

# Enviro-Sciences (of Delaware), Inc. Company Overview

### **Consulting & Technical Services**

#### **Environmental Auditing**

Environmental Impact Statements
Phase I Site Assessments
Due Diligence Reviews
Litigation Support
Regulatory Negotiations
Wetlands Delineation

#### Site Assessment Services

Soil & Groundwater Investigations
Phase II Investigations
Contaminant Delineation
Groundwater Monitoring & Modeling
Environmental Compliance Services

Air Quality Permits, Monitoring, and Modeling

Compliance Plans (SPCC, RCRA, other) Stormwater/Wastewater Permitting TSDF Audits

### **Workplace Consulting**

Facility Audits
Indoor Air Quality Evaluations
Program Planning and Assistance
Workplace/Process Hazards Assessment

ISO 14000 Consulting Services

#### Toxicology and Risk Assessment

TSCA Compliance Product Registration Environmental Risk Assessments

## **Engineering & Construction Services**

### **Engineering Services**

Feasibility Studies
Technology Assessments
Engineering Design & Design/Build
Construction Services

Groundwater & Soil Treatment Systems
Construction Management
Design/Build
Operation & Maintenance

#### **Outsourcing Division**

Professional Services for Consulting and Engineering

## Property Acquisition & Redevelopment

**ENVIRO-SCIENCES** (OF DELAWARE), INC. (ESI) is dedicated to providing the highest level of environmental and workplace expertise to a diverse range of clients. Communicating with our clients and understanding their goals and objectives enables us to provide tailored services and cost-effective solutions...and we have been successfully doing it for more than 29 years.

#### **OVERVIEW**

Developing practical solutions to our clients' worldwide environmental problems has been the hallmark of **ESI** since starting business in 1975. **ESI** has established a reputation for superior consulting, technical, engineering, and construction services conducted within an entrepreneurial structure that embraces achieving our clients' goals in a safe, efficient, and cost-effective manner. **ESI** prides itself in our ability to apply a diverse breadth of services to best satisfy specific client needs by deploying optimal strategies to achieve closure of environmental concerns. We can provide these services under a flexible array of business arrangements using a variety of contracting mechanisms to best suit clients' needs for a specific situation. **ESI** also qualifies as a small business under many public and private sector programs. Our mission is to provide innovative, cost-effective technical assistance and unparalleled service.

#### **STAFFING**

**ESI**'s multidisciplinary staff offers our clients a comprehensive source of environmental consulting, engineering, and construction expertise, with specialists in various scientific, technical, health and safety, and construction disciplines. Our staff conducts services within a flexible corporate structure that encourages teamwork ensuring that the right team members are assigned from our staff to best meet client objectives.

#### REPRESENTATIVE CLIENTS

**ESI**'s clients include Fortune 100 and other industrial companies, commercial firms, engineering/construction companies, law firms, financial institutions, utilities, real estate developers, public sector agencies, and government entities.

### SUCCESS THROUGH COST-EFFECTIVE PROJECT MANAGEMENT

Completing projects on time, within budget, and to the highest quality standards is a priority to **ESI**, as it is to our clients. **ESI** implements an aggressive, hands-on project management approach that facilitates achievement of our clients' goals. The key to our approach and the keys to our successful project execution are found in our commitment to the following:

- Assignment of experienced project managers and appropriate technical staff
- Up-front planning of work scope, schedule, and budgets with the client
- Effective communication with all parties from project start to completion
- Timely project tracking and work-in-progress reports
- QA/QC of all work completed
- Passion for excellence



"The success or failure of any program depends upon many factors; one of them is the project team - their ability to get the message across and the seamless impression they provide regarding their ability to work together and get things accomplished. ESI has done just that."

Director, Corporate Environmental Management Communications-Broadcasting Company



**ENVIRO-SCIENCES (OF DELAWARE), INC. (ESI)** has completed assignments for clients in a wide range of business activities throughout the United States, and portions of Canada and Europe since its founding over 29 years ago. Some of the clients who have benefited from the successful technical teams **ESI** has assembled and our cost-effective project management techniques are listed below.

