summarizing work of the previous maintenance period (June 1 – May 31), including maintenance activities completed under both the submitted Annual Work Plan and any Supplemental Work Requests within that maintenance period. The Annual Completion Report shall contain:

1. Completed Work Table
   a. A list of all tasks proposed in the previous Annual Work Plan that were reviewed by the BCDC staff, including both authorized and unauthorized tasks (including Supplemental Work Requests in either category);
   b. Narrative descriptions of maintenance activities, excluding de minimis activities, conducted over the previous maintenance period, including location, type of activity, fill involved, and BMPs (Exhibit B) used for the activities conducted; and
   c. A list of any de minimis activities conducted including the type of activity, when it occurred, and the general location.
2. Cumulative Maintenance Activity Tracking Table
   a. A cumulative list of completed activities, activity types, the lengths, areas and/or volumes of the activities, summation of lengths/areas/volumes by activity type and a comparison to limits for that activity type as set in the project authorization of this permit.
3. Mapping and tracking of areas with indicators of potential seepage, if observed (Special Condition II.J.2 (“Filling Internal Berm Gaps”)).
4. Reporting on volumes of Bay water pumped from each Bay water pump used on a monthly basis.
5. Biological Monitoring and Survey Summary
   a. The summary must include dates, locations, and results of surveys conducted, for Annual Work Plan tasks requiring biological monitoring or surveys from a qualified biologist; and
   b. Map showing the locations of activities requiring biological monitoring or surveys and the results of those surveys (Special Condition II.F.3 (“Endangered or Threatened Species Observed”)).
6. Storm and Earthquake Inspection Summary from the past maintenance year listing all Emergency Response Plan incidents, inspections and responses. if applicable (Special Condition II.J.9 (“Emergency Contingency Plan: Earthquake and Storm Inspections and Reporting”)).

7. Predator Management Annual Status Report (Special Condition II.F.6, ("Predator Control")); and,
8. Listing of general locations of any potential Tribal and Cultural Artifacts or remains encountered and confirmed as such by a tribal or consulting archeologist, per the Mitigation Monitoring and Reporting Program (MMRP, Exhibit C).

D. Permit Timeline and Potential Extension

The activities described herein are authorized for a period of ten years beginning from the date of permit issuance. At the conclusion of this 10-year period, the Executive Director, based on the evaluation of (1) all reporting requirements as listed in Table 3, (2) the effectiveness of BMPs in minimizing disturbance to existing habitat, (3) reported impacts to special status species, if any, (4) adverse impacts on public access, (5) implementation of the Monitoring and Adaptive Management Plan, (6) approval of Long-term Adaptive Management Plan, and (7) consultation with other resource agencies, may extend the authorization term for this permit for one additional five-year period, upon submittal of a time extension amendment request by the permittee. Such extension may include minor modifications by the Executive Director to the existing special conditions, including BMPs identified based upon monitoring results and experience with methods to avoid and minimize habitat disturbance, harmful effects to special status species, and adverse effects to public access, if the minor modifications are of a similar nature to existing special conditions and if the modifications themselves would not pose any new significant environmental impact not already addressed under the permit. If, based on evaluation of the information specified in subdivisions (1) through (7) above the Executive Director determines that one or more of these evaluation factors does not support extension of the authorization period of this permit, the permittee shall submit a new permit application for the activities authorized by this permit beyond the 10-year authorization period of this permit.

If a species becomes listed as a special status species at any time during the authorization period of this permit, such that new protection measures beyond those included in this permit are necessary to ensure the protection of the species consistent with Bay Plan Policies, an amendment to this permit may be required to incorporate any necessary new protection measures into the authorization and/or special conditions of this permit.

E. Plan Review

1. Plan Review and Approval for Pilot Projects
   Projects requiring plan review and approval may be submitted independent of the work plan process. Documents submitted shall be accompanied by a written request for plan approval, identifying the type of plans submitted, and indicating whether

the plans are final or preliminary. All documents will be reviewed within 45 calendar days of receipt. To save time, preliminary/draft documents may be submitted prior to the submittal of final documents.

Pilot projects identified in the Final Environmental Assessment associated with this permit (State Clearinghouse No. 2020080442), such as testing vinyl sheet piles and implementation of nature-based shoreline protection solutions, may be proposed during the permit period. However, unless otherwise provided by this permit, no such work whatsoever shall commence pursuant to this permit until a workplan for assessing the impacts and effectiveness of the pilot project, and conceptual design plans and final documents for pilot projects regarding proposed activities, are approved in writing by or on behalf of the Commission and the pilot project is determined to not have the potential for any new environmental impact not already evaluated in the Final Environmental Assessment. If any proposed pilot project would have the potential for a new environmental impact beyond that evaluated in the Final Environmental Assessment, the permittee shall seek a new permit or permit amendment for authorization of the proposed pilot project.

2. Document Details

All documents shall be labeled with: the Bay jurisdiction line: Mean High Water line or the upland extent of marsh vegetation no higher than +5 feet above Mean Sea Level and the tidal datum reference (NAVD88 or, if appropriate for dredging, Mean Lower Low Water (MLLW)); the corresponding 100-foot shoreline band; property lines; the location, types, and dimensions of materials, structures, and pilot project phases authorized herein; grading limits; and the boundaries of public access areas and view corridor(s) required herein. Documents for shoreline protection projects must be dated and include the preparer's certification of project safety and contact information. No substantial changes shall be made to these documents without prior review and written approval by or on behalf of the Commission through plan review or a permit amendment.

a. **Conformity with Final Approved Documents**

All authorized development and uses shall conform to the final documents. Prior to use of the facilities authorized herein as a pilot project, the appropriate professional(s) of record shall certify in writing that the work covered by the authorization and required of this permit has been implemented in accordance with the approved criteria and in substantial conformance with the approved documents. No substantial changes shall be made to these documents without prior review and written approval by or on behalf of the Commission through plan review or a permit amendment.

3. Discrepancies between Approved Plans and Special Conditions
   In case of a discrepancy between final approved documents and the special conditions of this permit or legal instruments, the special condition shall prevail.

4. Reconsideration of Plan Review
   The permittee may request reconsideration of a plan review action taken pursuant to this special condition within 30 days of a plan review action by submitting a written request for reconsideration to the Commission's Executive Director. Following the Executive Director's receipt of such a request, the Executive Director shall respond to the permittee with a determination on whether the plan review action in question shall remain unchanged or an additional review and/or action shall be performed by or on behalf of the Commission, including, but not limited to, an amendment to the permit and/or consultation with the Engineering Criteria Review Board.

F. Species Protection

The work authorized by this permit shall be performed in a manner that will prevent or minimize any significant adverse impact on any special status species within BCDC jurisdiction by ensuring that all authorized work is undertaken consistent with the below specified habitat and species protection measures. All species surveys and biological monitoring shall be conducted by a qualified biologist. All qualified biologists shall be approved by the USFWS, NMFS, and/or CDFW, as may be applicable, prior to conducting surveys.

Conditions specifically related to the protection of special status fish species can be found in Special Condition II.M ("Bay Water Intakes").

1. Nesting Surveys, Buffers, and Work Windows

   a. **California Ridgway's Rail (CRR)**
      Work within suitable CRR breeding habitat outboard of the berms shall be conducted during the non-nesting season (i.e., from September 1 through January 31) for CRR, if feasible. If it is not feasible to complete work in tidal marsh during non-nesting season, protocol-level CRR surveys shall be conducted between February 1 and April 15 in the year of planned outboard maintenance activities within the work area and in a 700-foot buffer around the work area. Results of protocol-level surveys shall be submitted for review and approval by USFWS. If CRR are located during the protocol-level survey then the work will not be allowed to commence during nesting season.

b. **Western Snowy Plover and California Least Tern Nesting Survey, Buffer, and Tracking**

During the Western Snowy Plover (WSP) and California Least Tern (CLT) nesting season (April 15 through September 15), prior to conducting work on berms, a qualified biologist shall perform a pre-activity nesting survey in the work area and within a 600-foot buffer around the work area. If nesting WSP or CLT are encountered, the permittee will maintain a 600-foot buffer around the nesting area(s). The qualified biologist will conduct the nesting surveys, record the locations of nesting birds and provide that information in the Annual Completion Report and the Biological Monitoring and Survey Summary Appendix. In addition, during the nesting season, the permittee will notify pertinent employees if the Don Edwards San Francisco Bay National Wildlife Refuge (Refuge) or the San Francisco Bay Bird Observatory (SFBBO) provides updates about WSP and CLT nesting activities in Refuge areas. The notification will provide the approximate location of the nest(s), as well as applicable road closures or other buffers.

c. **Nesting Birds**

To minimize the potential for impacts to nesting birds, pre-activity nesting bird surveys shall be conducted for maintenance activities with the potential to disturb nesting habitat that occur between February 1 and August 31. A qualified biologist shall survey for active bird nests; surveys will be conducted within 7 days, prior to starting the activity. Nest surveys shall include all areas within 500 feet of the activity footprint for nesting raptors, within 250 feet for special-status passerines, and within 100 feet for passerines. If active nests are detected, buffers around nests shall be established to ensure the maintenance activities do not adversely impact or disrupt breeding. Species-specific nest buffers shall be applied considering the location of the nest, topography, visual screening, and habituation to human presence. Buffers shall be maintained and maintenance activities in the area will be avoided until young have fledged or the nests become inactive

d. **Seal Pupping Buffer**

The permittee shall maintain a 500-foot buffer when active seal pupping is occurring at the Mowry Slough pupping site, or any other location within the Project area where pupping is noted, unless NMFS concurs that the buffer may be decreased for an activity. Prior to any work being conducted within 500 feet of any known haul out location, the permittee shall check for pupping activity and report any identified activity in the Annual Completion Report.

e. **In-water work**
All in-water maintenance activities shall be confined to occur between June 1 and October 31 (See Special Condition II.M "Bay Water Intakes"), and June 15 to October 31 at the Coyote intake to minimize the risk of entraining steelhead and longfin smelt.

2. Activity-Based Need for Qualified Biologists Onsite
Qualified Biologists are required where noted in the BMPs when surveys or other measures are required to avoid or minimize disturbance to listed species during maintenance activities. All biological monitoring shall be conducted by a qualified biologist approved by USFWS, NMFS, and/or CDFW. Biological monitors and qualified biologists conducting work onsite shall maintain a daily log of activities and record locations of listed species found during surveys using Geographic Information System (GIS) or an equivalent spatial data management program. A summary of biological monitoring surveys shall be submitted in the Annual Completion Report and locations shall be shown on Annual Work Plan maps.

The duties of the qualified biologists and biological monitors onsite depend on the type of maintenance activity for which their presence is warranted. BMPs requiring an onsite biologist for maintenance activities are listed below (see Exhibit B for details).

a. Berm Maintenance-3: Spills – biological monitor required (see Special Condition II.J for details);

b. Berm Maintenance-7: California Ridgway's Rail Avoidance During Emergency Berm Maintenance - qualified biologist required (see Special Condition II.F for details);

c. Riprap Placement-7: Monitor Effect on Adjacent Tidal Marsh – biological monitor required (see Special Condition II.G.1 for details);

d. ES and SNR-4: Emergency Access – qualified biologist required (see Special Condition II.J.7 for details);

e. Lock Access/Egress-1: Environmentally Sensitive areas identified in Work Plan – qualified biologist required (see Special Condition II.N for details);

f. ES and SNR -5: Lock Access – biological monitor required (see Special Condition II.N for details);

g. Lock Access/Egress-5: Seal Pupping 500-Foot Buffer- qualified biologist required (see Special Condition II.N for details); and

h. Lock Access/Egress-2: CRR - qualified biologist required (see Special Condition II.N for details).

3. Endangered or Threatened Species Observed
   If an endangered or threatened species is observed, work shall be stopped, until the qualified biologist provides approval to proceed, and the location and species observed are recorded in the daily monitoring log. All recorded observations will be submitted in the Annual Completion Report. Staff shall be trained to back away safely and inform the supervisor and others to avoid the area. Staff shall inform the Environmental Manager or designee who will instruct staff if any additional actions are necessary. Location and relevant habitat information for each endangered or threatened species observed shall be submitted to the California Natural Diversity Database (CNDDB).

4. Special-Status Species Take Notification
   The permittee shall notify BCDC, USFWS, NMFS, CDFW, or the San Francisco Regional Water Quality Control Board (RWQCB) within 24 hours of finding any injured or dead sensitive species, or eggs of sensitive species associated with project activities.

5. Environmental Training
   The permittee shall coordinate training for new maintenance staff and coordinate annual training for current maintenance staff on protection of sensitive species. This training shall be conducted by Refuge biologists, or other qualified wildlife biologists approved by USFWS, CDFW, and/or NMFS, and is intended to ensure effects to these species as a result of authorized activities are minimized. As part of this training, maintenance staff shall be familiar with: (1) the description and status of the species and the timing of their lifecycle; (2) the importance of their associated habitats; and (3) a list of measures being taken to reduce effects to these species during maintenance activities. A packet describing this information has been prepared by the permittee and will be made available to all permittee personnel.

