## Appendix C 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:

and

Lindsay Whalin, MS, PG

Keith E. Roberson, Ph.D., SEG

SUBJECT: Justification for Time Schedule Order Prescribing Administrative Civil Liability

for Non-Compliance with Item 7, Cleanup and Abatement Order Amendment 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 Time Schedule Order (Revised Tentative TSO) will prescribe administrative civil liability for non-compliance with requirements of an amended 1998 Cleanup and Abatement Order (Revised Tentative CAO Amendment) for the Leona Heights Sulfur Mine.

The site is 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. Leona Creek is aesthetically impacted by bright orange acidophilic (or acid loving) bacteria, and chemically impaired due to high concentrations of metals and arsenic dissolved from on-site rocks and soils by the acid mine drainage. Concentrations of some metals have been measured 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 the cleanup. No plans were submitted and no corrective action took place. Therefore, in 1998 the Water Board adopted a CAO to compel the cleanup. In 2003, the property was sold and the 1998 CAO was amended in 2003 to add the new property owner (Dr. Collin Mbanugo) as a Discharger. Since then, the Dischargers have been sporadically cooperative. A Remedial Action Plan was developed and incomplete applications for permits were submitted to various permitting agencies. None of the necessary permits were obtained and no corrective action has taken place. Recently, disagreements between the Dischargers regarding funding and apportionment of responsibility have halted progress completely.

Water Board Cleanup staff (Staff) are focused on remediation of the site and are therefore recommending adoption of an amendment to the 1998 CAO (the Revised Tentative CAO Amendment). The Revised Tentative TSO will allow for prompt and efficient enforcement of the Revised Tentative CAO Amendment should delays and inaction by the Dischargers continue.