

April 10, 2007

Mr. Charles Cheng
California Regional Water Quality Control Board, San Diego Region
9174 Sky Park Court
Suite 100
San Diego, CA 92123-4340
VIA EMAIL: ccheng@waterboards.ca.gov



RE: COMMENTS ON THE POSEIDON RESOURCES FLOW, ENTRAINMENT, AND
IMPINGEMENT MINIMIZATION PLAN FOR THE CARLSBAD DESALINATION
PROJECT

Dear Mr. Cheng:

I am writing on behalf of the San Diego Coastkeeper, a non-profit organization dedicated to protecting the region's bays, beaches, watersheds, and ocean. We have been active participants throughout the Carlsbad Desalination Project (CDP) permitting and development process. We believe it is essential that the CDP operate in the most environmentally sustainable manner possible and that full compliance with California Regional Water Quality Control Board Order No. R9-2006-0065 is necessary in achieving this goal.

After reviewing Poseidon Resource Corporation's (Poseidon) flow, impingement, and minimization plan (the plan) for the CDP, it is clear that the plan fails to comply with California Regional Water Quality Control Board (Regional Board) Order No. R9-2006-0065 (Order). We therefore request that the Regional Board deny approval of the plan and require Poseidon modify the plan to comply with the Regional Board's Order.

Poseidon's plan presents four different "recommended power plant intake system operations" (Plan, page 35) as its "minimization plan." All fail to sufficiently assess "mitigation measures to minimize the impacts to marine organisms" as required by the Regional Board's Order. (Order R9-2006-0065, page 22) The four proposals merely indicate preferential operational conditions of the Encina Power Station (EPS) intake pumps during temporary shutdown of the EPS. A fifth proposal contemplates dredging the Agua Hedionda Lagoon in the event of extended EPS shutdown. Furthermore, proposals two through four are not mitigation measures because they all rely on operational condition 5, which is currently incompatible with the current NPDES permit issued to the CDP.

The plan additionally fails because all recommended system operations presented are contemplated only in the context of a *temporary* EPS shutdown. The language in the order clearly requires the plan to assess "...mitigation measures to minimize the impacts to marine organisms *when the CDP intake requirements exceed the volume of water being discharged by the EPS.*" Without contemplating a permanent EPS shutdown, CDP's plan is incomplete.

1. Recommendation 1 Fails Because it is Incomplete in Several Respects

The first recommendation in the plan contemplates limiting operation of existing intake pumps to one of five operational conditions, with preference being given to the condition resulting in the lowest intake flow available at the time. Beyond failing to contemplate the harm to marine organisms, there are several shortcomings with this first proposal. First, the percent reduction of impingement and entrainment achieved by each condition is over-inflated by measuring such reductions against the maximum power intake flow instead of the EPS average daily intake flow. Using the EPS daily intake average will provide a much more realistic representation of the percent reduction of impingement and entrainment that will be achieved by each of the operational conditions.

Second, the measure fails to address impact on marine organisms by relying on the inference that a lower flow intake will result in minimized impact on marine organisms. Without further analysis on behalf of Poseidon, such an inference should not be allowed because, although it is logical that less intake flow will result in fewer marine organisms entrained and impinged, it does not necessarily follow that impact on all marine organisms will be mitigated, or to what degree. The Regional Board must require Poseidon to quantify the actual effects on marine organisms when CDP is operating at one of the five operating conditions before accepting such an inference.

Finally, the five operational conditions outlined in the first proposal address only usage of the EPS main intake pumps and do not include the cumulative effects on marine life of any CDP operational condition when coupled with the EPS auxiliary pumps. The EPS auxiliary pumps remain in operation even when the EPS is temporarily shutdown and have a capacity of over 62 million gallons per day (MGD). This represents a significant addition to total daily intake flow and any analysis on the impact to marine organisms should include the cumulative effects of the service pumps and the contemplated operational conditions during periods of temporary EPS shutdown.

The extended EPS shutdown scenario has also taken on a larger importance in recent months. As you may be aware, the Second Circuit U.S. Court of Appeals has ruled that U.S. EPA violated the Clean Water Act (CWA) when it issued its Section 316(b) Phase II regulations in 2004 (*Riverkeeper, Inc., et al. v. U.S. Environmental Protection Agency*, No. 04-6692-ag(L) (2nd Cir. Jan. 25, 2007)). This ruling has significant impacts here in California where the State Board is currently drafting a state policy to implement Section 316(b). The court findings affect all of the agencies charged with implementing Section 316(b) and regulating once-through cooled power plants. With the potential for the permanent shutdown of EPS's intake and discharge channels, CDP's flow minimization plan under those conditions takes on a greater significance.

