

EXECUTIVE OFFICER'S REPORT

January 2002

NORTH BASIN

1. ***Tahoe South "Y" PCE Investigation - Lisa Dernbach***

Over the past three years, Regional Board Staff has required potential responsible parties to conduct ground water investigations to determine if their properties are sources of tetrachloroethene (PCE) in municipal wells in the "Y" area of South Lake Tahoe. The letters were sent to parties that had used solvent chemicals. Entities receiving these letters included car dealerships, auto body shops, a high school, a printing shop, a former dry cleaner, and the City of South Lake Tahoe motor pool maintenance yard. Of all the investigation reports submitted to date, three sites are now considered by staff to be potential sources of PCE: Big O Tires, a former Honda dealership, and a former dry cleaner.

The Big O Tire site contains the highest concentration of solvent constituents in ground water, including PCE up to 4,700 micrograms per liter. The responsible parties have been directed to submit a workplan by February 3rd to conduct additional investigations and evaluate the extent of contamination. The site is located about 900 ft from the Clement municipal well, owned by the South Tahoe Public Utility District. Before the Clement well was shut down two years ago for MTBE contamination, PCE was detected at 140 µg/l and the district provided wellhead treatment by air stripping.

The drinking water standard for PCE is 5 µg/l.

The other two sites, the Honda dealership and the dry cleaners, show PCE concentrations in ground water an order of magnitude less than at the Big O Tire site. The two sites are somewhat downgradient of the Big O Tire property. Staff will wait until we receive the results of the next Big O Tire investigation to determine if the responsible parties for the dealership and dry cleaners should also be directed to conduct further investigations.

2. ***Grazing Impacts in Huntoon Valley, Mono County – Bud Amorfini***

Staff has received complaints about and has observed water quality impacts from sheep grazing in the Huntoon Valley which is located approximately 10 miles north of Bridgeport. Citizen monitoring provided to the Regional Board that indicates water quality impairment in Swauger Creek downstream of the grazed area.

Complaints/observations indicate that: 1) overgrazing has destabilized soils; 2) waste earthen materials from clearing eroded soil from ditches were side cast onto wetlands; 3) ditch clearing work increased turbidity in Swauger Creek; 4) stream banks along Swauger Creek and its tributaries are down cut, unstable, and stripped of riparian vegetation; and 5) down stream water quality was adversely affected in terms of temperature, ammonia, turbidity, dissolved

oxygen, and total dissolved solids based on water quality sampling information provided.

Staff sent a letter to the landowner expressing these concerns. A copy of the *California Rangeland Water Quality Management Plan State Water Resources Control Board, 1995* requirements was provided to the land owner, Sario Livestock Company, along with a request to assess impacts and implement management measures to protect water quality. The land owner was also referred to available assistance offered by the Natural Resources Conservation Service and University of California Cooperative extension. The letter from staff requested that the land owner inform us by March 31, 2002 of the action planned to be taken.

3. ***Haiwee Reservoir Copper TMDL Status: Studies Planned for Summer 2002 – Anne Sutherland***

A Progress Report for the Haiwee Reservoir Copper Total Maximum Daily Load (TMDL) was submitted to the USEPA on June 29, 2001. During TMDL analysis, it became evident that additional data were needed to develop meaningful numeric targets for copper in the reservoir and to devise an implementation plan that would balance and protect all beneficial uses of the reservoir. Further, on July 19, 2001, the State Water Resources Control Board adopted a statewide General NPDES Permit for the discharge of aquatic pesticides to surface waters. Adoption of this permit is directly relevant to implementation plan development for the Haiwee Reservoir TMDL. The General Permit grants a categorical exception from requirements to meet applicable water quality criteria and objectives for priority pollutants, including copper. It is available to dischargers who

conduct resource or pest management programs in order to fulfill statutory requirements, and to protect beneficial uses of water and the public health. The categorical exception is intended to limit the extent and duration of impacts to receiving water due to water supply management practices.

