



POSEIDON SURFSIDE

a Poseidon Water company

September 1, 2016

Mr. Kurt V. Berchtold
Executive Officer
California Regional Water Quality Control Board, Santa Ana Region
3737 Main Street, Suite 500
Riverside, CA 92501-3348

Dear Mr. Berchtold:

Subject: ***Response to July 29, 2016 Notice of Incomplete Application Regarding the Huntington Beach Desalination Project***

On June 29, 2016, Poseidon Water submitted to the Santa Ana Regional Water Quality Control Board (“RWQCB”) an application for amendment and renewal of Order No. R8-2012-0007, NPDES No. CA8000403 for the Huntington Beach Desalination Project (“Project”) which incorporated our earlier request for a determination that the Project complies with California Water Code (“CWC”) Section 13142.5(b) and the California Ocean Plan’s Desalination Amendment.¹

On July 29, 2016, Poseidon received a Notice of Incomplete Application (“NOIA”) from the Regional Board that identified three (3) items. This letter and supporting enclosures provide Poseidon Water’s detailed response to the three (3) items identified in the RWQCB’s July 29, 2016 NOIA as well as additional Project and site-specific information that we believe is sufficient to allow the Regional Board to evaluate the Project’s compliance with the Desalination Amendment and to deem the Project’s application complete at this time.

Enclosed, Regional Board staff can find information regarding, but not limited to, the following areas:

¹The RWQCB’s discretionary determination of compliance with CWC Section 13142.5(b) falls under the purview of the Permit Streamlining Act. Gov’t Code §§ 65920 *et seq.* Under this Act, the lead agency must deem an application complete or incomplete with 30 days of receiving it. Gov’t Code § 65943(a). If the RWQCB does not act on a project within the prescribed period of time, then the application will be deemed approved. The May 1, 2013 letter from the Office of Chief Counsel of the State Water Resources Control Board (“SWRCB”) to the Executive Office of the SWRCB also requires the same timing for review of the 13142.5 (b) completeness determination.

Poseidon Surfside

17011 Beach Blvd., Suite 900 Huntington Beach, California 92647 Phone: (714) 596-7946 Fax: (714) 596-7947
www.poseidonwater.com

1. *The identified need for the desalinated water (Ocean Plan, Chapter III.M.2.b(2))*

Attached is a copy of the August 3, 2016 Orange County Water District (“OCWD”) letter to the RWQCB [**Attachment #1**]. In compliance with Chapter III.M.2.b(2) of the Desalination Amendment, Attachment #1 demonstrates that the Project’s 56,000 acre feet per year (50 MGD) of new water supply is identified in the OCWD’s Groundwater Management Plan as a planned future water supply. This letter addresses the discrete question raised by the State Water Board staff regarding the nature of the OCWD Groundwater Management Plan 2015 Update and why the plan identifies the Project as providing OCWD with “up to” 56,000 acre feet per year of water by 2020.

In response to more recent questions raised by the State Water Board staff, also attached is a whitepaper addressing the fact that Chapter III.M.2.b(2) of the Desalination Amendment does not prescribe a water supply “loading order” [**Attachment #2**]. This whitepaper demonstrates that the administrative record for the Desalination Amendment clearly shows that the State Board rejected attempts to utilize the Ocean Plan to dictate to water agencies that ocean desalination should only be pursued “as a last resort.” The OCWD letter [Attachment #1], “loading order” whitepaper, and the combination of the other information we have provided and that is in the RWQCB’s administrative record (e.g., The Municipal Water District of Orange County’s Urban Water Management Plan 2015 Update), individually and collectively exhibit that the RWQCB has sufficient information to substantiate a finding that the Project complies with *Chapter III.M.2.b(2)*, thereby bringing closure to this item.

2. *Analysis of alternative sites (Ocean Plan, Chapter III.M.2.b)*

Attached is a copy of the alternative sites matrix [**Attachment #3A #3B**] that the RWQCB staff attached to its July 29, 2016 NOIA and requested that Poseidon populate. The information in this matrix is supported by the detailed evaluation of the coast of Orange County found in Dudek’s June 11, 2015 *Huntington Beach Desalination Plant Alternative Sites Analysis* (submitted to RWQCB on March 15, 2016), and concludes that there are no other nearby sites within a reasonable range of the proposed site that meet the Project’s objectives² and where subsurface intakes would be feasible.

² The stated Project objectives identified in the 2005 Re-circulated Environmental Impact Report and 2010 FSEIR include 1. *Use proven technology to affordably provide a long-term, local and reliable source of water not subject to the variations of drought or regulatory constraints;* 2. *Reduce*

Equally as important, state law (i.e., CWC Section 13142.5(b)) requires that alternative project sites, not just the seawater intake technology, be both “available” and “feasible.” None of the landward sites identified in the RWQCB staff’s alternative sites matrix are commercially available to Poseidon to build a desalination plant. In contrast to the proposed Project site, where Poseidon has held property rights, permits and entitlements for over a decade, we could not obtain property rights and onshore and offshore permits and entitlements to develop a desalination plant at the locations identified in the alternative site matrix in a successful manner in a reasonable period of time, which makes these alternative sites infeasible under Section 13142.5(b). In this regard, the RWQCB has sufficient information to substantiate a finding that the Project site is the best available and feasible site, thereby bringing closure to this item.