6. Predator Control
   The permittee shall provide funding for predator control on an annual basis, pursuant to the Cooperative Service Agreement between permittee and the USDA-APHIS-WS, effective October 1, 2022, and amended every five years. The permittee shall continue to cover the expenses of predator control, prorated to the acreage of the current salt pond system. The Predator Management Annual Status Report produced by USDA-APHIS WS shall be included in the Annual Completion Report package.

7. Weed Management
   The permittee shall implement procedures described in the 2021 Cargill Weed Management Plan (Cargill 2021) to prevent the introduction and spread of non-native invasive weeds. The permittee shall survey and remove or appropriately

control any species identified in the Weed Management Plan prior to initiation of proposed work to minimize the spread of non-native invasive species. Weed removal shall be timed to prevent or avoid flowering weeds to minimize the potential for seed dispersal and propagation. The permittee shall coordinate the implementation of its weed management plan with the Refuge, including quarterly check-ins with the Refuge. The permittee shall update the plan consistent with the Refuge's direction regarding any new invasive weeds as necessary following coordination with the Refuge. If new weeds are identified, updated weed ID cards shall be provided to all workers.

G. **Tidal Marsh Protection**

Activities occurring in or immediately adjacent to tidal marshes (defined in the Bay Plan as vegetated wetlands subject to tidal action that occur throughout much of the Bay extending from approximately Mean Sea Level to the maximum height of the tides) shall be conducted to minimize and avoid adverse impacts to tidal marsh habitats and resident organisms in accordance with the below requirements.

1. Tidal Marsh Impacts

   When a proposed tidal marsh activity is expected to result in significant temporary impacts to tidal marsh vegetation and habitat (including but not limited to major vegetation removal, placement of construction matting in a tidal marsh, driving over tidal marsh in an amphibious excavator, and excavation), those sites shall be restored to 90% of the pre-activity cover conditions (see Table 1) or better within three years, and the permittee shall:

   a. Conduct a pre-activity vegetation survey of the site to establish the pre-existing site condition for comparison in follow-up vegetation monitoring. Pre-activity surveys shall record absolute vegetative cover by species using visual estimation techniques in several randomly placed 0.5-meter x 0.5-meter quadrats and document conditions with at least two fixed photo points that will be reused for post-activity performance monitoring;

   b. Immediately after activity completion, restore the site by removing all construction materials and debris, regrading to original elevations, and/or reseeding and planting, and send a post-activity report containing as-built information, photographs of the site, and results of the pre-activity survey;

c. Conduct annual post-activity vegetation surveys including measurements of absolute vegetative cover by species using visual estimation techniques in randomly placed in 0.5-meter x 0.5-meter quadrats (multiple quadrats per area) species present, and photographs from at least two fixed monitoring points, until success criteria are met; and

d. Send annual reports to BCDC documenting progress towards meeting the success criteria, and proposed adaptive management actions, if necessary, until the success criteria are met. (See Table 1 below.) Reports shall include average percent absolute cover of all native species, Cal-IPC high species, for each identified species individually, photographs from the fixed photo points before and after the activity for each year, and a discussion about any failure to meet the success criteria in Table 1 below.

Table 1. Success criteria:

Monitoring Year	Percent absolute cover of native vegetation compared to pre-project cover	Percent absolute cover of plants listed as "high" by the Cal-IPC
Year 1	30%	<5%
Year 2	60%	<5%
Year 3	90%	<5%

The success criteria may be modified by or on behalf of the Commission for individual sites at the request of the permittee if the permittee can demonstrate that alternative success criteria would achieve the same level of restoration as required by the original success criteria (90% of the pre-activity cover conditions). If BCDC staff find that a post-activity or annual monitoring report are inadequate in meeting success criteria or require revision, BCDC staff shall respond to the permittee within 20 business days of receipt of the monitoring report. If BCDC staff do not respond to the permittee's post-activity monitoring report within the specified timeframe, no further action will be required of the permittee for that specific report. If Year 2 or 3 success criteria are achieved by Year 1, or if Year 3 success criteria are achieved by Year 2, the restoration may be considered complete, if confirmed by BCDC staff.

Within 20 business days of receipt of a final monitoring report asserting achievement of the success criteria (as determined by the permittee), BCDC staff shall respond to the permittee to confirm or object to the permittee's

determination of the success of the site restoration. If BCDC staff do not respond to the permittee's report of a completed restoration (all success criteria achieved) within the specified timeframe, no further action will be required of the permittee for that restoration site.

If a temporarily-impacted tidal marsh site restoration has not achieved the success criteria within three years of activity completion (as determined by BCDC staff), the permittee shall submit an analysis of the situation and a remedial action plan to facilitate the restoration for approval by or on behalf of the Commission, and which may require additional monitoring, the requirement to obtain a separate BCDC permit or permit amendment, and/or compensatory mitigation for the adverse impacts.

2. Mitigation for Permanent Impacts to State Protected Wetlands
Although no activities resulting in permanent impacts to tidal marsh are authorized under this permit, if unauthorized permanent project impacts occur on wetlands, including those resulting from placement of riprap on tidal marsh (per Special Condition II.K.2), mitigation shall be provided at ratio of 3:1. Compensatory mitigation may include implementation of a pilot study for nature-based solutions to outboard berm erosion, and/or purchasing credits from a mitigation bank or in-lieu fee program. Mitigation shall be provided as close to the location or the impacted area(s) as feasible.

H. Creosote Treated Wood

No pilings or other wood structures that have been pressure treated with creosote shall be used in any area subject to tidal action in the Bay or any certain waterway, in any salt pond, or in any managed wetland within BCDC jurisdiction as part of the activities authorized herein.

I. Pile Driving

The permittee shall use a vibratory hammer when conducting repair and replacement of in-kind piles. Pile driving shall be conducted using a soft-start method to minimize sound impacts to fish and other aquatic wildlife and shall be conducted at low tide or when water is not present to the extent feasible.

J. Earthen Berm Maintenance Requirements

1. Earthen Berm Maintenance
When conducting berm maintenance activities, the permittee shall implement the following BMPs to reduce the potential for material entering Bay and salt marsh habitat:

a. The permittee shall build choker berms on the outboard side of the tops of berms abutting the Bay or sloughs, including areas with outboard tidal marsh;

b. Outboard berm tops shall slope inward toward the salt pond when viable;

c. Berm work shall be performed from land-based equipment, amphibious excavator, or on the tops of berms, where possible, to avoid or minimize the use of locks;

d. Vehicular traffic shall be confined to berm roads that have been graded or have been maintained for drivable condition. Vehicles driving on berms, depending on the area and conditions, shall not exceed 15 mph. Vehicles driving on salt roads shall not exceed 35 mph; and

e. If spillage occurs onto the marsh plain, permittee staff shall notify the Supervisor and Environmental Manager. Spillage will be removed unless it is deemed by CDFW, RWQCB, NMFS and/or USFWS, as applicable that the spillage removal would create more impacts than leaving the material in place. The amount of spillage onto the marsh plain is generally de minimis; however, if greater than 1 cubic yard of material spills on to the marsh plain, it will be reported to the regulatory agencies. If material is left in place, the regulatory agencies will also provide direction on any corrective actions to be performed in lieu of removal. The permittee will prepare any required reports according to applicable regulations and permits governing spill response.

2. Filling Internal Berm Gaps
The permittee may fill up to 3 internal 20 to 60-foot berm gaps (average of 0.3 berm gaps per year), using approximately 830 cubic yards of imported clean material;

3. Making Berms Drivable
The permittee may grade approximately 2.5 miles of earthen berm tops (average of 0.25 miles per year) to support vehicle and equipment traffic, using approximately 1,375 cubic yards of imported clean material;

4. Import Material
The permittee shall meet or exceed quality standards as specified in the approved Quality Assurance Project Plan (QAPP), see Special Condition II.L. for import material used for maintenance activities.

5. Keying
The permittee shall monitor and inspect the berms to identify indicators of potential seepage, including bare patches, isolated patches of dead vegetation, or pools of red water, in the vicinity of highest salinity ponds to identify the need for berm keying or

other maintenance to address potential seepage. Areas prioritized for keying or other measures to address potential seepage shall be identified in the Annual Work Plan. The permittee shall provide a summary documenting locations of potential indicators of seepage and where keying has been completed within the Annual Completion Report.

The permittee shall monitor locations of indicators of potential seepage for three years after the completion of keying and document the condition of the area. The permittee shall continue monitoring and inspecting berms to identify the need for further berm keying or other maintenance. If potential seepage control work is shown to be ineffective, the permittee shall evaluate alternative seepage control methods which may warrant the need for a permit amendment or new permit, including any associated necessary environmental review.

6. Sea Level Rise Adaptation
   By December 31, 2029, all berm heights of the MSS ponds (Ponds P2-12 and P2-13) shall be increased to reach a minimum elevation of 11.5 feet NAVD88 and the bayfront berm of Pond P2-12 shall be increased to a minimum elevation of 12 feet NAVD88. Within 90 days of completion, the permittee shall provide BCDC with confirmation that the berm heights meet the target elevations by means of surveying by a licensed land surveyor or with LiDAR.

7. Long-term Adaptative Management Plan
   The permittee shall prepare a Long-term Adaptative Management Plan (LAMP) to address berm adaptations necessary to address the risk of berm overtopping and wave erosion for sea level rise beyond 6 inches. The analysis and design shall be prepared by a CA-licensed civil, coastal or geotechnical engineer as appropriate; however, any design that changes the shape of the berm should be prepared by a California-licensed geotechnical engineer. The LAMP shall be submitted for review by or on behalf of the Commission by January 1, 2030, in order to allow activities to begin by January 1, 2035. If required, implementation of the LAMP may warrant the need for a permit amendment or new permit, including any associated necessary environmental review.

   The LAMP shall include the following:

   a. Analysis of potential impacts to all berms rated high risk in AECOM's 2021 Sea Level Rise Assessment. Berms rated high risk by AECOM include Ponds P2-11, -12 and –13 at the Newark Plants and numerous pond berms at the Redwood City plant. High risk pond berms may be excluded if they are not in service and are empty but will need to be assessed prior to being placed back into service.

b. Recommendations and conceptual designs for berm crest elevations and other measures to reduce the risk of wave overtopping with an implementation schedule to begin by January 1, 2035. The LAMP shall be based on the 2030 Sea Level Rise and Wave Runup Assessment described below.

c. An evaluation of the feasibility of using nature-based solutions as a long-term management solution for outboard berms not exposed to high wave energy.

d. Geotechnical engineering analysis demonstrating that the proposed berm height/width modifications will be adequately seismically stable during the time period of sea level rise they are intended to address. The methodology shall be that approved by the ECRB in the updated Geotechnical Report described in II.J.11 below.

8. Sea Level Rise and Wave Runup Assessment Updates

Every 5 years generally coinciding with the adoption of updated State of California's sea level rise guidance, the permittee shall prepare and submit for review and approval by or on behalf of the Commission an update to the Sea Level Rise and Wave Runup Assessment for MSS Pond (P2-12 and P2-13) berms. Each report shall provide updated recommendations for the elevation of the berms and other measures to ensure resiliency to sea level rise and erosion from wave overtopping to continue the activities authorized under the existing permit for the next proposed permit authorization period. This report shall reflect the latest best available science on sea level rise, wave propagation and tidal wetland evolution. As of the issuance of this permit, the latest updates to the State of California sea level rise guidance were adopted in June 2024, and an addendum to Cargill's Sea Level Rise and Wave Runup Assessment was accepted by BCDC on July 1, 2024.

9. Emergency Contingency Plan: Earthquake and Storm Inspections and Reporting

On May 16, 2025, the permittee submitted to BCDC for review and approval, a peer-reviewed Emergency Contingency Plan (ECP) that specifies how the permittee will inspect the berms of the MSS ponds for damage after severe storms and earthquakes, make repairs in a timely manner, record any ecological impacts, and notify the appropriate agencies. The ECP defines the criteria for critical events (including earthquakes and storms) that would trigger an immediate inspection. Following a critical event, as defined in Cargill's ECP, the permittee shall implement the action sequence in the approved ECP to manage emergencies. The permittee

shall follow the May 2025 ECP and adequately address pending minor BCDC comments on the May 2025 ECP by July 31, 2025 including attaching the Rain Management Plan as an appendix.

The permittee shall install a staff gauge into each MSS pond (or use an equivalent structure in the ponds with water level markings), surveyed for elevation by a licensed land surveyor so the pond elevation can be measured in NAVD88 datum to help inform the permittee's Rain Management Plan and Emergency Contingency Plan. Direct discharges of MSS pond water to the Bay are prohibited.

10. Freeboard in MSS Ponds
To minimize the risks of a release of MSS due to earthquake displacement or wind-wave damage, Cargill shall operate the MSS ponds to maintain a minimum of 2 feet of freeboard.