On September 18, 2001 staff held a teleconference with the operators of the Haiwee Reservoir complex, the Los Angeles Department of Water and Power (LADWP). The implications of the General Permit and the direction of studies at Haiwee Reservoir were discussed. Following that discussion, a workplan was submitted by LADWP to collect water samples at the reservoir under ambient conditions (i.e., when copper sulfate is not being discharged) to determine concentrations of dissolved copper and detect the presence of any acute or chronic toxicity. Studies are also proposed for intensive sampling during a copper sulfate discharge to collect data on the fate and transport of copper following discharge.

These studies will be conducted during the summer of 2002. The results will be used to develop a site-specific relationship between total and dissolved copper and to determine if toxicity exists under ambient conditions. The data will also help ascertain the appropriate physical and temporal zone of impact where acute copper criteria may be temporarily exceeded, as allowed under the General Permit.

The study results will be submitted in a series of interim reports so that appropriate next steps can be implemented quickly. Following data review, staff will complete the final Haiwee Reservoir Copper TMDL, with specific numeric targets, loading capacities and allocations, and an

implementation plan. I anticipate that the TMDL and implementation plan will be ready for Board consideration as a Basin Plan amendment in June 2003.

4. ***Forest Service proposes CERCLA cleanup action at former Meyers Landfill, Lake Tahoe Basin, El Dorado County - James Brathovde***

The U.S. Forest Service (USFS), acting as the lead agency, has requested public comments for proposed remedial alternatives for cleanup of the closed Meyers Landfill and associated contaminated groundwater. The USFS' preferred remedial alternative for the Meyers Landfill site involves capping the landfill mass with an impermeable cover and remediating the groundwater by installing multiphase extraction wells and discharging treated water via infiltration trenches.

The Meyers Landfill site is a closed municipal landfill previously operated by El Dorado County on federally owned land administered by the USFS. The landfill closed in 1973 and was covered with native soil. The volatile organic compounds (VOC) contamination is produced by the degradation of organics within the landfill mass. Precipitation and snowmelt permeates the landfill mass and carries VOC contaminants into the shallow groundwater aquifer. One VOC degradation product of particular concern is vinyl chloride, which is highly toxic and has been detected in groundwater nearly 1,500 feet beyond the footprint of the landfill and threatens Saxon Creek, a tributary of Trout Creek.

VOCs were first detected in groundwater beneath the landfill in 1991. Vinyl chloride was detected downgradient of the landfill in 1996, and at the request of the Regional Board, the USFS initiated remedial

investigation action under the Federal Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLA requires, in part, that the proposed remedial actions prevent the landfill from acting as a continuing source of contamination. The feasibility study plan identifies three cleanup alternatives: (1) removing all landfill wastes and clean closure, (2) an impermeable cap using an in-situ reactive barrier to treat groundwater, and (3) the least costly and preferred option, an impermeable cap with groundwater treatment using multi-phase extraction. The USFS will select an alternative after the public comment period which ends February 15, 2002. Staff will be providing comments on the proposed plan and will continue working with the USFS and El Dorado County during the remediation process.

5. ***6,000 Gallon Petroleum Release at the Pat & Ollies – Gateway Gasoline Station, 11015 Donner Pass Road, Truckee, Nevada County – Tammy Lundquist***

On December 21, 2001 a single-wall fiberglass underground storage tank (UST) failed and released approximately 6,000 gallons of premium unleaded gasoline into the soil and underlying subsurface.

Continuous recovery of free product from the subsurface commenced December 24, 2001. Since the release, numerous groundwater wells have been installed for extraction and monitoring to facilitate free product removal and to obtain hydraulic control of the plume. As of January 10, 2002, about 3,500 gallons (free product and some groundwater mixed in) have been extracted from the subsurface.

