

State of California
Regional Water Quality Control Board
San Diego Region

EXECUTIVE OFFICER SUMMARY REPORT
February 11, 2009

- ITEM: 6
- SUBJECT: Poseidon Resources Corporation, Proposed Carlsbad Desalination Project (Order No. R9-2006-0065, NPDES No. CA0109223). The Regional Board will consider whether the Marine Life Mitigation Plan (MLMP) dated November 14, 2008, satisfies the conditions established in Resolution No. R9-2008-0039, Conditional Approval of Revised Flow, Entrainment, and Impingement Minimization Plan for Poseidon Resources Corporation Carlsbad Desalination Project, or whether failure to satisfy the conditions has rendered the Resolution inoperative by its own terms. The Regional Board may also provide direction to staff concerning future actions related to this Project. (Michelle Mata)
- PURPOSE: To consider whether the Marine Life Mitigation Plan (MLMP) dated November 14, 2008, satisfies the conditions established in Resolution No. R9-2008-0039, Conditional Approval of Revised Flow, Entrainment, and Impingement Minimization Plan for Poseidon Resources Corporation's Carlsbad Desalination Project, or whether failure to satisfy the conditions has rendered the Resolution inoperative by its own terms.
- PUBLIC NOTICE: A Notice of Public Hearing was published in the San Diego Union Tribune on December 30, 2008. A Corrected Notice of Public Hearing was published on January 2, 2009, which supersedes the December 30, 2008 public notice.
- DISCUSSION: On August 11, 2006 this Regional Board adopted Order No. R9-2006-0065, NPDES No. CA0109223 establishing waste discharge requirements for up to 57 million gallons per day (MGD) combined concentrated saline wastewater and filter backwash wastewater from a reverse osmosis unit (RO), to be discharged by the Carlsbad Desalination Project (CDP) to the Pacific Ocean.
- The proposed CDP would use approximately 300 MGD of seawater, a portion of Encina Power Stations (EPS's) once

through cooling water intake, to produce up to 50 MGD of potable water. The CDP plans to operate in conjunction with the power generation operations at EPS, resulting in the diversion of approximately 300 MGD of the seawater extracted from Agua Hedionda Lagoon for desalinization operations at CDP. The proposed operations at the CDP will use up to 100 MGD for the production of the 50 MGD of potable water, with the remaining 200 MGD to be used for dilution of 57 MGD of concentrated saline and filter backwash wastewater streams that are discharged into the Pacific Ocean via the EPS's cooling water discharge channel.

Section VI.C.2(e) of Order No. R9-2006-0065 states:

Flow, Entrainment and Impingement Minimization Plan

The Discharger shall submit a Flow, Entrainment and Impingement Minimization Plan within 180 days of adoption of the Order. The plan shall assess the feasibility of site specific plans, procedures, and practices to be implemented and/or mitigation measures to minimize the impacts to marine organisms when the CDP intake requirements exceed the volume of water being discharged by the EPS. The plan shall be subject to the approval of the Regional Water Board and shall be modified as directed by the Regional Water Board.

On February 12, 2007, Poseidon submitted the first draft of their Flow, Entrainment, and Impingement Minimization Plan (Plan) to satisfy the requirements of NPDES Permit Section VI.C.2(e). In response to extensive comments from the Regional Board, other agencies, and interested parties; Poseidon revised and resubmitted the Plan on June 27, 2007. On February 19, 2008, the Regional Board sent a letter (Supporting Document 34) to Poseidon in response to their February 12, 2007 and June 27, 2007 Flow, Entrainment, and Impingement Minimization Plan(s). The letter contained both general comments as well as specific comments on the plan(s) submitted. The letter identified 17 issues that needed to be resolved before the Plan would be considered complete.

On March 7, 2008, Poseidon submitted a revised Flow, Entrainment and Impingement Minimization Plan (Plan) and a response to the Regional Board Letter dated February 19, 2008.

At a public meeting on April 9, 2008, the Regional Board evaluated the Plan, considered extensive public input, and adopted Resolution No. R9-2008-0038, "Conditional Approval of Revised Flow Entrainment, and Impingement Minimization Plan" (Resolution) (Supporting Document 2). The Resolution found that the Plan lacked a specific mitigation alternative, but instead sets forth a process for evaluating and selecting a specific mitigation site. The Board required submittal of a specific mitigation alternative for its approval. (Resolution, Finding 7.) The Resolution conditionally approved the Plan, provided:

"3. Within six months of adoption of this resolution, Poseidon shall submit to the Regional Board Executive Officer for approval by the Regional Board an amendment to the Plan that includes a specific proposal for mitigation of the impacts by impingement and entrainment upon marine organisms resulting from the intake of seawater from Agua Hedionda Lagoon, as required by Section VI.C.2(e) of Order No. R9-2006-0065; and shall resolve the concerns identified in the Regional Board's February 19, 2008 letter to Poseidon Resources, and the following additional concerns:

- a) Identification of impacts from impingement and entrainment;
- b) Adequate monitoring data to determine the impacts from impingement and entrainment;
- c) Coordination among participating agencies for the amendment of the Plan as required by Section 13225 of the California Water Code;
- d) Adequacy of mitigation; and
- e) Commitment to fully implement the amendment to the Plan."

