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# California Regional Water Quality Control Board Central Valley Region

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## **CHARACTERIZATION REPORT, MOUNT DIABLO MERCURY MINE, CONTRA COSTA COUNTY**

Central Valley Regional Water Quality Control Board staff has reviewed the "*Characterization Report, Mount Diablo Mercury Mine*" ("Report") submitted on your behalf by The Source Group, Inc. The Report reviews old and new characterization data from the Mount Diablo site. Staff generally concurs with the Report's conclusions (1) that a large portion of the mercury discharge to surface water is interactions between exposed mine tailings/waste rock, oxygen and storm water; (2) methyl mercury generation in existing ponds appears to be small; and (3) remedial actions should concentrate on consolidating and covering tailings/waste rock deposits. However, the Board does not accept the Report's conclusion that Bradley Mining Co. is solely responsible for generating the main tailings/waste rock deposits. Rather, analysis of all currently-available evidence leads Board staff to conclude that every party active on this site between 1930 to present has contributed to the discharge of mining waste, and that it is not feasible to separate degrees of responsibility.

The Report proposes the following additional work elements to complete characterization:

1. A detailed topographic survey
2. Installation of a monitoring well into the Adit level to sample mine waters before they react with the atmosphere or mine waste.
3. Installation of a monitoring well into the former Cordero Tunnels.
4. Measure and evaluate gradients between the Cordero Tunnels and the Adit water, using measurements collected from the monitor wells.
5. Additional confirmation surface water sampling as conditions allow.

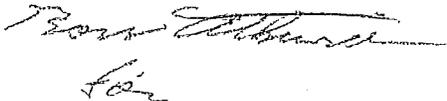
The detailed topographic survey, additional surface water samples and samples collected from the Adit workings will provide useful information for remediation planning. Staff concurs with these proposed actions. The Cordero Tunnels monitoring well and the evaluation of gradients between the Cordero workings and older underground workings is not likely to be useful in remediation planning, but can be used to support Sunoco's divisibility argument. We suggest that if this well is drilled (drilling the well is not required), it be placed in a location in vicinity of the Cordero tunnels to determine if groundwater is higher in surrounding bedrock than in the

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mine. If the groundwater is higher in the bedrock groundwater, it would suggest the groundwater flows from the Cordero Tunnels into the main workings. If the well is drilled into the Cordero workings and the water level is the same as in main working, it maybe difficult to determine if water is flowing down the Cordero working into the main workings. There is some likelihood that Cordero working will have the same water level as the main working because of high porosity and permeability of a backfilled Cordero mine tunnel.

Staff continues to develop information on potential responsible parties and we hope to issue a revised Order naming more responsible parties.

If you have any questions concerning this matter, please contact Ross Atkinson at (916) 464-4614 or via email at [ratkinson@waterboards.ca.gov](mailto:ratkinson@waterboards.ca.gov).



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