ABC, Inc.
Abbott Laboratories
AIG

Alabama Pipeline Alabama Power ALCOA Allianz Group

American Cyanamid American Natural Gas Apache Building Product

A.Schulman Inc.
Bay Grove Capital
Beatrice Companies
Berlex Laboratories

Berkadia Beth Israel Hospital Bristol-Myers Squibb

Capital One Calvin Klein Cosmetics

CBS Records

CB Richard Ellis Investors

Celotex

Centrum Properties

Chartis

Chase Manhattan Bank

Chevron

Clara Maass Medical Center

CNA Insurance Coleman Company

Community Food Bank of NJ Consolidated Pipeline Consolidation Coal Continental Airlines Crompton Corporation Custom Chemicals Delta Airlines de maximis, inc.

Disney

Dubois Chemicals Enron Liquid Fuels

Debevoise & Plimpton

Equiva ESPN Exxon

Florida Gas Transmission Florida Power & Light General Dynamics Heartland Pipeline Hewlett Packard Hoffman-La Roche Home Depot Houston Pipeline

IBM Indiana-Ohio Pipeline Ingersoll-Rand International Platex ITT Corporation ITT Industries JFKIAT, LLC

Jersey Central Power & Light Kelso

Kimco Realty Corporation Kings Supermarket

Mannington Industries Marathon Oil

Matheson Gas Max Factor McDonald's

Metropolitan Petroleum Midlantic National Bank Miles Petroleum

Mobay Synthetic

Mobil Oil Mount Olive Board of Education

National Health Laboratories National Lead Industries National Starch Corporation Newark Beth Israel Medical

Center

Northern Natural Gas
Novartis Pharmacueticals
Nuclear Assurance Oxyfuels
Pacific Property Services
Panhandle Eastern

**PEMEX** 

Phillips Petroleum Plastinetics

Port Authority of NY/NJ Prudential Insurance Company

of America Queens Group Rayonier Ray-o-Vac Reheis Chemical

Revlon

Rockaway Township School

District

Roysons Corporation Rutgers University sanofi-aventis Shell Oil

Sherwood Pharmaceutical South Jersey Gas Southern Natural Gas Sumitomo Bank Summit Bank Sun Metal Finishing Sunbrite Dye

Star Enterprises
Starwood Capital Group
Starwood Hotels and Resorts

Synfax Manufacturing Tenneco Texas Eastern Textile Chemicals

TR Metro Chemical Transco

Transwestern Pipeline

Trunkline Gas Unilever United States

Union Oil
Union Textile
United Airlines
United Gas Pipeline
United Steel Products

US EPA
US Gypsum
US Land Resources
US Mineral Products
US Pipe & Foundry
Vanguard Oil
Vornado Realty Trust
Wachovia, NA
Wal-Mart

Wheelock Capital

Williams Pipeline Company Witco Corporation Zurich North America



### **Consulting & Technical Services**

- Environmental Impact Statements
- Phase I Site Assessments
- Due Diligence Reviews
- Litigation Support
- Regulatory Negotiations
- Wetlands Delineation
- Soil & Groundwater Investigations
- Phase II Investigations
- Contaminant Delineation
- Groundwater Monitoring & Modeling
- Air Quality Permits, Monitoring, and Modeling
- Compliance Plans (SPCC, RCRA, other)
- Stormwater/Wastewater Permitting
- TSDF Audits
- Facility Audits
- Indoor Air Quality Evaluations
- Program Planning and Assistance
- Workplace/Process Hazards Assessment
- ISO 14000 Consulting Services
- TSCA Compliance
- Product Registration
- Environmental Risk Assessments

# Property Acquisition & Redevelopment

- Remedial Investigation
- Design & Operation
- Regulatory and Development Agency
- Negotiations
- Property Use Evaluations and
- Redevelopment Plans
- Financial and Insurance Program
- Procurement
- Permit Approvals