11. Finalize Geotechnical Report
Due to time constraints, the geotechnical stability analysis meeting the ECRB's standards was submitted to BCDC by the permittee on April 22, 2025 in the form of a slide deck and a memorandum and there was not time before issuance to incorporate these updated results into the Geotechnical Report. The permittee will submit to BCDC, as a formality and prior to December 31, 2025, an updated Geotechnical Report reflecting the content in the April 22, 2025 materials, stamped by the California-registered geotechnical engineer in charge of the work.

K. Shoreline Protection

1. Nature-Based Solutions
Nature-based solutions for shoreline protection shall be evaluated, and these features shall be incorporated to the greatest extent practicable. To facilitate this evaluation for shoreline repair and protection on unprotected outboard berm slopes, the permittee shall submit, as part of the Annual Work Plan (Special Condition II.A), an analysis of the least environmentally- damaging practicable alternative (LEDPA), a requirement under Section 404(b)(1) of the Clean Water Act for any new proposed shoreline protection activity in a previously unarmored area. Implementation of a nature-based solution for shoreline protection may require a permit amendment.

2. Riprap
Riprap shall only be placed in areas generally free of marsh vegetation, shall minimize voids, and shall be placed in the minimum amount necessary to protect the existing berm. The total quantity of new riprap placed under the 10-year authorization of this permit shall not exceed 7,800 square feet.

Riprap material shall be either quarry rock, specially cast, or carefully selected concrete pieces free of exposed reinforcing steel and other extraneous material. Use of small concrete rubble, concrete pieces with exposed rebar, large and odd shaped pieces of concrete (including slabs), and asphalt concrete as riprap is prohibited. In areas of high erosion and other areas where riprap is absent, geotextile fabric and any necessary soil shall be placed first underneath the riprap. Riprap derived from repurposed concrete on outboard berms exposed to high wave energy shall conform to the specifications in the Anchor QEA Memorandum dated January 9, 2024, titled "Cargill's Newark Salt Production Facility: Berm Slope Protection Specification Recommendations" and are summarized as follows:

a. For Newark Plant 1: Mean diameter 1.8 feet and mean weight 870 pounds per piece;
b. For Newark Plant 2 and Redwood City: mean diameter 0.8 feet and mean weight 60 pounds per piece; and,
c. Slabs are not permitted: for large pieces, the longest dimension of a piece shall be no more than 4 times the smallest dimension.

Any proposed new riprap placement must be quantified and included in the Annual Work Plan and the actual quantities reported in the Annual Completion Report, as per Special Condition II.D.

When new riprap is placed immediately adjacent to existing tidal marsh the biological monitor monitoring the riprap placement shall document the precise location and extent of any inadvertent placement into the adjacent tidal marsh. Compensatory mitigation may be required for any such placement that may permanently adversely impact the tidal marsh (see Special Condition II.G.2).

Where new riprap is used in new or repair applications, if undersized pieces of concrete in that area, previously placed by the permittee or its predecessors, are observed to be displaced into the shoreline where they are no longer functioning as shoreline protection, the permittee shall remove these pieces from the shoreline and either dispose of them or reuse them in such a way as to prevent them from being washed into the shoreline again.

L. Imported Material and Quality Assurance Project Plan (QAPP)

For any imported material, the permittee shall implement the testing requirements and handling techniques as specified in the Soil Import Acceptance and Quality Assurance Project Plan (QAPP) prepared by the permittee and dated March 13, 2025, and approved by BCDC and the RWQCB, or the most current updated version approved by BCDC and RWQCB.

M. **Bay Water Intakes**

1. Sediment Removal
   When removing sediment from water intakes, either by mechanical or hydraulic suction equipment, the permittee shall adhere to the following best management practices (BMPs) to minimize adverse impacts to aquatic habitat and special-status fish and marine mammals:

   a. When hydraulic suction is used for sediment removal around water intakes, divers and/or skiff operators shall use 4-inch to 6-inch hoses and low velocity pumps to carefully remove sediment;

   b. If sediment removal at intakes is completed using an amphibious excavator or barge-mounted excavator, work shall either be conducted at low tide, when no water would leave the work area, or within a coffer dam; and

   c. All sediment removal in outboard areas shall occur between June 15 and October 31 for the Coyote intake and between June 1 and October 31 for all other intakes.

2. Development and Implementation of a Fish Monitoring and Adaptive Management Plan (MAMP)
   Cargill shall prepare and implement a MAMP, approved by BCDC, CDFW, NMFS, RWQCB, and USFWS, to evaluate the potential for special-status fish species to be present and impacted at Cargill's Bay water intakes, and to define and prioritize any additional fish protection measures that may be required. Implementation of the MAMP is expected to be a multi-year effort and shall begin upon receipt of all necessary take authorizations from CDFW, NMFS, and USFWS for the monitoring effort. The MAMP shall be finalized by whichever is later, either June 30, 2025, or within 45 days of receipt of the final agency comments on the Draft MAMP.

3. Compensatory Mitigation
   Compensatory mitigation for any take of special status fish due to operation of the Bay water intakes will be required as specified in the Incidental Take Permit (ITP) from CDFW, and new Biological Opinions (BiOps) from USFWS and NMFS. This includes retroactive compensatory mitigation applied to the period between July 1, 2025 and the implementation of approved fish protection measures, where needed. Per the Environmental Assessment associated with this permit (State Clearinghouse No. 2020080442), data collected pursuant to the MAMP will be used to update take calculations in the ITP and BiOps, if the data indicate that such an update is required.

4. Bay Water Pumping
   a. **Interim Pumping Windows**
      (1) Pumping from the Coyote and Mowry Intakes shall be limited to May 1 to October 31, annually until one or more of the following occur: the proposed fish screens are installed at the Coyote intake (installation of fish screens would only eliminate the need for the interim pumping window at the pumps equipped with fish screens, not the potential need for compensatory mitigation) the new NMFS and USFWS BiOps and CDFW ITP are issued and have different pumping conditions, in which case pumping shall comply with the issued BiOps and ITP. Additionally, the permittee shall limit pumping to the maximum extent practicable from the Coyote and Mowry Intakes during the period between May 1 and May 31, unless pumping is necessary to maintain ongoing salt making operations due to weather and other operational factors.

      (2) Pumping from any Bay intake after October 31, 2025 requires take coverage from NMFS, USFWS, and CDFW in the form of new BiOps from NMFS and USFWS, as well as an ITP from CDFW. The new BiOps from NMFS and USFWS are also required for the maintenance activities authorized herein. In the event that new BiOps are not procured by October 31, 2025, the permittee shall provide proof that legal requirements with respect to federal take coverage with respect to both NMFS and USFWS are satisfied in the interim via documentation of any time extension of the existing 2010 USACE permit. The new BiOps once issued shall supersede the time extension of the 2010 USACE permit for purposes of compliance with this permit condition. Upon receipt of any of the aforementioned documents, the permittee shall submit proof of these documents to BCDC staff.

   b. **Portable Fish Screens**
      Portable fish screens were installed and are being maintained on the suction ends of temporary pumps and on the Bittern Pond P2-12-13 Siphon Intake and Green Hornet #1 Intake per the time extension for BCDC Permit No. 1993.004.23 issued on December 31, 2024. Upon issuance of this permit, maintenance of the portable fish screens is required under authority of this permit, rather than the time extension for BCDC Permit No. 1993.004.023. The portable fish screens may be removed if continued use of the screens is determined to be infeasible.

c. **Interim Monitoring**
Interim monitoring shall be conducted following the Cargill Maintenance and Operations eDNA and Water Quality Interim Monitoring Work Plan approved by BCDC, CDFW, USFWS, NMFS, and RWQCB. Interim monitoring shall continue until the agency-approved MAMP implementation replaces or supersedes the Interim Monitoring plans.

d. **Avoidance of Pumping During Pulse Flows**
Alameda County Water District (ACWD) is required to provide 7-day pulse flow releases in Alameda Creek in April and May during dry years to aid in the outmigration of juvenile salmonids, in accordance with the ACWD's Biological Opinion. ACWD will notify the permittee when pulse flows are expected, and the permittee shall coordinate with ACWD to cease or minimize taking in water through the Coyote intakes during pulse flow periods.

e. **Reporting of Pumping Volumes**
The permittee shall document mechanical pump use at each intake and includes the volumes of Bay water pumped on a monthly basis in the Annual Completion Report, as per Special Condition II.D.

5. Installation and Operation of Fish screens
   a. At a minimum, fish screens shall be installed on at least one of the pumps at the Coyote intake on Alameda Creek. The permittee shall work with NMFS, USFWS, and CDFW to finalize the fish screen design by December 31, 2025.

   b. Fish screen installation is not authorized in this permit. The permittee shall submit a permit amendment request or new permit application in order to authorize installation and operation of a fish screen and associated supporting structures. This process includes evaluation of the proposed activities to install and operate an approved fish screen design, evaluation of potential impacts and environmental review for compliance with CEQA, and addressing appropriate compensatory mitigation for unavoidable impacts.

   Based on the results of the MAMP, if additional fish screens are determined to be necessary, proposals for these additional fish screens to be installed at other Bay water intakes shall be submitted to BCDC at the conceptual stage for review for consistency with BCDC laws and policies. Implementation of any additional proposed fish screens may warrant the need for a permit amendment or new permit, including any associated necessary environmental review. Additional fish screens may require additional monitoring, or compensatory mitigation for any significant unavoidable adverse impacts to Bay resources.

N. Lock Use and Maintenance Requirements

If using locks to conduct berm maintenance authorized herein, the permittee shall adhere to the following BMPs:

1. Locks shall be accessed at the highest practicable tides of the month, to minimize excavation of Bay mud and the duration of time at the lock. If California Ridgway's rail are found to be present based on surveys of the work area, work shall be rescheduled to occur between September 1 and February 1 (See CRR Special Condition II.F.1).
2. A qualified biologist shall monitor work occurring in environmentally sensitive areas. Work shall preserve high marsh features created at previous lock access events, such as vegetated mounds.
3. Excavated material shall be placed into existing stockpile areas, into locks or salt ponds, or onto berms, to the maximum extent feasible to avoid or minimize side-casting into salt marsh habitat. If sidecasting into tidal marsh is unavoidable, sidecast material shall be placed into temporary areas adjacent to the access cut. The material shall be returned to the access channel when the excavator enters or exits the lock to restore the pre-access elevations so salt marsh vegetation can regenerate.
4. If lock access and egress will impact the outboard marsh, marsh vegetation within the area shall first be removed using hand tools in the presence of a qualified biologist. The biologist shall inspect the vegetation for salt marsh harvest mouse (SMHM) nests prior to removal and monitor the careful removal of vegetation to assist in the avoidance of individual mice. After the area has been inspected for mouse nests, the vegetation immediately ahead of the hand tool removal shall be agitated to flush any adult mice potentially in the work area, and then shall be immediately and carefully removed down to bare ground or stubble. Cut vegetation shall be removed from the work area to eliminate onsite cover for mice. Removal of vegetation is not required if the vegetation is fully submerged at the time of disturbance because the SMHM is not present.
5. If a SMHM or its nest is observed, no work shall occur within 100 feet of the observation until the mouse moves away of its own volition, or the USFWS is contacted and gives approval to proceed. The mouse shall not be harassed or moved out of the way.
6. Sediment from the lock interior in excess of that required for berm fortification shall be placed into the salt pond borrow ditches or on the salt pond berm.

7. Upon exiting a lock, the permittee shall place a small pipe in the lock berm or provide another means to equalize hydraulic pressure.
8. If additional sediment is needed to achieve the optimal elevations for reestablishing vegetation within the access cut, sediment shall be removed from the slough channel or from the lock and placed in the access cut once the barge has exited.
9. All measures to protect and minimize impacts to tidal marsh habitat and special status species as per Special Condition II.F and II.G shall be adhered to during lock access and egress.
10. Pre- and post-disturbance photographs shall be taken at lock access locations. The photographs shall be included in the monitoring report prepared by the biologist monitoring the lock access/egress event.

O. Water Quality

At the time of issuance, the Regional Water Quality Control Board (RWQCB) had indicated to BCDC staff that they planned to issue a Water Quality Certification (WQC) for this project. Once the WQC is issued the permittee shall submit the WQC to BCDC. The permittee shall conduct all maintenance activities in compliance with the WQC. No maintenance activities may be conducted prior to the submittal of the WQC to BCDC.

P. Other Agency Approvals

At the time of issuance, the California Department of Fish and Wildlife (CDFW) had indicated to BCDC staff that they planned to issue an Incidental Take Permit (ITP), NMFS to issue a Biological Opinion (BiOp), and USFWS to issue a Biological Opinion for this project. Once the ITP and BiOps are issued, or an extension of the 2010 USACE Permit if the BiOps are not issued by October 31, 2025, the permittee shall submit these documents to BCDC. The permittee shall conduct all maintenance activities in compliance with the ITP and BiOps and, prior to their issuance, any extension of the 2010 USACE permit. Prior to the issuance of these approvals, the permittee shall adhere to interim protective measures as per Special Condition II.M.4.a.

