



Ground/Water Treatment & Technology

PROJECT PROFILE

Groundwater Extraction Treatment System

Project Location	New Jersey
GWTT Scope	O&M, Procurement, Treatability Testing, System Upgrade
Flow Rate	100 GPM
Contract Value	\$1.3M (to date)
Project Duration	13 Years (current / ongoing)
Contaminants	1,4-dioxane, CVOCs

Key Project Details:

- Project included major treatment system upgrades
- Ongoing O&M of Soil Vapor Extraction (SVE) and groundwater extraction/reinjection and treatment system
- GWTT took over a non-operational system that had been neglected by the former operations company. System was restarted within a week of takeover with no compliance violations over the 13+ years of system operations under GWTT's O&M Team.
- The existing RTO was performing poorly and causing other system components to underperform. GWTT replaced the RTO with a SVE and vapor carbon, which saved the client >\$400,000 in fuel costs.



Extraction Treatment System Project Narrative

The Former Curtiss Wright Aeronautical Testing Facility Groundwater Extraction, Treatment & Reinjection System (GWERS) was constructed in the early 1990's. The original packed tower air stripper system, which was installed in 1998, began showing significant deterioration and had become severely inefficient in removing VOC's. GWTT preformed a ROI Analysis and then Provided Curtiss-Wright with the engineering, procurement, installation, and operations of a new low-profile removable tray air stripper (LPAS) which successfully replaced a pair of aging air stripper towers that had exceed their useful life and resulted in an annual cost savings of >\$55,000 that have been realized by Curtiss-Wright.

The GWERS is fed by 8 individual bedrock and overburden extraction wells located throughout the site with a design maximum of 150 gpm and an average flow rate of 75 GPM. The groundwater system components consist of oil/water separation, solids removal with gravity settling, multi-media filtration, air stripping, and carbon filtration prior to discharge to groundwater via three (3) reinjection wells. The Soil Vapor Extraction (SVE) system incorporates a vacuum blower to control of an array of vapor extraction wells in the most contaminant impacted area of the site. Captured vapors are treated via a series of vapor-phase carbon filtration vessels, along with the vapor stream from the GWTP Air Stripper.

A full-time N-3 Operator is required for daily operation of both the GWERS and SVE. Responsibilities include process adjustments, equipment maintenance, compliance sampling (both air and groundwater), supply acquisition, general housekeeping, and Preventive Maintenance (PvM). In addition, GWTT provides the client with a detailed monthly report summarizing system operation, maintenance, problems and solutions, flow summary, and compliance sampling results. GWTT works directly with a third-party analytical laboratory for sample scheduling and related issues.

Connect with one of our treatment system operations experts now: 800-770-0901



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