

POSEIDON CARLSBAD DESALINATION PROJECT

APPLICANT'S PROPOSED COASTAL DEVELOPMENT PERMIT CONDITIONS

I. STANDARD CONDITIONS

1. **Notice of Receipt and Acknowledgment.** This permit is not valid until a copy of the permit is signed by the Permittee or authorized agent, acknowledging receipt of the permit and the acceptance of the terms and conditions, and is returned to the Commission office.

2. **Expiration.** Construction activities for the proposed project must be initiated within two years of issuance of this permit. This permit will expire two years from the date on which the Commission approved the proposed project if development has not begun. Construction of the development shall be pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made at least six months prior to the expiration date.

3. **Interpretation.** Any questions of intent or interpretation of any condition will be resolved by the Executive Director of the Commission (hereinafter, "Executive Director") or the Commission.

4. **Assignment.** The permit may be assigned to any qualified person, provided the assignee files with the Commission an affidavit accepting all terms and conditions of the permit.

5. **Terms and Conditions Run with the Land.** These terms and conditions shall be perpetual, and it is the intention of the Commission and the Permittee to bind all future owners and possessors of the subject property to the terms and conditions.

II. SPECIAL CONDITIONS

1. **Limits of Development.** This permit authorizes the construction and operation of the Poseidon Carlsbad Desalination Project and associated infrastructure as described in the project description of this staff report, as clarified and modified by these conditions.

2. **Final Plans.**

a. **PRIOR TO COMMENCEMENT OF CONSTRUCTION,** the Applicant shall submit final plans for the project components for Executive Director review and approval of those components located in the coastal zone.

b. The Permittee shall undertake development in accordance with the approved plans and any changes shall be reported to the Executive Director. No material changes within the coastal zone shall occur without a Commission amendment to this coastal development permit unless the Executive Director determines that no amendment is necessary.

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Changes to the project requiring review for amendment would include but not be limited to changes in the physical, operational, or delivery capacity increases, or extension of water supply distribution pipelines (not individual connections from existing or approved lines) in the coastal zone beyond those shown on the final plans.

3. **Construction Plan. PRIOR TO COMMENCEMENT OF CONSTRUCTION**, the Applicant shall submit the Spill Prevention and Response Plan and a Construction Plan to the Executive Director for review and approval. The Construction Plan shall identify the specific location of all construction areas, all staging areas, and all construction access corridors in site plan view in the coastal zone. Public access shall be disrupted as little as possible, and corridors or detours to allow beach and bicycle access during construction shall be identified by the construction plan and maintained by the permittee throughout the construction period. The Construction Plan shall also identify the type and location of erosion control/water quality best management practices that will be implemented during construction to protect coastal water quality, including the following:

- a. Silt fences, or equivalent apparatus, shall be installed at the perimeter of the construction areas to prevent construction-related runoff and/or sediment from entering the dunes and/or the Pacific Ocean.
- b. Grading and alteration outside of the approved construction zone is prohibited.
- c. Equipment washing, refueling, and/or servicing shall not take place on the beach or sandy dune area. All construction equipment shall be inspected and maintained at an off-site location to prevent leaks and spills of hazardous materials at the project site.
- d. The construction site shall maintain good construction housekeeping controls and procedures (e.g., clean up all leaks, drips, and other spills immediately; keep materials covered and out of the rain (including covering exposed piles of soil and wastes); dispose of all wastes properly, place trash receptacles on site for that purpose, and cover open trash receptacles during wet weather; remove all construction debris from the beach).
- e. All erosion and sediment controls shall be in place prior to the commencement of construction as well as at the end of each workday. A copy of the approved Construction Plan shall be kept at the construction job site at all times and all persons involved with the construction shall be briefed on its content and meaning prior to commencement of construction. The Permittee shall notify Coastal Commission planning staff at least 3 working days in advance of commencement of construction, and immediately upon completion of construction. The Permittee shall undertake construction in accordance with the approved Construction Plan. Any proposed changes to the approved Construction Plan shall be reported to the Executive Director. No material changes to the approved Construction Plan shall occur without a Commission amendment to this coastal development permit unless the Executive Director determines that no amendment is necessary.

