

Selected Remedy for Groundwater

The selected remedy is groundwater Alternative 4. This alternative consists of extracting VOC-contaminated groundwater and treating it with liquid-phase activated carbon. In situ chemical treatment - reductive dechlorination or chemical oxidation - would be used to expedite and enhance treatment, and to reduce the volume of extracted water. The various components of the selected remedy are:

- Extract groundwater contaminated with VOCs and treat it using liquid-phase activated carbon in vessels at an on-site treatment system. Containment will be provided at the downgradient extent of contamination.
- The treated water will be reinjected into the contaminated groundwater aquifer or discharged to the public sewer system operated by the Los Angeles County Sanitation District. Reinjection will reduce the intrusion of and the potential for mixing with other off-site VOC plumes.
- Use in situ chemical treatment, either reductive dechlorination or chemical oxidation, to enhance remediation of VOC-contaminated groundwater. During the remedial design (RD) phase, conduct treatability studies to evaluate both methods and determine which works best under site conditions. Data obtained from pilot studies will also be used to determine the specific number and placement of in situ injection points.
- Conduct additional groundwater sampling during the RD phase to further define the downgradient extent of the VOC contamination.
- Conduct groundwater monitoring to evaluate the effectiveness of the remedy, the location of the plume, and that remediation goals have been met.

Continue groundwater monitoring for a period of three years after the monitoring demonstrates that remediation goals have been met. The projected time to reach remedial action goals is 20 years. However, the actual time required for cleanup may be reduced if the in situ chemical treatment is effective. Depending on the success of in situ chemical treatment, monitoring may become the only action needed at Cooper Drum within 5-10 years. For example, in situ chemical treatment may provide a relatively fast reduction of the contaminant mass in the ground water plume. This mass reduction could lead to stabilization of low contaminant concentrations to the point that containment with extraction wells may no longer be necessary.

Reference: Record of Decision, Sept. 2002