

Green Remediation Focus

Minimizing the environmental footprint of site cleanup

A Profile in Using Green Remediation Strategies

Additional profiles available at www.clu-in.org/greenremediation

Umatilla Army Depot
Hermiston, OR

Federal Facility
Superfund NPL

Cleanup Objectives: Treat 15,000 tons of soil contaminated with explosives such as trinitrotoluene (TNT) and royal demolition explosives (RDX)

Green Remediation Strategy: Composted with locally obtained feedstock

- Used Windrow techniques involving placement of soil in lengthy piles
- Periodically mixed soil with a mixture of cattle/chicken manure, sawdust, alfalfa, and potato waste
- Mixed soil with feedstock inside mobile buildings to control fumes and optimize biological activity

Results:

- Treated each 2,700-cubic-yard batch of soil in 10-12 days
- Destroyed contaminant byproducts or permanently bound byproducts to soil or humus, with non-detectable concentrations of explosives.
- Provided \$150,000 potential end-revenue from sale of humus-rich soil
- Saved an estimated \$2.6 million compared to incineration, a common alternative for explosives treatment
- Avoided significant fossil fuel consumed by an incinerator
- Avoided fuel costs/consumption associated with transporting soil to an offsite incinerator or transferring ash generated by an onsite mobile incinerator

Property End Use: Privatization under base realignment and closure

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Umatilla Army Depot

http://www.cluin.org/greenremediation/profiles/subtab_d26.cfm



United States Environmental Protection Agency
Office of Solid Waste and Emergency Response (5202P)

For more information:
www.cluin.org/greenremediation
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