

---

## **CORPORATE OVERVIEW**

Portnoy Environmental, Inc. (PEI) is an employee owned full-service environmental consulting and engineering firm providing timely, innovative solutions to today's environmental challenges. PEI was founded in July 2000 to serve the regulated community by working with our clients to identify environmental liabilities, navigate potential obstacles, and manage and minimize risk.

PEI's staff of highly trained professionals includes registered engineers, geologists, and environmental scientists. PEI provides consulting services to a wide range of clients which include the oil and gas industry, chemical plants, real estate developers, and commercial property owners.

PEI offers comprehensive environmental services including:

- Regulatory Interpretation and Compliance
- Site Characterization and Risk-Based Corrective Action
- Hydrogeological Services
- Settlement Negotiations
- Environmental Geophysics
- Due Diligence and Acquisitions
- Water Quality Services

## **FOCUS**

The focus of PEI is service. We are responsive to our clients' needs and provide high-quality, cost-effective, and timely service. Our firm objective is to complete projects according to the client's specifications, within budget, and on schedule. We remain focused on putting the client first and providing the same close attention to schedule, cost, and quality control on every project. At the same time, PEI remains committed to its employees by providing a secure and rewarding working environment.

---

## CAPABILITIES AND REPRESENTATIVE EXPERIENCE

### **REGULATORY INTERPRETATION AND COMPLIANCE**

PEI provides the capability and experience to interpret and assist in compliance with the following Federal environmental rules and regulations:

- NESHAPs (40 CFR 60)
- MACTs
- PSD
- EPCRA
- TIER 2
- TSCA (40 CFR 761)
- CERCLA
- Storm Water Pollution Prevention
- NSPS (40 CFR 61)
- NSR
- Title V
- TRI
- RCRA
- NPDES
- SPCC (40 CFR 112)

PEI is also familiar with the rules and regulations of multiple state agencies, including, but not limited to, those in:

- Texas (TCEQ and RRC),
- Louisiana (LDEQ and LADNR),
- Mississippi (MSDEQ),
- Alabama (ADEM),
- Georgia (GADNR),
- Virginia (VDEQ),
- Washington (DOE), and
- South Carolina (SCDHEC).

---

## **SITE CHARACTERIZATION AND RISK-BASED CORRECTIVE ACTION SERVICES**

Cost effective site characterization, and design and implementation of a corrective action program can be challenging due not only to project and technical complexities, but also to regulatory constraints. The experience of PEI's staff enables us to meet our clients' needs to manage costs, while appropriately addressing technical and regulatory concerns. PEI's site characterization and risk-based corrective action services include:

- Preparing and implementing workplans and satisfying requirements of consent agreements and decrees;
- Performing site characterization, pre-remediation, and verification sampling;
- Performing baseline risk assessments;
- Performing Risk-Based Corrective Action (RBCA) evaluations;
- Providing oversight of remedial contractors, and
- Preparing and submitting final reports to clients and appropriate regulatory agencies.

Examples of PEI's staff site characterization and risk-based corrective action experience include:

### *Gas Pipeline Company - Site Characterization and Remediation Oversight*

Site characterization and remediation oversight for mercury impacts in soils at more than 70 gas pipeline meter and regulating (M&R) facilities in New Jersey and Texas. Responsibilities included collecting samples, interpreting analytical results, and preparing reports for the client and state agencies.

### *Gas Pipeline Company - Site Characterization and Remediation Oversight*

Preparation and implementation of work plans for remediation at natural gas compressor stations in Louisiana, Mississippi, Alabama, Virginia, and South Carolina. Work plan implementation encompassed the collection and interpretation of analytical results of pre-remediation and verification samples, including more than 15,000 soil samples (7,000 at one facility), 1,500 wipe samples (1,000 at one facility), and concrete chip samples. Areas sampled and remediated included drainlines, wetlands, used oil/burn pits, pervious and impervious surfaces, and air systems. Constituents of concern included PCBs, VOCs, SVOCs, TPH and metals. Staff was also responsible for laboratory contacts and negotiations, oversight of the remediation contractor, and preparation of final reports for submittal to the client and regulatory agencies.

---

In addition, PEI's staff is experienced in using the precepts of risk-based corrective action (RBCA) to develop site-specific cleanup goals for impacted environmental media. PEI is an expert at applying the RBCA programs for Texas (TRRP), Louisiana (RECAP), and Alabama (ARBCA).

## **HYDROGEOLOGICAL SERVICES**

PEI provides a wide variety of hydrogeologic services, ranging from the initial identification of potential groundwater problems to the design and implementation and monitoring of remedial action systems. PEI's staff has extensive experience with groundwater issues and provides the following services:

- Monitor well installation,
- Aquifer characterization,
- Groundwater sampling and monitoring,
- Potentiometric surface mapping,
- Geochemical and geophysical data analysis and regulatory review,
- Plume delineation,
- Groundwater modeling (including capture zone analysis),
- Design and implementation of Corrective Action Plans, and
- Ongoing monitoring.

Examples of PEI's staff hydrogeological experience include:

### *Oil Refinery - Monitor Well Installation and Monitoring*

Installation of monitoring wells to satisfy regulatory agency requirements as well as quarterly monitoring and potentiometric mapping services. This experience included the design and implementation of the sampling plan, negotiation with analytical laboratories, and submittal of quarterly reports to the state.

