



Heal the Bay



8/1 and 8/15 Meetings  
COP Model Monitoring  
Deadline: 8/15/06 5pm

August 15, 2006

Chair Doduc and Board Members  
State Water Resources Control Board  
Executive Office  
1001 I Street, 24<sup>th</sup> Floor  
Sacramento, CA 95814



**Re: Comments on the Proposed Draft Amendments to the Standard Monitoring Procedures of the California Ocean Plan**

Dear Chair Doduc and Board Members:

On behalf of Heal the Bay and California Coastkeeper Alliance, we submit the following comments on the proposed Draft Amendments to the Standard Monitoring Procedures of the California Ocean Plan ("Draft Amendments" or "Amendments"). We appreciate the opportunity to provide these comments.

Both groups strongly support the State Water Resources Control Board ("State Board") providing basic direction to the Regional Boards on the implementation of the California Ocean Plan, as this provides a certain level of consistency among monitoring programs and ensures that useful information will be gathered. However as outlined below, we have numerous concerns with the Draft Amendments as written.

**Ocean Plan Chapter II. B. Bacterial Standards**

The Draft Amendments state that "[t]he Regional Board may allow analysis for E. coli by approved test methods to be substituted for fecal coliform, if sufficient information exists to support comparability of E. coli methods with approved fecal coliform methods." Amendments at 1. This approach is problematic for two reasons. First, fecal coliform is not entirely made up of the species, E. coli. In fact, many scientists estimate that only 80-90% of fecal coliform is comprised of E. coli. Second, State bacteriological standards exist for the *total to fecal* coliform ratio. Thus, an accurate value for fecal coliform is necessary for this calculation and comparison to the threshold. For these reasons, the State Board should not assume a one to one comparison and simply allow one test to be substituted for the other.

Instead, Heal the Bay recommends one of several approaches. The easiest alternative would be for the State Board to acknowledge these issues and remove the option to substitute E. coli for fecal coliform monitoring from the Draft Amendments. However, if the State Board maintains this provision, then one of two approaches should be pursued. One option is for the discharger to conduct a study to determine the appropriate ratio



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between fecal coliform and *E. coli*. This ratio would then be used to compare *E. coli* results to fecal coliform standards. Also, the appropriate *E. coli* to fecal coliform ratio would be used to calculate the total to fecal ratio. An alternate approach is for the State Board to modify the current bacteriological thresholds, assuming that 80% of fecal coliform is comprised of *E. coli*. For instance, the State Board would use a single-sample threshold of 320 *E. coli*/100 mL ocean water, in order to be appropriately protective of public health. The State Board would have to recalculate the geometric mean threshold as well.

### **Effluent Monitoring, Bacteria – Non-Storm Water Point Sources**

The Draft Amendments outline that non-storm water point sources should conduct effluent monitoring for all Ocean Plan indicator bacteria. Amendments at 2. For clarity purposes, the Amendments should explicitly state that monitoring should occur for all three indicator bacteria: total coliform, fecal coliform, and enterococcus.

Also, does the State Board intend “effluent monitoring” to mean monitoring at the end-of-pipe or in the receiving water? At the State Board’s August 8 workshop, staff indicated that the traditional definition of “effluent” was not used in the Amendments. In this instance and in general, the State Board should make their intentions explicitly clear.

### **Effluent Monitoring, Bacteria – Permitted Storm Water Point Sources**

The Draft Amendments do not specify the monitoring location for permitted storm water sources. The State Board should include more detail on this topic. First in order to gain valuable public health information, it is vital that monitoring take place at point zero (in the surf zone at ankle depth at the discharge point) and *not* at the end-of-pipe. Also in order for the State Board to fully account for public health and beneficial uses, additional sampling points should be designated at set distances away from the discharge point to understand the fate and transport of pollutants. The State Board should stipulate these requirements in the Amendments.

Also, the Amendments require storm water monitoring during wet weather a minimum of three times per year. Amendments at 2. Bacteria monitoring at this frequency provides no benefit. AB411 requires weekly sampling. Monitoring must occur on at least a weekly basis and more frequently (ideally, five times per week) at beaches with year-round recreational use.

### **Effluent Monitoring, Table B – Permitted Storm Water Point Sources**

The Amendments describe that Phase I storm water dischargers should monitor 10% of outfalls greater than 36 inches during three storms per year for Table B Marine Aquatic Life parameters and Phase II discharges should do the same during three storms per permit cycle. Amendments at 3. There are several issues with this requirement. Clearly,



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monitoring only three storms per permit cycle has little to no value, as no variability will be captured at this extremely low monitoring frequency. Instead, monitoring should be conducted on a frequency that depicts variability. The State Board should require that Phase II dischargers monitor a minimum of two storms per year. Also, it is unclear how the State Board has determined that 10% of outfalls greater than 36 inches is an appropriate number of monitoring locations. Regardless, the State Board should allow *no* discretion for monitoring in watersheds over 50 square miles. Otherwise as currently written, the biggest pollution contributors may not be sampled.

