CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN DIEGO REGION

TENTATIVE ORDER NO. R9-2007-0006

SAN DIEGO STATE UNIVERSITY RESEARCH FOUNDATION COASTAL WATERS LABORATORY

RESPONSES TO COMMENTS FROM INTERESTED PARTIES

Comment #	Comment	Staff Response	
Comments received from San Diego State University Research Foundation (SDSURF) via electronic mail dated February 8, 2007			
1	Please see the email below and include the information as formal comments for consideration. One of our concerns of course is for total nitrogen. If possible, maybe incremental limitations above channel conditions at time of sampling can be included. Total Nitrogen: There will be days when existing ammonia levels in the channel are pushing the limits. If we add N, then we could easily be over the limitations. For example, the maximum daily limit is 0.14 mg/L; however, PBS&J's sampling data shows a range in the channel from 0.03 mg/L to 0.17 mg/L.	The Regional Board calculated total nitrogen effluent limitations in the tentative Order based on estimates of expected nitrogen concentrations in the discharge submitted by SDSURF. These estimates were based on calculations provided by SDSURF of how much nitrogen would be added to the aquarium water after organisms consume food that is provided. These estimates did not account for background nitrogen concentrations that may initially be already present in the intake seawater. The total nitrogen effluent limitations of the tentative Order are technology-based effluent limitations because SDSURF can comply with those limitations through proper operation and maintenance if the intake seawater did not initially contain nitrogen. While SDSURF may be able to control the amount of nitrogen added to the intake seawater, it does not have control of the nitrogen concentration of the intake seawater. Because background nitrogen concentrations of the intake seawater are approximately the same magnitude	

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		as the total nitrogen effluent limitations, the total nitrogen concentration in the discharge could exceed the effluent limitations although the nitrogen amounts added to the seawater by SDSURF are less than the effluent limitations. In light of this consideration, the Regional Board has determined that the technology- based effluent limitations of the tentative Order are not appropriate.
		The technology based total nitrogen limitations of the tentative Order have been deleted and replaced with water quality-based effluent limitations (WQBEL), see Errata Sheet. The WQBEL is based on the Basin Plan water quality objective for biostimulatory substances which indicates that nitrogen concentrations in surface waters should be 1 mg/L, using and N:P ratio of 10:1 and a P value of 0.1 mg/L.
		The new WQBEL for total nitrogen is accompanied by a footnote which addresses situations where the intake seawater already exceed the WQBEL. The Regional Board also reconsidered the WQBEL for total phosphorus and determined that the footnote should also apply to the total phosphorus WQBEL. In order to implement the footnote, a provision has been added to the Monitoring and Reporting Program which requires that influent and effluent be monitored on the same days and at the same frequency. These changes are included in the Errata Sheet.
		The Errata Sheet includes additional changes to the tentative Order, Fact Sheet and Attachment G to reflect the replacement of the technology-based effluent limitation for total nitrogen with a water quality-based effluent limitation.