

SUPERFUND GROUNDWATER & OPERATIONS

Landfill Leachate System for Superfund Site

Industry: Chemicals/Battery
System: 250 gpm Temporary & 10 gpm Permanent Landfill Leachate System
Location: Pennsylvania
Goals: Remove Lead & other Heavy Metals

Project Overview:

Our innovative Landfill Leachate Treatment System design at a Superfund Site employs Heavy Metals Precipitation, Clarification, Sludge Handling/Dewatering, Filtration & Ion Exchange to treat groundwater/landfill leachate & meet stringent discharge levels per USEPA consent order. The temporary system skid mounting & permanent system mounting on enclosed trailer, significantly speeds project delivery time by 50% & reduces overall project costs by 30%.

Critical Issues:

Complex wastewater w/ varied contaminants
Budget Constraints & Maximize ROI
Varied flow during construction & operations phases

Stringent USEPA discharge limits
Fast-Track, Concept to Completion

Vision for Solution:

- Prepackaging of temporary system on skids & permanent system on enclosed trailer in lieu of field construction to reduce overall project execution time by 50% and cost by 30%
- 10 gpm Permanent Trailer Mounted System for ongoing operations phase and 250 gpm Temporary Skid Mounted System for peak flows during remedial construction phase
- Utilize our standard products & pre-packaged system design for fast-track turnkey project delivery and performance guarantee
- PLC w/ Remote Telemetry for minimum onsite operator attention
- Modular design with expansion capability for future needs

Project Scope:

Concept Development	Treatability Studies
Design/Engineering	System Fabrication
Controls Integration	Field Installation
Commission/Startup	Ongoing O&M



Equipment Description:

Equalization Tank	Influent Pumps
Chemical Feeds	Reaction Tanks Unit
Inclined Plate Clarifier	Multimedia Filters
Ion Exchange	Sludge Handling & Filter Press
Air Compressor	PLC Controls
Enclosed Trailer	



Special Features:

- PLC controlled system enables supervisory control & data acquisition from a remote site
- Process monitoring include flow, level, pressure, pH, etc
- Modular expandability for future changing needs