

# INDUSTRIAL GROUNDWATER & OPERATIONS

## GWTP for Chemical/Aerospace Industry

Industry: Chemicals/Aerospace Manufacturing  
System: 20 gpm Ground Water Treatment Plant  
Location: New York  
Goals: Remove Oil & Grease, Heavy Metals, VOCs/SVOCs

### Project Overview:

Our innovative Ground Water Treatment Plant at a leading company's site employs Oil-Water Separation, Heavy Metals Precipitation, Clarification, Filtration, Activated Carbon Adsorption and Sludge Handling/Dewatering to treat groundwater & meet stringent discharge levels per NYSDEC/USEPA consent order. The system prepackaging on two 45 ft. x 12.5 ft. skids, with pre-assembled metal building on the skid, significantly speeds project delivery time by 50% & reduces overall project costs by 30%.

### Critical Issues:

Stringent NYSDEC/USEPA discharge limits  
Tight budget constraints

Complex & varied contaminants  
Fast-track, concept to completion

### Vision for Solution:

- System prepackaging on two skids pre-enclosed with metal building in lieu of field construction to reduce overall project execution time by 50% and cost by 30%
- 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
- Direct contract with client for turnkey concept to completion of ground-water treatment plant

### Project Scope:

Concept Development  
System Fabrication  
Field Installation  
Ongoing O&M

Detailed design/Engineering  
Controls Integration  
Commission/Startup

### Equipment Description:

Oil Water Separator  
Influent Pumps  
Reaction Tanks Unit  
Multimedia Filters  
Air Compressor  
Platforms/Stairs

Equalization Tank  
Chemical Feeds  
Inclined Plate Clarifier  
Activated Carbon Filters  
Sludge Handling/Filter Press  
PLC/Remote Telemetry

### Special Features:

- PLC controlled system enables supervisory control & data acquisition from a remote site
- Regulatory Reports are auto-generated by the SCADA system
- Process monitoring include flow, level, pressure, pH, etc
- Modular expandability for future changing needs