The permittee shall comply with all applicable conditions of approvals within the BiOps and ITP issued, respectively, and any extension of the 2010 USACE permit by the USACE, USFWS, CDFW, and NMFS for any proposed activities conducted under the authorization of this permit.

Q. Inspections

Upon 24-hour advance notice by BCDC staff, the permittee shall allow staff inspection of the permittee's property covered by this permit to ensure compliance with any of the permit conditions, if feasible and safe to access the requested area.

R. State Lands Commission Lease

Prior to conducting work in areas identified as sovereign lands of the State of California, the permittee shall obtain a lease or other approval for work in those areas from the California State Lands Commission (SLC) and provide evidence of such permission to the Commission. The lease shall be renewed and updated through the life of this permit as necessary in order to undertake any work authorized herein on such sovereign lands of the State of California. Prior to performing work in the Bay in areas the permittee asserts are not subject to lease or other approval of work by SLC, the permittee shall provide written confirmation of concurrence from SLC that these areas are not under their jurisdiction.

S. Best Management Practices

In addition to complying with all of the special conditions specified in this permit, in conducting any activities authorized under this permit, the permittee shall also comply with all BMPs as described in Exhibit B, *Final Environmental Assessment Cargill, Incorporated Solar Sea Salt System Maintenance and Operations Activities*, 2025 (State Clearing House number 2020080442) (Final EA).

T. Mitigation Monitoring and Reporting Program

The permittee shall adhere to all mitigation measures and comply with all reporting guidance as described in Section 10 of the Final EA, Mitigation Monitoring and Reporting Program (MMRP) (Exhibit C).

U. Public Access and Views

The solar salt system contains approximately 20 miles of public access trails. Cargill's continued maintenance of the system maintains and supports these public access trails and areas. No activities that would result in permanent adverse impacts to existing public access or views of the Bay are authorized by this permit, including sections of the Bay Trail and USFWS-maintained trails located within the project site. When a proposed activity would result in temporary impacts to public access, they shall be avoided, minimized and mitigated (in that order of priority). The permittee shall coordinate with Refuge staff and East Bay Regional Park District (EBRPD) staff to install temporary trail detour/closed signs where appropriate to keep the public out of work areas.

The permittee shall notify BCDC of any temporary closures to public access areas for maintenance and operation activities. The closure shall be the minimum necessary, limited to 180 total days per activity, and shall be adequately mitigated for through detours, traffic control, and public notice. Public access areas impacted during maintenance activities shall be restored to their previous condition or better immediately following maintenance. If the temporary public access impacts of a

proposed activity are not adequately minimized and mitigated in accordance with the above-specified criteria, then the activity shall be deemed not covered under the authorization of this permit and will require separate permit authorization.

V. Reimbursement by Applicant for Certain Costs and Attorneys Fees

By acceptance of this permit, the permittee agrees to reimburse BCDC in full for all of the following costs of defense in the event of any action brought by a party, other than the permittee, against BCDC or any of its officers or employees, challenging the approval or issuance of this permit: (1) reasonable BCDC staff time, calculated using reasonable hourly rates based upon actual salary paid to such staff; and (2) BCDC's reasonable costs and reasonable attorneys' fees, consisting of (a) those fees charged by the Office of the Attorney General, and (b) any court costs and reasonable attorneys' fees that BCDC may be required by a court to pay. In the event of any challenge to the approval or issuance of this permit, BCDC shall not oppose intervention in the action by the permittee. As part of any request for reimbursement, BCDC will provide an itemized accounting of the reasonable BCDC staff time and BCDC costs and attorneys' fees for which BCDC is requesting reimbursement, and permittee shall make payment within 90 days of receiving a reimbursement request unless the permittee challenges the basis for such request. In the event of any such dispute that cannot be resolved between the permittee and the Executive Director, the matter may be referred to the full Commission for resolution. Any request for reimbursement must be made or completed, in full, by BCDC by no later than 120 days after issuance of a final, non-appealable judgment. BCDC retains complete authority to conduct and direct the defense of any legal action initiated against the agency so long as the fees and costs incurred are reasonable and in accordance with this paragraph. The permittee's obligation to reimburse any reasonable costs and attorneys' fees shall terminate if BCDC, in exercise of its independent authority, takes a position in the litigation that is significantly adverse to the permittee.

W. Compensatory Mitigation

The table below summarizes potential compensatory mitigation that may be required due to impacts resulting from project activities. Specific compensatory mitigation requirements are not calculated as part of this permit but would be determined based on the nature and extent of impacts, and are dependent on input from other agencies, including CDFW, NMFS, USFWS, or the RWQCB.

Table 2 Compensatory Mitigation Required for Project Activities

Impact	Special Condition
Permanent Impacts to Tidal Marsh	II.G.2
Bay Water Intakes	II.M.3
Fish Screen Construction	II.M.5

X. Compliance Reporting Requirements Summary

The table below summarizes all reporting requirements during the life of the permit.

Table 3 Deliverables Due During the Life of the Permit

Reporting Frequency	Reporting Deliverable	Due	Period of Time Analyzed in Deliverable	Permit Condition
Annually	Annual Work Plan	March 1	Proposed project activities for upcoming maintenance year, June 1 – May 31	II.A
As needed	Weed Management Plan Updates	As needed	Updated as needed as directed by the Refuge to cover new invasive species	II.F.7
Annually	Annual Completion Report	August 1	Report maintenance activities that occurred June 1 - May 31 (previous maintenance year)	II.C
Annually	Predator Management Summary	August 1	USDA-APHIS-WS report of activities that occurred June 1 - May 31 (previous maintenance year)	II.F.6
Annually	Biological Monitoring and Survey Summary	August 1	Report activities that occurred June 1 - May 31 (previous maintenance year)	II.F.2
Annually	Earthquake and Storm Inspections and Reporting.	August 1	Report activities that occurred June 1 - May 31 (previous maintenance year)	II.J.9
Twice, every 5 years	Sea Level Rise and Wave Runup Assessment	5 years following adoption of updated State of California's sea level rise guidance	50 years	II.J.8

Reporting Frequency	Reporting Deliverable	Due	Period of Time Analyzed in Deliverable	Permit Condition
Year 5	Long Term Adaptive Management Program (LAMP)	January 1, 2030	50 years	II.J.7
Once for the life of the permit	Monitoring and Adaptive Management Program (MAMP)	June 30, 2025	Life of the permit	II.M.2
TBD	MAMP Monitoring Reports	TBD	As specified by the MAMP	II.M.2
TBD	Compensatory Mitigation Plan for Impacts to Special-Status Species	TBD	Life of the permit	II.W
One time	Updated Emergency Contingency Plan		Life of the permit	II.J.9
One time	Final (100%) Plans for Coyote Intake Fish Screens	January 1, 2026		II.M.5
One time	Updated Geotechnical Report		Not applicable	II.J.11

III. Findings

This authorization is given on the basis of the Commission's findings and declarations that the work authorized herein is consistent with the McAteer-Petris Act, the San Francisco Bay Plan (Bay Plan), the California Environmental Quality Act (CEQA), and the Commission's amended coastal zone management program for San Francisco Bay for the following reasons:

A. Project Background

1. Project Location and Description

Salt has been produced at the South Bay for well over a hundred years through the solar evaporation of sea water. After purchasing Leslie Salt Company in 1978, Cargill, Inc. is currently the sole operator and producer of salt in the Bay Area, located primarily in Alameda County on the east shore of the San Francisco Bay, with a smaller area on the west shore in San Mateo County. Salt production is conducted in three primary areas: Newark Plants 1 and 2, and the Redwood City Plant.
In addition to these three primary plant areas, Cargill also operates Baumberg Pond

B-3C north of Alameda Creek, as well as the Cargill West Bay areas as part of the salt-making operations. The Cargill West Bay areas include the Redwood City Maintenance Pond at U.S. Fish and Wildlife Service (USFWS) Pond SF2 (formerly known as the SF-2 Donut) and the West Bay lands overlying the brine pipeline under the Bay connecting the Redwood City Plant to the Newark plants. The Project area includes 41 parcels, including parcels that are owned by Cargill and parcels owned by the USFWS as the Don Edwards San Francisco Bay National Wildlife Refuge. Cargill has the perpetual right to operate on the USFWS parcels in accordance with the 1979 agreement between USFWS and Leslie Salt Company (Cargill's predecessor).

Sea water from San Francisco Bay is introduced into concentrators (also known as evaporation ponds), where a substantial portion of the water evaporates, resulting in a concentrated brine. The concentrated brine is then transferred to "pickle ponds" where evaporation continues until the brine reaches a concentration suitable for harvesting. Harvestable brine is transferred into crystallizers, where additional evaporation results in the precipitation of sodium chloride (NaCl, i.e., table salt). There are also post-harvesting salt ponds, and wash ponds. The post-harvesting salt ponds include two ponds storing mixed sea salts (MSS, salts remaining after all commercial products are harvested), and the six small FMC ponds, which store high-salinity magnesium-rich brines for harvest of additional salt products. No additives or chemicals are used to produce salt; solar and wind energy alone cause evaporation.

To keep salt pond operations in working condition, Cargill must maintain the existing earthen berms around the various ponds, pond intake and support structures, the salt ponds themselves, and the other various structures in the Project area.

The objectives of this permit, therefore, include: (1) continue conducting various activities necessary to maintain the integrity and stability of earthen berms, water control structures, and other infrastructure associated with salt-making to ensure continued viability of salt production activities; (2) allow for implementation of preliminary sea level rise adaptation efforts, including studies; and (3) permit Cargill to develop and implement alternative maintenance methods, as discussed herein, that may further reduce the effects of maintenance activities on the environment, improve efficiency, and/or adapt to changing climate conditions, where appropriate, while ensuring any new maintenance methods will still result in less-than-significant impacts on the environment.

Examples of maintenance activities that are currently performed regularly under the existing BCDC Permit include:

- Maintenance of salt pond berms, various salt-making equipment, and pipes and ditches used to move brine.
- Minor excavation to provide access to repair and replace berms and other facilities, including use of locks.
- Making salt pond berms drivable.
- Removal of sediment at Bay water intakes.
- Import of clean soil and concrete.
- Minor modifications to internal berms including re-establishing vehicle access on some internal berms by replacing existing gaps with culverts and bridges.

New activities under this permit, not previously authorized under the previous permit, include installing fish screens on one or more of the three pumps comprising Cargill's main (Coyote) Bay water intakes near the mouth of Alameda Creek, preparing a Monitoring and Adaptive Management Plan (MAMP) to evaluate the potential for special-status fish species to be present at Cargill's Bay water intakes, and conducting a study of using vinyl sheet pile for possible sea level rise adaptation efforts and enhanced berm integrity.

Specific maintenance activities, and the extent of maintenance activities needed would vary year to year, are influenced by annual weather patterns, among other factors, and would be approved on a year-to-year basis through an Annual Work Plan encompassing work allowed under this permit (Special Condition II.A).

2. Permitting History

Cargill and its predecessor companies have been operating salt ponds for solar salt production in the South San Francisco Bay since the turn of the 20th century and have performed maintenance and operation activities under BCDC permits since 1977. BCDC permit M1970.100, issued to Leslie Salt Company on April 5, 1977, and amended through May 2, 1988 (Amendment No. Three), provided an initial authorization of salt pond maintenance, including placement of riprap, and annual review of maintenance activities. On March 14, 1995, BCDC issued permit 1993.004.00 authorizing the operations and maintenance of existing salt ponds to Cargill Salt Division. Because BCDC at that time was acting as lead agency for purposes of the California Environmental Quality Act ("CEQA") pursuant to its certified regulatory program – as it is for purposes of the present permit – BCDC

prepared an Environmental Assessment (EA) in support of that permit.[2] This authorization was to be effective for 10 years and has since been extended 19 times since 2005. Beginning in 2020, Cargill has been actively working to complete its California Environmental Quality Act (CEQA) requirements prior to the expiration of each respective time extension. The most recent extension was issued on December 31, 2024, and covers existing activities authorized under the 1995 permit through June 30, 2025.

Since the issuance of the permit in 1995, environmental and legal conditions under which the permittee operates their salt making facilities have changed. This includes the listing of the longfin smelt as a special status species by the State of California in 2009, and as a federally listed species in 2024. The Northern California steelhead also was listed as federally threatened in 2000. In November 2022, Alameda County Water District constructed a fish ladder in lower Alameda Creek, resulting in reestablishing a Central California Coast steelhead run in the Creek, within the operations of permitted activities. As BCDC Bay Plan Policies do not allow for "take" of any listed species unless the project applicant has obtained the appropriate "take" authorization(s) (Fish, Wildlife, and Aquatic Organisms Policy 4.b; see below), continued extension of Permit No. 1993.004 no longer ensures that authorized activities are fully consistent with BCDC's laws and policies.