4. **Habitat Mitigation Plan. PRIOR TO COMMENCEMENT OF CONSTRUCTION**, the Applicant shall submit to the Coastal Commission evidence of the

Regional Water Quality Control Board's approval of a Habitat Mitigation Plan. The Habitat Mitigation Plan shall provide for the restoration of no less than 37 acres of marine wetlands. The Plan shall detail the specific site of the mitigation. The site shall be contained within the San Dieguito Wetland Restoration Plan that was approved by the Coastal Commission on October 12, 2005 (Coastal Development Permit No. 6-04-88) and was the subject of a Final Environmental Impact Report that was prepared and certified by the San Dieguito River Park Joint Powers Authority and U.S. Fish and Wildlife Service, or such substitute site or sites approved by the Regional Water Quality Control Board. The Habitat Mitigation Plan shall include an implementation protocol that includes 5 years of monitoring and annual performance review. No later than the commencement of commercial operation of the desalination facility, applicant shall commence implementation of the Plan. The Executive Director may extend the deadline for implementation of the Plan upon Poseidon's request and showing of good cause.

5. **Climate Action Plan.** PRIOR TO ISSUANCE OF THE PERMIT, the Applicant shall submit to the Executive Director a Climate Action Plan in substantial conformance with the Plan dated November [___], 2007. Within one year of the commencement of commercial operations of the desalination facility, applicant shall implement the Plan for the life of the project. The Executive Director may extend the deadline for implementation of the Plan upon Poseidon's request and showing of good cause.

6. **Storm Water Pollution Prevention Plan.** PRIOR TO COMMENCEMENT OF CONSTRUCTION, the Applicant shall submit for Executive Director review and approval a Storm Water Pollution Prevention Plan (SWPPP), which is intended to prevent degradation of surface and ground waters during the grading and construction process. Significant impacts would be avoided through implementation of Best Management Practices (BMPs) that would address erosion/sedimentation, spill prevention, waste management, dust suppression, cleaning and maintenance measures that will be part of the General Construction Activity Stormwater Permit. The following best management practices shall be adhered to during construction:

a. Gravel bags, silt fences, etc. shall be placed along the edge of all work areas as determined appropriate by the City's construction inspector in order to contain particulates prior to contact with receiving waters.

b. All concrete washing and spoils dumping will occur in a designated location.

c. Construction stockpiles will be covered in order to prevent blow-off or runoff during weather events.

d. A pollution control education plan shall be developed by the General Contractor and implemented throughout all phases of development and construction.

e. Severe weather event erosion control materials and devices shall be stored onsite for use as needed.

7. **Storm Water Management Plan.** PRIOR TO COMMENCEMENT OF CONSTRUCTION, the Applicant shall submit for Executive Director review and approval a Storm Water Management Plan for the post construction project site, prepared by a licensed water quality professional, which shall include plans, descriptions and supporting calculations. The Storm Water Management Plan shall incorporate all feasible Best Management Practices (BMPs) designed to reduce, to the maximum extent practicable, the volume, velocity and pollutant load of stormwater leaving the developed areas of the site. The plan shall include, but not be limited to, the following criteria:

a. Post-Development peak runoff rates and average volumes shall not exceed pre-development conditions, to the extent feasible.

b. Runoff from all parking areas, turnouts, and driveways shall be collected and directed through a system of structural BMPs including vegetated and/or gravel filter strips or other media filter devices. The filter elements shall be designed to 1) trap sediment, particulates and other solids and 2) remove or mitigate contaminants through infiltration and/or biological uptake. The drainage system shall also be designed to convey and runoff in excess of this standard from the developed site in a non-erosive manner.

c. The Plan shall include provisions for maintaining the drainage and filtration systems so that they are functional throughout the life of the approved development. Such maintenance shall include the following: 1) the drainage and filtration system shall be inspected, cleaned and repaired prior to the onset of the storm season, no later than September 30th each year and 2) should any of the project's surface or subsurface drainage/filtration structures fail or result in increased erosion, the applicant/landowner or successor-in-interest shall be responsible for any necessary repairs to the drainage/filtration system and restoration of the eroded area.

d. The entire drainage system shall be designed, and then submitted to, and approved by the City Engineer, to ensure that runoff resulting from 10-year frequency storms of 6 hours and 24 hours duration under developed conditions, are equal to or less than the runoff from a storm of the same frequency and duration under existing developed conditions. Both 6-hour and 24-hour storm durations shall be analyzed to determine the detention basin capacities necessary to accomplish the desired results.

