Environmental Due Diligence Process and Considerations in Purchase-Sale and Leasing Scenarios

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Have you or your client been caught off guard by a contaminated site in a purchase-sale, lending, or leasing scenario?

If you operate in the real estate industry long enough, you are bound to run into a contaminated site to navigate. Environmental site assessments (ESAs) are conducted for various reasons:

- Quantify soil, groundwater, and air quality
- Evaluate risk to humans and the environment
- Mitigate risk to stakeholders (e.g., lenders, buyers)
- Conduct release/contamination discovery reporting

In a transactional context, ESAs reduce the probability of costly disagreements and lessen the risk of a financial or legal burden.

Common sources of environmental contamination in a commercial or industrial context may include, among others:

- Retail fuel outlets / petroleum hydrocarbon (PHC) storage
- Drycleaners
- Manufacturing or industrial operations
- Public works yards
- Transportation services (trucking, rail, aviation)

The most common groups of contaminants include PHCs, chlorinated solvents, and salts (Figure 1).

TOP THREE CONTAMINATION SOURCES

1. **HYDROCARBONS**
   Gas Stations
   Transportation
2. **CHLORINATED SOLVENTS**
   Drycleaners
   Industrial Degreasing
3. **SALTS**
   Oil and Gas
   Road Maintenance

FIGURE 1

The Contaminated Site Management process is iterative, with several steps that build on one another (Figure 2):

→ STEP 1

Conduct a Phase I ESA. A Phase I ESA entails a non-intrusive review to identify potential environmental liabilities through records reviews, site inspections, and interviews. If potential risks are identified on site or from adjacent properties (generally within a 100-m buffer), an investigative Phase II ESA is recommended.

→ STEP 2

If warranted, the second step is conducting a Phase II ESA. A Phase II ESA includes an assessment of the soil and groundwater quality at the site and characterization of the level of environmental risk.

This step is performed to gather information on:

1. **Source –** What type of contamination, dimensions, and concentrations.
2. **Receptors –** Who or what is being affected (vegetation, humans, freshwater lakes/ wetlands, wildlife, etc.).
3. **Pathways –** How the contamination migrates from the source to the receptor. The transport method (groundwater, surface water) and distance.

→ STEP 3

Once sufficient data on source, receptor, and pathway is collected, the next step is to conduct a site-specific risk evaluation. This step involves generic guideline adjustment or applying a risk-based approach to identify the potential for adverse effect. Generally, laboratory data is compared to generic guidelines, and this step will consider site-specific conditions. If excess risk is identified through this process, remediation and/or risk management may be required.

PHASE I ESA
Identify potential sources
↓
PHASE II ESA
Assess and characterize
↓
RISK ASSESSMENT
Evaluate site-specific risk
↓

DATA INFORMS:
Requirement for remediation and/or risk management

FIGURE 2

What should be considered when engaging a firm to perform an ESA?

- **Do not overlook the importance of the Phase I ESA;** the scope of the Phase I ESA is a balance of client requirements and cost/timeline constraints. It is catered to the overall stakeholder objectives of the assessment. A high-quality Phase I ESA can reduce the probability of costly disagreements and will ensure future assessments are scoped appropriately. Consider the Phase I ESA as important as the foundation of a home.
- **Ensure the firm has the subject-matter expertise to manoeuvre through the entire contaminated site management framework, from cradle to grave.** Switching consultants on a file can result in duplication of effort and added costs to the client.
- **Find a "forward-thinking" team that keeps the end goal in mind.** A project team that collects a few extra data points in early phases can result in savings down the road. Find a firm that treats the client's money as if it is their own.

The Trace Associates Inc. team has the expertise and experience to guide you in building this foundation and navigating the complexities of environmental due diligence. We're ready to help!

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