Additionally, new BCDC policies on Climate Change and Environmental Justice and Social Equity Policies were adopted in 2019; the prior permit was not required to address the considerations of these new policies, including berm integrity due to seismic risks and rising sea levels, and environmental justice considerations (discussed below).

On April 28, 2021, BCDC received a permit application from Cargill to continue maintenance and operational activities at Cargill's solar salt systems in Newark, Fremont, and Redwood City.

3. Environmental Documentation

As the permittee did not require any local discretionary approvals for the project, and BCDC was otherwise the first government agency to take action on a discretionary governmental approval for the project, BCDC is in the unique position to serve as the lead agency for purposes of CEQA. Pursuant to its regulations for implementing CEQA when acting as lead agency pursuant to its certified program, BCDC prepared an "Environmental Assessment" (EA), in lieu of an environmental impact report, negative declaration, or mitigated negative declaration (Public

[2] *See* Subchapter 1 of Chapter 15 of BCDC's regulations, codified at Title 14 of the California Code of Regulations ("CCR") for rules regarding BCDC's implementation of CEQA when it acts as CEQA lead agency. Rules regarding preparation of EAs are found specifically in Article 3, sections 11520 to 11525.

Resources Code section 21080.5. For BCDC's certified program, reference 14 CCR § 15251(h)).[3] A Draft EA was prepared and initially circulated in April 2021 for a 30-day public comment period. (State Clearinghouse No. 2020080442). The 2021 Draft EA was not finalized, however, due to changes that arose with respect to the project description, including the proposed construction of fish screens, placement of new outboard riprap, additional BMPs, and modifications to increasing berm heights. The Draft EA was updated to address these and other new information and then recirculated by BCDC on August 22, 2024, with a 30-day public comment period concluding on September 23, 2024. Additional public outreach events included a virtual community meeting on September 4, 2024, and a public hearing on the recirculated draft EA (RDEA) at the Commission's September 5, 2024, meeting. In support of the RDEA, BCDC sent outreach letters to the list of tribal representatives provided by the Native American Heritage Commission, inviting them to provide comments regarding the Project, share any information regarding possible Native American cultural resources which could potentially exist on the Project site, and identify any other potential concerns related to the proposed Project. In response to input received by the tribal nation the Confederated Villages of Lisjan Nation, BCDC incorporated certain changes to the mitigation measures CUL-1 and TCR-1 in the Final EA.

The Final EA addressed comments received on the RDEA and made revisions, as warranted, resulting from those comments to address environmental impacts of the proposed project. The Final EA was presented and voted on at the May 1, 2025, Commission Hearing. Commissioners voted 22-0-0 to approve the Final EA. As per 14 CCR section 11524(a) of BCDC's regulations, the EA is only deemed "final" if and when the Commission approves the corresponding permit application for the proposed Project that is the subject of this staff recommendation, thus satisfying BCDC's CEQA compliance with respect to the proposed Project.

B. Use

Applicable Policies: The McAteer-Petris Act Section 66602.1[4] on Salt Ponds (and Managed Wetlands) states that it is in "the public interest to encourage continued maintenance and operation of the salt ponds", citing the benefits they provide in the form of "wildlife habitat and a large water surface which, together with the surface of the bay, moderate the climate of the Bay Area and alleviate air pollution".

[3] For BCDC's regulations for preparation of an EA when acting as CEQA lead agency, see footnote 2 above.
[4] The McAteer-Petris Act is codified at Government Code §§ 66600 *et seq*. All further statutory references and citations to the McAteer-Petris Act are in reference to the Government Code.

The San Francisco Bay Plan Salt Pond Policies similarly state that “The use and maintenance of salt ponds for salt production should be encouraged” and that “maintaining the integrity of the salt production system should be encouraged” (Policy 1).

Analysis: The project authorized herein provides for maintenance of the existing salt pond system primarily through existing and some new practices, including the maintenance of the salt pond berm system, adaptation to sea level rise, and use and maintenance of the existing system of "locks." No conversion or change of use of any of the existing salt ponds is proposed. Although authorization of the proposed activities can be expected to result in certain impacts to marshes and mudflats, fish and wildlife, and endangered species habitat which can be conditioned to reduce and mitigate significant impacts to a level of less than significance (further discussed below), the proposed salt pond maintenance activities are still fundamentally consistent with the use requirements of the Bay Plan and the McAteer-Petris Act as such maintenance activities facilitate the ability to continue operation of the salt ponds.

C. Bay Fill

Applicable Policies: Section 66605 of the McAteer-Petris Act provides that further filling of the Bay may be authorized when: a) public benefits from fill clearly exceed public detriment from the loss of the water areas and should be limited to water-oriented uses; b) no alternative upland location is available for such purpose; c) should be the minimum necessary to achieve the purpose of the fill; d) it will minimize harmful effects to the bay area; e) be constructed in accordance with sound safety standards; f) to the maximum extent feasible, establish a permanent shoreline; and g) the applicant has such valid title to the properties in question.

Analysis: The project activities authorized in this permit involve the maintenance and operations of an existing salt pond system over a total area of approximately 12,100 acres, including approximately 123 miles of earthen berms, of which approximately 47.2 miles are outboard and abut the Bay and tidal marsh habitats. Over the proposed 10-year authorization of this permit, the permittee will import soil and other materials to conduct the maintenance of these berms necessary for the safe continued operation of the salt pond system. This includes approximately 950 cubic yards of soil per year for berm keying, approximately 25,600 cubic yards of material to increase the elevations of the outboard MSS pond berms, and approximately 830 cubic yards for filling of berm gaps. The majority of this material, however, will be placed within BCDC Salt Pond jurisdiction—the top of the earthen berms, inboard of berms, and berms internal to the

salt ponds—and therefore do not constitute Bay fill.[5] The permit also authorizes the placement of approximately 7,800 square feet of new riprap on outboard berms over the 10-year life of the permit.

Additional project activities are generally limited to replacement and maintenance activities which will result in insignificant net fill, characterized as de minimis fill activities herein. De minimis fill is defined in the EA as "routine maintenance and repairs, minor modification of structures, and component replacement and removal activities that do not involve any substantial enlargement or change in use of an existing structure, do not involve in-water work, and would not cause any temporary or permanent adverse effects to the environment or public access."

Public Benefits from Fill Clearly Exceed Public Detriment. Only a minor amount of proposed work activities would be conducted within the Bay jurisdiction on the outboard side of the outboard berms, therefore the majority of fill activities proposed do not involve Bay fill and instead act to maintain the existing earthen berm footprint. The proposed placement of new outboard riprap is to maintain berm integrity and prevent brine, at various levels of salinity, from entering Bay waters. This activity thus serves the same function as "shoreline protection," for which Bay fill may be allowed. Public benefits of any Bay fill outweigh detriments in that it will facilitate salt pond activities, a use promoted by the Bay Plan. In addition to the long-standing production of salt, these salt ponds also represent wildlife habitat, for which the project activities and Bay fill maintain. The impacts that may result from the proposed project are less than significant with appropriate mitigation measures (as per the EA analysis). Fill for fish screens further protects sensitive-status species as a result of Cargill's continuation of the historic saltmaking activity, and therefore satisfies the water-oriented requirement and public benefits of the fill for fish screens outweigh public detriments.

Alternative Upland Location. There is no alternative upland location because the salt ponds are existing and fixed in location. The production of salt inherently involves the evaporation and concentration of Bay water. Therefore, any Bay fill required for the Project is determined by the existing salt pond system. Stockpile locations are located outside of Bay jurisdiction, and are used for the purpose of maintaining salt pond berms and preventing unnecessary erosion.

Minimum Necessary Fill. Project activities involving fill act to ensure the stability and safety of salt pond berms from erosion and storm risk. New riprap to be placed is conditioned to be the minimum amount necessary to achieve the intended purpose of berm protection. Additionally, placement of new fill in the form of fish

[5] The Commission determines that salt pond jurisdiction as defined in McAteer-Petris Act section 66610(c) extends Bayward to the extent of Bay jurisdiction as defined in McAteer-Petris Act Section 66610(a).

screens on at least one of the pumps at the Coyote intake on Alameda Creek is necessitated by ESA protections and to ensure that project operations are consistent with Bay Plan policies on Fish, Aquatic Organisms, and Other Wildlife.

Minimize Harm to the Bay. Conditions have been included in this permit to minimize any potential impacts to the Bay resulting from fill. These include Special Condition II.K.2 which specifies that riprap may only be placed in areas generally free of marsh vegetation, and be either quarry rock or concrete pieces of specific size and form to ensure it provides the necessary berm protection function without being at risk of dislodging and sliding into the adjacent Bay. If tidal marsh is inadvertently impacted through the placement of new riprap, compensatory mitigation may be required in accordance with Bay Plan Mitigation policies (see III.I below).

Sound Safety Standards. To ensure that fill placed to maintain berm integrity and mitigate risks from storms, flooding, sea level rise, and earthquakes conforms to sound safety standards, the project was reviewed by the ECRB multiple times (see III.E below). Through this process, minimum elevations for berm height raising, riprap specifications, and a schedule for updating sea level rise adaptations were established. Allowed fill will therefore afford reasonable protection against hazards of unstable geologic or soil conditions and storm risk.

Establish a Permanent Shoreline. The salt pond system, including its 47.2 miles of outboard berms, is existing and fixed in location in the South Bay. Project activities and new proposed fill would protect these existing salt pond berms and salt ponds and associated infrastructure. The proposed project activities occur adjacent to or within salt ponds or the outboard berms bordering the Bay. A “natural” shoreline has not existed at the project area for over a hundred years, with salt production existing prior to BCDC, including the requisite earthen berms. Therefore, the proposed fill would “establish a permanent shoreline” in that it would protect these existing earthen berms and the long-standing salt ponds behind them.

Valid title. The permittee has established that they possess valid title for proposed fill either outright, through their 1979 agreement with USFWS allowing for perpetual rights to operate on those parcels, or through lease with SLC, as per Special Condition II.R.

Therefore, fill for the proposed project, as conditioned, provides public benefits in the preservation of fish and wildlife habitat, minimizes necessary fill, minimizes harmful effects to the Bay, affords reasonable protection against hazards of unstable geologic or soil conditions, and is a necessary part of maintenance that provides continued protection of the existing salt ponds and is, therefore, consistent with McAteer-Petris Act Section 66605.

D. **Environmental Impacts**

1. Fish, Wildlife, and Habitat Protection

Applicable Policies: Bay Plan Policies on Fish, Aquatic Organisms and Wildlife include several policies directly applicable to project activities. These include:

- Policy 1: “To assure the benefits of fish, other aquatic organisms and wildlife for future generations, to the greatest extent feasible, the Bay's tidal marshes, tidal flats, and subtidal habitat should be conserved, restored and increased.”
- Policy 2: “Native species, including candidate, threatened, and endangered species; species that the California Department of Fish and Wildlife, the National Marine Fisheries Service, and/or the U.S. Fish and Wildlife Service have listed under the California or Federal Endangered Species Act; and any species that provides substantial public benefits, as well as specific habitats that are needed to conserve, increase, or prevent the extinction of these species, should be protected, whether in the Bay or behind dikes. Protection of fish, other aquatic organisms, and wildlife and their habitats may entail placement of fill to enhance the Bay’s ecological function in the near-term and to ensure that they persist into the future with sea level rise.”
- Policy 4: “The Commission should:
    a. Consult with the California Department of Fish and Wildlife, and the U.S. Fish and Wildlife Service or the National Marine Fisheries Service, whenever a proposed project may adversely affect an endangered or threatened plant, fish, other aquatic organism or wildlife species;
    b. Not authorize projects that would result in the "taking" of any plant, fish, other aquatic organism or wildlife species listed as endangered or threatened pursuant to the state or federal Endangered Species Acts, or the federal Marine Mammal Protection Act, or species that are candidates for listing under these acts, unless the project applicant has obtained the appropriate "take" authorization from the U.S. Fish and Wildlife Service, National Marine Fisheries Service or the California Department of Fish and Wildlife; and
    c. Give appropriate consideration to the recommendations of the California Department of Fish and Wildlife, the National Marine Fisheries Service or the U.S. Fish and Wildlife Service in order to avoid possible adverse effects of a proposed project on fish, other aquatic organisms and wildlife habitat.”

Analysis:

Fish

Several fish species that are currently listed or candidate state or federally threatened or endangered and may be present in the project area. These include the California Central Coast Steelhead, Chinook salmon, longfin smelt, white sturgeon, and green sturgeon[6]. Additional fish species and their habitats are of concern to the resource agencies, such as Western river lamprey, Pacific lamprey and other species with commercial/recreational value.

