Phase I Environmental Site Assessments

An **Environmental Site Assessment** is a report prepared for a real estate holding which identifies potential or existing environmental contamination liabilities. The analysis, often called an ESA, typically addresses both the underlying land as well as physical improvements to the property.

Actual sampling of soil, air, groundwater and/or building materials is typically not conducted during a Phase I ESA. The Phase I ESA is generally considered the first step in the process of environmental due diligence. Standards for performing a Phase I site assessment have been promulgated by the US EPA and are based in part on ASTM in Standard E1527-05.

The examination of a site may include: definition of any chemical residues within structures; identification of possible asbestos containing building materials; inventory of hazardous substances stored or used on site; assessment of mold and mildew; and evaluation of other indoor air parameters.

Asbestos-containing materials are not typically surveyed or sampled in a Phase I site inspection, but suspect building materials may be noted.

Depending upon precise protocols utilized, there are a number of variations in the scope of a Phase I study. The tasks listed here are common to almost all Phase I ESAs:

- Performance of an on-site visit to view present conditions (chemical spill residue, die-back of vegetation, etc.); hazardous substances or petroleum products usage (presence of above ground or underground storage tanks, storage of acids, etc.); and evaluate any likely environmentally hazardous site history.
- Evaluation of risks of neighboring properties upon the subject property.
- Review of Federal, State, Local and Tribal Database Records out to distances specified by the ASTM 1528-06 and/or ASTM1527-05 and AAI Standards (ranging from ⅛ to 1mile depending on the database)
- Interview of persons knowledgeable regarding the property history (past owners, present owner, key site manager, present tenants, neighbors).
- Examine municipal or county planning files to check prior land usage and permits granted.
- Conduct file searches with public agencies (State water board, fire department, county health department, etc.) having oversight relative to water quality and soil contamination issues.
- Examine City Directories of subject property and adjacent properties.
- Examine historic aerial photography of the vicinity.
- Examine current USGS maps to scrutinize drainage patterns and topography.
- Examine chain-of-title for Environmental Liens and/or Activity and Land Use Limitations (AULs).
- Chain of Title (depends on lender and scope)

In most cases, the public file searches, historical research and chain-of-title examinations are outsourced to information services that specialize in such activities. Non-Scope Items in a Phase I Environmental Site Assessments can include visual inspections or records review searches for:

- Asbestos Containing Building Materials (ACBM)
- Lead-Based Paint
- Lead in Drinking Water
- Mold
- Radon
- Wetlands
- Threatened and Endangered Species
- Mercury poisoning
- Debris blow
- Earthquake Hazard
- Vapor intrusion

Preparers of Phase I Environmental Site Assessments

Often a multi-disciplinary approach is taken in compiling all the components of a Phase I study, since skills in chemistry, atmospheric physics, geology, microbiology and even botany are frequently required. Many of the preparers are environmental scientists who have been trained to integrate these diverse disciplines. Many states have professional registrations which are applicable to the preparers of Phase I ESAs; for example, the state of California has a registration entitled "California Registered Environmental Assessor Class I or Class II".

Under ASTM E 1527-05 parameters were set forth as to who is qualified to perform Phase IESAs. The new parameter defined an Environmental Professional as someone with

1. a current Professional Engineer's or Professional Geologist's license or registration from a state or U.S. territory with 3 years equivalent full-time experience;
2. have a Baccalaureate or higher degree from an accredited institution of higher education in a discipline of engineering or science and 5 years equivalent full-time experience; or
3. have the equivalent of 10 years full-time experience.

A person not meeting one or more of those qualifications may assist in the conduct of a Phase IESA if the individual is under the supervision or responsible charge of a person meeting the definition of an Environmental Professional when concluding such activities. Most site assessments are conducted by private companies independent of the owner or potential purchaser of the land.