The UST was removed on December 27, 2001, and a one-inch hole was discovered in

the tank bottom, which was suspected to be the point of fuel release. Staff is preparing a Cleanup and Abatement Order to direct the Responsible Party in cleanup efforts.

6. ***Use of the fish toxicant rotenone planned by Department of Fish & Game, Silver King Creek, Alpine County – Jason Churchill***

The California Department of Fish & Game (DFG) is proposing to use the fish toxicant rotenone beginning Fall, 2002, as part of a program for restoring the endangered Paiute Cutthroat Trout (PCT) to its historic habitat in the Silver King Creek wilderness area. Rotenone is a pesticide used to eradicate introduced fish species that have a competitive advantage over the native fish. The PCT was successfully restored to upper portions of Silver King Creek following rotenone treatments in 1990, 1991, and 1992. The current proposal involves rotenone treatment to expand the PCT population to additional downstream areas. Treatments are planned on five or more miles of the Creek and its minor tributaries over several successive years, followed by introducing PCT to the treated area. In August 2001, staff met at the proposed project area with DFG and personnel from other agencies (USFS Humboldt-Toiyabe National Forest, U.S. Fish and Wildlife, CalTrout) to learn more about the proposed project. DFG is presently in the process of preparing California Environmental Quality Act compliance documents for the proposed project.

Rotenone use by DFG in the Lahontan Region is controlled under Basin Plan provisions that allow for a variance to water quality objectives and waivers of waste discharge requirements provided specific conditions are met. (For additional

information, see the Basin Plan at Section 4.9, pp. 23.) A Memorandum of Understanding (MOU) was executed between DFG and the Regional Board in 1990 to implement the Basin Plan provisions. In addition, following a 2001 decision by the U.S. Ninth Circuit court, discharges of aquatic pesticides to waters of the U.S. must be regulated by a Clean Water Act National Pollutant Discharge Elimination System (NPDES) Permit.

Rotenone use by DFG for fishery management is eligible for coverage under a statewide Aquatic Pesticides General NPDES Permit (General Permit) adopted by the State Water Resources Control Board in July 2001. Following discussions between staff at the Regional Board and DFG, I intend to authorize the proposed Silver King Creek project to proceed under the General Permit only if applicable provisions of the MOU and the Basin Plan are also met. The General Permit allows the Regional Boards latitude for incorporating these MOU and Basin Plan requirements, including project-specific monitoring plans subject to my approval. I understand that the DFG staff does not object to this regulatory approach, and is working cooperatively with our staff to ensure the proposed project meets all requirements.

In addition to the active ingredient, rotenone, formulations may contain "inert" ingredients and trace organic contaminants (such as known and suspected carcinogens benzene and trichloroethylene, respectively). The Basin Plan provisions encourage DFG to promote the development and use of rotenone formulations that contain less-objectionable "inert" ingredients. In January 2002, DFG staff reported that they are currently conducting lab tests with such a formulation (used successfully in the

Netherlands for many years) that shows considerable promise towards meeting this aim. If authorized by the California Department of Pesticide Regulation, DFG may propose a limited field test of the alternative formulation on a tributary of Silver King Creek during this year's treatment.

7. ***Update on aquatic herbicide use in Lake Tahoe – Jason Churchill***

At the January 2002 meeting, the Regional Board heard an information item regarding spread of the invasive aquatic weed Eurasian watermilfoil in Lake Tahoe, and a proposal by the Tahoe Keys Property Owners' Association (TKPOA) to use herbicides to control this weed in the Tahoe Keys. As discussed at the meeting, it is my intent to issue a Notice of Exclusion (NOE) denying coverage to TKPOA under the statewide Aquatic Pesticides General NPDES Permit (General Permit). I expect to receive a detailed submittal from TKPOA describing pilot project proposal sometime before March 2002. Based on the information provided in that submittal, I may, after advising the Board, consider withdrawing or modifying the NOE in order to allow the pilot project coverage under the General Permit. As of this date, we are not aware of any other proposals to use aquatic pesticides in the Lake Tahoe Basin under the General Permit.