The potential for activities authorized in this permit to impact these species results from the maintenance and operation of intake structures for the intake of Bay water into the salt pond system, necessary for its functional operations. Currently, the permittee operates and maintains 11 Bay water intakes which together withdraw a total of up to 32,350 acre-feet of water per year. Most of these intakes do not have CDFW-approved fish screens on them; some of the smaller intakes have coarse screens (e.g. foot valves) on them with 3/8-inch openings, and some of those coarse screens are further restricted by portable fish screens with 2.39 mm mesh and 33% open area (exceeding CDFW and NMFS standards). Some intakes have direct mechanical pumps in the Bay, including the main Coyote intake located at the mouth of Alameda Creek, with pumping rates up to 90,000 gallons per minute (gpm). Other intakes are passive intakes where the water enters a ditch through a check valve or weir and the flow rate is not measured.

To date, there is little data available indicating the presence or absence of some special-status fish at Cargill's intakes. The EA determined that impacts of the maintenance and operation of the intake structures for the intake of Bay water to special status fish from the project are potentially significant, citing potentially suitable habitat within the project area for those listed species. Green sturgeon are likely to favor deeper water, and are not expected to spawn in the South San Francisco Bay or its tributaries; however, the presence of foraging juvenile, subadult, and adult sturgeon year-round in the project vicinity cannot be ruled out, and the entire San Francisco Bay is designated as critical habitat for the species under Federal Section 4 of the Endangered Species Act. White sturgeon are similarly not expected to spawn in the South San Francisco Bay or its tributaries; however, juvenile, subadult, and adult sturgeon can potentially occur year-round in the project vicinity. Pacific lamprey, an anadromous fish distributed alongside salmon and steelhead, have been documented at the Alameda Creek fish passage facilities through monitoring conducted in 2022/2023, and suitable habitat is present throughout the aquatic habitat in outboard portions of the project area.

[6] Green sturgeon: listed as federally threatened; white sturgeon: candidate for listing as threatened by California; central California coast distinct population segment (DPS) of steelhead: listed as federally threatened; Chinook salmon -Central Valley fall / late fall-run ESU: CDFW species of special concern; Bay-Delta longfin smelt: state listed as threatened and federally listed as endangered.

In late 2022, Alameda County Water District (ACWD) and the Alameda County Flood Control and Water Conservation District completed construction of the Lower Alameda Creek Fish Passage Improvement Project, which provided steelhead unimpeded access to spawning habitat upstream of previously inaccessible barriers. As part of this project, fish ladders installed in 2022 have documented the passage of anadromous species steelhead, Chinook salmon, and Pacific lamprey. Chinook salmon have also been observed actively spawning in Alameda Creek, and a record number of outmigrating juvenile steelhead were counted in surveys in 2024.

The small, pelagic longfin smelt, listed as state threatened and federally endangered, have recently been detected at locations adjacent to the project site. Studies indicate that longfin smelt are likely only present in the South Bay seasonally when temperature and salinity are more stable and within more suitable ranges for this species. Recent surveys have captured longfin smelt at high densities near the mouth of Coyote Creek, with the tidal marshes present in the area characterized as suitable habitat, and as such, longfin smelt have the potential to be impacted by project activities.

Impacts to these species and their habitat are uncertain due to limited data available at present. However, given the potential presence of these species based on available evidence; consistent consultation with representatives of NMFS, USFWS, and CDFW; and the requirements of Bay Plan Fish, Other Aquatic Organisms, and Wildlife Policy 4, the Commission determines that a mechanism or program is needed to be in place to guard against the potential for project impacts to adversely impact these special status species.

Special Condition II.M has been included in this permit to avoid and minimize potential adverse impacts to these fish species in the maintenance, operation, and use of Bay water intakes. Special Condition II.M.2 requires the permittee to prepare and implement a Monitoring and Adaptive Management Program (MAMP) to evaluate if special-status fish species are present and impacted at Cargill's Bay water intakes, and to define and prioritize any additional fish protection measures that may be required. The contents and requirements of this MAMP will be developed in coordination with BCDC, RWQCB, CDFW, NMFS, and USFWS.

Special Condition II.M.5 requires the installation of a fish screen on at least one of the pumps at the Coyote intake on Alameda Creek, where the presence of steelhead has been established. At the time of this permit's issuance, the details on the design of this fish screen were not finalized. Therefore, the installation of this, and any additional, fish screens is not authorized under this permit, but will require a permit amendment, including any necessary CEQA environmental review. To ensure that this requirement is acted upon, this condition stipulates that the permittee must obtain approval of its fish screen design by NMFS, USFWS, and CDFW by December 31, 2025.

Given that Bay water is and has been pumped into salt ponds for project operations, potential impacts to special status species are ongoing. Special Condition II.M.3 requires compensatory mitigation for any take of special status fish due to operation of these water intakes, as will be specified in the forthcoming Incidental Take Permit (ITP) from CDFW, and Biological Opinions from USFWS and NMFS. CDFW, USFWS, and NMFS have stated that take of special status fish species is projected by the project, and certain resource agencies initially called for fish screens on all intakes to comply with their laws and policies (BCDC is not outright requiring fish screens on all intakes due to the potential for nonstructural measures to provide adequate species protections and the evidentiary basis for this requirement being uncertain; the MAMP will provide an evaluation of the presence of the special-status species and prioritization of additional fish protection measures as necessary, potentially including additional fish screens). Typically, a complete set of permits including the Incidental Take Permit (ITP) from CDFW and a Biological Opinion (BiOps) from NMFS and USFWS would be available during the permit application process to reference for specific protections and mitigations for take of special-status fish. For various reasons, most notably because BCDC is serving as CEQA lead agency for the project, these permits are not yet complete at this time. However, BCDC staff have been meeting regularly with these agencies, and some draft permit conditions have been incorporated into this permit to ensure consistency with Bay Plan Fish, Other Aquatic Organisms, and Wildlife Policy 4. Furthermore, due to uncertainty created by the current federal administration, the staffing and workload capacity of federal agencies has become strained and unpredictable. Based upon discussions with these federal agencies, if new BiOps are not issued by October 31, 2025, USACE has indicated its intent to extend the authorization of the existing 2010 USACE permit, which would result in the extension of the BiOps issued by NMFS and USFWS that informed USACE's consultation when it issued its 2010 permit. Until these documents are issued, and at the recommendations of those agencies, interim pumping windows are required under Special Condition II.M.4.a, in which the Coyote and Mowry Intakes pumping windows are limited to May 1 to October 31, and during the period between May 1 and May 31 pumping will be limited to the maximum extent practicable.

Further measures included in this permit to protect special status fish species include the avoidance and/or minimization of pumping during 7-day pulse flow releases in Alameda Creek, typically in April and May during dry years, to aid in the outmigration of juvenile salmonids, in accordance with Alameda County Water District (ACWD) (II.M.4.d); and the implementation of interim fish protection measures prior to the finalization of the MAMP, including adherence to a pumping window from the Coyote and Mowry Intakes, and implementation of an interim monitoring program following the agency-approved Cargill Maintenance and Operations eDNA and Water Quality Interim Monitoring Work Plan.

Ultimately, in order to ensure that the maintenance and operation of the intake structures for the intake of Bay water in support of the existing salt making operations authorized under this permit is consistent with Bay Plan policies, the installation and operation of fish screens will be required for at least one pump at Coyote Intake on Alameda Creek. To avoid entrainment of juvenile and adult steelhead, green sturgeon, and longfin smelt, fish screens or other suitable physical barriers will be installed on Bay water intakes with velocities high enough to entrain these fish when fish may be present during the water intake period. Depending on the results of the MAMP, additional fish screens may be required to be installed, in addition to installation of a fish screen on at least one of the pumps at the Coyote Intake on Alameda Creek. As specified under Special Condition II.M.5, approval for the design and construction of the Coyote Intake fish screen(s) must be obtained by NMFS, USFWS, and CDFW by December 31, 2025. Given that at the time of this permits' issuance, these designs have not yet been finalized or approved, the construction and operation of fish screens are not authorized under this permit, and will require a separate permit amendment request, at which time any additional impacts, including the need for potential compensatory mitigation, will be reviewed. Additional fish screens beyond those to be installed on Cargill's main Coyote Bay water intakes will further require updated CEQA review for any potential environmental impacts.

Wildlife and Habitat

In addition to fish species, the project area is also habitat for several listed bird and mammal species. These include the western snowy plover (WSP), California ridgeway's rail (CRR), California least tern (CLT), and salt marsh harvest mouse (SMHM). Dry salt ponds, interior earthen berms, and some areas outside the salt ponds are considered suitable nesting habitat for the WSP. Suitable habitat for CRR include tidal marsh on the bayside margins of the outboard earthen berms at Newark Plants 1 and 2 and in marshes in close proximity to the Redwood City Plant. A large breeding colony of the CLT is found approximately 20 miles north of Newark Plant 1, and the species forages in bays, lagoons, estuaries, tidal marshes, and ponds, as well as rests on sandy beaches, mudflats, and salt pond dikes. Special Condition II.F is included to ensure salt pond maintenance activities are performed in a manner consistent with Bay Plan policies that minimizes potential impacts to these species. This condition requires that all species surveys and biological monitoring be conducted by a qualified biologist approved by the USFWS, NMFS and/or CDFW, and specific work windows, buffers, and reporting requirements be adhered to. Activities which require a qualified biologist on-site are listed under Special Condition II.F.2. Special Condition II.F.3 requires observations of endangered or threatened species to be recorded and submitted in the Annual Completion Report; and II.F.4 requires the permittee to report within 24 hours any findings of dead or injured sensitive species, or eggs of sensitive species associated with project activities.

Pacific harbor seals may also use various locations of the project area as haul out sites, and the Mowry Slough as a pupping site. Special Condition II.F.1 requires that a 500-foot buffer is maintained around any observed seal pupping activity, and to report identified activity in the Annual Completion Report.

The Salt Marsh Harvest Mouse (SMHM), a federally and state listed endangered rodent, is found only in and adjacent to suitable salt- and brackish-marsh habitat in the greater San Francisco Bay, San Pablo Bay, and Suisun Bay areas. It does not burrow, but depends on year-round vegetative cover, including pickleweed found in the tidal marshes surrounding the project area. Special Condition II.N requires a qualified biologist to remove vegetation and inspect the site prior to lock access, and for work to cease if a SMHM or nest is found.

Additionally, Special Conditions II.F.6 and II.F.7 require the permittee to provide funding for predator management on an annual basis, pursuant to the Cooperative Service Agreement between Cargill and the USDA-APHIS-WS, and to implement procedures described in the 2021 Cargill Weed Management Plan (Cargill 2021) to prevent the introduction and spread of non-native invasive weeds.

Finally, Special Conditions II.O and Special Conditions II.P requires the permittee to conduct work in compliance with the RWQCB Water Quality Certification, and to comply with the all applicable conditions of approvals issued by the USACE, USFWS, CDFW, and NMFS, respectively.

Therefore, the project activities to be authorized under this permit, including the maintenance and operation of Bay water intakes and berm maintenance activities, as conditioned above and in conjunction with the full set of Best Management Practices (Exhibit B), are found to be consistent with the Bay Plan Fish, Other Aquatic Organisms, and Wildlife Policies, in that species shall be protected in a manner consistent with the determinations of USFWS, NMFS, and CDFW, and any adverse impacts will be avoided or minimized.

2. Tidal Marsh

Applicable Policies: Bay Plan Policies on Tidal Marshes and Tidal Flats state that "*Tidal marshes and tidal flats should be conserved to the fullest possible extent" (Policy 1), and that "Any proposed fill, diking, or dredging project should be thoroughly evaluated to determine the effect of the project on tidal marshes and tidal flats, and designed to minimize, and if feasible, avoid any harmful effects" (Policy 2).*

Analysis: Most of the berms of the salt pond system have tidal marsh vegetation on their outboard sides, characterized by marsh species such as pickleweed and alkali heath. These marsh habitats provide refugia for tidal marsh wildlife species, including SMHM and CRR, from high tides and winter storms. Some of the more densely vegetated berms also provide potential nesting habitat for SMHM.

Potential impacts to tidal marsh include the access and use of locks, the use of equipment on berms for maintenance activities, and the placement of new riprap on outboard berms. It is estimated that up to approximately 1.2 acres of salt marsh habitat could be temporarily disturbed up to approximately 1.25 times annually at the 14 existing lock access points over the 10-year permit period as a result of activities associated with lock access and egress.

When temporary impacts to tidal marsh habitats occur, whether through lock access/egress or routine maintenance activities, Special Condition II.G requires the permittee to minimize and avoid adverse impacts and to restore impacted sites to 90% of the pre-activity cover conditions within three years. Surveying and reporting requirements to ensure this restoration is conducted properly are further described in that Condition.

Although no activities resulting in permanent impacts to tidal marsh are authorized under this permit, if inadvertent permanent impacts occur on tidal marsh, appropriate compensatory mitigation shall be evaluated, as described under Special Condition II.G.2.

Therefore, as conditioned, the project is consistent with Bay Plan Policies on Tidal Marshes and Tidal Flats.

