In-Situ Soil Treatment

Construction Services

Project History

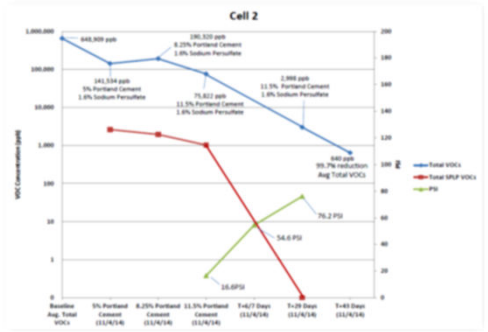
Former Waste Storage Area

Zanesville, Ohio

Highlights

Chemical oxidation and soil stabilization performed

Total VOC reduction of three orders of magnitude





Regulatory Agency

USEPA – Region IV

Project Manager

Hank Pappert

Contract Value

$1,000,000

Project Description

In-situ chemical oxidation and soil stabilization on approximately 500cy of in place material to reduce mass VOC concentrations in source area soils and prevent leaching of site constituents into groundwater. Achieved total VOC reduction of three orders of magnitude in source area soils (pre-treatment total VOCs averaging ~650ppm post-treatment total VOCs averaging ~0.5ppm), achieved unconfined compaction performance criteria and SPLP performance criteria.



Activities Performed

- Installation of 1,500ft construction access road and 1.75 mile of HDPE water supply line to work site
- Pressure test water supply line
- Installation of erosion and sedimentation control measures
- Stock pile of clean surface soils for post remediation surface grading
- Application and mixing of ~27,000lbs of Sodium Persulfate, ~180,000lbs of Portland cement with impacted soils
- Performance monitoring (Total VOCs, Unconfined Compressive Strength and Total SPLP VOCs)
- Final grade and restoration of work area



Excavation/Mixing