3. *Ecological data*

Attached is a copy of the August 8, 2016 technical memorandum entitled “*Comparison of Existing Offshore Ichthyoplankton Data for the Huntington Beach Desalination Plant*” [Attachment #4] This report includes entrainment sampling data and analysis, and definitively concludes that the area offshore of Huntington Beach with the lowest concentrations of fish larvae is the existing seawater intake location. Moving the proposed 1 mm screened intake farther offshore will not reduce the intake and mortality of all forms of marine life or reduce the intake and mortality of marine life associated with Marine Life Protected Areas (“MPAs”).

4. *Potential neutral third party analysis of certain portions of the Independent Scientific Technical Advisory Panel (ISTAP) Phase 2 Report related to economic analysis. (Ocean Plan, Chapter III.M.2.a)*

Attached is an August 8, 2016 copy of a whitepaper [Attachment #5] previously provided to the RWQCB staff. This paper documents how the ISTAP’s economic feasibility evaluation meets or exceeds the requirements of Chapter III.M.2.a of the Desalination Amendment. Poseidon believes that further independent analysis of an independent analysis done by an independent panel sanctioned and jointly selected by the Coastal Commission is unnecessary and unjustified.

5. *Mitigation (Ocean Plan, Chapter III.M.2.e)*

Enclosed please find a copy of the July 2016 Marine Life Mitigation Plan

local dependence on imported water and strengthen regional self-reliance 3. Contribute desalinated water to satisfy regional water supply planning goals.

(“MLMP”) alternative site evaluation [**Attachment #6**]. Relying on the guidance found in the Desalination Amendment, the MLMP site analysis evaluated ten (10) different sites in Southern California. Poseidon has developed site-specific MLMPs for the two sites that the alternative site evaluation ranked the highest based on the Desalination Amendment’s MLMP criteria. The Newland Marsh MLMP [**Attachment #7**] and the Bolsa Chica MLMP [**Attachment #8**] both include Marine Life Mortality Reports that conclude either site would sufficiently mitigate for the Project’s unavoidable operational impacts to all forms of marine life. Poseidon is presenting to the Regional Board an option for either one of the MLMP sites for its consideration.

6. *Hydraulic modeling*

Enclosed is an August 29, 2016 technical memorandum from Michael Baker International that is entitled *Initial Dilution in a Quiescent Ocean Due to Discharges of Concentrated Seawater from the Huntington Beach Desalination Facility (HBDF)* [**Attachment #9**]. This memo is an update of the previous hydraulic model provided to the Regional Board on June 29, 2016 along with our application. This updated model was requested by the State Water Board staff to assess the discharge of the concentrated seawater (i.e. “brine”) plume under quiescent ocean conditions. The report concludes that even under these extremely conservative assumptions of quiescent ocean conditions that the discharge from the desalination plant will meet or exceed the Desalination Amendment’s receiving water quality standards.

In closing, Poseidon appreciates the Regional Board staff’s time and resources. The stated purpose of the interagency consultation process that was initiated by the State Water Board staff seven months ago was for the Regional Board staff to identify information that may not yet be included in our Coastal Development Permit application but is necessary for the 13142.5(b) compliance determination.³ Since February, at the request of the Regional Board staff, we have submitted our application for amendment and renewal of Order No. R8-2012-0007, NPDES No. CA8000403 and for a determination that the Project complies with CWC Section 13142.5(b) and the Desalination Amendment. We have diligently participated throughout the interagency consultation process, amended our Project description based on feedback from the State and Regional Board staff, and most recently agreed to postpone our planned September Coastal Commission hearing in order to consider the resequencing of the Regional Board’s and Coastal Commission’s Project approvals. Today, the Regional Board has sufficient information from Poseidon to evaluate the Project’s compliance with the Desalination Amendment, and the State Lands Commission is prepared to serve as the CEQA Lead Agency in lieu of the Regional Board

³ Please see February 8, 2016 letter from State Water Board staff to the Coastal Commission staff.

relying on the environmental analysis and certification associated with the Coastal Development Permit. Consistent with the original intent of the interagency consultation process and the permit sequencing agreement we have put forward, we are requesting at this time that the Regional Board deem complete our NPDES permit and CWC 13142.5(b) compliance determination application.

Thank you for your consideration. Please contact me at (760) 655-3996 (email: smaloni@poseidonwater.com) if you have any questions.

Sincerely,



Scott Maloni
Vice President

cc: Hope Smythe, Santa Ana Regional Water Quality Control Board
Milasol Gaslan, Santa Ana Regional Water Quality Control Board
Philip G. Wyels, State Water Resources Control Board
David A. Rice, State Water Resources Control Board
Kimberly Tenggardjaja, State Water Resources Control Board
Claire Waggoner, State Water Resources Control Board

Poseidon Surfside

17011 Beach Blvd., Suite 900 Huntington Beach, California 92647 Phone: (714) 596-7946 Fax: (714) 596-7947
www.poseidonwater.com