

Toolkit for Greener Practices

Showcase of Ideas

Option 3-2: Development Plan Incorporates Cleanup Remedy

Building Footprint and Grading as a Cap

Site conditions:

A former wood-treating operation (Joslyn Manufacturing) used a creosote thermal process and a pressure-treating process with pentachlorophenol (PCP) and chromated copper arsenic (CCA). Waste from the operation was placed in disposal ponds on-site and process sludge was buried on site. Spills of the wood-treating solution occurred at the site as well. Soil or groundwater cleanups were initiated to treat dioxin, polyaromatic hydrocarbon and PCP contamination. The site has been divided into operable units. One parcel at which cleanup is complete was enrolled in the Voluntary Investigation and Cleanup (VIC) Program after being de-listed from the state Superfund Program. This operable unit has been redeveloped.

Preventive activity description:

The building footprint and site grading were designed as caps to prohibit groundwater infiltration and prevent human and ecological exposure to contamination left in place. This remedy was consistent with the Risk-based Guidance designed to be protective under a commercial land use scenario. Currently, a furniture warehouse occupies the site.

Benefits realized through the Pollution Prevention/Sustainability approach:

- Cross-media transfer was avoided.
- Resource conservation (volume of fill dirt was minimized)

Keys to Success

- Detailed site investigation and hydrogeologic characterization were necessary to construct a model to predict remedy design that would protect remaining contamination from leaching into the ground water with stormwater infiltration.
- The regulatory staff had to be able — and motivated — to treat the site as operable units, some of which could be delisted from the Superfund Program and become eligible for enrollment in the Voluntary Investigation and Cleanup Program.
- The voluntary cleanup program provided parties found not responsible such as developers and city development agencies, with administrative or liability assurances when they reuse the cleaned-up property, putting it back on the tax roles and constructing businesses that provide employment opportunities in the community.

Regulatory administrative/legal tools:

- Record of Decision outlines the cleanup process.
- Delisting a portion of the site from the state Superfund list made it eligible for enrollment in the VIC Program.

- Written assurances concerning the environmental liability mitigated through the Response Action Plan and institutional controls approved as part of the Response Action Plan are available through the VIC Program to the developer and city (voluntary parties developing the VIC site).
- A Contingency Plan, including a long-term groundwater-and-surface-water-monitoring plan, ensured performance of the remedy.