



DEPARTMENT OF CONSERVATION

OFFICE OF MINE RECLAMATION

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California Abandoned Mine Lands Forum February 21, 2007 Minutes

Meeting Location:

Shaw Environmental and Infrastructure
1326 N. Market Blvd. (east of Arco Arena)
Sacramento, CA
(916) 928-3300

Call In Number: 1-888-793-1765, **Passcode:** 31575 (*numbers may change each meeting*)

FACILITATION AND MEETING SUMMARY

Facilitator: Stephen L. Jenkins, Michael Brandman Associates

Minutes: Erika Bennett, Michael Brandman Associates

ATTENDEES

Randy Adams, CA Dept. of Toxic Substances Control	Scott Leiby, Carlton Engineering
Doug Carey, State Water Resources Control Board	Curtis Lindskog, Shaw Group Environmental
Jan Carey, CA Dept. of Conservation, Abandoned Mine Lands Unit	Carrie Monohan, Friends of Deer Creek
Derek Cole, Cota, Duncan, and Cole	Gene Lorange, CA State Parks
Doug Craig, CA Dept. of Conservation, Office of Mine Reclamation	Gene Mullenmeister, Shaw Group Environmental
Dennis Geiser, US Forest Service	Cy Oggins, CA Dept. of Conservation, Abandoned Mine Lands Unit
Tracy Gidel, Nevada County Dept. of Environmental Health	Greg Pelka, CA State Lands Commission
Esol Henson, Friends of Deer Creek	Sarah Reeves, CA Dept. of Conservation, Abandoned Mine Lands Unit
Rick Humphreys, State Water Resources Control Board	Eric Ringelberg, Wallace Kuhl and Associates
J. C. Isham, Shaw Group Environmental	Matt Salazar, Sustainable Conservation
Jere Johnson, US Environmental Protection Agency	Rick Weaver, US Forest Service
Dave Lawler, US Bureau of Land Management	Bill Whiteside, Blue Sky Technologies
Kyle Leach, Holdrege and Kull	Becky Wood, Teichert Aggregates

Start time: 10:05 a.m.

I. Welcome and Introductions

Stephen L. Jenkins, from Michael Brandman Associates, started the meeting by introducing himself as the meeting facilitator. Steve welcomed Abandoned Mine Land (AML) Forum attendees and reminded participants to sign in to help update the Forum distribution list. Steve then asked for introductions (name and agency/organization).

II. Announcements

There were no announcements.

III. Review Agenda and Minutes of Previous Meeting

Steve reviewed the agenda topics and the time allotted for each item. No agenda changes were made.

There were no suggested revisions to the November 15, 2006 Forum meeting minutes. Meeting minutes will continue to be distributed to the Forum distribution list and posted on the Forum website. Anyone who wishes to suggest changes to the minutes should email Jan Carey of the Department of Conservation, Abandoned Mine Lands Unit at: Janet.Carey@conservation.ca.gov.

IV. Presentation: Update on Nevada City Brownfields Assessment Project (Carrie Monohan, Friends of Deer Creek)

Carrie Monohan, Friends of Deer Creek, gave a PowerPoint presentation and update of her presentation at the November 21, 2006 meeting of the Forum. She provided a brief overview of the Brownsfields Assessment Project for those not in attendance at the previous meeting. The Friends of Deer Creek received a Brownfields Grant in the amount of \$200,000 over three years from the U.S. Environmental Protection Agency to assess the effects on Deer Creek from mine tailings in the Nevada City area. The City of Nevada City is the contracting agent for the Grant. The Friends of Deer Creek, a watershed group that was formed six years ago, has been collecting information on hydrology, hydrogeology, and biological resources along Deer Creek.

The focus of the update presentation looked at the origin, transport and fate associated with water quality issues at five brownfields abandoned mine lands sites located in the City of Nevada City. The City lacks adequate recreational sites and trails and has a vision to clean up the sites in a "community-friendly" manner. The group is attempting to include a useful site assessment screening for each site without conducting a formal risk assessment associated with a Preliminary Endangerment Assessment (PEA).

An extensive discussion followed the presentation. The Forum was interested in documenting "lessons learned" that might be of interest to other watershed groups in

the future. Rick Humphreys suggested that the Forum schedule a future discussion on how best to transfer useful information to other watershed efforts. The EPA is working on tech-transfer efforts for watershed groups primarily out of its Region VIII in Colorado. Greg Pelka asked that information on the EPA program be forwarded to participants of the Forum.

Further updates may be provided as the Friends of Deer Creek continue to develop and implement of the Brownfield grant.

V. Presentation: Cleaning Up the Mother Lode – Jamestown Mine (J.C. Isham, Shaw Environmental and Infrastructure)

This Agenda Item was taken out of turn due to temporary technical difficulties with the Hawver Cave presentation. J.C. Isham, Shaw Environmental and Infrastructure, gave a PowerPoint presentation on the Jamestown Mine.

