

Project Summary

Site Investigation & Remediation: Pesticide Spill at Orchard

Client:

Wood Orchard,
Sturgeon Bay, WI

Contact:

Mr. Steven Wood

Project Manager:

Mr. Ken Ebbott, P. G.,
CGWP

Regulatory Status:

Closed and fully reimbursed

Project Features

Lead Arsenate from Cherry
Wastewater Discharge
Piping

Full Reimbursement under
ACCP for Multiple Parties

Soil Removal and Subtitle D
Landfill Disposal

Avoided Classification as
Hazardous Waste which
resulted in Significant Cost
Benefit

Complete Investigation to
Closure in 8 months

Remediation Division Staff

AmyHaak@alphaterra.net

KenEbbott@alphaterra.net

KyleKutcher@alphaterra.net

Introduction and Value to Client

After inadequate initial investigation efforts by a previous consultant, Alpha Terra was successful in remediation this property in only one day, with minimal disruption to the site. Full reimbursement was obtained on behalf of the multiple responsible parties under the agrichemical clean-up program (ACCP) requirements.

Synopsis

Lead arsenate was a common and effective pesticide used by apple and cherry orchards in Wisconsin from approximately the 1930's to the mid-1960's. Unfortunately, lead and arsenic do not readily degrade, and significant concentrations of lead and arsenic are common in soil at former orchard areas. Of particular concern, however, are areas where the lead arsenate was handled prior to application, as spills from mixing and loading pads can have extremely elevated concentrations of lead and arsenic.

At this site, lead and arsenic contamination was present in soil associated with the discharge water from a former cherry processing facility. From the 1930's to the 1970's, cherries were washed and pitted, and wastewater from these operations was discharged via pipeline to a shallow pit on the property. Alpha Terra Science directed remediation of soil containing high concentrations of lead and arsenic at three release areas along the wastewater discharge pipe using soil clean-up goals from the Wisconsin Department of Agriculture, Trade, and Consumer Protection (WDATCP). Efforts were completed under the agrichemical clean-up program (ACCP) requirements, and full reimbursement was obtained on behalf of the multiple responsible parties.

Initial investigation efforts by another consultant were not adequate to identify a remedial approach. Alpha Terra staff directed installation of 40 shallow soil borings, with select samples retained for laboratory analysis. Based on the results, the contaminated soil limits were defined, and the limits of the contaminated soil excavation were established prior to actual soil removal. This pre-excavation definition of the extent of contamination allowed the soil remediation to proceed in only one day.

Approximately 140 tons of lead and arsenic contaminated soil was excavated for off-site disposal at a licensed subtitle D landfill in Wisconsin. Groundwater investigation was not required, and the case has been closed with no additional action required.