### **Engineering & Construction Services**

- Feasibility Studies
- Technology Assessments
- Engineering Design and Design/Build
- Groundwater Treatment Systems
  - Pump and treat
  - Air sparging
  - ♦ Soil vapor extraction
  - ♦ Chemical oxidation
  - Other treatment technologies
- Soil Treatment Systems
  - ♦ Excavation and disposal
  - ♦ Soil vapor extraction
  - ♦ In-situ and ex-situ solidification
  - ♦ In-situ and ex-situ stabilization
  - Other treatment technologies
- Construction Management
- Design/Build
- Operations & Maintenance

### **Outsourcing Division**

• Professional Services for Consulting and Engineering



### **DUE DILIGENCE SERVICES**

Real estate transactions require timely and accurate information on environmental, health and safety problems. Enviro-Sciences, Inc. (ESI) can provide a thorough review of existing and past practices at a facility, and can assess the potential for environmental, and health and safety problems. **ESI**'s personnel have inspected business and properties worldwide, and are able to provide necessary information within the most demanding transaction schedules. **ESI** has conducted thousands of due diligence site investigations that have included the following services:

- Site inspections to determine hazards or environmental damage.
- Inventory of hazardous substances and wastes.
- Review of regulatory agency files for previous non-compliance.
- Verification of integrity of all underground storage tanks.
- Collection and interpretation of surface water, sediment, groundwater and soil data.
- Preparation of operating history and site maps.
- Evaluation of compliance with federal, state and local regulations.
- Interpretation of aerial photography.
- Documentation of storage vessels, landfills and surface impoundments.
- Documentation of known spills or waste discharges.
- Development of remediation cost estimates.
- Preparation of Phase I Environmental Site Assessment Reports in accordance with ASTM Standards, country and lending institution requirements.



### **ENVIRONMENTAL AUDITING**

**ESI** has assisted clients with all types of environmental auditing services at active facilities and at inactive sites. These audits typically involve the identification of potential areas of environmental concern when evaluating sites for purposes such as regulatory compliance, property transactions, or business divestitures or acquisitions. In other cases, **ESI** audits records or services provided by others to verify or disclaim existing data to support our clients in claims or in negotiations with regulators or other parties. **ESI** also audits sensitive areas such as wetlands to ensure protection of such regulated areas.

Results of audits performed by **ESI** are reported with recommendations for subsequent actions that are focused on driving open environmental concerns towards closure in a planned and systematic manner. **ESI's** goal is to serve our clients' interests in defining and closing out environmental issues in the most technologically appropriate, cost-effective, and timely manner possible. **ESI** audits frequently are performed in conjunction with our site assessment and remediation capabilities to provide continuity of services and to maintain the focus on results-oriented closure.

- ◆ ESI prepares environmental impact statements (EISs) for a broad range of commercial and manufacturing clients. Our staff members have been reviewers at lead agencies responsible for the preparation of EISs under programs such as the National Environmental Policy Act (NEPA), the New York State Environmental Quality Review Act (SEQRA), and the New York City Environmental Quality Review (CEQR).
- ◆ **ESI** has completed many Phase I site assessments for small sites, large industrial plant facilities, and multiple concurrent sites for real estate companies, financial institutions, insurers, and commercial and industrial companies in all major business sectors. Sites have ranged from ½-acre properties to large processing plants with hundreds of acres and complex operating facilities. **ESI** performs site inspections, reviews site historical records, conducts personnel interviews, searches local and regional records, and evaluates this information, then reports findings with recommendations for further actions.
- ◆ ESI provides due diligence reviews to assess existing and past practices at sites, and to provide timely information to support demanding transaction schedules. Reviews focus on determining the adequacy and accuracy of prior reports, to assess the viability of prior proposed recommendations, and to note any observed deficiencies and recommendations for change. ESI also evaluates and refines estimates of environmental liabilities based on observations made during due diligence reviews.



