

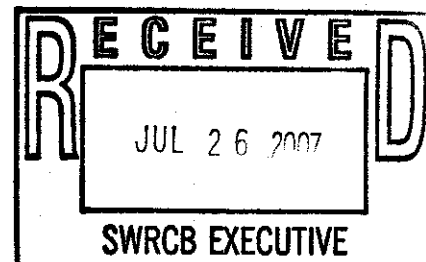


ENVIRONMENT, HEALTH AND SAFETY, 0920

9500 GILMAN DRIVE
LA JOLLA, CALIFORNIA 92093-0920
PHONE (858) 534-3660
FAX (858) 534-7982

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California State Water Resources Control Board
Executive Office
Attn: Song Her, Clerk to the Board
P.O. Box 100
Sacramento, CA 95812-0100



SUBJECT: Comment Letter – California Ocean Plan Amendments

As a leader in ASBS protection, the University of California, San Diego (UCSD) is writing to provide comments on the State's proposed "Scoping Document Amendment of The Water Quality Control Plan Ocean Waters of California – June 2007." The intention of this letter is to provide comments on the monitoring program based on Scripps Institution of Oceanography's (SIO) Ocean Plan monitoring efforts to date.

Monitoring Amendments:

The proposed Ocean Plan monitoring amendments and monitoring procedures guidance document for Regional Boards should include an adaptive process that provides a framework for dischargers that have already performed characterization monitoring to focus resources on identified pollutants of concern, not the entire suite of constituents in Table B.

The proposed monitoring guidance for point sources in Appendix III, Part 5, requires the analyses of all of the constituents listed in Table B at a minimum of once per year. Table B should not be a "minimum" monitoring requirement for all dischargers. In accordance with Appendix VI of the 2005 California Ocean Plan, monitoring should focus on constituents that, based on monitoring data, have the reasonable potential to cause, or contribute to an excursion above the Ocean Plan water quality objectives. For point sources with fixed and characterized discharges (e.g., an aquaria discharge), an analysis of all of the Table B constituents should be changed to once per permit cycle.

UCSD/SIO for example, currently spends considerable resources on Ocean Plan Table A and B monitoring as required by the SWRCB and RWQCB, not including the costs for special studies. More than half of the constituents in Table B, however, have never been detected in our seawater or storm water discharges and based on the reasonable potential analysis calculation, do not have a reasonable potential to cause or contribute to an excursion above the permit effluent limitations. From an ASBS

protection perspective, these resources could be better spent on public education and outreach and on collecting data that can be used towards integrated ASBS ecosystem assessments.

Total Residual Chlorine Analytical Method Issue for Seawater:

The standard EPA method (4500-CL) used to analyze for total residual chlorine does not provide accurate results in seawater matrices. Based on the monitoring conducted to date, total residual chlorine detections appear to be false positive results associated with interferences inherent to seawater. The analytical method for total residual chlorine is intended for fresh water. Other anions chemically similar to chlorine may occur in seawater. For example, the bromide in seawater can be converted to bromine and bromamines, which are detected as free or total chlorine. In addition, naturally occurring turbidity in the seawater may result in a false positive result. Past investigations into this seawater matrix interference issue have already led to modification of the method. However, based on an evaluation of the results for Outfall 004a using Standard Method 4500-CL in 2005 and a modification of this method in 2006, it appears that current analytical methods cannot accurately measure the presence (or lack of) total residual chlorine in seawater because of matrix interferences.

Acute Toxicity Issue:

As described in Issue 24 of the scoping document, the acute toxicity equation does not account for mortality in the control concentration. In addition, even if the calculation is revised as suggested in Alternative 2 to take the control sample into account, the TUa effluent limit still indicates a toxic response if 2 out of 40 fish die in the sample (5% mortality) and none die in the control sample. Under USEPA standard acute test practices however, a 95% survival rate in the full-strength sample is not considered to represent an acute toxic response. Furthermore, the USEPA acceptability criterion for the laboratory control sample is 90% survival which means that the Ocean Plan TUa requires organisms to perform better in an effluent or receiving water sample than in the corresponding clean laboratory water control. Toxic unit limits that fall near or within current control acceptability criteria do not accurately reflect a toxic response.

This issue was discussed with SWRCB and RWQCB staff at the Natural Water Quality Committee meeting held at SIO on December 1, 2006. The result of this discussion was that samples should only be reported as toxic if: 1) a statistical difference is detected between the sample and the corresponding control; and 2) the variability of the dataset suggests the statistical difference represents a "real-world" or biologically significant decrease. Amendments should be made to the Ocean Plan to reflect this.

Appendix III, Section 2, Quality Assurance:

The statement "Data must be formatted to match the database requirements of the SWAMP" is unclear. Does the statement refer to the SWAMP templates or to the backend database? It is recommended that this statement be revised to read: "Data should be submitted in a SWAMP comparable format."

The SWAMP data system is a work in progress. It is continually being modified as field names are changed, structures are updated, and columns are added. SWAMP in its current form can not manage all of the NPDES regulatory data collected in the ASBS by UCSD/SIO. The data management team for the La Jolla Shores Coastal Watershed Management Program modified the SWAMP templates into a SWAMP-based system that is compatible and transferable to the SWAMP relational data management system. With this effort, UCSD/SIO demonstrated how to adaptively manage data using SWAMP as a building block.

As UCSD/SIO has commented previously, Ocean Plan monitoring amendments should be developed in a collaborative effort with the Southern California Coastal Ocean Observation System (SCCOOS) and all of its partners. The work that is currently being done at Scripps Institution of Oceanography can help refine these protocols to more clearly create a nexus between compliance and ASBS resource protection. UCSD/SIO, the City of San Diego, and San Diego Coastkeeper have taken a collaborative watershed approach to develop the La Jolla Shores Integrated Coastal Watershed Management Plan, the focus of which is an ASBS protection model. We hope that this plan will be used as a tool by the State and other stakeholders for future ASBS protection efforts.

Sincerely,



Kimberly O'Connell
University of California, San Diego
Environment, Health and Safety
Environmental Affairs