

Appendix B

CLEANUP TEAM STAFF REPORT

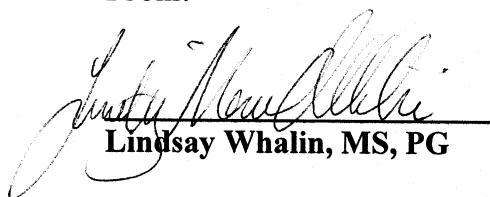
**STATE OF CALIFORNIA
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION**

STAFF REPORT

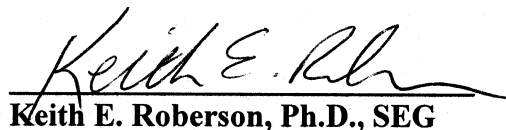
To: Dyan C. Whyte
Assistant Executive Officer

Date: April 29, 2013

From:


Lindsay Whalin, MS, PG

and


Keith E. Roberson, Ph.D., SEG

SUBJECT: Justification for Amendment of Cleanup and Abatement Order Nos. 98-004 and R2-2003-0028, and Rescission of Order No. 92-105 for the Leona Heights Sulfur Mine, Oakland, Alameda County

This staff report describes our proposed approach to overseeing the remediation of the Leona Heights Sulfur Mine. We recommend that the Water Board amend Cleanup and Abatement Order 98-004 (1998 CAO) and issue a Time Schedule Order that sets forth administrative civil liabilities for noncompliance. The Revised Tentative CAO Amendment will amend 1998 CAO to direct the remediation of the site, a two-acre inactive pyrite mine located in the Oakland Hills at the end of McDonell Avenue, south of the Montclair District.

The mine sits within the upper reach of the Leona Creek watershed, and the creek flows through sulfur-bearing mining waste (also referred to as tailings), generating sulfuric acid, commonly referred to as acid mine drainage. The pH of Leona Creek has been measured as low as 1.5, and is aesthetically impacted by bright orange acidophilic (acid-loving) bacteria, and chemically impaired due to the dissolution of metals and arsenic from on-site rocks and soils. Concentrations of some metals range up to four orders of magnitude above water quality objectives for the protection of freshwater aquatic habitat.

The Water Board initially adopted Waste Discharge Requirements in 1992 to direct cleanup of the site, followed by the CAO in 1998 after the Dischargers failed to act. In 2003, the Water Board adopted an amendment to the 1998 CAO to add Dr. Collin Mbanugo, the current property owner, as a Discharger. Discharge of acid mine drainage from the site is ongoing and therefore the list of Dischargers on the Revised Tentative CAO Amendment includes past and present mine operators and land owners. Dr. Mbanugo, the subsidiaries of Alcoa, Inc., and Ocean Industries, Inc., and its subsidiaries are involved in the site restoration planning process.

Despite significant effort by Water Board Cleanup Team staff (Staff) and collaboration with other jurisdictional permitting agencies, no ground has been broken on the site and the discharge to Leona Creek continues. Progress towards developing designs and obtaining permits has been sporadic, in part due to complicating factors, such as property ownership changes and changes to the initial remedial design that were required by the jurisdictional permitting agencies.

Cleanup Staff have determined that the lack of progress is primarily due to avoidable delays by the Dischargers; specifically due to disagreements over responsibility with respect to funding and project management. They have failed to complete critical tasks to remediate and comply with the 1998 CAO (Task B.2 Corrective Action Plan and Implementation). Although the Water Board has the authority to enforce the original 1998 CAO by assessing penalties, we recommend focusing on site remediation. Therefore, in an effort to re-engage the Dischargers, we have drafted revisions to the 1998 CAO that clarify tasks and include new compliance dates, concomitant with a Time Schedule Order to prescribe penalties for non-compliance. This approach should encourage the Dischargers to re-engage and move forward with the cleanup while facilitating Water Board enforcement should the Dischargers fail to comply.

Specifically, the Revised Tentative CAO Amendment does the following:

1. Clarifies actions necessary to comply with the 1998 CAO requirement to develop and implement a corrective action (or remedial action) plan. This includes:
 - a. A requirement for creek restoration, recognizing the long term success of any corrective action will depend upon the stability of the creek; and
 - b. A requirement to submit complete applications for permits, recognizing that permits from other regulatory agency are required for the remedial/restoration work and that the Dischargers failure to submit complete applications for those permits have caused significant delays in the recent past.
2. Modifies compliance dates for requirements of the 1998 CAO and the 2003 Amendment that have not been implemented or completed (notably, Staff recommend extending these dates an additional year in response to comments from the Dischargers);
3. Names Ocean Industries, Inc. as a Discharger as the successor to Watt Industries, a Discharger named on the 1998 CAO; and
4. Rescinds the 1992 WDRs (Order No. 92-105), which have no longer been needed since the 1998 CAO was adopted.