
Central Valley Regional Water Quality Control Board

TO: Gayleen Perreira, Senior
Sacramento Valley NPDES Unit, Central Valley Water Board

FROM: Elizabeth Thayer, WRCE
Sacramento Valley NPDES Unit, Central Valley Water Board

DATE: 18 August 2014

SUBJECT: 11 AUGUST 2014 MEETING WITH MICHAEL MILLER, PRESIDENT,
ORIGINAL SIXTEEN TO ONE MINE, INC., SIXTEEN TO ONE MINE, SIERRA
COUNTY

ATTENDANCE LIST:

Adam Laputz, Supervising Engineer, NPDES Section, Central Valley Water Board
David Coupe, Attorney for the Central Valley Water Board (by telephone)
Gayleen Perreira
Elizabeth Thayer
Jeff Huggins, Geologist, Central Valley Water Board
Michael M. Miller

On 11 August 2014, Central Valley Water Board staff met with Mr. Michael M. Miller, President, Original Sixteen to One Mine, Inc. to discuss the preliminary draft NPDES permit for Sixteen to One Mine, Alleghany, Sierra County. Following is a summary of my notes from the meeting.

Mr. Miller stated that he was busy with other matters for the remainder of August and September 2014 and would have difficulty reviewing the Tentative Draft during that period. Ms. Perreira reported that 23 September 2014 was the last day within our schedule that we could send out the tentative NPDES permit for the 30-day public comment period. Mr. Miller stated that 23 September 2014 was acceptable to him and we agreed to send out the tentative NPDES permit for the 30 day comment period on 23 September 2014.

Mr. Miller stated that the groundwater in the Mine is “mineral rich” and that the discharge has no effect on Beneficial Uses. Kanaka Creek contains fish and plant life. There is no odor and no turbidity in the discharge. People swim in the creek. There are no human communities downstream of the discharge on Kanaka Creek, therefore, there is no domestic water Beneficial Use of Kanaka Creek. Mr. Miller urged Board staff to take a look at actual beneficial uses including industrial use, which is a beneficial use but is not listed in the Basin Plan.

Mr. Miller also stated that there is no local opposition to the discharge. Local business is struggling; there are no jobs, there is no tax base, schools are closing. The Mining Company pays taxes while in business. Currently there are 7 men working at the mine when there could be up to 35.

Mr. Miller stated that it is not possible to get down to Kanaka Creek during winter months. Sampling and analysis is always difficult due to the steep terrain. Any sampling involves getting down to the creek, getting back up the hill with the samples, and due to the remote location of the mine, packing the samples, and mailing or transporting the samples.

Mr. Miller has a major disagreement with the NPDES program classification of the discharge based on Threat to Water Quality and Complexity; "Fees are outrageous." Threat assessment is "ridiculous". The current classification is 2B, and the annual fees for the Sixteen to One Mine NPDES Permit are based on the 2B classification. Mr. Miller thinks the proper classification should be 3C. Ms. Perreira stated that the 2B classification is appropriate based on the known conditions. The discharge must meet water quality objectives in order to receive a threat classification of 3. The discharge from Sixteen to One Mine exceeds the arsenic drinking water PMCL. Ms. Perreira also stated that the discharge cannot meet water quality objectives without a treatment system. Mr. Miller stated that the annual fees are a financial hardship for the Mine. Mr. Miller also stated that the Regional Board lacks flexibility to show discretion on threat and complexity. Lack of flexibility is up the chain of command, not at staff level. Mr. Coupe stated that staff will take another look at threat and complexity to see if it is possible to reclassify.

Mr. Miller stated that the danger of arsenic has been overstated in the federal and state regulations. Mr. Laputz stated that changing the water quality standards for arsenic is outside the purview of the Regional Board.

Mr. Miller is concerned that Sixteen to One Mine has been singled out for selective implementation of the laws and regulations. How many other properties similar to this one have a classification of 2B? Other dischargers do not receive the enforcement faced by Sixteen to One Mine.

Mr. Miller also disagrees with the characterization of the discharge from the mine as "mine waste"; he says it is groundwater naturally flowing from the mine and should not be regulated by an individual NPDES Permit. "The discharge is not the mine's." "We don't discharge."

Mr. Miller stated that "arsenic removal is not cost-beneficial".

Flow in Kanaka Creek is "seasonal" according to Mr. Miller. Flow is high during the rainy months and low during the dry months. The stream is currently almost dry in this extreme drought year. Mr. Miller asked how can an "intermittent" creek like Kanaka Creek be a navigable water? Even though there is flow year round, the Regional Board has allowed no dilution credits in Kanaka Creek. Mr. Miller stated that dilution credits should be allowed during high flows. There is a lot of old flow and concentration data. Critical conditions (drought flow) need to be evaluated. There was no discussion of who would perform this work.

pH has been well-tested and characterized. There are no problems with pH outside the range of 6.5 to 8.5. Mr. Miller stated that they do have difficulty measuring flow.

Mr. Miller stated that "they could live with quarterly monitoring" as currently required in the draft permit.

The draft permit also contains new requirements for waste pile characterization. A registered professional is required to complete the study; Water Code specific tests include 1) solubility, 2) acid mine drainage. There was some disagreement about whether there are waste piles on

site. Board staff stated that there are historic waste piles on site that were to be run through mill when it was operating. Mr. Miller stated that there are no waste piles. Waste gravel is used for road base. For a large operation, waste pile characterization is an ongoing process. For a small facility an ongoing process is probably not necessary. Mr. Miller stated that he was not worried about toxicity from the piles, but he was concerned about requirements for testing the piles just to do the tests.

Mr. Miller stated that Sixteen to One Mine is not “non-operating”.

Mr. Miller stated that 0.28 mgd is a generous flow limit currently in the draft permit, but they have no ability to control the flow out of the mine.

Mr. Miller stated that tapwater should be filtered if people are worried about arsenic, instead of treating the mine discharge.

In the 1990’s 55 gallon drums filled with iron filings were added to the stream, inside the mine. The iron filings may be producing the iron detected in the 2011 water samples. Board staff agreed to add a footnote for iron and manganese; the effluent limits will be removed if iron and manganese are not detected in the mine discharge.

Several acute toxicity tests were conducted in the 1990s by Mr. Miller. There was 100% survival in two tests and 75% survival in a third. No chronic toxicity testing has been conducted. Mr. Miller does not want to do any further acute or chronic toxicity testing. Board staff will look into the requirements for toxicity testing.

Mr. Laputz stated that it was in Mr. Miller’s best interest to get a time schedule because the discharge can’t meet the proposed effluent limits for iron, manganese, and arsenic. (In the cover letter with the Preliminary Draft Permit, Mr. Miller was provided an opportunity to submit an Infeasibility Analysis with a request for a time schedule to comply with new effluent limits. The limit for arsenic is not new.)

Mr. Miller stated that regulations often have less rigorous provisions for small facilities. However, Board staff stated that there are no less rigorous provisions in the federal ELGs for gold mines.

The Central Valley Water Board is still accepting comments during the preliminary draft phase. Mr. Miller was requested to submit the language he prefers. If there is something he disagrees with.

ACTION ITEMS FOR REGIONAL BOARD STAFF:

- Review Threat and Complexity
- Add footnote regarding iron and manganese and removal of the Effluent Limits
- Dilution credits/mixing zone?
- Toxicity Testing – necessary?
- Consider industrial use?