### **ENVIRONMENTAL AUDITING (CONTINUED)**

- ♦ **ESI** has provided litigation support services for many matters involving direct environmental liabilities or the indirect impact of environmental work on other facilities projects. These services typically involve providing expert testimony or performing technical reviews to evaluate the magnitude of claims and to substantiate our clients' position. **ESI** defines scientific issues, develops defense strategies, critiques and analyzes plaintiffs' positions, prepares attorneys and witnesses for depositions, reviews and summarizes literature, and prepares issue papers.
- ◆ ESI routinely negotiates with regulators as an advocate of our clients to ensure that the regulatory framework for any specific project does not become overly stringent. We also work to develop and maintain momentum on time-sensitive projects and to obtain reasonable cleanup criteria that account for site-specific, local, area, state, and regional environmental conditions. ESI has developed and maintained excellent working relationships with many regulators throughout the country at the federal, state, county, and municipal level, as well as many pseudogovernment authorities involved with decision-making at regulated facilities.
- ◆ ESI has completed hundreds of wetlands determinations throughout the United States. We have worked successfully for energy companies seeking to route their right-of-ways in wetlands areas. We have assisted developers with the preparation of mitigation plans when avoidance of sensitive areas cannot be achieved. Mitigation activities are associated with many projects and require participation by the responsible state agency.



### SITE ASSESSMENT SERVICES

**ESI** provides site assessment services to investigate, delineate, monitor, and model the location, extent, and migration of contaminated media. These services are often provided subsequent to an **ESI** site audit or Phase I Assessment to provide continuity of services, be timely and efficient, maintain strategic focus, and control costs. These projects include:

- ♦ Soil and Groundwater Investigations
- ♦ Phase II Investigations
- Contaminant Delineation
- Groundwater Monitoring & Modeling

- ◆ ESI has performed countless soil and groundwater investigations to identify areas of contamination, and to determine the contaminants of concern and the severity and extent of contamination. ESI uses a variety of methods including manual sampling, soil boring with various types of drilling equipment, and well installation. Sample collection, sample handling, record keeping, and data generation are all performed with strict adherence to all applicable protocol, procedures, and guidelines.
- ♦ ESI has designed and implemented hundreds of Phase II investigations to quantify environmental liabilities associated with ongoing manufacturing operations, inactive site, and at sites proposed for acquisition and/or divestiture. Phase II investigations are often performed subsequent to an ESI Phase I to provide continuity of service. Remediation services (Phase III) are also offered to complete a turnkey project.
- **ESI** uses the results of soil and groundwater investigations to delineate the extent and severity of contamination. Delineation data is used in conjunction with other key variables such as soil types and strata, depth to water, and groundwater characteristics, and cleanup criteria to develop conceptual remediation plans.
- ◆ ESI designs groundwater-monitoring programs to meet clients' needs while also satisfying regulatory requirements. Monitoring well locations are selected based on a review of site topography, the locations of areas of concern, and other relevant information. Strategic placement of wells provides information on contaminant distribution and contaminant migration, while also minimizing the number of wells to be installed and sampled, and with potential remedial strategies in mind.
- ◆ **ESI** performs groundwater modeling to predict trends in groundwater flow direction and to reflect interactions between groundwater recovery wells, multiple aquifer systems, and bodies of surface water. **ESI** uses finite-difference and finite-element numerical models as well as numerous analytical models to predict contaminant migration and degradation at any point in the future.



### **ENVIRONMENTAL COMPLIANCE SERVICES**

**ESI** provides environmental compliance services, including the following:

- Air Quality Permitting, Monitoring, and Modeling
- Compliance Plans (SPCC, RCRA, other)
- Stormwater and Wastewater Permitting
- ◆ TSDF Audits

