ENVIRONMENTAL SITE ASSESSMENTS

PHASE II ASSESSMENTS

Phase II elements may include activities such as:

- *Surface soil and water sampling*
- *Subsurface soil sampling*
- *Groundwater sampling and monitoring*
- *Soil gas and indoor air sampling*
- *Sampling contents of containers that were part of previous site use*
- *Sampling interior drains and catch basins*
- *Ground based testing for Underground Storage Tanks and other containers*
- *Sediment testing*

Specialized equipment may be used to collect environmental media samples—here, summa canisters are being used to sample soil vapor.

PHASE I ENVIRONMENTAL SITE ASSESSMENTS

An evaluation of environmental conditions at a property, the completion of which is often referred to as "due diligence," is a necessary component of commercial property transactions. This evaluation begins with a Phase I Environmental Site Assessment (ESA). A Phase I ESA is conducted to identify the potential presence of environmental contamination, referred to as Recognized Environmental Conditions (RECs), on the property. The identification of a REC does not always mean that there is environmental contamination present, however, it can be an indicator of the possible presence of environmental contaminants. What happens after the Phase I ESA is completed and RECs have been identified? This is a common question for parties involved in commercial property transactions. The need to complete a Phase II ESA is an important part of the discussion.

PHASE II OBJECTIVES

A Phase II ESA is typically conducted by an environmental professional with goal of gathering the information necessary to more completely understand the liability and costs associated with contaminant mitigation on a property. Generally speaking, Phase II activities are selected to further explore the RECs identified during the course of the Phase I ESA. Depending on the site use history, this may entail significant sampling and testing of environmental media (soil, water, air, etc.) in order to more fully understand the scope of contamination present on a property. Occasionally, it may also be necessary to conduct additional investigation work following the completion of a Phase II ESA in order to more fully characterize the contamination and assess the potential liabilities associated with the property. The Phase II ESA standard provided by ASTM International (ASTM E1903-11) allows for the assessment activities to be tailored to the real estate industry's acceptable level of risk for environmental and legal liabilities for transactions. Ultimately, the goal is to provide all parties involved with a property transaction the information necessary to make informed decisions about property value, potential liabilities, and reasonable uses for the property.

PHASE II COMPONENTS

A Phase II ESA is an intrusive investigation of the property in question, which often involves the collection and analysis of environmental media (soil, groundwater, soil gas, sediment, indoor air, etc.) samples. During the course of investigation, various sampling methods and technologies may be utilized, depending on the types of samples to be collected. For example, depending on site conditions, commonly utilized sampling equipment for the completion of soil and groundwater monitoring points include direct push geoprobe rigs, hand augers, or back hoes. At some sites, more advanced sampling methods such as hollow stem augers and vapor sampling equipment may be necessary. In almost all cases, samples that are collected during the course of Phase II activities are submitted to laboratories for analysis of relevant contaminants.

Soil sampling via hand auger.

The term contaminant is broadly used in this context. There are certain compounds that are described in environmental laws, such as the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). There are also substances related to petroleum products, pesticides, herbicides, and naturally occurring materials such as arsenic. What does this all mean? Essentially, the Phase II ESA can be a very important and necessary component of a commercial property transaction. It is more common for the prospective purchaser to pay for the completion of a Phase II ESA, however, due to the expense of sampling potentially affected media and analyzing contaminants, the purchaser may only be willing to conduct a limited amount of work.

A Geoprobe drill rig, used to advance borings for the collection of soil and groundwater samples.

PHASE II REPORTING

The final step in the process of a Phase II ESA is interpreting the results and drawing conclusions from the data. In validating the information obtained during the sampling and testing, consideration must be given in determining if the information that has been collected is sufficient to understand the regulatory and financial liabilities associated with the property. It is also important to understand that the environmental professional that is hired to do the work will be responsible for interpreting all of the collected data. It is therefore always recommended to consider your environmental professional's level of experience before embarking on a Phase II ESA.

Additional Resources: https://www.epa.gov/cleanups/cleanup-laws-regulations-and-guidance