# **ENVIRONMENTAL** Environmental Engineering

#### ENVIRONMENTAL ENGINEERING SERVICES

- > Sustainable infrastructure design
- > Stormwater and sewershed modeling
- > Remedial system design, construction, operation and maintenance
- Facility process water and wastewater management, planning and treatment system design
- > Process safety management assessments
- > Risk management planning
- > Spill prevention counter-measures and control plans (SPCC)
- Stormwater pollution prevention plans (SWPPP)
- Hazardous waste management and contingency planning
- > Solid waste management
- > Landfill design and monitoring
- > Permitting
- > Technical and economic feasibility



### Experience you can trust

If your project involves environmental impacts, treatment or management of solid waste, hazardous waste or wastewater, turn to POWER. Our team of environmental engineers has spent decades developing and managing creative and cost-efficient solutions customized to your needs.

From initial assessment to regulatory compliance and construction, we provide you with accurate scopes of work and economically feasible designs. Clients in the industrial, municipal, energy and government sectors rely on our experience.

### Mitigating your challenges

A comprehensive, in-house design process helps mitigate challenges across the board before they impact your project. We work with you to identify project objectives, review site and general conditions, evaluate all applicable technologies and assess economic feasibility.

## Thorough project support

Successful projects require comprehensive solutions that combine clear communication and technical expertise with strong knowledge of regulatory requirements. We can help you obtain a full range of necessary approvals and permits. Our capabilities include remedial and treatment systems, discharges to surface waters (NPDES) and sanitary sewers (POTW), landfill improvements, air emissions, and more.

You can also rely on our long history of providing owner's engineering services to help ensure the most challenging projects meet performance and financial objectives. We can provide you with the additional support you need to evaluate bids, assess contractors, recommend equipment vendors and provide construction oversight.





Our approach emphasizes innovative designs and sustainable infrastructure to help meet the most rigorous treatment and financial objectives.

#### **RELATED SERVICES**

- > GIS applications
- > Visual simulations
- > Site assessment and remediation
- Industrial hygiene and environmental compliance
- > Risk assessment
- > Construction safety
- > Stakeholder communications

## **Project Highlights**

### STORMWATER AND SUSTAINABLE INFRASTRUCTURE

- Alcoa: Design and permitting of an eight-acre treatment wetland to reduce concentrations of iron, cyanide, gasoline and diesel range organics from impacted underground springs.
- Metropolitan Sewer District of Greater Cincinnati: Watershed modeling and design of green and gray infrastructure to mitigate load on combined sewers and improve stormwater quality.

#### **COMPLIANCE OVERSIGHT**

• U.S. Army Reserve 88th Regional Support Command: Regulatory research and communication with state and federal regulators about engineered stormwater improvements at several military installations.

### **PROPERTY RESTORATION**

- Confidential Pharmaceutical Client: Restoration of a 1500-acre former industrial property with complex chemical impacts to soil and groundwater. The site will be repurposed for future commercial development and public use.
- Alcoa: Management, remediation and restoration of multiple industrial sites. Comprehensive services included design, permitting, resource assessments, public involvement and expert testimony. Helped Alcoa meet tight timelines and satisfy legal obligations.

### SOILS REMEDIATION

• **RW Collins:** Major soils remediation effort at former manufactured gas plant. Services included environmental engineering, construction oversight, and worker exposure monitoring for airborne constituents.

### WASTEWATER TREATMENT

- Marathon Petroleum: Regulatory guidance and options evaluation to obtain quick-turn permits for a mining wastewater treatment system. Phased permitting and installation approach with treatment system design to eliminate construction delays.
- **Milacron:** Feasibility assessment and design of an Ultra Filtration and Reverse Osmosis industrial wastewater treatment system. The system treats the wastewater and produces a byproduct that is used as a fuel for the facility boilers.
- **Golden Years:** Design, permitting, construction oversight and operation of an engineered bio-sludge treatment system to handle kitchen and general wastewater flows from a large medical nursing home facility.



We team efficiently with project partners and stakeholders to move your projects forward.