



EPA cleaning up 100 years of mercury tailings at Altoona Mine

Mark Neely

The Altoona Mine is an abandoned mercury mine located approximately 11 miles west of the town of Castella in Trinity County, California. The site is comprised of an abandoned and backfilled vertical mine, with an adjacent ore processing area, former retort areas, and waste rock and tailings piles. There are collapsed remains of wooden structures at the ore processing area, and other collapsed wooden structures are scattered about the periphery of the mine site.

The mine, a major mercury producer in operation from roughly 1895 until 1968, once boasted a hotel, a Post Office, and was the site of the first electrical grid in Trinity County. Supplied by mule trains in its early years, the mine benefited from its proximity to gold mining activities in the area, and liquid mercury's commercial value in the gold mining process. Later, the mine saw a spike in activity during World War II, when mercury was a 'strategic mineral,' necessary for the war effort.

Water from the mine flows from under tailings piles, down Soda Creek to the east fork of the Trinity River, which is approximately one mile to the southeast of the mine. The abandoned Altoona Mine was identified as the source of elevated mercury levels discovered in a 2000-2001 US Geological Survey of fish and amphibians in Trinity Lake and the Trinity River.



'The Repository' is a stunningly large, four-acre, 125 foot deep hole in the ground. It has been filled with the mine's toxic tailings and capped. Beginning in early July, a changing crew of 20 to 35 contractors worked 10 hours a day, six days a week, to build The Repository and fill it with the mine waste. Some final work remains for the spring, including tree planting and seeding, according to sources at the Forest Service, which joined the EPA on the project.

Tony D'Souza, Mount Shasta Area Newspapers

Humboldt Bay Ecosystem Based Management

Adona White

The Humboldt Bay Ecosystem Program (HBEP) began in November 2006 with funding from the State Coastal Conservancy. Regional Water Board staff were invited to participate on an advisory team to develop an ecosystem-based management framework, identify priority ecosystem issues, and develop funding proposals. Ecosystem Based Management is among the highest priorities resulting from the national ocean policy plans, the September 2004 Ocean Protection Act. The Ocean Protection Council Strategic Plan, and the September 2006 West Coast Governor's Agreement on Ocean Health. The mission of the HBEP is to increase our scientific understanding of the Humboldt Bay ecosystem and to create an integrated framework for resource management and collaboration that links the needs of people, habitats and species to ensure a healthy future for Humboldt Bay's natural and human communities. The participatory process allows and encourages issues of greatest concern to be discussed and practical, cross-jurisdictional solutions sought.



The Entrance to **Humboldt Bay**
northcoastphotos.com

The process has been facilitated by Susan Schlosser, Marine Advisor for the

Eureka Sea Grant office of University of California Cooperative Extension. Participants include representatives from NOAA Fisheries, HSU, CDFG, RSL, USFWS, RCAA, Cities of Eureka, Arcata, and Trinidad, County of Humboldt Public Works, and local consultants with expertise in restoration and planning. The HBEP adopted an ecosystem-based management approach to identify priority issues from the bay and watershed plans. This approach builds on hundreds of hours of community input, incorporates new knowledge, empowers the HBEP to act, and provides a unique opportunity to move forward. Ecosystem-based management offers a framework to address ecosystem issues, use scientific advances, develop economic opportunities and create policies to improve the effectiveness of human and natural resource management.



Arcata Marsh

www-csgc.ucsd.edu/.../HumboldtBayEBM.html

January 12-16, the HBEP will host a Strategic Planning Workshop. During the workshop, participants will provide essential expertise and the initial information needed to develop the Humboldt Bay Ecosystem Program Strategic Plan. *Foundations of Success* will facilitate the workshop, and provide training and technical assistance to develop the initial inputs for a strategic

plan for its second phase. An excellent example of a similar product was produced for Morro Bay and is available on the web at

<http://groups.ucanr.org/HumboldtBayEBM/Documents247/>.

