

State of California  
Regional Water Quality Control Board  
San Diego Region

EXECUTIVE OFFICER SUMMARY REPORT  
March 9, 2016

- ITEM: 10
- SUBJECT: Information Item: Innovative Cleanup and Abatement of PCB Contaminated Sediment in San Diego Bay at the Laurel/Hawthorn Embayment: A Case Study. (Brian McDaniel)
- PURPOSE: To brief Board members and the public on an Innovative cleanup and abatement approach for the remediation of polychlorinated biphenyl (PCB) contaminated sediment in San Diego Bay.
- RECOMMENDATION: This is an informational item only; no action will be taken by the Board at today's meeting.
- KEY ISSUES: A collaborative approach taken by the San Diego Water Board, TDY Industries, Inc. (TDY) as a responsible party and stakeholders resulted in an uncontested innovative cleanup and abatement approach for the remediation of PCBs in sediments discharged from a former industrial facility into San Diego Bay.
- PRACTICAL VISION: This item is consistent with Chapter 1 of the Practical Vision, which is dedicated to ensure that the staff, funding, authority, tools, and influence of the San Diego Water Board are put to the best possible use for the purpose of protecting and restoring the chemical, physical, and biological integrity (i.e., the health) of waters in the San Diego Region.
- DISCUSSION: Since the 1940's, aerospace component manufacturing operations were conducted on the former 44-acre TDY facility located at 2701 North Harbor Drive, San Diego. TDY used PCBs in manufacturing operations at the facility. The hazardous wastes were identified and delineated in marine sediments following the subsequent cleanout of a 30-inch storm water conveyance system (SWCS) outfall and demolition of surface structures and subsurface utilities related to the former facility. This outfall historically drained portions of the former facility, a small portion of the Airport,

and Coast Guard facilities. In 2013, TDY proposed a project to cleanup and abate the hazardous wastes within a 2.5-acre area in San Diego Bay. Supporting Document 1 shows the location of the project area. The project is located at the far western portion of the area known as the Laurel Street to Hawthorn Street Embayment.

Typically, an ecological risk assessment, a human health risk assessment, and a benthic triad analyses would be performed for a contaminated sediment site to determine if a beneficial use is impaired. However, based on total PCB concentrations in sediment as high as 12.2 milligrams per kilogram at the outfall and the relatively limited extent of the contamination, TDY proposed to move directly to remedy rather than spending further time and money in more studies. TDY collaborated with the San Diego Water Board and stakeholders to develop a remedial action plan.

The San Diego Water Board subsequently issued Cleanup and Abatement Order (CAO) No. R9-2015-0085 (Supporting Document 2), which required TDY to conduct a cleanup with an abatement action involving limited dredging, and placing an Enhanced Monitored Natural Recovery sand layer containing active carbon. These two actions are designed to achieve an average PCB abatement level in sediment effectively equivalent to 0.84 milligrams per kilogram of total PCBs, the background level of PCBs for this site.

The project design incorporates pre-remediation testing of the sand and activated carbon material to ensure it can achieve the needed reduction in biologically available PCBs. The project also includes post-remediation monitoring to ensure that cleanup and abatement levels are met, and mitigation measures to ensure that the project will not have a significant negative environmental impact. This cleanup and abatement action when complete will protect the benthic community, wildlife, resident finfish, and fishers. The resulting potential risk from consuming fish and shellfish from within the Project area will be equivalent to or less than the background condition in San Diego Bay for both human health and aquatic dependent wildlife receptors and is consistent with the maximum achievable remediation goals under State Water Resources Control Board Resolution 92-49.

The sediment quality objectives for benthic community, human health, and aquatic dependent wildlife beneficial uses are narrative. Translating these narrative objectives into numerical cleanup and abatement levels has proved to be a controversial and time consuming process for other San Diego Bay sediment cleanup sites. To address this problem, staff planned and implemented a detailed and comprehensive public process with stakeholders.

From the start of the project in 2013, the San Diego Water Board provided numerous opportunities for stakeholders to discuss and comment on the proposed remedial design, the California Environment Quality Act compliance document, and the CAO. Unlike our typical public process, the staff Cleanup Team met individually with key stakeholders to promote open dialogue and to better understand and resolve their concerns. The Cleanup Team also met with stakeholders both individually and as a group to review responses to written comments and provide additional clarification on the proposed project. This afforded the stakeholders an informal venue to ask questions and better understand the remedial process, resulting in fewer comments than the typical review process. The San Diego Water Board initiated this collaborative effort to ensure that stakeholders have a voice in the decision-making process prior to project approval. This collaborative process was well received by the stakeholders and the result of this process was an uncontested Order.

**LEGAL CONCERNS:**

None.

**SUPPORTING DOCUMENTS:**

1. Location Map
2. Cleanup and Abatement Order No. R9-2015-0085

**PUBLIC NOTICE:**

This item was publicly noticed in the Meeting Notice and Agenda for the March 9, 2016 meeting.