Prior to the commencement of commercial operations of the desalination facility, applicant shall implement the Plan for the life of the project. The Executive Director may extend the deadline for implementation of the Plan upon Poseidon's request and showing of good cause.

8. **Flow, Entrainment and Impingement Minimization Plan.** PRIOR TO COMMENCEMENT OF CONSTRUCTION, the Applicant shall submit to the Coastal Commission evidence of the Regional Water Quality Control Board's approval of a Flow, Entrainment and Impingement Minimization Plan. The Flow, Entrainment and Impingement Minimization Plan shall be in substantial conformance with the Plan dated June 1, 2007. Prior to the commencement of commercial operations of the desalination facility, applicant shall implement the Plan for the life of the project. The Executive Director may extend the deadline for implementation of the Plan upon Poseidon's request and showing of good cause.

9. **Public Access Enhancements.** PRIOR TO COMMENCEMENT OF OPERATIONS, Poseidon shall cause to be dedicated, in accordance with the City of Carlsbad's Precise Development Plan PDP 00-02 and in association with Cabrillo Power I LLC, the below-described parcels of land. The dedications shall be in the form of easements, title transfers, and/or deed restrictions, whose purpose is to further Coastal Act goals of maximizing public access and recreational opportunities along the coast in the South Carlsbad Coastal Redevelopment Area and maintaining, restoring and enhancing marine resources. The dedications are described below:

a. Fishing Beach: An easement for this site, along the shore of Agua Hedionda Lagoon and next to Carlsbad Boulevard, shall be dedicated to the City of Carlsbad for public recreational and coastal access use, including public parking.

b. Bluff Area: The Bluff Area, located on the west side of Carlsbad Boulevard and opposite the Power Station, shall be dedicated in fee title to the City of Carlsbad for recreational and coastal access uses.

c. Hubbs Site: The Hubbs Site, along the lagoon north shore, which consists of the land between the existing Hubbs Seaworld Research Institute and the railroad tracks. The site shall be deed restricted to uses such as a fish hatchery, aquatic research, and trails.

d. South Power Plant Public Parking Area: An easement for this site, along the east side of Carlsbad Boulevard and near the south entrance to the power plant, shall be dedicated to the City of Carlsbad for public parking.

10. **Visual Resources.**

a. Desalination plant exterior mechanical equipment and facilities, including tanks, heating, air conditioning, refrigeration equipment, plumbing lines, duct work and transformers, shall be screened from view on all sides visible to the public. The design and material used for screening shall be architecturally compatible with the building.

b. Exterior lighting for the desalination facilities shall serve the purpose of operations, security and safety only. The applicant shall submit for approval a lighting plan for the proposed facilities prior to building permit issuance. The lighting plan shall demonstrate that project lighting is shielded from surrounding areas, and that only the minimum amount of lighting required for safety purposes is provided to avoid adverse effects on surrounding areas. In general, lighting fixtures shall be shielded downward and away from the ocean and adjacent properties. Construction of the desalination plant and related facilities and improvements shall be in conformance with the approved plan.

11. **Water Quality.**

a. The operator of the desalination plant shall continuously monitor the desalination plant and EPS discharge flow rates and salinity levels. The operator of the desalination plant shall on at least a semi-annual frequency monitor and conduct testing to measure and evaluate the combined EPS/desalination plant discharge for compliance with the

California Ocean Plan acute and chronic toxicity requirements. The operator of the desalination plant shall maintain records of the monitoring results to ensure compliance with the Ocean Plan criteria and EPA guidelines. All semi-annual monitoring and testing required by this mitigation measure shall be summarized in a report and submitted to the Regional Water Quality Control Board and Coastal Commission within 45 days of completion, and any noncompliance with Ocean Plan acute and chronic toxicity requirements shall be reported to the Regional Water Quality Control Board and Coastal Commission. Such monitoring results shall be available for inspection by the City of Carlsbad, the Regional Water Quality Control Board and the Coastal Commission.

b. By acceptance of this permit, the permittee agrees that the proposed project shall be conducted in a manner that protects marine resources and water quality pursuant to the implementation of the following Best Management Practices (BMPs):

(1) All semi-solid and solid wastes generated by the project shall be contained and disposed of off-site at an appropriate location outside the coastal zone.

