

January 2011 Update

California Gulch Superfund Site

Leadville, Colorado

(Five-Year Review Date: 9/28/2007)

*H*ighlights since the 2007 Five-Year Review

- The Lake County Community Health Plan Phase 2 was adopted as the Institutional Control and Operations and Maintenance Plan for OU9 in 2010
- ROD Amendment for OU6 signed in 2010
- Clean up completed on residential properties in the summer of 2009
- Construction activities completed in 2009 on OU5 and OU11
- Institutional Controls passed by Lake County for OU3, OU8 and OU9 in 2009
- Deletion of OU8 completed in 2009
- Deletion of OU3 and OU9 expected in 2011
- OU12 Record of Decision signed in 2009

Issues & Recommendations Update

Issues	Recommendations/ Follow-Up Actions	Follow-Up Actions (Status/ Due Date)	Status of Follow-Up Actions January 2011	Responsible Party
1) OU2: Additional Institutional Controls (ICs) may be needed to ensure protection of human health in the event of changes in zoning or to preclude disturbance of engineered remedies as a result of development consistent with current zoning.	Investigate the impacts of mine permit expiration on remedy protectiveness and develop/ implement ICs, as necessary.	12/2011	Lake County has agreed to implement ICs on engineered remedies. Expect to have ICs in place by 12/11.	Colorado Department of Public Health and Environment (CDPHE) EPA Lake County
2) OU3, OU4 and OU10: ICs are needed to ensure protection of human health in the event of changes in zoning or to preclude disturbance of engineered remedies as a result of development consistent with current zoning.	Prepare an Explanation of Significant Differences (ESD) or ROD Amendment identifying appropriate ICs and implement the controls.	12/31/2011	Lake County has agreed to implement ICs on engineered remedies. Expect to have ICs in place by 12/11. IC adopted for OU3 in 2/09.	EPA Lake County

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3) OU7 and OU8: ICs are needed to ensure protection of human health in the event of changes in zoning or to preclude disturbance of engineered remedies as a result of development consistent with current zoning.	Develop and implement ICs.	12/2011	Lake County has agreed to implement ICs on engineered remedies. Expect to have ICs in place by 12/11. OU8 IC adopted 2/09.	EPA Lake County
4) OU1: Rising water levels in upper portion of Yak Tunnel.	Monitor effectiveness of dewatering of the Black Cloud Mine.	Complete	12/2/2008	Resurrection
5) OU1: Financial assurance for continued operation of the Yak Treatment Plant has not been established.	Establish financial assurance.	Complete	1/1/08	Resurrection
6) OU2: Settlement funds have been exhausted and use of Superfund resources is not permitted.	Funding of operation and maintenance (O&M) requires clarification.	12/31/2013	Ongoing. Discussing the need for O&M with CDPHE.	EPA CDPHE
7) OU2: Vegetation in need of maintenance.	Perform maintenance as required following the next scheduled annual inspection.	12/31/2011	Discussing the need for O&M with CDPHE.	EPA CDPHE
8) OU6: Delay in establishing control of the Mine Pool.	Perform remedial action.	9/13/2013 Re-evaluate at next five-year review.	BOR is pumping water from the tunnel in new well completed by EPA in 2008. Follow up evaluations to follow.	EPA BOR

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9) OU8: A portion of Non-Residential Soils Areas, Fluvial Tailing Site (FTS)-1 and FTS-2 remedies in need of repair or replacement.	Modify/repair the existing remedies, as necessary, so that vegetation is established and/or mine waste does not come into contact with California Gulch flows or allow precipitation to pond on the tailing surface.	12/31/2011	Anticipated in 2011	Resurrection
10) OU9: An Institutional Control Overlay (ICO) district was established to satisfy ROD required ICs. However, the ICO district was repealed by Lake County in 2006. As a result, concerns remain regarding protectiveness of the remedy.	Formalize ICs	Complete	10/21/2010 Lake County, CDPHE and EPA signed the LCCHP Phase 2 which serves as the O&M Plan for residential properties in Lake County. This plan serves as the IC for residual contamination.	EPA Lake County CDPHE
11) OU9: Isolated areas of soils in outlying portions of OU9 were identified as containing arsenic at levels that exceed the upper range of plausible action levels for residential land use. The arsenic exceedences occurred where the corresponding lead concentration was below the residential action level. Therefore, it is possible that unacceptable exposure of sensitive populations might occur should these areas be developed.	Consider creation of an IC to address areas of elevated arsenic in soils where development may result in unacceptable exposure of sensitive populations.	Complete	10/21/2010 Lake County agreed to implement an IC which notifies property owners about the potential for elevated arsenic concentrations.	EPA Lake County

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12) No O&M Plan exists for remediated properties.	Prepare and implement an O&M Plan.	Complete	10/21/2010 Lake County, CDPHE and EPA signed the LCCHP Phase 2 which serves as the O&M Plan for residential properties in Lake County. This plan serves as the IC for residual contamination.	EPA Lake County CDPHE
13) OU10: Additional seeps have been identified in the toe and down gradient from the impoundment.	Prepare an Explanation of Significant Differences (ESD) identifying appropriate ICs and implement the controls.	Complete	3/16/2009 Resurrection implemented additional actions to deal with the seeps.	Resurrection