

DSCSOC's Areas of Concern with Respect to the Adequacy of LEHR Site Investigation

October 30, 2003

The Davis South Campus Superfund Oversight Committee (DSCSOC) is the US EPA supported Technical Assistance Grant (TAG) representative of the public for the University of California, Davis (UCD)/Department of Energy (DOE) LEHR Superfund site. The issues raised by DSCSOC in its comments on UCD and DOE LEHR Superfund site documents that have not been adequately addressed include, but are not limited to, the following:

- **Problems in properly defining Constituents of Concern**
There are likely other constituents in LEHR site soils, wastes, stormwater runoff and groundwaters that are not being considered as part of the LEHR site investigation.
- **Inadequate stormwater runoff monitoring**
There have been chronic problems with the quality of the stormwater runoff water quality monitoring that has been conducted at the LEHR site. Of particular concern is inadequate analytical method detection limits for key potential pollutants.
- **Inadequate evaluation of the impacts of pollutants in LEHR stormwater runoff on Putah Creek water quality**
The inadequate stormwater runoff monitoring program and studies on Putah Creek have not adequately determined the problems that stormwater runoff from the LEHR site has caused or contributed to in Putah Creek.
- **Failure to address translocation of pollutants from the subsurface soil to the surface via vegetation**
The LEHR site studies have failed to investigate the potential for terrestrial plants to extract pollutants from the soil through the roots into the stems, leaves and flowers (translocation), and thereby lead to surface soil and stormwater runoff pollution. This is known to occur at the LEHR site, where a tree that was removed was found to be high in radioactive hydrogen (tritium).
- **Inadequate definition of the role of each LEHR waste management unit in impacting groundwater quality**
The groundwater monitoring well array does not adequately characterize the pollution of groundwaters downgradient from each LEHR site waste management unit. Pollution beyond that reported can be occurring and not be detected.

- Failure to require that DO and TOC measurements be made in all groundwater monitoring
 - Dissolved oxygen is an important parameter influencing the behavior of pollutants in groundwaters. DO should be measured in every groundwater sample. Total organic carbon should be measured in all groundwater samples since it is an indicator of the presence of the vast arena of uncharacterized potential pollutants in LEHR site wastes that can pollute groundwaters.
- Failure to define the full extent of offsite groundwater pollution by the LEHR site
 - While offsite groundwater pollution has been known since the mid-1990s, the full extent of this pollution has still not been adequately defined.
- Inadequate treatment and operation of the IRA groundwater demonstration project
 - From the beginning, the UCD IRA demonstration project has been plagued by inadequate design, operation, maintenance and monitoring.
- Failure to adequately consider potential impacts of IRA land disposal of partially treated polluted groundwater on groundwater and terrestrial life
 - UCD is attempting to dispose of VOC-stripped polluted groundwaters by land disposal, using surface irrigation. This approach can readily lead to soil and groundwater pollution. The current IRA land disposal project is not being adequately monitored for potential long-term problems.
- Unreliable statements made by UCD and DOE contractors in their draft reports
 - There has been a chronic problem with the quality of the draft reports prepared on the LEHR site investigation.
- Failure to correct errors in annual monitoring reports
 - Another chronic problem with LEHR site reports is that the contractors have not been required to correct the errors that have been pointed out in the reports.

It is DSCSOC's position that these issues will need to be adequately addressed before the public/DSCSOC can support that the LEHR Superfund site has been adequately investigated and remediated. Further information on these issues is available from the DSCSOC website, <http://members.aol.com/dscsoc/dscsoc.htm>, or by contacting Julie Roth, Executive Director of DSCSOC, at JRoth916@aol.com, or Dr. G. Fred Lee, DSCSOC TAG advisor, at gfredlee@aol.com.