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2008 305(b) and 303(d) Integrated Report *Rebecca Fitzgerald*

Regional Water Board staff are in the process of finalizing a Public Review Draft of the 2008 Integrated Report for the federal Clean Water Act (CWA) Section 305(b) Surface Water Quality Assessment and the CWA Section 303(d) List of Impaired Waters. Under CWA Section 305(b), states are required to report biennially to the US EPA on the conditions of their surface waters. The US EPA then compiles these assessments into their biennial "National Water Quality Inventory Report" to Congress. Under CWA Section 303(d), states are required to review, make changes as necessary, and submit to the US EPA a list identifying waterbodies not meeting water quality standards and identifying the water quality parameter (i.e. pollutant) not being met. Placement of a waterbody on this list generally triggers development of a total maximum daily load (TMDL). For 2008, California is integrating the 305(b) assessment and the 303(d) list into a single report, appropriately called the Integrated Report. Unlike in 2006 when the State Water Board developed the 305(b) Report and the 303(d) List without formal action by Regional Water Boards, the North Coast Regional Water Board is responsible for developing and adopting the 2008 Integrated Report for the North Coast Region. In all, staff

have analyzed data for over 500 waterbody/pollutant pairs. The release of the Public Review Draft is planned for January 2009, followed by two public workshops in February, an informational presentation at the March Board meeting, and an adoption Hearing at the April Board Meeting. The State Water Board plans to consider adopting the state-wide Integrated Report by the end of 2009.

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An update on recent enforcement actions and administrative civil liability (ACL) settlements

On November 24, 2008, the Regional Water Board Executive Officer issued a Notice of Violation (NOV) to **Malm Fireplace** for non-compliance with Cleanup and Abatement Order R1-2007-0014 and Monitoring and Reporting Program Order R1-2007-0062. Violations included: failure to submit monitoring reports and failure to install required additional monitoring wells. On August 29, 2008, the Executive Officer issued a NOV to Malm, in part for failure to submit a quarterly monitoring report. As of November 24, 2008, the Discharger had still not submitted the past due monitoring report cited in the August 29, 2008 NOV.

On December 11, 2008, David Leland, Chief of the Regional Water Board's Watershed Protection Division, issued a NOV to **Mendocino College Phase II** for failing to obtain coverage under a Municipal Storm Water Permit.

On December 12, 2008, David Leland, on behalf of the Regional Water Board Executive Officer, issued a NOV to

California Department of Transportation, Rte 253 Post Mile 7.75, Geotechnical Exploration, for unpermitted placement of fill, over spray of hydroseed and binder to a wetland, and threatened discharges of sediment waste to waters of the State. The Order requires submittal of a detailed investigation of events and impacts to beneficial uses that resulted from the violations, installation of erosion control measures, restoration of the impacted ephemeral drainage and wetland, and mitigation for the temporal losses of the beneficial uses of those waters of the State.

On December 12, 2008, the Regional Water Board Assistant Executive Officer issued Administrative Civil Liability Complaint No. R1-2008-0124 to **City Of Healdsburg, Wastewater Collection, Treatment and Disposal Facility** in the amount of \$369,000 in mandatory minimum penalties for violating WDRs Orders No. R1-2004-0111 and R1-2005-0084, and Cease and Desist Order No. R1-2006-0002. During the period from November 30, 2004 to April 30, 2008, Healdsburg exceeded effluent limitations 125 times.

On December 12, 2008, the Regional Water Board Assistant Executive Officer issued Administrative Civil Liability Complaint No. R1-2008-0123 to **McKinleyville Community Services District** in the amount of \$60,000 in mandatory minimum penalties for violating WDRs Order No. R1-2001-0060. During the period from June 1, 2005 to July 31, 2008, McKinleyville CSD exceeded effluent limitations 23 times while discharging to the Mad River.

