

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN DIEGO REGION

TENTATIVE ORDER NO. R9-2006-0065  
NPDES NO. CA0109223

WASTE DISCHARGE REQUIREMENTS

FOR THE POSEIDON RESOURCE CORPORATION, CARLSBAD DESALINATION PROJECT,  
DISCHARGE TO THE PACIFIC OCEAN VIA THE ENCINA POWER STATION DISCHARGE CHANNEL

RESPONSES TO COMMENTS RECEIVED BY REGIONAL BOARD ON OR BEFORE AUGUST 9, 2006  
REGARDING CHANGES TO TENTATIVE ORDER NO. R9-2006-065 MADE SUBSEQUENT TO  
THE JUNE 14, 2006 REGIONAL BOARD HEARING

Comment No.	Summary of Comment	Regional Board Staff Response	Revisions
<b>Comments received from Sierra Club via correspondence dated August 1, 2006</b>			
1	The recent reduction in the plant operating capacity with periods when the plant is not operating from 10 to 60 day a year substantially reduces the source water supply for desalination. The Order needs to be revised to account for this as well as the expected demolition of the EPS.	The tentative Order R9-2006-0065 does not need to be revised because the discharge requirements apply to all flow conditions. In addition, Standard Provision V.A and Special Provision VI.C.1 of the Tentative Order provide the RWQCB the authority to modify, revoke and reissue, or terminate the discharge permit if circumstances change.	No
2	<b>Fact Sheet Table 12.</b> We do not agree with the Summary of EIR Substantial Findings Related to Water Quality page F-19, Impingement and Entrainment, which states "No Significant Impact".	Comments noted. Regional Board's analysis on the Impingement and Entrainment issue is provided in Response No 4 of the Responses To Significant Water Quality Related Comments Received On Or Before June 14, 2006.	No
3	<b>Section VI C 2e. Special Studies Flow, Entrainment and Impingement Minimization Plan</b> This paragraph as written is very confusing. We recommend that it be revised for clarity to summarize the special studies described in the Fact Sheet page F-49. Referring to the Fact Sheet, the intent is to prepare a plan for the conditions in which the flows are less than the historical flows. We should note when flows are less than historical flows and if the	Special Provision VI C.2.e is added to the tentative Order to assess the feasibility of site-specific plans, procedures, and practices to be implemented and/or mitigation measures to minimize the impacts to marine organisms whenever the CDP intake flow demand exceeds 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. The plan will be a public record and	No

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	<p>temperature of the source water is lower than the historical temperatures that these conditions can modify the operating parameter of the desalination process and affect the dilution of the effluent in the receiving waters due to the lower effluent temperature.</p> <p>The plan is to minimize impingement and entrainment but "minimize" is not defined. Minimize should be in the context of 316(b), which requires the best available technology to minimize the adverse environmental impacts. Refer to the previously cited article by Super and Reed article on this subject.</p>	<p>comments on the adequacy of the plan to "minimize" impingement and entrainment will be considered by the Regional Board.</p>	
<p><b>Comments received from Stanford Law Clinics via correspondence dated August 2, 2006</b></p>			
4	<p>The revisions in the draft permit that require the facility to submit salinity and toxicity studies after adoption of the order do not satisfy our concerns that the RWQCB should defer consideration of the proposed NPDES permit as a matter of public policy.</p>	<p>The adoption of tentative Order No. R9-2006-0065 does not need to be delayed because the salinity effluent limitation established in the permit protects water quality. See response No 7 of the <i>Responses To Significant Water Quality Related Comments Received On Or Before June 14, 2006</i>. The goal of additional salinity and acute toxicity studies is to identify the maximum amount of salinity that can be discharged without causing acute toxicity.</p>	No
5	<p>The post-adoption Flow, Impingement and Minimization Plan requirement added to the revised draft permit does not address this deficiency because it does not inform the decisionmaker before approval of the project.</p>	<p>See Response No. 3 above, and Response No 4 of the <i>Responses To Significant Water Quality Related Comments Received On Or Before June 14, 2006</i>.</p>	No
<p><b>Comments received from San Diego Coastkeeper via correspondence dated August 9, 2006</b></p>			
6	<p>OTC Impacts are Inadequately Considered in the NPDES Permit for CDP</p>	<p>Although this comment is not regarding changes to tentative Order No. R9-2006-065 made subsequent to the June 14, 2006 regional board hearing (comment period for the draft tentative Order closed on June 14, 2006), it can be addressed by Response No. 1 above.</p>	No
7	<p>The salinity calculations assume heated outflow from EPS mixing with CDP RO brine, and are therefore inaccurate in stand-alone scenario.</p>	<p>Both heated and unheated outflow scenarios were evaluated for brine discharge, and the effluent limits specified in the permit are applicable to either conditions.</p>	No
8	<p>If the EPS continues to operate, but has fluctuations in use as expected, semi-annual monitoring of salinity effects is insufficient to fully capture the effects of varying salinity on</p>	<p>The purpose of receiving water monitoring for salinity is to measure discharge compliance with salinity limit, not the effects of varying salinity on marine life, so that receiving water salinity</p>	No

**SUPPLEMENT DOCUMENT NO. 2**

<b>Comment No.</b>	<b>Summary of Comment</b>	<b>Regional Board Staff Response</b>	<b>Revisions</b>
	marine life.	levels are maintained below 40 ppt at all times after initial dilution, which is protective to marine life.	
9	The flow, entrainment and impingement minimization plant required in the permit should be completed before approval of the permit.	See Response No. 3 above, and Response No 4 of the <i>Responses To Significant Water Quality Related Comments Received On Or Before June 14, 2006.</i>	No
10	The permit states on Page F-37 that "information given by the Discharger indicated that salinity concentrations up to 44 ppt will not likely cause violations of the Ocean Plan's acute toxicity standards". However, no reference or support is given for this statement except for the word of the discharger.	Supplemental information from a certified lab was submitted by the discharger, and is available for review at the RWQCB office.	No
11	To rely on the SDG&E study in setting the salinity concentration is unwise...	The salinity effluent limit is set based on discharger's own study, not the SDG&E study.	No
12	ESP currently receives an exception from the Thermal Plan, but if EPS is shut down, this exception must not be applied to CDP, as envisioned in the permit.	Comment noted. No revision is needed for the current revised tentative Order.	No
13	The effects of discharging the product water from the RO back into the Encina effluent channel have not been studied.	The RO product water that is discharged would be recombined with the brine, resulting in no net effects on the salinity.	No
14	Re-opener provision is an insufficient safeguard against instability of EPS and CDP	See Response No. 1 above.	No
15	RWQCB has independent authority to evaluate marine impacts of CDP	In issuing tentative Order No. R9-2006-065, the Regional Board has independently evaluated marine environmental studies including those contained in the Report of Waste Discharge from both EPS and CDP.	No