On November 14, 2008, Poseidon Resources Corp. submitted a Marine Life Mitigation Plan (MLMP) (Supporting Document 3) intended to comply with the conditions set forth in the Regional Board's Resolution. Staff initially reviewed the MLMP, and concluded, by letter dated December 2, 2008 (Supporting Document 4), that the conditions in the Resolution remained unsatisfied. Staff has since evaluated the December 9, 2008, Poseidon response (Supporting Document 5), and is in the process of evaluating the materials submitted by Poseidon on

January 26, 2009 (Supporting Documents 29-33). Staff remains concerned that the MLMP fails to satisfy a number of conditions in the Resolution, such as the requirement to submit adequate data on impingement of organisms and to propose adequate mitigation (see Resolution, Implementing ¶ 3, 3.d.). Staff looks forward to discussions with Poseidon and members of the public in the future to try to resolve these and other substantive concerns.

Staff's overarching concern, which remains unsatisfied, is that the MLMP fails to include a specific mitigation alternative as the Board required. Instead, it sets forth a process and criteria for evaluating 11 independent mitigation site options. The Resolution conditions approval of the Plan on the timely submittal of a specific mitigation alternative for Regional Board approval. Staff continues to believe that a specific mitigation alternative is a critical element in order to properly evaluate whether the functions of the proposed mitigation will match those lost from impingement and entrainment. Poseidon's MLMP is fundamentally flawed in that it fails to fulfill this condition.

The Regional Board has received comments directly from Poseidon, from Latham & Watkins on behalf of Poseidon Resources Corporation, as well as from public agencies, municipalities, private individuals, and elected officials. Comment letters received to date have been included in this Agenda mailing.

SIGNIFICANT
CHANGES:

N/A

COMPLIANCE:

N/A

LEGAL ISSUES:

None

SUPPORTING DOCS:

1. Site Map
2. Resolution No. R9-2008-0039
3. Flow, Entrainment and Impingement Minimization Plan
(November 14, 2008)
4. Regional Board Review of November 14, 2008 Submittal
(December 2, 2008)
5. Poseidon Resources Corporation Response to Regional Board
December 2, 2008 Letter (December 9, 2008)

6. San Diego Coastkeeper Letter Regarding Closed Session Discussion During the January 21, 2008 Board Meeting (January 16, 2009)
7. Comments from Hubbs-Sea World Research Institute (January 19, 2009)
8. Comments from the Industrial Environmental Association (January 19, 2009)
9. Comments from the Carlsbad Chamber of Commerce (January 19, 2009)
10. Comments from the City of Carlsbad, Office of the Mayor (January 19, 2009)
11. Comments from the San Diego County Building & Construction Trades Council (January 19, 2009)
12. Comments from Latham & Watkins on behalf of Poseidon Resource Corporation (January 21, 2009)
13. Comments from Sweetwater Authority (January 21, 2009)
14. Comments from the San Diego County Tax Payers Association (January 21, 2009)
15. Comments from the Flower Fields at Carlsbad Ranch (January 21, 2009)
16. Comments from the Santa Fe Irrigation District (January 21, 2009)
17. Comments from the Olivenhain Municipal Water District (January 21, 2009)
18. Comments from Councilmember Benjamin Hueso (January 21, 2009)
19. Comments from Assemblymember Martin Garrick (January 21, 2009)
20. Comments from Don Christiansen (January 21, 2009)
21. Comments from Senator Mark Wyland (January 22, 2009)
22. Comments from Robert Simmons, Counselor at Law (January 22, 2009)
23. Comments from the San Diego Regional Chamber of Commerce (January 23, 2009)
24. Comments from Valley Center Water District (January 23, 2009)
25. Comments from Julianne Nygaard (January 23, 2009)
26. Comments from San Diego County Water Authority (January 26, 2009)
27. Poseidon Resources Corporation request to enter audio cassette of November 12, 2008 Board Meeting into record (January 26, 2009)
28. Latham & Watkins Statement of Procedural Objections and

- Request for Alternate Procedures (January 26, 2009)
29. Dr. David Mayer, Ph.D., Expert Opinion on Poseidon's Marine Life Mitigation Plan (January 26, 2009)
 30. Chris Norton, Expert Opinion on Poseidon's Marine Life Mitigation Plan (January 26, 2009)
 31. Dr. Scott A. Jenkins, Ph.D., Expert Opinion on Biological Data Used to Support Poseidon's Impingement and Entrainment Assessment (January 26, 2009)
 32. Comments Letter from Latham & Watkins on behalf of Poseidon Resources Corporation (January 26, 2009) (Two Volumes of Appendices)
 33. Cover Letter with enclosures (January 26, 2009):
 - a. Declaration of Peter MacLaggan;
 - b. Declaration of Jessica H. Jones; and
 - c. January 26, 2009 Letter from Peter MacLaggan to Members of the Regional Board
 34. Regional Board Review of Poseidon's February 12, 2007, and June 27, 2007, Flow, Entrainment, and Impingement Minimization Plan(s) (February 19, 2008)

RECOMMENDATION: Staff recommends that the Regional Board determine that Poseidon has not satisfied all of the conditions in the Resolution and that failure to satisfy the conditions has rendered the Resolution inoperative by its own terms. Staff seeks direction from the Board for future action related to this matter.