- ◆ ESI prepares air permits for various agencies and regulatory authorities for discharges from remediation systems and existing facilities. Typical permits include a process description, descriptions of air pollution control devices, emissions modeling, and monitoring plans to ensure permits limits are not exceeded during operation of the permitted control devices, operation, or system.
- **ESI** prepares pre-construction and Title V operating permit applications.
- **ESI** analyzes air pollutant emissions from continuing sources at operating facilities and under different operating scenarios.
- ♦ ESI provides stormwater and wastewater permitting services, including baseline monitoring and submittal of the initial permit applications, as well as on-going stormwater and wastewater sampling, analyses, and preparation of monthly reports for all wastewater discharges. Permits are prepared and compliance monitoring is performed to ensure compliance with NPDES and other federal, state, county, municipal, and facility-specific requirements for all types of discharges to surface water and groundwater.
- **ESI** assists its clients in the management of their hazardous wastes by auditing their treatment, storage and disposal facilities (TSDFs) and ensuring they are operated in compliance with all applicable rules and regulations. **ESI** also helps clients to minimize the number of TSDFs and to participate in waste minimization practices.



### WORKPLACE CONSULTING SERVICES

**ESI** provides a wide range of workplace consulting services to fulfill regulatory requirements, to satisfy clients' environmental health and safety (EHS) needs, and to prevent losses. Services offered include the following:

- Facility audits
- Indoor air quality evaluations
- Program planning and assistance, including professional staff training
- Assessments of employee exposures to materials and process hazards
- ♦ ISO 14000 consulting

- Reviewed corporate and facility EHS programs to identify gaps in meeting management's expectations
- Established EHS strategies and action plans to be consistent with clients' corporate EHS goals and objectives
- Upgraded EHS policies and practices
- Measured worker exposures to chemical hazards and noise
- Developed, performed, and led formal EHS audits of facilities and external TSDFs
- Provided on-site technical assistance to meet short-term work force needs
- Developed training to increase management cooperation, make programs more effective, and enhance the technical development of professional staff
- Evaluated indoor air quality (physical parameters and biological contamination), and recommended improvements in order to eliminate employee complaints
- Evaluated existing management systems for compatibility with ISO 14000
- Coordinated and led the ISO 14001 registration process



### TOXICOLOGY AND RISK ASSESSMENT SERVICES

**ESI** provides a wide range of toxicology and risk assessment services, including TSCA compliance, product registration, and environmental risk assessment. These services are often provided to satisfy regulatory requirements for product advocacy and defense. We also offer epidemiological research to provide defensible solutions to chemical exposures or releases.

- ◆ ESI has registered new products and performed product risk assessments, including implementation of toxicology testing programs. Examples of tasks performed include FDA registration of a high-intensity sweetener, TSCA approval of a stain resistant carpet finish, and toxicology and biodegradation testing of nylon 6.
- **ESI** has reviewed epidemiology literature and prepared response papers, performed targeted human health studies, and designed surveillance programs.
- ◆ ESI has performed human and ecological risk assessments, analyzed and evaluated risks, developed risk-based criteria, and negotiated favorable risk-based corrective action (RBCA) criteria to reduce environmental liabilities and the associated costs. ESI has performed risk assessment of Superfund, RCRA, and State-led sites to prioritize remedial actions and reduce remediation costs, developed site-specific health-based cleanup goals for all environmental media, and negotiated regulatory acceptance of project-specific health-based cleanup goals.



### **ENGINEERING SERVICES**

**ESI** provides engineering services for the cleanup of contaminated sites. Our engineers have successfully designed, permitted, and implemented remediation systems using a wide array of proven and cutting edge technologies to cleanup soil and groundwater. Engineering services are often applied to audits and site investigations performed by **ESI** to provide continuity of service, and to maintain the focus on an aggressive remedial strategy that can achieve site closure as efficiently and cost-effectively as possible. Likewise, **ESI** often follows the engineering phase by implementing the selected remedy, further streamlining the cost and timeframe necessary to achieve cleanup goals and other client objectives. The services offered are:

- Feasibility Studies
- Technology Assessments
- Engineering Design and Design/Build

