Lahontan Regional Water Quality Control Board

EXECUTIVE OFFICER'S REPORT

February 2002

NORTH BASIN

1. Status Report on USFS Removal Action at Inactive Colorado Hill Mines, Alpine County – John Steude

As I previously reported to you, the US Forest Service, Humboldt-Toiyabe National Forest (USFS) has initiated actions to examine and abate water quality and waste disposal problems from the inactive mining area generally known as Colorado Hill. As part of the USFS activities pursuant to the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), the first official Technical Advisory Group (TAG) meeting for Colorado Hill took place on January 17, 2002. Representatives from the USFS, US Environmental Protection Agency, US Fish and Wildlife Service, University of Nevada at Reno, Markleeville Chamber of Commerce, and the Regional Board participated in the meeting and are official members of the TAG, which will meet approximately quarterly.

At the meeting, USFS staff and contractors provided presentations on: (1) USFS authorities and procedures for funding and implementing the CERCLA, (2) an overview of site conditions at various mines and waste dumps within the scope of the Colorado Hill CERCLA Removal Action, and (3) the status of the site investigation and Engineering Evaluation/Cost Analysis (EE/CA) for Removal Actions that are being contemplated there. The EE/CA is on schedule to be completed in 2002. However,

at the TAG meeting the USFS announced that the 2003 funding necessary to implement the EE/CA (i.e., the actual, physical Removal Action) has been postponed to 2004.

As part of the hydrogeologic site investigation for the EE/CA, tunnel dewatering at certain Colorado Hill sites began on February 5, 2002, and should take approximately 8 to 10 days to complete. USFS contractors will be conducting pumping tests, treating acidic mine water on-site, and infiltrating treated mine water back into the ground according to a work plan provided at my request. Staff inspections of the dewatering activities are being conducted to ensure that the work is conducted in compliance with the work plan and with appropriate waste management practices.

A meeting with technical and legal representatives from the USFS and the Regional Board has been scheduled for February 20, 2002, to discuss a draft Memorandum of Understanding for the Colorado Hill site. At issue is the Regional Board's role in coordinating with, and/or overseeing, the USFS activities undertaken under CERCLA to ensure that applicable state requirements are met and water quality is improved and protected.

2. Update on Squaw Valley Public Service District, Water Supply Well No. 3 and the

Opera House UST Diesel Contamination, Placer County – Tammy Lundquist

Squaw Valley Ski Corporation (Ski Corp) installed a mid-level groundwater monitoring well, MW-9, in March 2001 to check potential migration of diesel contamination into a deeper zone. Plume migration into the deeper zone concerns Board Staff because the Squaw Valley Public Services District (SVPSD) Supply Well No. 3 is screened in the deeper zone.

Ski Corp measured concentrations of total petroleum hydrocarbons as diesel (TPHd) in MW-9 at 130 micrograms per liter ($\mu g/L$) during the December 2001 sampling event. The taste and odor threshold for TPHd is 100 $\mu g/L$. Municipal Supply Well No. 3 remains threatened because TPHd contamination is deeper in the drinking water aquifer and apparently closer to Supply Well No. 3's intake than originally thought.

On January 25, 2002, Staff met with SVPSD General Manager and the SVPSD attorney to discuss the TPHd contamination that potentially threatens Supply Well No. 3. SVPSD would like to resume operating the well provided the Responsible Party, Ski Corp, acts to protect Well No. 3. SVPSD's General Manager indicated he would draft a letter requesting Staff to work with Ski Corp to ensure Ski Corp protects Well No. 3 from the TPHd contamination. Following SVPSD's written request, Staff will request Ski Corp to sample Well No. 3 pursuant to SVPSD's proposed sampling regimen.

Fortunately, TPHd contamination has never been detected in Well No. 3, but the well hasn't operated since October 1998. SVPSD shut the well off after Ski Corp discovered the TPHd contamination in the

groundwater at the Opera House site. SVPSD and Staff anticipate the sampling regimen will provide the necessary safeguards for Well No. 3 and will also show if TPHd, even at low concentrations, has entered the well.

3. Meyers Beacon Gas Station, El Dorado County - Lisa Dernbach

An off-site groundwater investigation was conducted by the Regional Board's consultant, Secor, in December, for a detached MTBE plume from the Meyers Beacon Station. Multi-depth groundwater samples collected from nine locations show the plume has migrated about 2,000 ft. One downgradient monitoring well shows MTBE concentrations at 170 ppb. The migrating plume threatens the Upper Truckee River, approximately 800 ft away.

Board staff is amending the contract to continue consulting services with Secor for the remainder of this year. The contract scope of work will include current tasks, such as groundwater monitoring and operating the on-site pump and treat system. Additional tasks will include installing a soil vapor extraction system to treat the contamination at the underground storage tank basin, installing additional downgradient monitoring wells, and extracting and treating the detached MTBE plume. The latter tasks are scheduled for implementation during summer 2002.

