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HW

Region 6

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**From:** Craig J. Wilson  
**To:** Yates, Randal  
**Date:** 11/10/2005 7:15:57 AM  
**Subject:** Fwd: Searles Lake/Lahontan Region 303(d) sublist

For the admin record. Robert, could you enter these comments into the comments database. CJW

>>> "Darlene E. Ruiz" <derhr@earthlink.net> Wednesday, November 09, 2005 >>>  
Craig,

Per our telephone discussion and for the record, attached please find a side by side comparison and comments regarding the sublisting of Searles Lake as a waterbody being addressed by other regulatory means. The further data and information available and cited from the Regional Board files does not support moving the listing of this waterbody to organize and be consistent with the listing policy. This playa lakebed is not water subject to the Federal Act and deserves to have a factual hearing on the matter before the regional board. While

SVM understands and appreciates that the State Board is not responsible for determining whether the regional board holds such a hearing, the movement of the waterbody to a sublist, begs the fundamental and jurisdictional question whether the Boards have programmatic jurisdiction over isolated brine/mineral bodies with naturally occurring TDS of 300,000 to 430,000 ppm.

*Commenter questions the State Board's jurisdiction over Searles Lake.*

SVM will make every effort to obtain all regional board files relevant to this matter.

**CC:** Robert Musial

40.1

Searles Lake

Searles Lake placed on the 2002 Enforceable Programs List	Searles Lake placed on the 2006 List	Comparison/Determination and Comments
<p>Petroleum Products: 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.</p>	<p>Water Segment: Searles Lake</p> <p>Pollutant: Petroleum Products</p> <p>Recommendation: List</p> <p><b>Weight of Evidence:</b> This pollutant is being considered for listing under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. A remedial program other than a TMDL has been developed, approved, and is being implemented. This program is expected to result in attainment of the standard. This water segment-pollutant combination was moved off the section 303(d) list during the 2002 listing cycle.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being Addressed portion of the section 303(d) list.</p> <p><b>SWRCB Staff Recommendation:</b> After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a program is in place to address this water quality problem.</p>	<p>Searles Lake went from "Enforceable Programs List 2002" with the note in column A to the "Water Quality Limited Segments Being Addressed" category for 2006. Based on the "Enforceable Programs List 2002", Regional Board was to determine whether the dry lakebed is a water of the United States. The Regional Board has not made a determination that Searles Lake is a water of the United States. Because Searles Lake is not considered to be a water of the United States and is being regulated strictly as a water of California, it should not be included on the 303(d) list or sublist.</p> <p>Searles Lake Brines contain from 300,000 to 430,000 ppm Total Dissolved Solids. Brine return from SVM Operations contains from 240,000 to 300,000 ppm Total Dissolved Solids.</p> <p><b>COMMENT 1</b></p> <p>Searles Valley Minerals expected Regional Board to bring clarity to the question whether the dry lakebed is a "Water of the United States." It is unsatisfactory for Searles Lake to be placed on a sublist that indicates there is a "remedial program in place" because then anytime SVM was not in compliance with its permit, then Searles Lake could be moved to the 303(d) and be subject to determination of a TMDL.</p> <p>In October 2001, the Regional Board directed staff to evaluate the appropriateness of current beneficial use designations for Searles Lake and to consider site-specific beneficial uses. (Cleanup and Abatement Order No. 6-00-64A2) Due to budget cuts, however, the Basin Plan amendment process was not completed.</p> <p><b>COMMENT 2</b></p> <p>On May 16, 2002, Charles Hungerford of Heller Ehrman White &amp; McAuliffe, submitted comments on behalf of then IMC Chemicals regarding the November 2001 recommended changes to the Section 303(d) list. Evidence considered for the 2006 list is identical to the language presented in 2001. Mr. Hungerford's comments are relevant today, while the evidence SWRCB relied upon is based on outdated information.</p> <p>First, more recent CRWQCB inspections occurred on May 5, 2003, June 13, 2003, and April 7-8, 2004, and that information has not been considered. Second, thousands of data points have been generated as a result of <u>daily</u> effluent brine samples that were analyzed over the past 5 years.</p> <p>SVM's June 13, 2005 Section 3005 mitigation plan addresses an unavoidable and incidental take of birds at SVM's mining facilities. DFG recognizes that the partially depleted brine return ponds are essential to the ongoing solution mining operations. Birds are not exposed to hydrocarbons on Searles Lake.</p>