The Jamestown Mine is a lode gold mine that was operated discontinuously since the late 1840s near the city of Jamestown, California, in Tuolumne County. Mining at Jamestown was renewed in the summer of 1986. The mine facility consists of three mine pits (including the Harvard Pit), the Tailings Management Facility (TMF), a Waste Rock Storage Area (RSA), a process water retention pond (a lined Class II surface impoundment), and several storm water retention ponds. The TMF consists of an approximately 120 acre lined tailings impoundment, a containment dam, underdrain, and leachate collection system. A 7,000-ton-per-day gold processing facility was erected adjacent to the Harvard pit and ore was first processed in February of 1987. Sonora Mining processed about 17,000,000 short tons of ore, yielding about 660,000 troy ounces of gold. Most of the material came from the Harvard pit, which attained dimensions of about 2,700 ft in length, 1,500 ft in width, and 600 ft in depth.

Since mining operations ceased in mid-1994, the Harvard pit has been filling with water. The other pits were backfilled. The property is currently owned by Tuolumne County and two private parties. The County acquired part of the mine property in 1996, in exchange for releasing Sonora Mining Corp.'s \$2.7 million cash reclamation bond, posted to guarantee cleanup at the site. County leaders originally envisioned the mine property as a place for new businesses, parks, trails and a reservoir; however, none of those projects were built.

Instead, in 2001 the California Attorney General's Office, acting on behalf of the California Regional Water Quality Control Board, sued the County, the private parties, and the past mine operators, alleging that waste from the former gold mine was polluting ground and surface water in and around the property. All parties agreed to a settlement in May 2006. The combined settlement monies were put into two trust accounts (Jamestown Trust I and II) which fund an investigation of releases at the mine facility, the closure of the TMF, an evaluation of the RSA, and clean-up the Harvard Mine Pit. The work includes:

- Dewatering of the TMF and transferring the water to the Harvard Pit.

- Closure and capping of the TMF in compliance with California State requirements.
- Evaluation of the RSA cover and characterization of the stockpiled rock.
- A site investigation to determine the extent of impacts to groundwater.
- Hydrogeologic evaluation of the mine site, including the Harvard Pit.
- Evaluation of water treatment technologies for groundwater impacted by metals, including arsenic and salts.

VI. Presentation: The Real Story of Hawver Cave (Gene Lorange, California State Parks – Auburn State Recreation Area)

This presentation was postponed from the November 15, 2006 Forum meeting. Gene Lorange, State Parks, gave a PowerPoint presentation on the pre-history, discovery, development, abandonment, illicit use, and closure of the Hawver Cave/Limestone Mine complex located on land owned by the U.S. Bureau of Reclamation and managed by State Parks in the Auburn State Recreation Area near Auburn. State Parks, partnering with the Department of Conservation's Abandoned Mine Lands Unit (AMLU) and Teichert, recently designed and implemented physical closures for several abandoned mine openings that prevent physical access but permit use by bats and wildlife.

Discovered in 1906, Hawver Cave yielded a treasure trove of prehistoric remnants, including four human skeletons determined to be 10,000 years old and the bones of extinct sabertoothed tigers, ancient cousins of the armadillo and ground sloths, and other species. The cave also contained a rich seam of limestone, and in 1912, mining operations resulted in a tunnel being driven through the cave. Also in the early 1900s, the Pacific Portland Cement Company built a railroad line that connected the "Mountain Quarry" operation with the westbound Southern Pacific main line in Auburn. High-grade limestone was transported by rail for use in the manufacturing of cement and the refining of sugar. Part of the railroad line includes the Mountain Quarry Cement Bridge, later known as "No Hands Bridge," which was completed in March 1912. At the time of its construction, the bridge was the longest concrete arch bridge in the world. The railroad and mine operated until the late 1930s. A quarry near the site continues to operate, extracting 98% pure limestone mostly for concrete manufacturing processes.

Since the mine's closure, Gene stated that the cave and mine tunnels—which include two underground lakes, four waterfalls, and a stalactite-filled room—have been ostensibly blocked off to the public. The main entrance was initially covered over, but people had dug their way back to participate in hard partying, fireworks displays, and vandalism, and resulting in the need for several rescues by Parks rangers. With assistance from the AMLU and Teichert (which operates the nearby quarry), rock and rubble were removed from the entrance and 900-pound gates were installed in concrete. Pictures of the closure are at www.conservation.ca.gov/OMR/abandoned_mine_lands/Contracts/index1.htm.

VII. New Business

This item was not discussed as several Forum participants had to leave to attend an abandoned mine meeting with representatives of U.S. Senator Feinstein's office.

VIII. Action Items

There were no formal action items assigned or requested.

IX. Future Meeting Schedule and Agenda Ideas

Date: The next meeting is scheduled for May 16, 2007 beginning at 10:00 a.m.

Location: The location was not established during the meeting. Those on the Forum distribution list will be notified via e-mail in advance of the next Forum meeting.

Agenda Topics: To be decided during a meeting of the Guiding Committee before the next Forum meeting.

Forum Adjourned – 1:05 p.m.