

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

ORDER NO. R5-2008-0105

REQUIRING SOPER COMPANY
SPANISH MINE
NEVADA COUNTY
TO CEASE AND DESIST FROM
VIOLATING WASTE DISCHARGE REQUIREMENTS

The California Regional Water Quality Control Board, Central Valley Region, (hereafter Regional Water Board) finds that:

1. Soper Company (hereafter Discharger) owns the inactive Spanish Mine. The mine is approximately 2.5 miles north of the town of Washington, Nevada County in Sections 19, 30, and 31, T18N, R11E, MDB&M
2. Mining activities were initiated in the 1880s for gold recovery. Between the 1920s and 1930s, precious metals (gold and silver) and base metals (copper, lead, and zinc) were extracted from underground workings. In the 1930s barite was also obtained from the underground workings. Beginning in 1950, barite was recovered exclusively from an open pit. The open pit barite operations ceased in 1988.
3. The excavation of the underground workings and exposure of the sulfide mineral deposits to water and oxygen resulted in the generation of acid mine drainage (AMD) which discharges pollutants in the form of heavy metals and low pH solutions to surface water drainage courses
4. In October 2006, in response to a request from the Regional Water Board, the Discharger submitted a Report of Waste Discharge and application for a NPDES Permit to discharge mine drainage from the Spanish Mine.
5. On 31 July 2008, the Regional Board adopted Order No. R5-2008-0104 (NPDES No. CA0085286), a new permit that establishes narrative discharge limits and requires implementation of Best Management Practices (BMPs) to control discharges of AMD.
6. Waste Discharge Requirements Order No. R5-2008-0104 provides, in part, the following:

“IV. BEST MANAGEMENT PRACTICES AND APPLICATION SPECIFICATIONS

- A. The Discharger must implement Best Management Practices (BMPs) to manage the discharge of AMD from the mine portals, and other point source discharges to surface waters or surface water drainage courses. BMPs may include, but are not limited to, installation of concrete bulkhead seals, passive biological or physical treatment systems (sulfate reducing bacteria reactors, anoxic limestone drains, etc), injection of neutralizing agents into underground workings, run-on and run-off controls, consolidation and capping of reactive waste rock, or other technologies, including new technologies as they are developed.

- B. The Discharger shall continue to implement additional BMPs until the concentrations of arsenic, cadmium, cobalt, copper, lead, manganese, nickel, and zinc at Discharge Points 001 and 003, are at or below the Receiving Water Limits contained in Table 6, Receiving Water Limits for Poorman Creek, or until the Executive Officer determines all practical BMPs have been implemented.

V. Receiving Water Limitations

A. Surface Water Limitations

Receiving water limitations are based on water quality objectives contained in the Basin Plan and are a required part of this Order.

1. The Discharge shall not cause the concentrations or parameters to exceed the following in Poorman Creek at Monitoring Locations RSW-1D and RSW-3D:

Table 6. Receiving Water Limits for Poorman Creek

Parameter	Units	Receiving Water Limitations			
		Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Arsenic	ug/l		10 ^{1,2}		
Cadmium	ug/l	0.9 ^{3,4}	1.0 ^{3,4}		
Cobalt	ug/l	50 ⁵			
Copper	ug/l	3.0 ^{3,4}	4.1 ^{3,4}		
Iron	ug/l	300 ⁶			
Lead	ug/l	0.6 ^{3,4}	15 ^{3,4}		
Manganese	ug/l	50 ⁶			
Nickel	ug/l	17 ^{3,4}	100 ²		
Zinc	ug/l	46 ^{3,4}	46 ^{3,4}		
PH	ug/l			6.5	8.5

¹Criteria from Basin Plan

²Primary MCL for drinking water supply

³Criteria from California Toxics Rule

⁴Listed criteria are based on a "worst case" hardness of 27 mg/l. Actual criteria shall be calculated after each sampling event using the California Toxics Rule formulas for Total Recoverable Metals for Criteria Continuous Concentration and Criteria Maximum Concentration.

⁵Agricultural Water Quality Objective

⁶Secondary MCL for drinking water supply"

7. The Discharger is in violation of and threatening to continue to violate the conditions in Finding No. 6 above in that untreated AMD containing constituents in excess of the discharge limits specified is being discharged to Poorman Creek which is tributary to the South Fork Yuba River.
8. Order No. R5-2008-0104 is the first NPDES permit adopted for this facility. The discharge has probably been continuous from the time underground mining began in the 1880s. The Discharger requires a reasonable amount of time to bring the

discharges into compliance with the NPDES permit. This Order contains a five year time schedule for the Discharger to implement required Best Management Practices necessary to meet the Prohibitions, Limitations, and Specifications provided in this Order.

9. The Discharger submitted the following reports to address violations at the mines and in support of a reasonable time schedule to bring the discharges into compliance with applicable laws and regulations:

- *Application Package, Waste Discharge Requirements, Spanish Mine Property, Nevada County, California, October 2006*
- *Five-Year Remedial Action Work Plan, Spanish Mine Property, Nevada County, California, January 2007*

10. Section 13301 of the California Water Code states, in part, that:

“When a regional board finds that a discharge of waste is taking place or threatening to take place in violation of requirements or discharge prohibitions prescribed by the regional board or the state board, the board may issue an order to cease and desist and direct that those persons not complying with the requirements or discharge prohibitions (a) comply forthwith, (b) comply in accordance with a time schedule set by the board, or (c) in the event of a threatened violation, take appropriate remedial or preventive action. In the event of an existing or threatened violation of waste discharge requirements in the operation of a community sewer system, cease and desist orders may restrict or prohibit the volume, type, or concentration of waste that might be added to such system by dischargers who did not discharge into the system prior to the issuance of the cease and desist order. Cease and desist orders may be issued directly by a board, after notice and hearing, or in accordance with the procedure set forth in Section 13302.”