- **ESI** performs feasibility studies to facilitate selection of the most appropriate remedial technology or combination of technologies for a specific situation. The studies performed by **ESI** range in complexity depending on the nature of the project and the regulatory requirements.
- ◆ ESI routinely assesses various remediation technologies to find the most suitable and appropriate approach to deploy for a specific cleanup application. ESI uses an open teamwork approach to access the composite knowledge base of our entire staff to determine the optimal solution to satisfy clients' needs via brainstorming techniques. This process maximizes our ability to evaluate long proven technologies as well as the most innovative new technologies. This teamwork approach allows a group with diverse backgrounds to present options and assess ideas in a constructive and productive open forum, resulting in the design of optimum remedial solutions.
- ♦ ESI designs vary in complexity based on the nature of the areas of concern, the regulatory programs involved, and the needs of our clients and other involved parties. ESI strives to provide streamlined designs whenever possible to eliminate unnecessarily excessive engineering costs or timeframes. This is especially true when we are preparing the design under a design/build project or in other performance-based situations. Typical designs include plans and specifications varying in complexity from a few pages to multiple volumes. Design/build projects are coordinated with ESI's construction services group.



### **OUTSOURCING DIVISION**

**ENVIRO-SCIENCES (OF DELAWARE), INC. (ESI)** provides our professional services to clients on an outsourcing basis. This program is very effective at extending clients' staffing capabilities by providing experienced environmental professionals for either short-term or long-term projects, operations, or program needs. **ESI**'s outsourcing division provides the following advantages to our clients:

- Provides experienced professionals on an as-needed basis to fulfill resource needs
- Fills gaps in staffing in instances where hiring cannot be justified
- Eliminates the administrative and financial burdens of creating staff openings, recruiting, hiring, and retaining new personnel
- Access to personnel can be expedited through establishment of a blanket contract for outsourcing services
- Readily extends existing staffing levels to facilitate business upsizing or strategic growth
- Provides a simplified approach to meet staff needs with a time-sensitive approach

**ESI**'s outsourcing division can be beneficial to provide a wide array of services for clients:

- Prepare filings, permits, or other applications for environmental activities at operating facilities or for remediation projects
- Audit a facility to identify potential areas of environmental concern or potential workplace health or safety issues
- Provide expert testimony or litigation support services to provide expertise from an external party to validate client claims or challenge opposition claims
- Provide third-party quality assurance or quality control services
- Oversee site assessments and/or review delineation data to ensure investigatory efforts are properly focused towards achieving remedial goals
- Provide technology assessments or design services to provide optimal remedies for cleanup of contaminated sites
- Manage remediation and other construction activities and perform related reporting functions
- Negotiate favorable regulatory terms such as risk-based closure criteria



## **PROPERTY ACQUISITION & REDEVELOPMENT**

**ENVIRO-SCIENCES (OF DELAWARE), INC. (ESI)** has developed an active Brownfields program designed to take properties through cleanup to redevelopment. **ESI**'s program covers the following facets:

- Contamination assessment and remediation cost estimates
- Remediation system design/build
- Regulatory and development agency negotiations
- Property use evaluations and redevelopment plans
- Permit approvals
- Community participation plans
- Financial and insurance program procurement
- Property acquisition
- Property redevelopment

**ESI**'s Brownfields experience includes the following projects:

- **ESI** performed a project where we purchased a contaminated industrial property, then sold the property to the existing tenant once remediation was completed. **ESI** negotiated site closure criteria, conducting site remediation activities, and collaborated in the site redevelopment plans.
- **ESI** purchased a 25-acre industrial site contaminated by dioxin, chromium, and solvents. **ESI** negotiated a remediation and reuse program with local and state officials. The property purchase transferred contamination liability from the property owner and PRP using cash payments and insurance coverage.
- ◆ **ESI** purchased a former petroleum-blending facility with areas of soil and groundwater contamination. The purchase agreement included cooperation with the former owner with site cleanup and joint profit sharing when the property was sold. **ESI** negotiated the cleanup closure criteria with state regulators.
- ◆ **ESI** provided site assessment and remediation feasibility/selection services for a former chromium-smelting site that was being redeveloped for a retailer. **ESI** developed technical specifications for the remedial approach so that it would harmonize with the redevelopment plan and property deed restrictions.
- **ESI** developed an assessment and innovative remediation plan that reduced the volume of hazardous waste from an urban industrial property that was being redeveloped into residential housing.