E. Safety of Fills, Flooding and Sea Level Rise

Applicable Policies: Bay Plan Policies on the Safety of Fills describe the role of the Engineering Criteria Review Board for projects: "*The Commission has appointed the Engineering Criteria Review Board consisting of geologists, civil engineers specializing in geotechnical and coastal engineering, structural engineers, and architects competent to and adequately empowered to: (a) establish and revise safety criteria for Bay fills and structures thereon; (b) review all except minor projects for the adequacy of their specific safety provisions, and make recommendations concerning these provisions; (c) prescribe an inspection system to assure placement and maintenance of fill according to approved designs;… and (f) gather, and make available performance data developed from specific projects" (Policy 1). Additionally, Safety of Fills Policy 4 states that "Adequate measures 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".*

Analysis: During the permitting process, concerns were raised regarding the safety of the mixed sea salts (MSS), concentrated salts which have been accumulating since salt production began, in Ponds P2-12 and P2-13 (the "MSS ponds"). MSS are generally in a solid formation, but the MSS ponds may fill with rainwater in the winter and spring and this water is assumed to also be a risk to the adjacent tidal marshes. MSS are not toxic to humans, but can be toxic to wildlife and habitats due to their highly concentrated nature.

The MSS ponds have earthen berms that are not engineered; they were made on top of existing tidal marshland in the 1950s from locally sourced mud. Cargill has been more recently maintaining the berms with imported soils. FEMA Flood Insurance maps show the MSS ponds within the 100-year floodplain of elevation 11 feet NAVD88, indicating they could be overtopped by a 100-year event. Overtopping of the berms by waves during high tides could cause erosion and breaching or localized failure of the berm. This flooding risk will be exacerbated by sea level rise. Structures built over Bay mud are also vulnerable to shaking, displacement, and liquefaction during earthquakes.

BCDC directed Cargill to present materials to the Engineering Criteria Review Board (ECRB) regarding the risks to the adjacent tidal marsh of an MSS release. Three ECRB meetings were held in 2022, 2023 and 2024, and additional consultations with a geotechnical subcommittee of the ECRB were held in 2025. During the course of the meetings, the potential risks of a MSS release fell into two main topics: 1) the risk of wave erosion and overtopping of the Bay-facing berms and 2) the risks of berm failure from an earthquake.

Regarding sea level rise and wave overtopping, studies presented by Cargill indicated wave overtopping was possible in a 2- to 10-year storm event. To address this risk, the ECRB recommended and Cargill has agreed to the following by the end of 2029:

- Increase the berm heights to a minimum elevation of 11.5 ft NAVD88 and the bayfront berm of P2-12 facing the Bay to 12.0 ft NAVD88
- Prepare a Long-Term Adaptive Management Plan (LAMP) addressing the risk of wave overtopping for 2030 sea level rise and beyond

These requirements are encapsulated in Special Conditions II.J.4 and II.J.5, respectively. Special Condition II.J.6 further requires the permittee to update their Sea Level Rise and Wave Runup Assessment every five years, generally following the publication of updated Sea Level Rise guidance from the State of California. The latest updates to the State of California sea level rise guidance were adopted in June 2024, and an addendum to Cargill's Sea Level Rise and Wave Runup Assessment was accepted by BCDC on July 1, 2024; therefore, the next required update is expected to occur in Summer 2029.

Cargill's MSS ponds, like all of the Bay Area, are located in an area of high seismicity. According to the Draft EA, the probability of one or more earthquakes of magnitude 6.7 or higher occurring in the San Francisco Bay Area by 2036 is 63%. The Hayward Fault is the closest to the MSS ponds of numerous active faults in the region, about 3.5 miles away. Regarding the seismic risk of failure, in 2024 Cargill's consultants performed a geotechnical field study, based on a workplan recommend by the ECRB. Although geotechnical data was available on the MSS pond berms, the records did not go deep enough to determine the thickness of the Bay mud layers below the berms, a key parameter in the stability modeling. The new geotechnical data was collected by

Cargill and used to model the stability of the berms under two earthquake scenarios: an ordinary (50-year or 2% annual chance) event and an extreme 475-year event (having a 10% chance of occurring over a 50-year period).

The seismic analysis showed scenarios of a 50-year event could have small amounts of settlement. The extreme 475-year event, which could be thought of as like a magnitude 8 Richter scale event, could have settlement of the berm of up to 27 inches with one scenario resulting in 3 feet displacement in one section of the berms. Berm displacement could lead to berm failure if it coincided with a source of erosion such as a rainstorm or extreme tide wave event.

To address the seismic stability issues, Special Condition II.J of this permit includes several requirements to ensure the stability of its berms and adequacy of its response to a catastrophic event, including 1) limiting the height of water levels in the MSS ponds to have a minimum 2 feet of freeboard space between the water surface and the top of the berm, and 2) to update the draft Emergency Contingency Plan. The draft Emergency Contingency Plan, submitted by Cargill on May 16, 2025, includes a commitment, when feasible based on safety considerations, to perform inspections (the timeframe for the inspection is currently under review) following a Moderate (intensity level V) earthquake and a storm with sustained wind speeds of at least 15 mph from a West to Southeast direction coinciding with a tide level over 6.8 ft NAVD88 at the San Francisco NOAA tide station.

Therefore, as conditioned above, the project as authorized is determined to be consistent with the Bay Plan Policies on Safety of Fills and Climate Change.

F. Shoreline Protection

Applicable Policies: Bay Plan Policies on Shoreline Protection[7] include the following:

- Policy 1: "*New shoreline protection projects and the maintenance or reconstruction of existing projects and uses should be authorized if: (a) the*

[7] The Bay Plan Shoreline Protection Policies arguably do not directly apply to this project in the sense that the berms protecting the existing salt ponds are not "the shoreline" as that term/jurisdiction type is defined at McAteer-Petris Act Section 66610(b). Furthermore, one of the criterion for allowance of further Bay fill per McAteer-Petris Act Section 66605(f) – from which the Bay Plan Shoreline Protection Policies, in part, derive their authority – is if filling would, to the maximum extent practicable, establish a permanent shoreline. However, the salt pond berms are not akin to a "true" permanent shoreline; Bay Plan Salt Pond Policies set a prioritization of use if salt ponds are no longer used as such to encourage restoration, enhancement, or conversion to subtidal or wetland habitat (Bay Plan Salt Pond Policies 2 and 3); and, if not, retention of the maximum amount of water surface area consistent with another development project (Bay Plan Salt Pond Policy 4). Still, there is a need to ensure the ongoing maintenance and integrity of the berms in order to protect salt ponds much in the way that shoreline protection may be needed to reduce damage to shoreline property and improvements (Bay Plan Shoreline Protection Finding b). Therefore, by and large the underlying substance of the Bay Plan Shoreline Protection Policies can be justified for application here on an *ad hoc* basis, and relevant substantive requirements of these Policies are discussed as applied to this project as appropriate.

project is necessary to provide flood or erosion protection for (i) existing development, use or infrastructure, or (ii) proposed development, use or infrastructure that is consistent with other Bay Plan policies; (b) the type of the protective structure is appropriate for the project site, the uses to be protected, and the causes and conditions of erosion and flooding at the site; (c) the project is properly engineered to provide erosion control and flood protection for the expected life of the project based on a 100-year flood event that takes future sea level rise into account; (d) the project is properly designed and constructed to prevent significant impediments to physical and visual public access; (e) the protection is integrated with current or planned adjacent shoreline protection measures; and (f) adverse impacts to adjacent or nearby areas, such as increased flooding or accelerated erosion, are avoided or minimized."

- *Policy 3: "Riprap revetments, the most common shoreline protective structure, should be constructed of properly sized and placed material that meet sound engineering criteria for durability, density, and porosity. Armor materials used in the revetment should be placed according to accepted engineering practice, and be free of extraneous material, such as debris and reinforcing steel. Generally, only engineered quarry stone or concrete pieces that have either been specially cast, are free of extraneous materials from demolition debris, and are carefully selected for size, density, and durability will meet these requirements."*
- *Policy 4: "Authorized protective projects should be regularly maintained according to a long-term maintenance program to assure that the shoreline will be protected from tidal erosion and flooding and that the effects of the shoreline protection project on natural resources during the life of the project will be the minimum necessary"*
- *Policy 5: "All shoreline protection projects should evaluate the use of natural and nature-based features such as marsh vegetation, levees with transitional ecotone habitat, mudflats, beaches, and oyster reefs, and should incorporate these features to the greatest extent practicable"; and,*
- *Policy 7: "The Commission should encourage pilot and demonstration projects to research and demonstrate the benefits of incorporating natural and nature-based techniques in San Francisco Bay."*

Analysis: Cargill's maintenance activities include the installation of new and maintenance of existing riprap to protect the existing salt pond berms, for the most part in areas of berms exposed to high wave energy. For decades Cargill has been using recycled concrete for riprap, which meet BCDC's requirements for it to be generally

rounded, free of rebar, exclude contaminants such as asphalt, and has environmental benefits due to it being recycled. However, until recently the recycled concrete pieces were not required to be sized to withstand the wave energy at site specific locations.

BCDC staff required Cargill to develop site-specific engineering criteria for the size of concrete riprap pieces to withstand wave action based on exposure. The specifications from this study for proper sizing of concrete pieces for use on outboard berms exposed to wind waves are in Special Condition II.K.2.

There may be previously unarmored areas along the salt pond berms that become eroded and require the placement of new riprap. BCDC Shoreline Protection Policies requiring the evaluation of nature-based solutions for shoreline protection and the use of these where practicable, reflect the knowledge that hard armoring such as riprap can have adverse impacts to tidal marsh and mudflats. Special condition II.K.1 requires that Cargill evaluate the use of nature-based solutions for protecting previously unarmored areas for BCDC staff consideration during the annual workplan review process.

In addition, this permit authorizes the evaluation of a pilot study to address berm stability and protect against potential seepage through berms. The authorized pilot study would install approximately 500 to 600 feet of vinyl sheets along the inboard side of the berms along Pond 2-12 at Newark Plant 2 using a vibratory hammer, with no work on the outboard sides of the berms. The use of vinyl sheet piling for various levee and berm structures has been implemented in multiple San Francisco Bay area projects, and the material has been determined by USACE to be a reliable material for various applications which also provides for lower construction cost alternatives. Benefits of vinyl sheet piles include a long service life (50 years or more), being corrosion resistant, lightweight, largely maintenance free, and easy to remove.

The purposes of the evaluation would be to determine the effectiveness of the sheet piles against potential seepage and overtopping relative to existing methods; evaluate the ability to install the vinyl sheeting over an extended length of the berm in an efficient manner; observe the flow of rain water around the barrier to confirm that the design avoids creating saturated zones after rain events; monitor durability of the vinyl sheet pile to confirm that it resists wear and tear due to weather and vehicular traffic; and evaluate the ability to easily extract the vinyl sheet piling in an efficient manner. The pilot study would be implemented following the submittal of a work plan, to include specific evaluation criteria. The plan would be submitted and reviewed subject to Special Condition II.E Plan Review. In the event of any unexpected significant impacts, it may be necessary for supplemental or subsequent environmental analysis be performed and submitted to BCDC and other regulatory agencies for review to authorize the proposed field testing on a long-term basis. Should the pilot test be successful, the

permittee would evaluate more extensive use of the new methodology, with any such further use of vinyl sheet pile being subject to additional environmental review and permitting processes.

G. Public Access

Applicable Policies: Section 66602 of the McAteer-Petris Act states, in part, that "*maximum feasible public access, consistent with a proposed project, should be provided*," and Section 66632.4 states, in part, that "*[w]ithin any portion or portions of the shoreline band that are located outside the boundaries of water-oriented priority land uses…the commission may deny an application for a permit for a proposed project only on the grounds that the project fails to provide maximum feasible public access, consistent with the proposed project, to the bay and its shoreline*." Bay Plan policies on Public Access state, in part, that "[*a] proposed fill project should increase public access to the Bay to the maximum extent feasible*" (Policy No. 1), "*maximum feasible access to and along the waterfront and on any permitted fills should be provided in and through every new development in the Bay or on the shoreline*" (Policy No. 2), and "[*w]henever public access to the Bay is provided as a condition of development, on fill or on the shoreline, the access should be permanently guaranteed*" (Policy No. 6).

Analysis: Most of Cargill's Newark salt ponds lie on property owned by the USFWS as the Don Edwards San Francisco Bay National Wildlife Refuge. Cargill has the perpetual right to operate on the USFWS parcels in accordance with the 1979 agreement between USFWS and Leslie Salt Company (Cargill's predecessor). Approximately 20 miles of public access trails exist on berms surrounding ponds in Newark Plant 1, which can be accessed from the East Bay Regional Park District Coyote Hills Regional Park to the north, or from the Shoreline Trail Parking Area along the Dumbarton Bridge. At the Redwood City Plant, there is a public trail only along the west side of the facility.