On a related note, the South Tahoe Public Utility District is installing wellhead treatment on the Arrowhead #3 municipal well. The municipal well, installed several years ago to replace two municipal wells, has never been put into service due to MTBE detections. Wellhead treatment will consist of hydrogen peroxide and ozone.

The municipal well is scheduled for startup on Memorial Day weekend.

4. Update on aquatic herbicide use and Eurasian watermilfoil in Lake Tahoe – Jason Churchill

The Regional Board heard an item at the January 2002 meeting regarding a proposal by the Tahoe Keys Property Owners' Association (TKPOA) to apply aquatic herbicides in the Tahoe Keys, for control of the invasive weed Eurasian watermilfoil. Dr. Lars Anderson, a UC Davis aquatic weed control specialist, indicated that application should take place in the spring. On February 5, 2002, I issued a Notice of Exclusion (NOE), denying the TKPOA coverage under the statewide Aquatic Pesticides General NPDES Permit (the Permit). I may consider withdrawing the NOE if the TKPOA submits a detailed project proposal addressing Regional Board concerns. Since the January Board meeting, we have not been contacted by the TKPOA regarding this matter and no proposal has been received.

On a related note, Regional Board staff is preparing a "Eurasian watermilfoil" fact sheet for distribution to interested parties, including marina owners and local agencies. The fact sheet will describe the Eurasian watermilfoil problem, management options, and Regional Board regulatory requirements applying to control activities.

SOUTH BASIN

5. Apple Valley Landfill – Christy Hunter

San Bernardino County has completed the final phase of a pilot-scale, enhanced landfill gas venting system at the Apple Valley, Class III landfill. This project uses a wind-

assisted barometric pumping system that is intended to extract landfill-generated gas (LFG) from the landfill refuse. Because of the landfill's unique site conditions, wind-power may prove to be the most cost effective energy source for this system. Consultants completed final testing and have placed the system in operation in February 2002.

The County implemented, in late 1995, a pump and treat system to assess aguifer conditions for an engineering feasibility study of this site. The volatile organic constituents (VOCs) (i.e., tetrachloroethylene, trichloroethylene, and Freon compounds) that have degraded ground water have been attributed to migration of LFG, while inorganic and some organic impacts are attributed to old septic waste ponds. The objective of this windpowered gas extraction project is to determine the effectiveness of using windpower to extract LFG and thereby decrease VOC impacts to the ground water. As of the end of the Discharger's 2001-reporting period, the pump-and-treat system has processed about 3,954,152 gallons of ground water. And while some VOCs show a decreasing trend, it is still too early to determine when clean up levels will be attained.

6. Molycorp Cleanup and Abatement Order Compliance Status Update - Steve Fischenich and Curt Shifrer

The Board adopted Revised WDRs (Revised WDRs) for Molycorp's Interim Plan for operation of its tailings pond (P-16) in November 2000. Molycorp subsequently installed a liner on a portion of the existing tailings surface within P-16. Molycorp is currently mining and discharging tailings to the lined area. Progress continues on the environmental review for a new long-term

tailings disposal facility. Revised WDRs require Molycorp to stop discharging to P-16 by November 6, 2002 and complete closure (final cover) of P-16 by October 1, 2004.

In March 2001 I issued an amended Cleanup and Abatement Order (Amended CAO) requiring Molycorp to improve capture and removal of the wastewater leakage located outside of the lined area on P-16. Currently, the greatest potential for leakage is dewatering through tailings settlement, drainage of free liquid from tailings, and migration of wastewater leakage in the ground water mound underlying P-16. In early 2001 Molycorp installed and began operating two additional extraction wells to improve the existing P-16 Corrective Action Systems. Ground water levels at the two extraction well sites have dropped over 100 feet. Piezometric levels in shallow and deep tailings, and underlying fractured bedrock continue to drop steadily. Molycorp disposes of captured leakage by evaporators located on the lined portion of P-16.

By October 2001 Molycorp had constructed and began operating an extraction well for the Corrective Action System located in the western portion of the Mine Site near the old tailings pond (P-1). Mathematical modeling indicates the System (new extraction well and an existing extraction well) is expected to capture any residual pollutants migrating to ground water from the vadose zone underlying P-1, prevent onsite pollutants from migrating offsite, and cause significant offsite pollutants to be drawn onsite into the extraction wells. The amended CAO requires the Discharger to submit a report by March 29, 2002 evaluating the effectiveness of the corrective actions.

A Revised Report of Waste Discharge (RWD) was recently submitted by Molycorp for the New Ivanpah Evaporation Ponds (NIEP) as required by Amended Cleanup and Abatement Order No. 6-98-20A3. Molycorp recommended a ground water cleanup remedy that involves the continued monitoring of ground water conditions, with strategic aquifer management as a contingency measure (provide an alternate water supply in the event a user's water supply well is impacted).

