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August 14, 2006

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Clerk to the Board, Executive Office
State Water Resources Control Board
P.O. Box 100
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SUBJECT: Comment Letter - ASBS Special Protections

The University of California, San Diego is writing to provide comments on the State's proposed "California Ocean Plan, Areas of Special Biological Significance (ASBS) Special Protections to Address Storm Water and Nonpoint Source Discharges." The intention of this letter is to focus relative comments on the overall process and proposed draft program based on Scripps Institution of Oceanography's significant involvement with protecting the San Diego Marine Life Refuge, a designated ASBS.

While it is generally understood that the purpose of this document is to provide compliance guidance for the Ocean Plan's call for special protections for Areas of Special Biological Significance, how this suite of prescriptive measures specifically meets the goals for ocean protection is unclear. As leaders in ASBS protection efforts, UCSD/Scripps Institution of Oceanography (SIO) offers our extensive experience to help refine these protocols to more clearly create a nexus between compliance and ASBS protection.

As written, the special protections focus on prescribing unprecedented levels of water quality monitoring but do not provide a programmatic link between the collected water quality data and potential impacts to biological communities (e.g., the bioaccumulation data that will be generated from the mussel watch). For example, the program could include a risk assessment mechanism for adapting the monitoring program to specifically address ecosystem impacts identified through the bioaccumulation study. Protecting biological communities by evaluating the impacts from storm water discharges to the ASBS shifts the emphasis to the ASBS ecosystem and not solely on water quality. Developing a refined monitoring protocol that more specifically targets marine life protection may require revisions to regulations such as the Ocean Plan. SIO, The City of San Diego, and Coastkeeper are at the forefront of ASBS evaluation efforts and are currently gathering data to develop management tools to monitor and assess impacts on ASBS ecosystems. Ecosystem evaluations can be used as a baseline to refine these ASBS protection protocols. Although maintaining natural water quality is one component in ASBS protection, a more comprehensive policy that is protective of ASBS beneficial uses can be achieved by developing appropriate measurements of biological indicators and incorporating existing regional integrated monitoring programs.

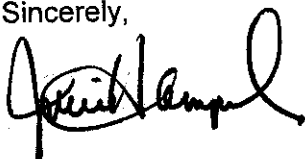
The State should "stay-the-course" on their initiative to work with the marine scientists on the natural water quality committee in refining definitions and protocols, rather than adopt a separate process to define natural water quality. Decisions regarding impacts to natural water quality should be based on the scientific consensus established by the Natural Water Quality Committee, rather than a comparison of discharge results to a reference station (may not be scientifically comparable). If the Water Quality Committee is unable to reconcile a definition on natural water quality, then a better metric may need to be developed (such as biological indicators as discussed above).

The proposed monitoring 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 rather than the entire suite of constituents in Table B (e.g., reasonable potential analysis). Furthermore, monitoring should assess management actions, such as pollutant removal best management practice (BMP) effectiveness (before and after monitoring), for identified pollutants of concern to provide real-time removal evaluations in lieu of the proposed "end of pipe" characterization monitoring.

Lastly, the implementation schedule should consider established and verified scientific and engineering practices to ensure resources are spent on effective BMPs that will meet the overall objective of ASBS protection. Compliance with the Time Schedule Order requirement should be based on percent removal of pollutants of concern by the BMP (identified through effectiveness monitoring) rather than a prescriptive concentration reduction schedule. Many of the effective BMPs will need additional time beyond the five years proposed to design, install, and evaluate storm water treatment options.

We strongly urge the State Board to re-evaluate the format and content of this prescriptive document and perhaps engage a small work group in reframing the approach to articulating these guidance measures. We would be happy to serve on such a work group and look forward to continuing to work with the State as partners refining the proposed protocols to develop an effective ocean protection program. By working together, we work for the betterment of ASBS protection and provide a value for society.

Sincerely,



Julie Hampel
University of California, San Diego
Environment, Health and Safety
Environmental Affairs Division Manager

COMMENT SHEET

State Water Resources Control Board Division of Water Quality

California Ocean Plan, Areas of Special Biological Significance (ASBS) Special Protections to Address Storm Water and Nonpoint Source Discharges

Date: August 15, 2006
Subject: Comments – ASBS Special Protections
Name: Rolf Schottle, Project Manager, AMEC Earth and Environmental
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Remarks:

