G. Fred Lee & Associates

27298 E. El Macero Dr. El Macero, California 95618-1005 Tel. (530) 753-9630 • Fax (530) 753-9956 e-mail: gfredlee@aol.com web site: http://www.gfredlee.com

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Establishing Groundwater Background Characteristics at the LEHR Superfund Site

Julie Roth, Executive Director DSCSOC

Dear Julie:

Several weeks ago, UCD, through their consultant, Montgomery Watson, provided a "Background Groundwater Study – HSU-1; LEHR/SCDS Environmental Restoration, Davis, California." This document is devoted to providing an updated assessment of the background concentrations of various constituents in HSU-1. This background information is to be used to determine when the land disposal system begins to pollute groundwaters with constituents derived from the IRA pump-and-treat system.

The characteristics of groundwaters at the LEHR site are sufficiently complex and sufficiently poorly understood so that UCD's proposed approach for characterization of the upgradient groundwaters is not technically valid. It is somewhat surprising that UCD would even attempt this approach, since this issue has been discussed at several RPM meetings in the past, where there has been general agreement that there is need for additional monitoring wells upgradient of the LEHR site and, for that matter, upgradient of each waste management unit which has the potential to pollute groundwaters that pass under the unit in HSU-1 and HSU-2. For years, UCD has been attempting to shortcut proper groundwater characterization for the LEHR site. The experience with the IRA has demonstrated the poor understanding of groundwater characteristics at this site.

I am surprised to see that UCD is attempting to continue to rely on a single upgradient monitoring well to provide "background" information on the groundwaters entering the LEHR site. As some of the RPMs and DSCSOC have discussed in the past, the single upgradient monitoring well in HSU-1 (UCD-1-18) does not adequately represent the upgradient groundwater characteristics for the LEHR site. Basically, UCD should be required to construct several additional monitoring wells upgradient in HSU-1 and HSU-2, and monitor these for at least a year to begin to obtain information on the true upgradient characteristics of the groundwaters entering the LEHR site.

With respect to assessing upgradient groundwater characteristics for a particular waste management unit or the proposed land disposal system, several monitoring wells should be developed upgradient of the waste management unit and disposal site to characterize the groundwaters in both HSU-1 and HSU-2 that could be influenced by the waste management unit/land disposal operations.

I suggest you pass these comments on to the RPMs and PRPs, indicating that, if they have questions, they should contact me. As I have indicated, the date of the next RPM meeting conflicts with a previously scheduled meeting that I must attend, since I am chairing that group.

Fred