

To: Judith Unsicker, CRWQCB Lahontan Region
From: Denise Kirchner, Searles Valley Minerals
Date: June 11, 2009

Re: Water Quality Data and Information for 2008 Integrated Report – List of Impaired Waters and Surface Water Quality Assessment [303(d)/305(b)]

Having reviewed the “Clean Water Act Section 305(b) and 303(d) Integrated Report for the Lahontan Region, April 2009”, Searles Valley Minerals submits the following comments and urges the following actions:

Searles Lake is listed in Appendix G as a Category 4B water body segment for the following pollutants:

Salinity/TDS/Chlorides – Source unknown. This listing is being addressed through Lahontan Water Board CAO 6-00-64 and 6-00-64A1 (also 6-00-64A2), and

Total Petroleum Hydrocarbons – Industrial Point Sources. This listing is being addressed through Lahontan Water Board CAO 6-00-64 and 6-00-64A1 (also 6-00-64A2).

Comments:

1. While the fact sheet retains the comment that “a determination of whether or not this water body is a ‘water of the United States’ will be made by the Regional Water Quality Control Board”, Searles Valley Minerals requests at a minimum and as a temporary alternative to de-listing, that the Category 4B listing for Searles Lake retain an asterisk noting the ambiguity, so the information is carried forward to the State Water Resources Control Board document.
2. A second amendment to the Cleanup and Abatement Order No. 6-00-64A2, dated October 11, 2001, is not referenced in the fact sheet at Appendix I. In Section 4 of 6-00-64A2, Regional Board directed staff to evaluate the appropriateness of current beneficial use designations for Searles Lake and to prepare information as part of a proposed Basin Plan amendment process to consider establishing site-specific beneficial uses for Searles Lake. The Regional Board staff has delayed complying with the directive, purportedly due to budgetary constraints for some eight and going on nine years. It is highly unlikely that budgetary relief will be occurring any time soon.

The CAO and subsequent amendments do not reference Salinity/TDS/Chlorides as “pollutants” in Searles Lake. In fact, at the direction of Regional Board staff, Searles Valley Minerals (then IMC Chemicals) conducted a study to evaluate the hydrologic resources within the Searles Valley Hydrologic Basin and the conclusion is that “a comparison of the ephemeral waters to the process brine effluent indicates that both are brines. The TDS concentrations for five ephemeral ponds were shown to be higher than the concentrations found in the process brine effluent.” (IMC Chemicals Inc. Evaluating Hydrologic Resources Within the Searles Valley Hydrologic Basin, March 2002, page 17, submitted to California Regional Water Quality Control Board Lahontan Region.) These constituents are naturally occurring, as rain and mountain stream runoff come in contact with the salt surface of Searles Dry Lakebed, that water instantly becomes brine with well over an average of 86,000 mg/L sodium, 350,000 mg/L TDS, and 145,000 mg/L Chlorides for the five ephemeral ponds tested. The presence of naturally occurring Salinity/TDS/Chlorides may require a change in

water quality standards because Searles Lake cannot be made drinkable or fishable. Note that brackish water on the surface at the south edge of Searles Lake resulting from a secondary industrial discharge (Westend North discharge) provides shorebird nesting; however, the minor discharge stream is not characteristic of the Searles Lake current and potential future mining resource brines.

3. USEPA expects TMDLs to be completed within 13 years after the list update cycle when the water body-pollutant combination was first listed. There is no doubt that the CAO addresses Total Petroleum Hydrocarbons at Searles Lake. Searles Valley Minerals has achieved compliance with Waste Discharge Requirements discharge limits and continues to work with Board staff to address historic cleanup sites as required in the CAO.
4. The fact sheet at Appendix G retains a reference to CDFG documentation of “hundreds of bird deaths, primarily from salt toxicosis and salt encrustation in the water body.” Searles Valley Minerals implemented its wildlife hazing and rehabilitation efforts, and DFG approved the Section 3005 Mitigation Plan of June 13, 2005. DFG agrees that SVM is doing all that it can to minimize bird loss due to contact with Searles Lake Brines, where do we go from here with regard to the 303(d) listing? In the absence of jeopardy from Total Petroleum Hydrocarbons and the protections being afforded migratory birds from naturally occurring Salinity/TDS/Chlorides what beneficial uses are being protected by the Regional Board?

I am not an expert in the world of TMDLs and water quality management, so I look to Regional Board staff to help me understand the process going forward. For almost a decade, a determination of the actual site-specific beneficial uses of Searles Dry Lakebed has not been addressed by the Regional Board. Searles Valley Minerals has no regulatory recourse in spite of submittal of overwhelming technical evidence. Further, over the past 10 years, Searles Valley Minerals has accumulated a great deal of analytical data for WDR reporting that was not available when the CAO was issued. Searles Valley Minerals previously submitted documents that I believe support removing Searles Lake from the 303(d) list of impaired water bodies. The process brines are not water as defined by scientific sources, are not waters of the state and are not waters of the United States. Searles Valley Minerals continues to respectfully petition and urge a formal amendment to the Basin Plan properly finding no beneficial uses other than brines for resource mining and a de-listing from the proposed 303(d) listing.

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