On a related matter, Regional Board staff participated in a kickoff meeting for a Lake Tahoe Basin Weed Management Group on January 16, 2002. The group includes representatives from various agencies and the public with an interest in noxious weed problems (including both terrestrial weeds and aquatic weeds such as Eurasian watermilfoil) in the Basin. The group will

function to provide outreach and education, and coordination amongst agencies involved in weed control efforts. Eurasian watermilfoil will be a topic of concern in future meetings, but no new information regarding Eurasian watermilfoil was provided during the kickoff meeting.

8. ***Eagle Lake CSD/Spalding Tract – Scott Ferguson***

The Spalding Community Service District (District) is continuing to make progress towards designing and constructing a community wastewater treatment system that would comply with Basin Plan prohibitions for the Eagle Lake Basin. The District has consultants working on the system design that addresses both the collection and treatment systems.

The District's latest challenge is to address the potential impacts to bald eagles identified in a recent United States Fish and Wildlife Service (USFWS) Biological Opinion. The District's proposed site for wastewater treatment facilities is currently owned by the United States Forest Service (USFS). The District has been in negotiations with the USFS to acquire the proposed project site and, as part of the land transfer process, the USFS must consult with the USFWS. The USFWS has concerns regarding the potential indirect and cumulative impacts of the wastewater treatment facilities on the Eagle Lake bald eagle population.

The District is currently working with the necessary agencies in an effort to understand and address the USFWS concerns and to continue moving forward on the project. The District and Lassen County Board of Supervisors have brought this latest challenge to staff's attention. Staff intends

to send a letter to the USFWS explaining the history of and water quality benefits associated with the project proposal. The letter will be silent regarding the proposed mitigation measures for bald eagle protection.

SOUTH BASIN

9. *Proposed Desert Ground Water Management Ordinance for the County of San Bernardino - Christy Hunter*

San Bernardino County solicited comments concerning a proposed ordinance that would regulate ground water extraction, through a well permitting program, for specific areas of the high desert of San Bernardino County. The purpose of this ordinance is to ensure that, in addition to a well construction plan, ground water plans detailing the aquifer's characteristics are submitted for approval for certain future ground water extraction projects in unprotected, unmanaged desert ground water basins with the goal being the protection of ground water resources. The focus of the ordinance are large industrial, commercial, or municipal development projects requiring large amounts of ground water that could rapidly deplete an aquifer. In the Lahontan Region, the area exempt from this ordinance includes the area under jurisdiction of the Mojave Water Agency, which includes a substantial part of the Victor Valley region. Other exclusions include previously permitted wells, wells to be pumped for less than thirty acre-feet per year, and mining operations for which a mining reclamation plan has been established, just to name a few. The ordinance allows San Bernardino County to deny issuing a well permit when they determine the application is not complete or where the well operations proposed would result in

overdraft of the aquifer individually or in conjunction with other wells.

Board staff reviewed this draft ordinance and provided comments to San Bernardino County staff. Overall, this ordinance if enacted, would appear to have little or no effect on the Regional Board activities, and/or mission.

10. *Mammoth Lakes Erosion Control Memorandum of Understanding (MOU) Status of Compliance – Doug Feay*

Soil disturbance construction activities have been curtailed due to winter snow conditions within the Town of Mammoth Lakes (Town). During this time, Town and Board staff are working on project review and planing approval for new construction projects that will be starting in the spring.

