RCRA facility investigation & closure plan for hazardous waste management units at metal finishing facility (Lynwood, California)

After soil and groundwater investigations performed by previous consultants and by Lindmark Engineering, the owner of a metal finishing facility retained Lindmark Engineering to install 172 soil-gas probes and conduct a soil-gas survey that had been required by the Department of Toxic Substances Control (DTSC) to evaluate contamination by volatile organic compounds. We conducted the soil-gas survey throughout the facility, including areas formerly occupied by underground storage tanks as well as areas where releases of PCE (tetrachloroethene) had occurred. In conjunction with the soil-gas survey, we also collected soil samples within areas identified by the DTSC as hazardous waste management units: a former wastewater treatment area and two areas where hazardous waste had been stored. Concentrations of hexavalent chromium were detected in the soil samples, and we recommended additional sampling.

The DTSC also required that the property owner prepare a closure plan for the hazardous waste management units identified above. The property owner retained Lindmark Engineering to prepare the closure plan, which outlines extremely detailed procedures to close the hazardous waste management units: sampling and analysis plans for soil (based on results of the soil-gas survey and soil sampling investigation) and for groundwater, collection of samples for quality assurance/quality control, and procedures to remove and/or decontaminate the units. The removal and decontamination of the former wastewater treatment area includes procedures for dismantling and removing the individual treatment components and hydro-blasting the area. The closure plan also includes cleanup levels in soil, closure certification procedures, and a closure cost estimate and schedule.

The DTSC is currently reviewing the closure plan but has approved the portion of the plan that outlines sampling and analysis of existing groundwater monitoring wells. Using a low-flow purging method, we have conducted two groundwater sampling events at the site; various solvent compounds were detected in the wells. The DTSC will incorporate the sampling results in their final review of the closure plan.

The DTSC further issued the property owner an Enforcement Order to investigate and clean up areas designated as solid waste management units and additional "areas of concern" throughout the facility (other than the hazardous waste management units). The Enforcement Order includes an area formerly occupied by a cluster of tanks that stored gasoline and methyl ethyl ketone and another that held a cluster of paint thinner tanks (which we had previously removed and then conducted a limited site assessment in that area), as well as an area of PCE contamination, another hazardous waste storage area, and former piping areas used to convey chromate waste from the facility to the former wastewater treatment area.

As required in the Enforcement Order, Lindmark Engineering prepared a Current Conditions Report, an RCRA Facility Investigation work plan of the solid waste management units and areas of concern, and a Community Profile of the facility, all of which are being reviewed by the DTSC. The chemicals of concern include chromium and chromium VI, PCE and other chlorinated solvents, benzene, toluene, ethylbenzene, xylenes, and acetone. *Client: Martin Metal Finishing*

For more information on this project, please contact Lindmark Engineering at (818) 707-6100 or ulf.lindmark@efiglobal.com.