Staff has determined that additional information is needed to complete the RWD, including additional ground water modeling, results of historical wastewater testing, completion of a risk assessment report, and further discussions on California Environmental Quality Act (CEQA) concerns. Staff met with Molycorp and the Radiologic Health Branch of the California Department of Health Services (RHB), on January 3, 2002 to discuss a Feasibility Study to evaluate alternatives for closure of the NIEP and a radiological risk assessment to be prepared using RHB approved methodology. The risk assessment will assess human health and environmental risk for NIEP soils and other sites impacted with radioactive materials. The Feasibility Study will include Molycorp's recommended alternative for closure of the NIEP soils. Staff sent out a letter requesting that Molycorp complete and submit the Feasibility Study and risk assessment by March 30, 2002.

7. Notice of Preparation of Draft Basin Plan Amendments Sent out to Trustee Agencies and Interested Parties – Shannon K. Smith

A Notice of Preparation (NOP) was sent out to interested parties and trustee agencies on February 5, 2002. The notice outlined

several amendments that will be proposed in an upcoming Functional Equivalent CEQA document that is currently being prepared by staff.

Four of the five proposed amendments deal with the removal and/or addition of beneficial uses to several surface waters, including:

- Amargosa Creek
- Paiute Ponds
- Rosamond Dry Lake
- Searles Lake
- Owens Lake and Laurel Pond

A Use Attainability Analysis (UAA) will determine the appropriate existing and potential beneficial uses for each water body.

The fifth proposed amendment deals with amending exemption criteria for Mojave Hydrologic Unit Prohibitions Nos. 2 and 4. The amendment, if adopted, would allow dischargers to apply for exemptions to discharge treated sewage to the surface waters under stormwater conditions, provided that the discharges are protective of water quality.

The Functional Equivalent Document is expected to be released for public review in summer 2002.

8. Town of Mammoth Lakes Erosion Control Memorandum of Understanding – Doug Feav

A stormwater workshop for the Town of Mammoth Lake is being arranged by Board staff in cooperation with San Francisco Bay Region staff. The contents of the workshop will focus on stormwater issues relevant to local County agencies, private contractors, and Town of Mammoth Lakes staff. Caltrans has expressed an interest in attending the workshop. The workshop will focus on pre-construction measures to ensure adequate erosion control practices, maintenance, inspections, waste management disposal, temporary and permanent erosion control, Best Management Practices (BMPs) and testing and reporting practices. The workshop is scheduled to be held in Mammoth in April 2002.

No new projects have been proposed since last month's report. Board staff have reviewed and found the plans submitted to date to be adequate.

9. Interest in Citizen Monitoring Expands - Cindi Mitton

Lee Vining High School students are interested in participating in citizen monitoring in the Mono Lake Basin. SWRCB citizen monitoring staff met recently in Lee Vining to discuss potential monitoring parameters and protocols for the program. A central component of the student-monitoring project will be a Streamside Biosurvey. The Mammoth Water Watchers Citizen Monitoring Group has expressed interest in working with Lee Vining High School and has incorporated some bioassessment quality control features into its Quality Assurance Project Plan. Staff of the Sierra Nevada Aquatic Research Lab have agreed to review student taxonomic identifications and to provide the students classroom and field training in bioassessment monitoring. The group is in the process of determining monitoring locations and sampling frequencies

10. **IMC Chemicals (IMCC), Trona** – Kai Dunn

Improving Technology

IMCC is conducting an analytical study to evaluate whether the total recoverable petroleum hydrocarbons (TRPH) analytical procedure can successfully analyze the concentration of phenols potentially present in IMCC's discharge. Due to the makeup of phenols that could be expected to be present at IMCC, the previous methods did not work. The phenolic compounds used by IMCC may be able to be detected better using the TRPH analytical method studied by IMCC rather than the typical method used for total phenols. Additionally, the holding time and analytical study to evaluate formaldehyde in IMCC brine is ongoing. To date, IMCC has evaluated analytical methods for total petroleum hydrocarbons (TPH), TRPH metals and the chemicals discussed above.

Compliance Status

Results from daily sampling of effluent shows that the interim effluent limit for TRPH in the WDRs was exceeded twice during the month of January. Twelve bird deaths were reported during the same period. IMCC received necropsy results from the Department of Fish and Game. Those results indicate that 25% of the birds were diagnosed with salt toxicity, 20% with infections and/or parasites, and 56% died of unknown causes.

Based on staff's comments, IMCC is revising its lake cleanup work plan. IMCC has started cleanup activities of certain sites according to an intermediate implementation plan for site cleanup. Staff is continuing to work with IMCC regarding final cleanup levels.

IMCC has submitted two work plans to evaluate alternatives to address planned maintenance pipeline discharges and unplanned leaks to the lakebed. Staff is reviewing these work plans and will provide comments. Board staff is proposing a workshop to be held at the April 2002 Board meeting that will include information from IMCC's study of bird usage and mortality at Searles Lake and other water quality issues.

Basin Plan Amendment

The Notice of Preparation for an environmental document to support proposed changes to beneficial use designation for Searles Lake within the next Basin Plan update has been finalized and mailed out for public review. Environmental investigations are currently underway to determine the appropriate site-specific surface water beneficial uses for Searles Lake. Site specific beneficial uses relating to plant and animal life may be developed. These uses relate to Wildlife Habitats and Inland Saline Water Habitats.