As agreed during the Regional Board's October 2001 meeting, Town staff submitted for our review two new Intrawest construction projects. The two new proposed projects are called Crooked Pines and Juniper Crest. Crooked Pines is a development of ten single family lots and infrastructure along Lodestar Drive. The lots are to be sold for individual development. Juniper Crest will consist of 11 buildings containing 27 dwelling units and infrastructure. Both projects are required to provide details of the Best Management Practices (BMPs) that will be implemented for erosion control during project construction. Board staff provided comments to the Town regarding the adequacy of stormwater BMPs for the new projects. Staff will be inspecting these new sites to insure that construction BMPs are in-place and adequate to protect from off site discharge of sediment. The Town has also informed Board staff that it will inspect these

and all continuing construction sites during the spring 2002 runoff to assure that BMPs are functioning and no offsite discharges of sediment occur.

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

Improving Technology

Recent analytical studies found that unpreserved IMCC brine samples tend to lose approximately 50 percent of the measurable formaldehyde in one day. IMCC and its consultants are conducting a preservation and holding time study to evaluate an appropriate preservation method and sample holding time to achieve accurate analytical results. Staff provided comments on the holding time study work plan and the analytical study is in progress.

Compliance with Board Order

Daily reporting data from IMCC shows that interim effluent limitations set forth in the WDRs have not been exceeded during the month of December 2001. Fifteen bird deaths were reported during the same period. The cause of the bird deaths is unknown. Necropsies have been performed on collected birds, however the results are inconclusive. Board staff reviewed the work plan for the formaldehyde and phenol background study. Comments to IMCC were provided requesting an alternate approach to determine the background concentration for formaldehyde and phenol in the brine and requested IMCC to re-submit a revised work plan. Board staff is reviewing the report of site characterization and work plan for site cleanup and will schedule a meeting with IMCC and its consultants to discuss the risk assessment and the cleanup levels.

Basin Plan Amendment

IMCC is preparing a hydrological survey report for the draft use and attainability analysis to support the next Basin Plan amendment.

12. ***U.S. Borax Complies – Liz Lafferty***

Staff performed a compliance inspection of the U.S. Borax facility on December 18, 2001. The Mining and Mineral Processing Facility is undertaking significant upgrades in equipment and repairs in response to Board staff's Notice of Violation (NOV) which was issued on May 16, 2001 due to apparent increase in accidental spills. Borax uses six one-million gallon above ground "thickener" tanks for dewatering process material at different stages of production. Past experience has shown the tanks are a source of spills to the ground surface. Borax has provided a plan to retrofit each tank with double walls and to prepare new paved drainage-ways through the bermed tank containment area. The drainage-ways will convey any runoff or product spillage directly to the appropriate effluent evaporation ponds.

Underground piping damage has been a source of spills (a threat to water quality) in the past year. The spilled material reached unpaved roads and a stormwater retention basin. Staff requested a piping diagram to indicate potential source locations for leaks. A piping diagram is in preparation for the entire facility. The inspection found that locations of underground piping have now been marked with digging-safety signs.

Additional product effluent spills occurred when three automatic three-thousand gallon-per-minute pumps were turned off. A new

overflow basin was immediately built to containerize 60,000 gallons of effluent immediately downgradient of the large pumps. Special permission was obtained from OSHA to lock-on those pumps so that they would automatically turn on to move a spill to the appropriate effluent evaporation pond.

Each mine and plant worker must attend a one-half hour hazardous material safety and awareness training each month to reduce the number of accidental spills. Each of the other items listed in the NOV has been appropriately addressed or is in ongoing construction to attain compliance in a timely fashion. Staff is satisfied with the actions U.S. Borax has taken and/or planned to minimize spills.