(2) No construction materials, equipment, debris, or waste will be placed or stored where it may be subject to wave, wind, or rain erosion and dispersion.

(3) Machinery and construction materials not essential for the project are prohibited on the beach.

(4) Machinery and construction materials are prohibited at all times in the subtidal and intertidal zones.

12. **Dredging and Beach Deposition.**

a. Timing of Dredging and Beach Deposition. PRIOR TO THE ISSUANCE OF A COASTAL DEVELOPMENT PERMIT FOR A POSEIDON-INITIATED MAINTENANCE DREDGING OF AGUA HEDIONDA LAGOON, Poseidon shall submit to the Executive Director for review and written approval, final plans that are substantially in accordance with previous plans submitted by Cabrillo Power I LLC, to process dredging of the Agua Hedionda Lagoon, and that include the following:

(1) Placement of sand on area beaches shall occur outside of the summer season (Memorial Day weekend through Labor Day of any year).

(2) To avoid potential impacts to the California least tern breeding period and the grunion spawning period, dredging can occur between September 15 and April 15 with the option of extending the dredge period to April 30 if approved in writing by the Executive Director in consultation with the Army Corps of Engineers (COE) and California Department of Fish and Game (DFG).

The permittee shall undertake the development in accordance with the approved plans. Any proposed changes to the approved plans shall be reported to the Executive Director. No material changes to the plans shall occur without a Coastal Commission approved amendment to this

coastal development permit unless the Executive Director determines that no amendment is legally required.

b. Pre-and-Post Dredge Requirements. At least two weeks prior to dredging and within 60 days of completion of the proposed dredge cycle, the applicant shall submit to the Executive Director for review and written approval the following:

(1) A map of pre-dredge conditions of the outer lagoon and pre- and post-deposition profiles at the approved beach deposition locations; proposed dredge quantities; deposition plan and methodology; and signage plan; and

(2) Evidence the Corps of Engineers has approved the proposed dredge spoils as suitable for deposition at the approved beach locations, pursuant to ACOE Permit 200100328-SKB.

c. Eelgrass Mitigation and Monitoring. PRIOR TO THE ISSUANCE OF A COASTAL DEVELOPMENT PERMIT FOR A POSEIDON-INITIATED MAINTENANCE DREDGING OF AGUA HEDIONDA LAGOON, the applicant shall submit, for review and written approval of the Executive Director, an eelgrass mitigation and monitoring plan that includes at a minimum the following:

(1) Performance of a pre-construction eelgrass survey of the project area by qualified biologist immediately prior to the proposed maintenance dredging in order to establish the location of all eelgrass habitat.

(2) Marking the location of all eelgrass habitat found in the pre-construction survey in order that the contractor can avoid impacting these areas during the proposed maintenance dredging. No anchorage of dredging equipment is permitted outside the limits of the dredging operation.

(3) Performance of a post-construction eelgrass survey of the project area by qualified personnel no more than 30 days after the completion of the work to determine if any eelgrass habitat was impacted by dredging activities.

(4) Performance of mitigation if it is determined by the post-construction eelgrass survey that there has been a loss of eelgrass habitat. This mitigation must be performed in accordance with and subject to the requirements of the Southern California Eelgrass Mitigation Policy (1:1.2 ratio). The applicant shall consult with the Executive Director prior to construction to determine if an additional coastal development permit or amendment is required for any necessary mitigation.

The permittee shall undertake the development in accordance with the approved plans. Any proposed changes to the approved plans shall be reported to the Executive Director. No material changes to the plans shall occur without a Coastal Commission approved amendment to this coastal development permit unless the Executive Director determines that no amendment is required.

d. Monitoring/Beach Profiles. Prior to the placement of any material at the Middle Beach, South Beach or North Beach, the applicant shall prepare two profiles of the beach and off shore area (to closure or wading depth, consistent with the survey requirements of the ACOE permit) showing the pre-disposal conditions. Profiles shall be taken at the same locations after completion of the disposal, one month after disposal, and annually thereafter until the area either returns to its pre-disposal condition or is further modified by additional nourishment. Reports shall be provided to the Executive Director following the one-month after disposal profiles and after each annual survey, which provide information on site conditions and an analysis of the long-term changes in sediment supply between the jetties.

