



**Central Coast Regional Water Quality Control Board** 

July 20, 2012

Mr. Michael Sheehy Marine Programs Director Santa Barbara Channelkeeper 714 Bond Avenue Santa Barbara, CA 93103

Dear Mr. Sheehy,

### SITE CLEANUP PROGRAM: SANTA BARBARA HARBOR DRY DOCK - RESPONSE TO COMMENTS ON PUBLIC NOTICE OF PLAN FOR NO FURTHER ACTION

Thank you for your May 21, 2012 letter and comments on the Central Coast Regional Water Quality Control Board's (Water Board's) *Public Notice of Plan for No Further Action for the Santa Barbara Harbor* (Harbor). As we stated in the public notice, Water Board staff concur with the request from the City of Santa Barbara's (City's) Waterfront Department to close this site within our Site Cleanup Program. Your letter and follow-up phone conversation with Diane Kukol, of my staff, indicate Santa Barbara Channelkeeper (SBC) opposes site closure, and that you would prefer to see additional sediment monitoring. Your comments are summarized in the following table; our responses to your comments are provided below.

#### Issues of Concern Expressed by Mr. Michael Sheehy on behalf of SBC

- 1. Potential disturbance of sediment caused by dredging or pile driving in the vicinity of the "New" Dry Dock.
- 2. Concern that sediment quality below the "New" Dry Dock and within the Harbor at large pose a persistent threat to wildlife.
- 3. Future Water Board actions.
- 4. Continued illegal disposal of marine batteries into the Harbor.

#### Water Board Staff Responses to Comments

# Issue 1: Potential disturbance of sediment caused by dredging or pile driving in the vicinity of the "New" Dry Dock.

We agree that dredging in the "New" Dry Dock vicinity could result in the redistribution and/or spreading of sediment throughout an area larger than the current localized area. Fortunately, bathymetric surveys of the Harbor bottom indicate the bottom experiences little sedimentation

JEFFREY S. YOUNG, CHAIR | ROGER W. BRIGGS, EXECUTIVE OFFICER

and limited movement of existing sediment. Therefore, dredging below the "New" Dry Dock has never occurred, and it is highly unlikely it would be needed in the future.

Water Board staff agrees that pile driving could also disturb and spread the sediment containing waste constituents, and we discussed this possibility with Waterfront Department staff. We were told the City's contractor would minimize sediment disturbance during pile driving by encircling the area with a turbidity curtain, inside which suspended particles will be allowed to settle prior to the curtain's removal. The Waterfront Department has successfully used this procedure to manage turbidity in other areas of the Harbor, and has purchased its own curtain for future use.

# Issue 2: Concern that sediment quality below the "New" Dry Dock and within the Harbor at large pose a persistent threat to wildlife.

You state in your letter that samples collected in 2006 ". . . seem to suggest no real change in contamination from those in 2002 . . . with continued exceedences for specifically copper, dibutyltin and tributyltin." We agree that copper concentrations in 2006 were the same order of magnitude as the 2002 concentrations (although somewhat less). We do not agree that organotin concentrations stayed approximately the same. In fact, the 2006 organotin concentrations are at least an order of magnitude less than those from 2002. In addition, although you did not mention lead, it did not exceed any sediment quality guideline in 2006 whereas the sediment quality guideline known as the Effects Range Low, or ERL<sup>1</sup> was exceeded in one of the two samples in 2002. That being said, we acknowledge that metals and organotins from anti-fouling paint have potentially adversely impacted sediment below the "New" Dry Dock.

Your letter indicates that in addition to reviewing our April 16, 2012 Public Notice, you also reviewed the February 29, 2012 Water Board staff memo<sup>2</sup> and the *Environmental Condition of Water, Sediment, and Tissue Quality in Central Coast Harbors* (also known as the Central Coast Harbor Study Report, or CCHS Report<sup>3</sup>). The February memo summarizes and evaluates all Harbor data (including data from the CCHS) and provides a thorough discussion of the relevance of sediment quality guideline exceedences. With respect to concerns associated with sediment quality below the "New" Dry Dock, Water Board staff included technical justification in *Discussion Regarding Further Action* comment 6 in the February 2012 memo and in the Public Notice of No Further Action to explain why we support closure of the Santa Barbara Dry Dock Site Cleanup Program case.