COMMENT 3

<p><b>Petroleum Products:</b> 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. (Continued from previous page.)</p>	<p><b>Lines of Evidence:</b>  <b>Line of Evidence:</b> Pollutant-Water</p> <p><b>Beneficial Use:</b> Rec-1, Rec-2, Saline Habitat, Wildlife Habitat</p> <p><b>Information Used to Assess Water Quality:</b> Thirteen site inspections by Regional Board staff between February and June, 2000. Visible oil observed. Sample collected showed 156,000 ppm TPH.</p> <p><b>Data Used to Assess Water Quality:</b> Numerous (at least 13) observations of visible oil on Lake waters, banks, channels and ponds. Over 150 dead waterfowl collected by CDFG. Waterfowl encrusted with brine and oil. Oil found in internal organs of waterfowl. Visible oil observed. Sample collected show 156,000 ppm TPH.</p> <p>DFG believes that wastewater ponds created at Searles Lake are an ongoing threat to wildlife. DFG has documented hundreds of bird deaths, primarily from salt toxicosis and salt encrustation. Historically, the dry lakebed offered little or no open water to migrating waterfowl. Hence birds did not stop and mortality was minimal. That is in contrast to current conditions, where effluent from salt-extraction operations have created a lethal attraction for migrating birds. (SWRCB, 2003).</p> <p><b>Spatial Representation:</b> Remedial Program in Place</p> <p><b>Temporal Representation:</b> Visible oil observed on more than 13 occasions during a 5-month period.</p>	<p>SVM's operations include the Searles Lake ore body where naturally occurring concentrations of TDS, chloride, sodium and other minerals are <u>higher</u> than in the partially depleted brine return ponds. (Reference "IMC Chemicals, Inc. Report of Comparison of Searles Dry Lake Ephemeral and Process Ponds Brine Composition" Kennedy/Jenks Consultants, 15 June 2001, submitted to SWRCB May 16, 2002. Hydrocarbon products that were present in the brine return ponds at one time have been removed from Searles Lake. Negligible amounts of hydrocarbon material are removed immediately from the brine return ponds. While some cleanup sites remain on the dry lakebed, they do not effect water quality.</p> <p>Access to Searles Lake is restricted at all times, except for one weekend in October when, in conjunction with the local gem and mineral society's show, the public is allowed onto the lakebed to collect salt crystals that form naturally in the brine and beneath the surface of the Dry Lakebed. There is no fresh water in Searles Valley to support wildlife habitat or migrating waterfowl. Brackish seeps do support shorebirds during the nesting season, which live, breed, and thrive at Searles Lake. "Report on the Mortality of Birds at Searles Dry Lake Bed, and Evaluation of Searles Lake Bed as Avian Habitat." Dr. Michael Fry, Ph.D.</p>
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<p><b>Petroleum Products:</b> 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. (Continued from previous page.)</p>	<p><b>Line of Evidence:</b> Remedial Program in Place</p> <p><b>Beneficial Use:</b> Rec-1, Rec-2, Saline Habitat, Wildlife Habitat</p> <p><b>Information Used to Assess Water Quality:</b> Source is IMCC Chemical mineral extraction operation. Waste Discharge Requirements. Cleanup and Abatement Orders.</p> <p>Source is IMCC Chemical mineral extraction operation. Waste Discharge Requirements, Cleanup and Abatement Orders.</p> <p>The RWQCB has issued Cleanup and Abatement Orders to address this pollutant problem in Searles Lake (Cleanup and Abatement Order Nos. 6-00-64 and 6-00-64A1). These orders require the company to (1) describe methods implemented to significantly reduce the number of waterfowl deaths, (2) eliminate ongoing sources of contaminant concentrations to the Lake, (3) implement any additional methods that are necessary to correct the problems, (4) eliminate all visible petroleum hydrocarbons from surface waters of the Lake, (5) remove or remediate to non-detect levels, all visible petroleum hydrocarbon contaminated surface soils and sediments, and (6) to periodically report on effectiveness of remediation efforts (SWRCB, 2003).</p>	
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<p><b>Salinity/TDS/Chlorides:</b> 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. (Continued from previous page.)</p>	<p><b>Line of Evidence:</b> Pollutant-Water</p> <p><b>Beneficial Use:</b> Rec-1, Rec-2, Saline Habitat, Wildlife Habitat</p> <p><b>Information Used to Assess Water Quality:</b> 13 site inspections by Regional Board staff between February and June, 2000. Visible oil observed. Sample collected showed 156,000 ppm TPH.</p> <p><b>Data Used to Assess Water Quality:</b> Numerous (at least 13) observations of visible oil on Lake waters, banks, channels and ponds. Over 150 dead waterfowl collected by CDFG. Waterfowl encrusted with brine and oil. Oil found in internal organs of waterfowl. Visible oil observed. Sample collected show 156,000 ppm TPH (SWRCB, 2003).</p> <p>DFG believes that wastewater ponds created at Searles Lake are an ongoing threat to wildlife. DFG has documented hundreds of bird deaths, primarily from salt toxicosis and salt encrustation (documentation enclosed). Historically, the dry lakebed offered little or no open water to migrating waterfowl. Hence birds did not stop and mortality was minimal.</p> <p>That is in contrast to current conditions, where effluent from salt-extraction operations have created a lethal attraction for migrating birds.</p> <p><b>Spatial Representation:</b> Visible oil observed at numerous locations.</p> <p><b>Temporal Representation:</b> Visible oil observed on more than 13 occasions during a 5-month period.</p>	<p>Chuck Hungerford's May 16, 2002, comments on behalf of IMC Chemicals (referenced also above) are still relevant because the evidence SWRCB relies upon was presented in November 2001.