On December 15, 2008, the Regional Water Board Assistant Executive Officer issued Administrative Civil Liability Complaint No. R1-2008-0127 to **Forestville Water District** in the amount of \$57,000 in penalties for violating WDRs Orders No. 95-54 and R1-2004-0027. During the period from February 29, 2000 to June 30, 2008, Forestville exceeded MMP effluent limitations 22 times while discharging to Jones Creek, a tributary to Green Valley Creek which is a tributary to the Russian River.

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Low Impact Development (LID) Update

John Short



Dearlership Parking Lot with LID feature

LID is a storm water management and land development strategy applied at the parcel, subdivision and watershed scale. LID emphasizes conservation and use of on-site natural features integrated with engineered, small-scale hydrologic controls to more closely mimic pre-development pollutant loads and hydrologic functions. The implementation of LID for new development is a priority for state and federal water quality agencies. There have been several recent developments in the area of LID implementation, within and outside of the Region, that are summarized below.

1. Storm water treatment offsets

CalTrans is proposing freeway widening projects along Hwy 101 in Sonoma County. Since the projects will include installation of significant areas of new pavement, CalTrans is required to provide treatment for storm water runoff generated from the expanded highway. In many areas, CalTrans has proposed to utilize vegetated road shoulders for storm water treatment. In other areas, there is not enough unpaved right-of-way to allow for runoff treatment. Staff have worked with CalTrans and local municipalities to develop storm water treatment offset projects to mitigate for approximately 15 acres of new impervious surface. At this time, project proposals have been submitted by Sonoma County, City of Santa Rosa and the Sonoma County Fairgrounds. Each proposal includes plans to install LID storm water controls at areas of existing development. Areas to be retrofitted include the parking lot for the Sonoma County permitting office, a residential roadway in Santa Rosa, and a large parking area at the Fairgrounds. Each LID demonstration site will have interpretive signage to educate and inform the public about LID. The projects will be funded by CalTrans.

2. State of Washington storm water permit appeal

On January 17, 2007, the state of Washington issued a Phase 1 NPDES municipal storm water permit. Seven parties appealed the permit. One of the permit areas contested included a claim that the

permit failed to require maximum use of “low impact development” techniques and that this failure unlawfully causes or contributes to violations of water quality standards. Specifically, the appeal questioned whether the Phase 1 permit failed to meet the required storm water treatment standard of reducing pollutants to the “maximum extent practicable” and applying “all known, available and reasonable methods of treatment”, because the permit does not require more extensive use of LID techniques.

A decision was issued on August 7, 2008. In what some call a landmark decision, the state was required to modify the permit to require the use of LID measures to mitigate impacts from new development. A video report of this story was recently shown on PBS’s “The News Hour with Jim Lehrer”. A video broadcast can be viewed from the following website -

http://extension.ucdavis.edu/unit/center_for_water_and_land_use/index.asp

3. Supplemental Environmental Project (SEP) projects

Provisions of the California Water Code allow for the Regional Water Board, with the concurrence of the discharger, to direct a portion of administrative civil liability (ACL) penalties to be expended on a supplemental environmental project (SEP) in accordance with the enforcement policy of the State Water Resources Control Board. SEPs are projects that enhance the beneficial uses of the waters of the State, provide a benefit to the public

at large, and, at the time they are included in an ACL action, are not otherwise required of the discharger. When the RWQCB is considering allowing a discharger to perform a SEP in lieu of some or all of a monetary assessment, the enforcement policy calls for the RWQCB to direct the discharger to a list of candidate SEPs. The discharger may select a SEP from the list of candidate SEPs or may propose a different SEP that satisfies the established criteria. Staff have worked with several North Coast communities including Fortuna, Eureka and Arcata as well as the California Coastal Commission in order to develop LID implementation projects suitable for consideration as future SEPs. Proposals include development of LID design manuals, training videos, educational meetings as well as “on the ground” LID installations with public education and outreach.

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