1. As part of the overall approach, the primary elements of the SWAMP guidance (and consistent with EPA guidance for Data Quality Objective Process, EPA QA/G-and QAPPs, QA/G-5) provide a useful, standardized template for the collection, testing and reporting of a majority of the Ocean Plan constituents. However, several elements of the current SWAMP Guidance require additional consideration. Specifically,
 - The SWAMP guidance is designed with the intent for the evaluation of surface waters and may not adequately address issues associated with monitoring the marine environment of an ASBS.
 - Harmony with other regional integrated monitoring programs. Section B.1 of 2005 CA Ocean Plan prescribes applying the more stringent standard which may or may not be appropriate (e.g. SWAMP QAPP Table C-3 TRL for PCB congeners is 0.2 ppb wet weight, Bight 03 Coastal Ecology Committee QAPP recommended reporting objective for PCB congeners is 20 ppb wet weight). Reporting criteria should be based on sound scientific approach and may warrant revision to Ocean Plan guidance.
 - Target Reporting Limits, Lowest Minimum Detection limits and Use of Minimum Limits are the subject of current debate among environmental testing laboratories and various regulatory agencies as they relate to the intent of performance based measurement systems. Lingering obstacles remain; Will all regions with responsibility for evaluating the data accept the lab's use of the selected (modified) method? What are the criteria for use and selection of appropriate quality assurance materials or testing to demonstrate the methods performance? These issues warrant further consideration and refinement.
 - Comprehensive low level testing should be targeted to initial characterization testing under the most probable conditions of potential discharge of OP constituents. Where no

OP exceedences are observed, routine monitoring should be decreased to include only those potential constituents of concern above OP limits.

Alternative: Let current efforts (e.g. as established under current NPDES permits exceptions such as SIO) provide the scientific basis for evaluating the approach to future monitoring requirements. Similarly, utilize a collective, collaborative approach (e.g. recommendations the Natural Water Quality technical committee) to develop appropriate and achievable standards derived from the best available science (including consideration of risk-based effects, potential impact to the ecosystem and other beneficial uses). The rationale (and limitations) for all measurement endpoints for all testing matrices should be clearly defined (and described in EPA QA/G-4) before additional monitoring requirements are appended to the current Ocean Plan. In addition, proposed OP revisions may be more appropriately addressed as part of the peer reviewed tri annual review process versus the issuance of draft staff recommended guidance with relatively short comment and review period.

2. Inclusions of Reference Stations are inherently problematic and may or may not be appropriate to a given ASBS. Where as isolated watersheds and their corresponding ASBS (e.g. undeveloped coastal areas, ASBS surrounding offshore islands) *may* lend themselves to a useful comparison to a reference site(s), however, larger more complex watersheds may not afford comparable reference areas. Other issues include:

- Scientific basis for assigning "Regional" reference values
- Method and reporting comparability with previous long term monitoring programs (e.g. State Mussel Watch)
- Reference stations are subject to the similar measurement variability due to seasonality, spatial disparity and site specific factors.
- This comment applies to water, tissue and sediment matrices

Alternative: Results should be ranked on the basis of relative concentrations (including areas deemed "clean" and those considered impacted) instead of prescribing to attain a constructed reference value. Results from established regional monitoring programs can be used as a comparative datasets.

3. Monitoring effectiveness may decrease as constituent concentrations near Ocean Plan Water Quality Objectives due to measurement variability from both natural occurring sources and the variability introduced during sample collection and testing. In particular, the rationale for method selection is based primarily on the lowest achievable detection limits. Results from these low level methods are more prone to false positives, negatives and higher uncertainty.

Alternative: If initial results indicate constituent concentrations at or slightly above OP exceedence criteria, lower confidence thresholds should be employed as part of a risk based approach.

COMMENT SHEET

State Water Resources Control Board Division of Water Quality

California Ocean Plan, Areas of Special Biological Significance (ASBS) Special Protections to Address Storm Water and Nonpoint Source Discharges

Date: August 15, 2006
Subject: Comments – ASBS Special Protections
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Remarks:

1. The State should be using an adaptive process for monitoring requirements in the Special Protection conditions and the Ocean Plan Amendments. Scripps and the City of San Diego have collectively monitored for the Ocean Plan Table A and B constituents a number of times and have only detected a handful of constituents and even less instances where the Ocean Plan numeric targets have been exceeded.
2. The Special Conditions and Ocean Plan must recognize the erratic nature of storm water and include allowances for very large storms. The most reasonable approach is to utilize a particular design storm when outlining load reduction goals. The precedent has been set in the Standard Urban Stormwater Mitigation Program (SUSMP) for many municipal Phase I NPDES Permits to require treatment for the 85th percentile storm.
3. Page 3, Enforcement: The State should develop a process whereby monitoring data is reviewed in a collaborative and scientific manner to develop solutions for ASBS protection.
4. Page 4, Non-storm Water Point Sources: The exclusion of agricultural irrigation return flows is puzzling, since these flows potentially contain pollutants with significant impacts on aquatic resources.
5. Page 5, Discharges via Seeps or Springs that Discharge into an ASBS: A process to identify the presence of anthropogenic activities should be outlined. For example, "based on the presence of chlorine".
6. Page 6, #5.a: The document assumes that "Region" refers to RWQCB boundaries, but this should be spelled out.
7. Page 6, #5.b: The term "reasonable distance" should be better defined. Consider using 75-feet as is used in AB411 bacteria sampling.