With respect to your concern for Harbor-wide health, Moss Landing Marine Laboratories (MLML) staff conducted the CCHS by evaluating sediment and water samples from a minimum of six stations in each of the six harbors in our Central Coast Region. In addition, MLML collected fish and mussel tissue samples from a subset of all harbors' sampling stations, including Santa Barbara's. As we state in the February 2012 memo, MLML staff analyzed all harbors' samples as follows, and consequently ranked the harbors' quality according to the USEPA's National Coastal Condition Assessment:

<sup>&</sup>lt;sup>1</sup> The ERL is the concentration below which toxic biological effects to benthic organisms are rarely observed.

<sup>&</sup>lt;sup>2</sup> http://geotracker.waterboards.ca.gov/view\_documents.asp?global\_id=SL0608336723&document\_id=5732194

<sup>&</sup>lt;sup>3</sup> Data from the CCHS were collected by Moss Landing Marine Laboratories (MLML) in 2004; the CCHS Report was published in 2007.

- <u>Water samples</u>: dissolved nutrients, chlorophyll-a, total suspended solids, depth, temperature, pH, dissolved oxygen, specific conductivity, salinity, and sunlight penetration.
- <u>Sediment samples</u>: grain size, total organic carbon, trace metals, dibutyltin (DBT), tributyltin (TBT), trace organics, toxicity, and benthic community indicators.
- Fish and mussel tissue samples: trace metals, DBT, TBT, and trace organics.

CCHS results indicated approximately seventeen percent (17%) of the six Santa Barbara Harbor stations displayed a rank of "poor" water quality due to low dissolved oxygen levels. Eighty-three percent (83%) of Santa Barbara Harbor stations exhibited "poor" sediment quality ranking mainly *due to total organic carbon and total chlordanes*, the latter of which suggested toxic biological effects throughout the Harbor. Actual toxicity tests on the amphipod *Eohaustorius estuarius*, however, indicated no toxicity. With respect to metals, the ERL was exceeded in five of the six stations for arsenic, copper, and nickel. The Effects Range Median, or ERM<sup>4</sup> was slightly exceeded at one station for nickel. However, again, confirmatory toxicity tests indicated no toxicity<sup>5</sup>. Twenty-five percent (25%) of the tissue samples from the Harbor exhibited a ranking of "poor" due to arsenic and low molecular weight polycyclic aromatic hydrocarbon concentrations.

Based on the CCHS results, Water Board staff concluded 1) sediment sampled in 2004 indicates various inorganic and organic inputs to the Harbor need to be further evaluated and, most likely, better managed and 2) even with the concentrations of various constituents detected in 2004 in various media, the Harbor at that time did not satisfy California listing criteria for Water Board staff to include the Harbor on its 303(d) list of impaired water bodies. If the Harbor had been listed on the 303(d) list, Water Board staff would have required the City to establish a total maximum daily load (TMDL) for one or more constituents.

#### Issue 3: Future Water Board actions.

As we've stated previously, Site Cleanup Program staff determined that site closure is warranted; this action does not preclude our regulatory oversight by other sections within our Our Region's Central Coast Ambient Monitoring Program (CCAMP), which also office. facilitated the CCHS, allows staff to assess the magnitude of water quality issues within the Central Coast Region via stream sampling and analysis. Due to the size of our region and the numerous water bodies in it, CCAMP staff devote a year to monitoring a particular part of our region, then move on to the next area in subsequent years until all areas have been monitored. After all areas are addressed, the monitoring process is repeated in the same order so as to evaluate changes in water quality parameters over time. In response to the CCHS' findings and in order to continue to evaluate the current overall health of the Harbor, CCAMP staff will expand its monitoring program to include frequent dissolved oxygen monitoring of Harbor water starting immediately. In addition, starting in 2014/2015 when the CCAMP rotation returns to Santa Barbara County, CCAMP will establish specific Harbor locations at which trends in sediment quality and toxicity can be evaluated over the long-term. Although these specific locations are in the process of being determined, they will include areas where the CCHS indicated sediment quality was compromised, as well as the Harbor bottom below the "New" Dry