e. Grunion Protection Plan. During any beach deposition, the permittee shall comply with the provisions of the grunion protection plan as required by ACOE Permit #200100328-SKB.

f. Invasive Species. PRIOR TO THE COMMENCEMENT OF DREGDING, the applicant shall provide evidence that dredging of the outer lagoon can occur without the risk of spreading the invasive green alga *Caulerpa taxifolia* as follows:

(1) Not earlier than 90 days nor later than 30 days prior to commencement or re-commencement of any dredging, the applicant shall undertake a survey of the project area (includes the dredging area, anchoring areas and any other areas where the bottom could be disturbed by project activities) and a buffer area at least 10 meters beyond the project area to determine the presence of the invasive alga *Caulerpa taxifolia*. The survey shall include a visual examination of the substrate.

(2) The survey protocol shall be prepared in consultation with the Regional Water Quality Control Board, the California Department of Fish and Game, and the National Marine Fisheries Service.

(3) Within five (5) business days of completion of the survey, the applicant shall submit the survey:

(a) For the review and written approval of the Executive Director; and

(b) To the Surveillance Subcommittee of the Southern California Caulerpa Action Team (SCCAT). The SCCAT Surveillance Subcommittee may be contacted through William Paznokas, California Department of Fish & Game (DFG) (858/467-4218) or Robert Hoffman, National Marine Fisheries Service (NMFS) (562/980-4043).

(c) If *Caulerpa* is found, then the NMFS and DFG contacts shall be notified within 24 hours of the discovery.

(4) If *Caulerpa* is found, the applicant shall, prior to the commencement of dredging, provide evidence to the Executive Director for review and written approval either that the *Caulerpa* discovered within the project and/or buffer area has been eradicated or that the dredging project has been revised to avoid any contact with *Caulerpa*. No material changes to the dredging project shall occur without a Coastal Commission approved

amendment to this coastal development permit unless the Executive Director determines that no amendment is required.

13. **Regional Cooperation.** The Applicant shall cooperate with regional water supply planning and water conservation programs.

14. **Evidence of Other Agency Approvals.** PRIOR TO COMMENCEMENT OF CONSTRUCTION, the Applicant shall submit to the Executive Director for review and approval, evidence that approvals have been obtained from the City of Carlsbad, State Lands Commission, Regional Water Quality Control Board, California Department of Health Services, National Marine Sanctuary, and U.S. Fish & Wildlife Service or that these approvals are not necessary.

15. **Conformance with the Requirements of the Resource Agencies.** The permittee shall comply with all requirements, requests and mitigation measures from the California Department of Fish and Game, State Lands Commission, Regional Water Quality Control Board, U.S. Army Corps of Engineers, and the U.S. Fish and Wildlife Service with respect to preservation and protection of water quality and marine environment.

16. **Assumption of Risk and Waiver of Liability.** The Permittee acknowledges and agrees, on behalf of itself and all successors and assigns: (i) that the may be subject to hazards from seismic events, liquefaction, storms, waves, floods and erosion; (ii) to assume the risks to the Permittee and the property that is the subject of this permit of injury and damage from such hazards in connection with this permitted development; (iii) to unconditionally waive any claim of damage or liability against the Commission, its officers, agents, and employees for injury or damage from such hazards; and (iv) that any adverse effects to property caused by the permitted project shall be fully the responsibility of the landowner.

17. **Deed Restriction.** PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall provide to the Executive Director satisfactory evidence of an agreement from the owner of that portion of the property subject to the applicant's leasehold interest (the "Property") that, prior to any conveyance of the Property that is the subject of this coastal development permit, the landowner shall execute and record a deed restriction, in a form and content acceptable to the Executive Director (a) indicating that, pursuant to this permit, the California Coastal Commission has authorized development on the Property, subject to terms and conditions that restrict the use and enjoyment of the Property; and (b) imposing all of the Special Conditions of this permit as covenants, conditions and restrictions on the use and enjoyment of the Property. The restriction shall include a legal description of the Property. It shall also indicate that, in the event of an extinguishment or termination of the deed restriction for any reason, the Standard and Special Conditions of this permit shall continue to restrict the use and enjoyment of the Property so long as either this permit or the development it authorizes – or any part, modification, or amendment thereof – remains in existence on or with respect to the Property.