11. Section 13267 of the California Water Code states, in part, that:

“(a) A regional board, in establishing or reviewing any water quality control plan or waste discharge requirements, or in connection with any action relating to any plan or requirement or authorized by this division, may investigate the quality of any waters of the state within this region.

(b)(1) In conducting an investigation specified in subdivision (a), the regional board may require that any ... citizen or domiciliary, or political agency or entity of this state who has discharged, discharges, ... or who proposes to discharge wastes within its region that could affect the quality of waters within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports, and shall

identify the evidence that supports requiring that person to provide the reports.”

12. The technical reports required by this Order are necessary to assure compliance with the Cease and Desist Order and Waste Discharge Requirements, and to assure protection of the public health and safety. The Discharger operates the facility that discharges the waste subject to this Order.
13. The action to adopt a Cease and Desist Order is exempt from the provisions of Chapter 3 of the California Environmental Quality Act (CEQA) (Public Resources Code Section 21100, et seq.), in accordance with Section 13389 of the California Water Code.
14. On 31 July 2008, in Rancho Cordova, California, after due notice to the Discharger or other affected persons, the Regional Water Board conducted a public hearing at which the Discharger appeared and evidence was received to consider this Cease and Desist Order.
15. Any person affected by this action of the Regional Water Board may petition the State Water Resources Control Board to review the action in accordance with section 2050 through 2068, Title 23, California Code of Regulations. The petition must be received by the State Water Resources Control Board, Office of Chief Counsel, P.O. Box 100, Sacramento, CA, 95812-0100, within 30 days of the date on which the Regional Water Board action took place. Copies of the law and regulations applicable to filing petitions are available at www.swrcb.ca.gov/water_laws/index.html and also will be provided upon request.

IT IS HEREBY ORDERED that, pursuant to sections 13301 and 13267 of the California Water Code, Soper Company, its agents, successors, and assigns, shall:

1. Cease and desist from discharging and threatening to discharge wastes in violation of Waste Discharge Requirements Order No. R5-2008-0104, No term or conditions of Order No. R5-2008-0104 is superseded or stayed by this Cease and Desist Order.
2. Comply with the following time schedule to assure compliance with Waste Discharge Requirements Order No. R5-2008-0104 as described in the above Findings:

<u>Task</u>	<u>Compliance Date</u>
a. Progress reports, describing the activities of the past year, shall be submitted at the beginning of February of each year. The Reports shall contain a detailed narrative description of the remedial activities undertaken and contain water quality data, in tabular and graphical form as appropriate, to demonstrate the success, or lack thereof, of the remedial activities.	<u>1 February of</u>

each year

- b. Submit report, including a time schedule, describing what BMPs shall be installed to reduce the discharge of AMD from Adit 1 to surface waters. **1 May 2009**
 - c. Begin installation of BMPs identified in report described in Task b above. **1 July 2009**
 - d. Sample discharges from Adits 1 and 3, and Poorman Creek upstream and downstream of the adit discharges monthly for one year and analyze for priority pollutant metals, pH, EC, and flow. Submit report summarizing data to the Regional Water Board. **30 September 2009**
 - e. Submit report, including a time schedule, describing what BMPs shall be installed to reduce the discharge of AMD from Adit 3 to surface waters. **1 May 2010**
 - f. Begin installation of BMPs identified in Task e above to reduce the discharge of AMD from Adit 3 to surface waters. **1 September 2011**
 - g. Completion of implementation of BMPs to reduce discharges of AMD from Adits 1 and 3. Obtain full compliance with WDRs. **1 September 2012**
3. The technical reports required herein that involve planning, investigation, evaluation, or design, or other work requiring interpretation and proper application of engineering or geological sciences, shall be prepared by or under the direction of persons registered to practice civil engineering or engineering geology, as appropriate, in California pursuant to California Business and Professions Code, sections 6735, 7835, and 7835.1. To demonstrate compliance with Title 16, CCR, sections 415 and 3065, the technical reports must contain a statement of the qualifications of the responsible registered professional(s). As required by these laws, the completed technical reports must bear the signature(s) and seal(s) of the registered professional(s) in a manner such that all work can be clearly attributed to the professional responsible for the work. The technical reports are subject to Executive officer approval.
4. If, in the opinion of the Executive Officer, the Discharger violates this Order, the Executive Officer may apply to the Attorney General for judicial enforcement or issue a complaint for Administrative Civil Liability.

CEASE AND DESIST ORDER NO. R5-2008-0105
SOPER COMPANY
SPANISH MINE
NEVADA COUNTY

6

I, PAMELA C. CREEDON, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Central Valley Region, on 31 July 2008.

Signed By

PAMELA C. CREEDON, Executive Officer

31 July 2008

(Date)

PVW: sae