13. *Marine Corps Logistics Base (MCLB) Barstow- Restart of Ground Water Extraction, Treatment and Recharge System, Operable Unit One (OU-1), Yermo Annex Barstow - Jehiel Cass*

In accordance with a Record of Decision for OU-1, a Ground Water Extraction, Treatment and Recharge System (GETRS) was installed in 1996 at the Yermo Annex of the MCLB to provide hydraulic containment of three plumes of dissolved volatile organic compounds (VOCs). The system consists of 13 extraction wells, Granular Activated Carbon (GAC) vessels for VOCs removal, and treated water piping to two infiltration galleries located adjacent to the MCLB municipal drinking water wells. The system was designed to treat 1,600 gallons per minute but by 2000, the extraction rates had declined to about 500 gallons per minute due to a dropping water table. In late 2000 and early 2001, methyl tertiary butyl ether (MTBE) was detected in MCLB monitoring wells located in the southern portion of the

base. MTBE had also been detected in ground water beneath the CalNev Pipeline Company's Daggett Terminal located adjacent to and south of the Base. Site investigation at the terminal continues under Cleanup and Abatement Order No. 6-99-15A1. MCLB determined that it was likely that MTBE may soon be present in the extracted ground water. In January 2001 the GTRS was shut down to prevent the breakthrough of MTBE into the aquifer through the infiltration galleries. Since then the MCLB has evaluated options to address this situation and in early 2002 plans restart the GETRS; and 1) install two additional GAC vessels to ensure that all MTBE will be removed; and 2) install two deeper extraction wells to contain the VOCs plume migration.

14. *Secretary of Energy Officially Notifies the Governor of Nevada of His Intent to Recommend Yucca Mountain as a National Nuclear Waste Repository - Tim Post*

In a letter dated January 10, 2002, Secretary of Energy Spencer Abraham notified Nevada Governor Kenny Guinn of his intent to recommend to the President approval of the Yucca Mountain site for development as a high-level nuclear waste repository. The Nuclear Waste Policy Act also requires the Secretary to submit to the President a comprehensive statement of the basis for that recommendation. Abraham noted that the recommendation will include the basis for, and documentation supporting, his belief "that the science behind this project is sound and that the site is technically suitable for this purpose" and that "there are compelling national interests that require us to complete the siting process and move forward with the development of a repository." The complete basis for recommendation will be available to

the public once the formal recommendation is delivered to the President.

The Governor of Nevada can veto the Secretary's decision to recommend the site. It is then up the U.S. Congress and Senate to vote to either approve or override Nevada's objection.

Since 1985, California has provided comments on various proceedings and documents for the proposed Yucca Mountain Project, including comments on the Department of Energy's Draft Environmental Impact Statement and comments to DoE in October 2001 on the possible approval of the Yucca Mountain project. The California Energy Commission coordinates a Yucca Mountain Technical Review Group, made up of 13 California transportation, water quality, and environmental agencies. This group met January 14 and 15, 2002, to update the October 2001 comments and prepare a summary list of findings and recommendations regarding DoE's recommendation of the Yucca Mountain site to the President.

15. *Cleanup Underway at Former Fuel Farm at Armitage Field China Lake Naval Air Weapons Center - Elizabeth Lafferty*

The fuel farm at Armitage Field consisted of four 50,000-gallon and two 100,000-gallon, reinforced-concrete underground storage tanks (USTs). The USTs were constructed in 1943 on pre-poured concrete pads, with concrete walls, in a twenty-foot-deep excavation. Between the wall and the bottom of the tanks a thin rubber gasket was placed to "seal the tank." These seals were not tight and resulted in a loss of approximately one million gallons of jet fuel

during the 55 years of operation of the fuel farm.

US Navy removed the six USTs; and installed a Vacuum-Enhanced Skimming and Soil Vapor Extraction System to skim the free phase fuels from the water table and remove petroleum and solvent vapors from the unsaturated zone. The system has recovered 22,047 gallons of fuel and 18,181 gallons of solvents from the subsurface, along with only 400-gallons of water. The vapor extraction system has also recovered 3,866 gallons of benzene, toluene, ethylbenzene, xylene and solvents.

The Navy estimates that the site will be cleaned up in approximately 20 years, allowing for down time, regular maintenance of the system, and the fact that the petroleum hydrocarbons will be more difficult to remove toward the end of the cleanup period.