

Hazardous Waste Management Plans

- Facility audits and assessments
- Compliance program development
- Regulatory Analysis
- Compliance monitoring

· Operation and maintenance plans

Environmental Site Assessments and Investigations

- Phase I, II and III environmental site assessments
- Hydrogeological investigations and groundwater quality surveys
- · Aquifer modeling

RI/FS

- · Site specific regulatory analysis
- Sampling and analysis plans
- · Field sampling
- Data validation
- Comprehensive reporting
- Feasibility studies and alternative analysis
- · Treatability studies

Remediation/Cleanup

- Engineering design
- · Plans and specifications
- · Construction management
- · System startup
- · Operations & maintenance plans
- Brownfields development

Hazardous Waste and Remediation

The remediation of previous hazardous waste management practices continues to present a challenge to property owners, developers, and facility operators. Whether the issue is a simple property transfer, cleanup of on-site contamination, or participation in a broader cleanup action, the legal and economic hurdles can often be significant. Parametrix has been a leader in developing creative solutions to hazardous waste problems for many years. From Phase I Environmental Site Assessments to multi-party Superfund cleanups, Parametrix scientists and engineers work to minimize client liability and cost, expedite cleanups, and develop creative, agency approved, riskbased, technical solutions to hazardous waste management. Our staff thoroughly understand the regulations that drive and affect remediation, and are experienced in groundwater, surface water, soil, sediments, and air remediation.

Selected Project Experience

Gas Works Park Phase II EIS – City of Seattle Parks Department, WA

Parametrix prepared the Phase II EIS for this popular urban park. Contaminants included volatile organic compounds and polynuclear aromatic hydrocarbons resulting from previous operation of a manufactured gas and coal tar plant. Solutions addressed public health, aesthetic, and recreation environments, as well as reduction of contaminations leaching into Lake Union.

Kitsap County Brownfields Demonstration Pilot Project – Kitsap County, WA

Under an EPA grant from the Brownfields Economic Redevelopment Initiative, Parametrix is assisting Kitsap County in assessing brownfields redevelopment opportunities. Program goals are to foster community awareness and public participation, and to inventory and prioritize brownfields sites that represent fundable, sustainable projects, in order to provide an improved economic base or public facility.

Evergreen Park Expansion, Phase I and II – City of Bremerton Parks and Recreation, Bremerton, WA

Parametrix is providing engineering design and site remediation services to redevelop this old industrial property into a waterfront City Park with recreational and cultural facilities, to include picnic shelters, waterfront trail, boat ramp, and a new outdoor performance amphitheater.

Hazardous Materials Management – Washington State Department of Corrections (DOC), Statewide Locations, WA

Parametrix has conducted hazardous materials management and regulatory compliance audits at 12 major DOC institutions statewide. The results of the audits served as the basis for recommending options to update the hazardous materials and hazardous waste management programs and to provide appropriate technical resources to the facility managers.

Tugman Park Landfill Remedial Investigation/Feasibility Study – Eugene, OR

Parametrix performed a RI/FS for a former landfill that is currently the location of Tugman Park. Site characterization activities included a soil and groundwater investigation and sediment assessment. Parametrix developed a risk screening tool to identify chemicals of concern and a risk assessment of dioxins and furans using modified risk assessment exposure parameters representative of residential park use at the site.

TCE RI/FS - Port of Vancouver, Vancouver, WA

Parametrix is performing this RI/FS of a former industrial facility on Port property. Initial efforts focused on characterizing the extent of trichloroethylene (TCE) in soil and groundwater in the vicinity of the Mill Plain Extension Project. A mobile laboratory was used to analyze samples immediately after collection, enabling field task leaders to perform real-time mapping of contamination in both soil and groundwater and direct subsequent sampling efforts.

Remedial Investigation/Remedial Action - AKSA Akrilik, Yalova, Turkey

Parametrix was retained to conduct environmental investigations and remedial actions at a acrylic fiber production plant in located on the Sea of Marmara in northwest Turkey. Storage tanks were damaged during the August 1999 earthquake, resulting in the release of approximately 1.7 million gallons of acrylonitrile to soil, marine waters and groundwater. Parametrix was part of a multidisciplinary team, which provided for marine sediment, surface water, soil, and groundwater sampling and transported samples to the US for low-level detection analyses. Parametrix completed preliminary risk screening and assisted this client with the design and construction of groundwater pump and treat systems for hydraulic control and product recovery. Over 80 metric tons (>25,000 gallons) of acrylonitrile was recovered from groundwater using an on-site distillation process.

Asarco Smelter Remediation - Asarco, Tacoma, WA

For the past seven years Parametrix performed remedial action design at the Asarco Smelter Property in Tacoma which encompasses 67 acres of uplands and 30 acres of tidelands. Historic smelter operations caused elevated levels of metals in upland soils and groundwater, as well as marine sediments offshore of the smelter site. The project is being performed under a Consent Order with the Environmental Protection Agency and the Washington State Department of Ecology. Funding for remedial actions includes Site Study and Remediation Grant monies as well as private and federal contributions. Parametrix completed a Remedial Investigation/Feasibility Study for metals in upland (soil and groundwater) and marine areas. The focus of our work was minimizing the area requiring active remediation through statistical analysis of chemical and biological data.

Contact Us

Parametrix

- Sumner (253) 863-5128
- Bellevue (425) 458-6200
- Bremerton (360) 377-0014
- Portland (503) 233-2400
- Olympia (360) 459-3609
- Boise (208) 898-0012
- Corvallis (541) 758-2103
- Albuquerque (505) 323-0050
- Denver (303) 791-9235

For additional information, visit our website at <u>www.parametrix.com</u>or e-mail us at info@parametrix.com