### *Butadiene Plant – Groundwater Investigation and Remedial Action Design*

Investigation of the impact of a variety of constituents of concern at a butadiene plant in south Texas. This work included preparing a sampling and analysis plan, performing data collection and analysis, plume delineation and hydrogeological modeling (including capture zone analyses), and preparation of a Remedial Action Plan and monitoring program.

---

### Remedial Client - Groundwater Investigation and Remedial Action Design

Monitor well installation to post-remedial monitoring at several facilities in Michigan. The facilities' groundwater, impacted by constituents such as hexavalent chromium, arsenic, and chlorinated solvents, had adversely impacted the drinking water supply of a nearby town. Activities included assisting in the design and implementation of groundwater assessment programs, remedial action plans, and post-remedial monitoring programs. In addition, evaluation of the most cost-effective method to provide an alternative drinking water source while installing new drinking water supply wells was performed.

### Gas Pipeline Company - Groundwater Database

PEI is currently responsible for the maintenance of a groundwater database containing the results of up to 10 years of monitoring at several natural gas compressor stations.

Members of PEI's staff have historically provided a wide range of hydrogeologic services to a variety of other clients, including, but not limited to, wood preservative plants, heavy equipment manufacturers, petroleum processing facilities, automobile painting facilities, and metal fabrication facilities. Activities included groundwater investigations using drilling rigs, cone penetrometers, and direct-push technologies (e.g., Geoprobe®); well installation and monitoring; aquifer characterization through pump and slug tests; plume delineation and groundwater modeling; geochemical and geophysical data interpretation; and design and implementation of remedial action and post-remedial monitoring programs.

## **ENVIRONMENTAL GEOPHYSICS**

PEI has completed projects using environmental geophysics using ground penetrating radar, resistivity, conductivity, shallow refraction techniques, and magnetometers. Examples of PEI's staff environmental geophysics experience include:

### Seismic Imaging, Houston, Texas

Completed a Seismic Tomographic Imaging project for 1-mile of sewer system at a major oil refinery. Project goals were to determine if voids or unstable soils were present above high-risk sewer lines.

---

Electromagnetics, Wadley, Alabama

Completed an EM-31 geophysical investigation to delineate a free phase hydrocarbon plume at a gas transmission site.

Electromagnetics, Pine Ridge Indian Reservation, South Dakota

Completed an EM-61 and magnetometer investigation to locate pits of buried ordinance on a former bombing range. Collected the data as well as completed data reduction and interpretation. The location of pits led to further soil and groundwater investigations.

Electromagnetics, Alkali, Monterrey, Mexico

Completed a comprehensive electromagnetic conductivity survey at a Mexican manufacturing plant. Responsible for oversight and collection of over 10 miles of data, and data reduction and interpretation.

## **DUE DILIGENCE AND ACQUISITIONS**

PEI's staff offers hands-on experience helping clients understand the liabilities for potential acquisitions. PEI's staff has completed multiple due diligence acquisition projects where timing was critical for determining potential environmental liabilities and the associated costs.

## **WATER QUALITY SERVICES**

PEI's staff offers hands-on water quality experience developed from projects conducted at various industrial sites. We prepare federal and state wastewater discharge permit applications and assist with storm water management and spill prevention plans. PEI's capabilities include:

- Wastewater sampling and characterization,
- Permitting of industrial wastewater discharges,
- Federal (NPDES) and state storm water permitting program support,
- Storm Water Pollution Prevention Plans (SWPPP), and
- Spill Prevention Control and Countermeasures (SPCC) Plans.

---

Examples of PEI's staff water quality experience include:

NPDES Permits

Preparation of several NPDES permits for natural gas pipeline compressor stations in Louisiana and Pennsylvania and for other industrial clients in Texas and Louisiana.

Stormwater Pollution Prevention Plans

Preparation of SWPPPs for several natural gas pipeline compressor stations in Indiana and for a mining equipment facility in Arizona. Activities included performing the facility audits, differentiating stormwater vs. non-stormwater discharges, and identifying and assisting in the implementation of Best Management Practices.

Spill Prevention Control and Countermeasures Plans

Preparation of SPCCs for over 120 natural gas pipeline compressor stations in over 20 states and for a variety of other facilities including petrochemical plants and bulk oil storage and distribution facilities. In addition, PEI's staff has designed and prepared a one-page SPCC plan that has been deemed acceptable by regulatory agency personnel during their facility audits.

**SETTLEMENT NEGOTIATIONS**

The USEPA and state regulatory agencies have always been aggressive in enforcing environmental laws on the regulated community. At the same time, these agencies have generally become less doctrinaire and more willing to compromise as the environmental movement has matured. Therefore, settlement negotiations (vs. litigation) have become even more important to the regulated community since history has shown that settlement can normally provide a cost-effective manner of complying with the appropriate laws and regulations.

PEI has experience in assisting the regulated community (specifically a gas pipeline company) with such negotiations. PEI's hydrogeologist served on the team of engineers and lawyers in settlement negotiations with the USEPA and U.S. Department of Justice regarding the Client's past environmental practices. PEI's responsibilities included compilation of historical assessment and remedial data at 35 natural gas compressor stations along the pipeline; presenting and defending the data; providing expertise in such areas as groundwater, PCBs, mercury, and stormwater; and assisting in the development of a Consent Decree.