2. Recommendation 2 Fails Because it is Incompatible With the Existing NPDES Permit

Recommendation 2 provides "whenever possible, reduce flow collected through existing power plant intake to 184.32 MGD." This can be achieved only by operating under condition 5. However, operation under this condition is currently not permissible under the existing NPDES permit because the salinity of the discharge exceeds that permitted in the permit. This is not a viable mitigation measure because the NPDES permit does not allow the CDP to operate under this condition due to the limits placed on total dissolved solids allowed in the effluent discharge. Additionally, proposal 2 fails

to address how the higher salinity of effluent from operational condition 5 will impact marine organisms.

3. Recommendations 3 & 4 Fail Because They are Merely Informational Statements

Proposals 3 and 4 are not mitigation measures at all and only attempt to bolster proposal 2. As a result, they are irrelevant in the context of the mitigation measures the order requires contemplated. Proposal 3, discusses how the NPDES permit would have to be amended to allow for an increased salinity limit in both average and maximum daily discharge. This is simply evidence of the fact that the operational condition that Poseidon is presenting as the most favorable condition is not even possible under current limits. The Regional Board should require Poseidon to modify the plan to limit mitigation measures to those which are compatible with the existing NPDES permit.

Proposal 4 merely states why operational condition 5 is more favorable than condition 1-3. However as stated above, percent reduction of impingement and entrainment is skewed as a result of using EPS's maximum intake flow as the baseline for comparison. Additionally, Poseidon claims, without supporting evidence, that "the environmental benefits of (operational condition 5) are substantial while the environmental impact associated with the elevated salinity discharge is minimal."

First, the Regional Board should require Poseidon to elaborate on what type of "benefits" they are referring to, since it is unlikely that the intake of 184.33 MGD will yield any benefits in the traditional definition of the word. Second, the Regional Board should require Poseidon to provide data on the "minimal" environmental impact that can be expected as a result of the increased salinity. Finally, Poseidon is not in a position to make a determination as to what constitutes "a substantial environmental benefit" or a "minimal environmental impact" and requiring Poseidon to provide quantifiable information on the benefits and impacts of operational condition 5 will better inform the Board on making such a determination.

4. Dredging Agua Hedionda Lagoon Carries Separate and Significant Environmental Concerns

In proposal 5, Poseidon attempts to make itself appear like an environmental crusader by offering to dredge the Agua Hedionda Lagoon during periods of extended shutdown at the EPS. By keeping the lagoon entrance open, Poseidon contends that periodic dredging of the lagoon will prevent the lagoon entrance from closing, therefore maintaining the lagoon's "biological productivity and environmental health." The gross omission in the plan is that dredging carries with it separate and severe environmental concerns and such concerns should be analyzed in making such a proposal. The frequency and manner in which the lagoon is to be dredged is also left unaddressed. Finally, Poseidon fails to consider that dredging requires a separate permit issued from the Army Corps of Engineers. Poseidon fails to provide any information as to whether such a permit has even been applied for at this time and without a permit in place; this mitigation proposal must be considered speculative and unacceptable.

Conclusion

Finally, Poseidon failed to submit the plan by the 180 day deadline required in the Order. "The developer shall submit a Flow, Entrainment and Impingement Minimization Plan *within 180 days of adoption of the Order.*" The order was adopted by the Regional Board on June 14, 2006. It was from this

date that Poseidon had 180 days to submit the plan. Poseidon actually submitted the plan on February 13, 2007, well after December 11, 2006 deadline expired.

In conclusion, the plan submitted by Poseidon fails to comply with the Regional Board's Order because it does not adequately present mitigation measures to minimize impacts to marine organisms. Additionally, the plan fails to consider operation of the CDP in the event of a permanent EPS shutdown, proposes an impermissible proposal in Operational Condition 5, was submitted after the deadline, and uses unsupported claims in hopes of subverting the purpose of the Regional Board's Order. For these reasons, we request that the Regional Board not accept the plan in its current state and require Poseidon to modify the plan to include the mitigation measures, and any other considerations required by Regional Board Order R9-2006-0065.

Thank you for the opportunity to comment on this important issue. Please do not hesitate to contact Gabriel Solmer at 619 758-7743 ext 109 or gabe@sdcoastkeeper.org with any questions or comments.

Sincerely,

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