No activities that would result in permanent adverse impacts to existing public access or views of the Bay are authorized by this permit, including sections of the Bay Trail and USFWS-maintained trails located within the project site. Special Condition II.T requires that any temporary closures to public access areas for maintenance and operation activities be reviewed by Refuge and EBRPD staff and ensures that the closure is the minimum necessary, would be limited to 180 total days per activity and would be adequately mitigated for through detours, traffic control, and public notice. Given that the project authorized herein does not constitute a substantial change of use (*i.e.*, the project is primarily a continuation of existing maintenance and operations), does not involve new development impacting existing shoreline access, and are not the types of activities that would generate demand for new public access, no new public access improvements are being required as part of this renewed authorization of the operations and maintenance of the salt pond system.

H. Environmental Justice and Social Equity

Applicable Policies: Bay Plan policies on Environmental Justice and Social Equity state, in part: "Equitable, culturally-relevant community outreach and engagement should be conducted by local governments and project applicants to meaningfully involve potentially impacted communities for major projects and appropriate minor projects in underrepresented and/or identified vulnerable and/or disadvantaged communities, and such outreach and engagement should continue throughout the Commission review and permitting processes. Evidence of how community concerns were addressed should be provided. If such previous outreach and engagement did not occur, further outreach and engagement should be conducted prior to Commission action." (Policy No. 3) "If a project is proposed within an underrepresented and/or identified vulnerable and/or disadvantaged community, potential disproportionate impacts should be identified in collaboration with the potentially impacted communities. Local governments and the Commission should take measures through environmental review and permitting processes, within the scope of their respective authorities, to require mitigation for disproportionate adverse project impacts on the identified vulnerable or disadvantaged communities in which the project is proposed." (Policy No. 4).

Analysis: The permittee, in coordination with BCDC, conducted a number of public outreach events to educate the public on the Cargill permit application and EA. The Draft EA was completed in April 2021 and circulated for a 30-day public and agency review from April 30, 2021, through June 1, 2021. Following changes to the Draft EA, Cargill held two public informational meetings on August 8, 2023, including one which provided live translations into Spanish. BCDC recirculated the Draft EA for public review on August 22, 2024 (the Recirculated Draft EA, or RDEA). To align with Bay Plan Environmental Justice and Social Equity Policies, renters of property within the 1,000-foot radius around the Project were notified, amounting to approximately 650 renters along with 31 owners. On September 4, 2024, BCDC held a public community meeting to receive comments on the RDEA (with simultaneous translation into Spanish), and on September 5, 2024, a public hearing on the RDEA was held as part of a regularly-held Commission meeting. Public comments received through this process were addressed and incorporated into the Final EA, approved by the Commission on May 1, 2025.

Additionally, BCDC conducted outreach to the tribes with regard to the proposed Project since the start of the Project. In June 2020, BCDC initiated tribal consultation by requesting a list of tribal representatives from the Native American Heritage Commission (NAHC), as well as a search of NAHC's Sacred Lands file. On July 20, 2020, BCDC sent letters to the tribal representatives provided by NAHC. The letters notified the tribal representatives of the proposed Project and invited them to provide comments regarding the Project, share any information regarding possible Native American cultural resources which could potentially exist on the Project site, and

identify any other potential concerns related to the proposed Project. Due to the changes to the proposed Project addressed in the RDEA, the record search location and results were reviewed in February of 2024 and it was determined that the proposed areas of potential new excavation, if fish screens are installed, were included in that research. Subsequent to the publication of the RDEA, the Confederated Villages of Lisjan Nation, which have a cultural affiliation with an area including Newark Plants 1 and 2, requested tribal consultation. BCDC provided information gathered during the cultural resources review for the EA to the Confederated Villages of Lisjan Nation, and met with tribal representative on November 27, 2024. Following this consultation and additional review, the Final EA was revised to include measures to be undertaken in the event of inadvertent discovery of tribal resources.

Therefore, through this documented process of community outreach and tribal consultation, the project is determined to be consistent with Bay Plan Environmental Justice and Social Equity Policies as described above.

I. Mitigation

Applicable Policies: Bay Plan Mitigation Policy 1 states that "Projects should be designed to avoid adverse environmental impacts to Bay natural resources such as to water surface area, volume, or circulation and to plants, fish, other aquatic organisms and wildlife habitat, subtidal areas, or tidal marshes or tidal flats. Whenever adverse impacts cannot be avoided, they should be minimized to the greatest extent practicable. Finally, measures to compensate for unavoidable adverse impacts to the natural resources of the Bay should be required. Mitigation is not a substitute for meeting the other requirements of the McAteer-Petris Act."

Analysis: Activities authorized under this permit that may require compensatory mitigation include the potential unanticipated impacts to tidal marsh, whether through the use of locks or through placement of new riprap and routine maintenance activities, as well as take of special-status fish species and impacts to essential fish habitat through Bay water intake as part of regular pumping operations. As described in Findings section III.C.2, Special Condition II.G.2 is included in this permit in the event of inadvertent permanent impacts to tidal marsh.

As described previously, at the time of this permit's issuance, the permittee has not received a final Incidental Take Permit from the CDFW nor Biological Opinions from USFWS and NMFS for the operations of their pumps and the resulting take of special-status fish species. Therefore, BCDC is not in a position at this time to issue formalized compensatory mitigation requirements independent of a consensus among the resource agencies. Lacking these documents, Special Condition II.M.3 states that compensatory mitigation for any take of special status fish due to operation of the Bay water intakes will be required, as specified under any forthcoming estimates as specified from the

Incidental Take Permit (ITP) from CDFW, and Biological Opinions from USFWS and NMFS. Retroactive mitigation for take of longfin smelt and steelhead will be required for take that occurs starting on July 1, 2025.

These different project activities with the potential for compensatory mitigation requirements are listed under Special Condition II.V for clarity. Specific compensatory mitigation requirements are not calculated as part of this permit, but would be determined based on the nature and extent of impacts, and may be dependent on input from other agencies, including CDFW, NMFS, USFWS, or the RWQCB, in accordance with Bay Plan Mitigation Policies.

J. Public Trust Uses

The activities authorized herein are located on filled former tidelands subject to the public trust. Certain activities may also occur on lands that are held in trust by the State Lands Commission, in which event, as required by Condition II.R, a lease from SLC or documentation from SLC that no lease is needed is required in order to exercise this permit upon such lands. The activities authorized herein located on filled former tidelands can otherwise be found consistent with the public trust as continued maintenance and operations of the salt ponds involve use of these lands for water-based commerce (solar sea salt production).

K. Coastal Zone Management Act

The Commission further finds, declares, and certifies that the activity or activities authorized herein are consistent with the Commission's Amended Management Program for San Francisco Bay, as approved by the Department of Commerce under the Federal Coastal Zone Management Act of 1972, as amended.

L. Enforcement Program and Civil Penalties

The Commission has an enforcement program that reviews its permits for compliance. The Commission may issue cease and desist and civil penalty orders if violations are discovered. The McAteer-Petris Act provides for the imposition of administrative civil penalties ranging from $10 to $2,000 per day up to a maximum of $30,000 per violation. The Act also provides for the imposition of court-imposed civil penalties of up to $30,000 in addition to any other penalties, penalties for negligent violations of between $50 and $5,000 per day, knowing and intentional penalties of between $100 and $10,000 per day, and exemplary penalties, which are supplemental penalties, in an amount necessary to deter future violations. In addition, anyone who places fill, extracts materials, or makes any substantial change in use of any water, land or structure within the area of the Commission’s jurisdiction without securing a permit from the Commission is guilty of a misdemeanor.

IV. Standard Conditions

A. Permit Execution

This permit shall not take effect unless the permittees execute the original of this permit and return it to the Commission within ten days after the date of the issuance of the permit. No work shall be done until the acknowledgment is duly executed and returned to the Commission.

B. Notice of Completion

The attached Notice of Completion and Declaration of Compliance form shall be returned to the Commission within 30 days following completion of the work.

C. Permit Assignment

The rights, duties, and obligations contained in this permit are assignable. When the permittees transfer any interest in any property either on which the activity is authorized to occur or which is necessary to achieve full compliance of one or more conditions to this permit, the permittees/transferors and the transferees shall execute and submit to the Commission a permit assignment form acceptable to the Executive Director. An assignment shall not be effective until the assignees execute and the Executive Director receives an acknowledgment that the assignees have read and understand the permit and agree to be bound by the terms and conditions of the permit, and the assignees are accepted by the Executive Director as being reasonably capable of complying with the terms and conditions of the permit.

D. Permit Runs with the Land

Unless otherwise provided in this permit, the terms and conditions of this permit shall bind all future owners and future possessors of any legal interest in the land and shall run with the land.

E. Other Government Approvals

All required permissions from governmental bodies must be obtained before the commencement of work; these bodies include, but are not limited to, the U. S. Army Corps of Engineers, the State Lands Commission, the Regional Water Quality Control Board, and the city or county in which the work is to be performed, whenever any of these may be required. This permit does not relieve the permittees of any obligations imposed by State or Federal law, either statutory or otherwise.

F. Built Project must be Consistent with Application

Work must be performed in the precise manner and at the precise locations indicated in your application, as such may have been modified by the terms of the permit and any plans approved in writing by or on behalf of the Commission.

G. Life of Authorization

Unless otherwise provided in this permit, all the terms and conditions of this permit shall remain effective for so long as the permit remains in effect or for so long as any use or construction authorized by this permit exists, whichever is longer.

H. Commission Jurisdiction

Any area subject to the jurisdiction of the San Francisco Bay Conservation and Development Commission under either the McAteer-Petris Act or the Suisun Marsh Preservation Act at the time the permit is granted or thereafter shall remain subject to that jurisdiction notwithstanding the placement of any fill or the implementation of any substantial change in use authorized by this permit. Any area not subject to the jurisdiction of the San Francisco Bay Conservation and Development Commission that becomes, as a result of any work or project authorized in this permit, subject to tidal action shall become subject to the Commission's "bay" jurisdiction.

I. Changes to the Commission's Jurisdiction as a Result of Natural Processes

This permit reflects the location of the shoreline of San Francisco Bay when the permit was issued. Over time, erosion, avulsion, accretion, subsidence, relative sea level change, and other factors may change the location of the shoreline, which may, in turn, change the extent of the Commission's regulatory jurisdiction. Therefore, the issuance of this permit does not guarantee that the Commission's jurisdiction will not change in the future.

J. Violation of Permit May Lead to Permit Revocation

Except as otherwise noted, violation of any of the terms of this permit shall be grounds for revocation of the permit. The Commission may revoke the permit for such violation after a public hearing held on reasonable notice to the permittees or their assignees if the permit has been effectively assigned. If the permit is revoked, the Commission may determine, if it deems appropriate, that all or part of any fill or structure placed pursuant to this permit shall be removed by the permittees or their assignees if the permit has been assigned.

K. Should Permit Conditions be Found to be Illegal or Unenforceable

Unless the Commission directs otherwise, this permit shall become null and void if any term, standard condition, or special condition of this permit shall be found illegal or unenforceable through the application of statute, administrative ruling, or court determination. If this permit becomes null and void, any fill or structures placed in reliance on this permit shall be subject to removal by the permittees or their assignees if the permit has been assigned to the extent that the Commission determines that such removal is appropriate. Any uses authorized shall be terminated to the extent that the Commission determines that such uses should be terminated.

L. Permission to Conduct Site Visit

The permittees shall grant permission to any member of the Commission's staff to conduct a site visit at the subject property to verify that the project is in compliance with the authorization and conditions contained herein. Site visits may occur during business hours without prior notice and after business hours with 24-hour notice.

M. Abandonment

If, at any time, the Commission determines that the improvements in the Bay authorized herein have been abandoned for a period of two years or more, or have deteriorated to the point that public health, safety or welfare is adversely affected, the Commission may require that the improvements be removed by the permittees, their assignees or successors in interest, or by the owner of the improvements, within 60 days or such other reasonable time as the Commission may direct.

N. Best Management Practices

1. Debris Removal
   All construction debris shall be removed to an authorized location outside the jurisdiction of the Commission. In the event that any such material is placed in any area within the Commission's jurisdiction, the permittees, their assignees, or successors in interest, or the owner of the improvements, shall remove such material, at their expense, within ten days after they have been notified by the Executive Director of such placement.
2. Maintenance & Operations
   All maintenance and operations activities shall be performed to prevent materials from falling, washing or blowing into the Bay. In the event that such material escapes or is placed in an area subject to tidal action of the Bay, the permittees shall immediately retrieve and remove such material at their expense.

O. In-Kind Repairs and Maintenance

Any in-kind repair and maintenance work authorized herein shall not result in an enlargement of the authorized structural footprint and shall only involve materials approved for use in San Francisco Bay. Work shall occur during periods designated to avoid impacts to fish and wildlife. The permittees shall contact Commission staff to confirm current restricted periods for maintenance.