<sup>&</sup>lt;sup>4</sup> The ERM is the concentrations above which toxic biological effects are frequently observed or expected.

<sup>&</sup>lt;sup>5</sup> We have acknowledged in previous documents that the CCHS did not conduct toxicity tests with sediment from below the "New" Dry Dock, therefore direct evidence of the toxicity of this sediment is unknown.

Dock and areas where marine batteries have been disposed in the Harbor. The results of this monitoring will allow Water Board staff to determine if the Harbor requires (1) designation as an impaired water body, and consequently, (2) development of a TMDL assessment and (3) remediation of specific constituents.

In addition to CCAMP, Stormwater Program staff enforce stormwater regulations via the City's stormwater pollution, prevention, planning, and monitoring program, which incorporates the Harbor. Water Board staff also issue certification for proposed activities when the proponent has adequately demonstrated the project will not adversely impact waters of the United States. Site Cleanup Program staff will continue to coordinate with the Stormwater and Water Quality Certification units to insure sediment quality issues observed from 2002 to 2006 are properly addressed.

### Issue 4: Continued illegal disposal of marine batteries into the Harbor.

You state in your letter that our April 16, 2012 Public Notice incorrectly stated, "[w]ith the removal of six batteries in 2003, there are no additional issues associated with marine battery disposal in the Harbor." Thank you for pointing out that the 2003 recovery of illegally disposed marine batteries into the Harbor did not represent an isolated incident of such battery disposal. The fact that five batteries were found during the recent Harbor cleanup event indicates a disregard for applicable laws that Waterfront Department staff are equipped to enforce, provided they witness someone in the act of battery disposal. Water Board staff will discuss with Waterfront Department personnel an enhanced effort to educate Harbor users about proper marine battery disposal. We will suggest that, at a minimum, Waterfront Department staff clearly post new notices about appropriate disposal throughout the Harbor. In addition, we will not state or imply in future documents that illegal battery disposal into the Harbor ceased in 2002/2003.

We appreciate you taking the time to review and comment on the public notice. You obviously care a great deal about the Harbor and the many uses it affords the community. We believe the more targeted Harbor monitoring that will be conducted by our office's CCAMP staff (noted in our response to Issue 3) will be valuable for determining the Harbor's health. If you have any questions or comments about this letter, please contact **Diane Kukol** at (805) 542-4637 or <u>dkukol@waterboards.ca.gov</u>. You may also contact Thea Tryon at (805) 542-4776 or <u>ttryon@waterboards.ca.gov</u>.

Sincerely,

*for* Michael Thomas Assistant Executive Officer

Digitally signed by Thea Tryon DN: cn=Thea Tryon, o=Central Coast Water Board, ou=SCP - LD, email=ttryon@waterboards.ca.gov, c=US Date: 2012.07.20 10:27:11 -07'00' cc:

Mr. Karl Treiberg City of Santa Barbara Waterfront Facilities 132 A Harbor Way Santa Barbara, CA 93109 <u>KTreiberg@SantaBarbara</u> <u>CA.gov</u> Mr. Mick Kronman City of Santa Barbara Harbor Operations Mgr. 132 A Harbor Way Santa Barbara, CA 93109 <u>MKronman@SantaBarbar</u> <u>aCA.gov</u> Mr. Scott Riedman City of Santa Barbara Waterfront Business Mgr. 132 A Harbor Way Santa Barbara, CA 93109 <u>SRiedman@SantaBarbara</u> <u>CA.gov</u>

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