### **Permitted Storm Water Discharges – Receiving Water and Sediment Quality**

The Draft Amendments require receiving water and sediment quality monitoring for Table B Aquatic Life pollutants and acute toxicity in sediment during three storms per permit cycle. Amendments at 3. There are several issues with these requirements as written. First, contaminated sediments are primarily associated with longer-term, chronic impacts. Thus, the State Board should require *chronic* toxicity sediment monitoring as well. Also, sediment monitoring can be nearly impossible and dangerous during certain storm events. Therefore, the State Board should not require sediment monitoring *during* the event. In addition, monitoring should take place on an *annual* basis, at a minimum, in order to fully characterize the sediment and receiving water quality over the life of the permit. Appropriately, the recently adopted NPDES permit for the Los Angeles County Joint Water Pollution Control Plant requires *annual* sediment chemistry monitoring. NPDES at E-36.

Receiving water and sediment quality requirements are only outlined for Phase I discharges. This is another shortcoming in the Draft Amendments, as Phase II urban areas can greatly impact coastal water quality. For instance, coastal cities such as Santa Barbara and Monterey have a large urban footprint but are slightly under the 100,000 population threshold. Thus, these “borderline” Phase II areas should be required to conduct receiving water and sediment quality monitoring.

Finally, the Draft Amendments allow for the receiving water and sediment monitoring requirements to be satisfied through a regional monitoring program. In general, group monitoring tends to be extremely misleading and does not give an accurate reflection of individual pollution sources. Pollution is site-specific, and sampling should be as well. For instance, group monitoring makes it impossible to measure the effectiveness of site-specific best management practices or the on-going effects of runoff from *individual* facilities. Moreover, under the group monitoring approach, it will be extremely difficult to pinpoint, mitigate and potentially enforce upon the source(s) of pollution in a timely manner. Thus, the State Board should remove this provision from the Draft Amendments.



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### **Agricultural Nonpoint Source Discharges**

The Draft Amendments do not specify the location or frequency for agriculture runoff monitoring. The State Board should include a few more specific requirements in the Draft Amendments. First, the State Board should specify that monitoring should occur on an annual basis, at a minimum, in order to adequately identify agricultural impacts. Also, the Amendments should require that the Regional Boards take into account individual site characteristics such as when pesticides are applied and crop rotation and irrigation schedules when developing a monitoring program. If the discharger significantly changes a management practice such as the type of crop or pesticide(s) used, additional samples should be collected during the monitoring cycle to characterize the new discharge. Overall, the State Board should maintain consistency with agricultural monitoring requirements that are currently in place in the State.

Again as discussed above, permitting regional monitoring is problematic for source identification. Instead, the State Board should develop a minimum acreage value for the drainage area that needs to be monitored.

### **Table B Toxicity Tests**

The Amendments stipulate that toxicity monitoring can be reduced to the most sensitive species after a screening period. Amendments at 3. This provision is not conservative. The pollutants contained in storm water are extremely variable, and different species have different sensitivities to different pollutants. Therefore, the most sensitive species at one point in time may not be the same as the most sensitive species at another time. Thus, the State Board should require that all three species be required for at least the first toxicity monitoring event of each season.

### **Benthic Community Monitoring**

The Draft Amendments require benthic community monitoring once per permit cycle for certain categories of non-storm water point sources. Amendments at 4. This low monitoring frequency is inadequate, as benthic community health can drastically change over a period of five years. Appropriately, the NPDES monitoring program for the Los Angeles County Joint Water Pollution Control Plant requires *annual* benthic infauna community monitoring. The State Board should take a similar approach in the Amendments.

Also, there is no sound rationale for limiting benthic community monitoring to non-storm water point sources. Storm water pollution can also severely impact the benthic community. The State Board should include a provision for benthic community monitoring at storm water outfalls as well.



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### Model Monitoring Requirements

The Draft Amendments refer to the SCCWRP Model Monitoring Programs as another source of information for the Regional Boards to use in developing monitoring requirements. However, it is important to note that SCCWRP's efforts do not implement or substitute for SB72 requirements. The California State legislature adopted SB72 in 2001. This law requires the standardization of stormwater monitoring programs. SB72 also clarifies what information to consider when determining which constituents should be monitored in municipal runoff. California Water Code Section 13383.5 required that the requirements in SB72 be addressed by January 2003, which is over three years ago. To date, the State has failed to comply with SB72 requirements, and there has been no attempt to implement the law. The State Board should meet the requirements of SB72 to develop and implement a strong stormwater monitoring program as soon as possible.

If you have any questions or would like to discuss any of these comments, please feel free to contact us at (310) 451-1500. Thank you for your consideration of these comments.

Sincerely,

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