</p> <p>SVM requests SWRCB to consider inspections that occurred more recently than June 2000. CRWQCB staff performed inspections on May 5, 2003, June 13, 2003, and April 7-8, 2004. SVM requests SWRCB to consider the thousands of data points generated as a result of <u>daily</u> effluent brine samples over the past 5 years, which demonstrate compliance with permit conditions.</p> <p>DFG approved SVM's Section 3005 Mitigation Plan (June 2005), which authorizes the unavoidable and incidental take of 241 birds per year at SVM's mining facilities. DFG recognizes that the effluent ponds that receive the partially depleted brine are essential to the ongoing solution mining operations, and that the combination of avoidance and minimization measures in place do represent the use of Best Available Technology to reduce and/or avoid bird mortality.</p> <p>The Spatial and Temporal Representations list "Visible oil observed at numerous locations," which are not relevant to the pollutant "Salinity/TDS/Chlorides."</p>
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<p><b>Salinity/TDS/Chlorides:</b> 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. (Continued from previous page.)</p>	<p><b>Line of Evidence:</b> Pollutant-Water</p> <p><b>Beneficial Use:</b> Rec-1, Rec-2, Saline Habitat, Wildlife Habitat</p> <p><b>Data Used to Assess Water Quality:</b> Department of Fish and Game (DFG) believes that wastewater ponds created at Searles Lake are an ongoing threat to wildlife. DFG has documented hundreds of bird deaths, primarily from salt toxicosis and salt encrustation. Historically, the dry lakebed offered little or no open water to migrating waterfowl. Hence birds did not stop and mortality was minimal. That is in contrast to current conditions, where effluent from salt-extraction operations have created a lethal attraction for migrating birds (SWRCB 2003).</p> <p><b>Line of Evidence:</b> Remedial Program in Place</p> <p><b>Beneficial Use:</b> Rec-1, Rec-2, Saline Habitat, Wildlife Habitat</p> <p><b>Information Used to Assess Water Quality:</b> Waste Discharge Requirements Cleanup and Abatement Orders issued. The RWQCB has issued Cleanup and Abatement Orders to address this pollutant problem in Searles Lake (Cleanup and Abatement Order Nos. 6-00-64 and 6-00-64A1). These orders require the company to (1) describe methods implemented to significantly reduce the number of waterfowl deaths, (2) eliminate ongoing sources of contaminant concentrations to the Lake, (3) implement any additional methods that are necessary to correct the problems, (4) eliminate all visible petroleum hydrocarbons from surface waters of the Lake, (5) remove or remediate to non-detect levels, all visible petroleum hydrocarbon contaminated surface soils and sediments, and (6) to periodically report on effectiveness of remediation efforts (SWRCB, 2003).</p>	<p>The CAO addresses a petroleum hydrocarbon issue that has been resolved on the surface waters. Neither the CAO nor the WDRs address or limit Salinity/TDS/Chlorides in the brine. The six requirements listed in the "Information Used to Assess Water Quality" here are not relevant to the stated "pollutant" Salinity/TDS/Chlorides.</p>
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<p><b>Salinity/TDS/Chlorides:</b> 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.</p>	<p><b>Water Segment:</b> Searles Lake</p> <p><b>Pollutant:</b> Salinity/TDS/Chlorides</p> <p><b>Recommendation:</b> List</p> <p><b>Weight of Evidence:</b> This pollutant is being considered for listing under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status.</p> <p>Three lines of evidence are available in the administrative record to assess this pollutant. A remedial program other than a TMDL has been developed, approved, and is being implemented. This program is expected to result in attainment of the standard. This water segment-pollutant combination was moved off the section 303(d) list during the 2002 listing cycle.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being Addressed portion of the section 303(d) list.</p> <p><b>SWRCB Staff Recommendation:</b> After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a program is in place to address this water quality problem.</p> <p><b>Lines of Evidence follow:</b></p>	<p>Searles Lake went from "Enforceable Programs List 2002" with the note in column A to the "Water Quality Limited Segments Being Addressed" category for 2006.</p> <p>Again, based on the 2002 303(d) listing, Searles Valley Minerals expected Regional Board to bring clarity to the question whether the dry lakebed is a "Water of the United States." It is unsatisfactory for Searles Lake to be placed on a sublist that indicates there is a "remedial program in place" because there is nothing in the WDRs or the CAO to address the pollutant of concern (salinity/TDS/chlorides). It would serve no public interest to add Searles Lake to the 303(d) and subject it to a TMDL determination for salts.</p> <p>On the "Enforceable Programs List 2002", Regional Board was to determine whether the dry lakebed is a water of the United States. The Regional Board has not made a determination that Searles Lake is a water of the United States. Because Searles Lake is not considered to be a water of the United States and is being regulated strictly as a water of California, it should not be included on the 303(d) list or sublist.</p> <p>Searles Lake Brines contain from 300,000 to 430,000 ppm Total Dissolved Solids. Brine return from SVM Operations contains from 240,000 to 300,000 ppm Total Dissolved Solids. The winter months, the surface of the lakebed has some naturally occurring shallow brine pools.</p> <p><i>COMMENT No. 1</i></p>
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