



Brownfields Resources

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Phase I Environmental Site Assessments

What are Phase I Environmental Site Assessments?

Phase I Environmental Site Assessments (ESA) are an important tool for property owners, investors, borrowers, and lenders to meet legal, financial, and ethical obligations for **due diligence** on properties before purchase, sale, development, refinancing, or foreclosure.

Potential buyers use a Phase I ESA to

- avoid taking ownership of contaminated property;
- be eligible to use the “innocent landowner” defense and avoid responsibility for cleanup under the federal Superfund law (**CERCLA**); and
- evaluate whether environmental risks are worth accepting in a case where contamination is discovered.

The purpose of a Phase I ESA is to learn about a property's past use, environmental conditions at the site and adjoining sites, and possible presence of hazardous substances. A Phase I ESA is typically conducted prior to entering into a purchase, re-financing, or option agreement, and is ultimately used to assist property owners in managing environmental risks.

Results of the Phase I ESA may remove barriers to redevelopment. Often, a Phase I ESA will show that a property is not as contaminated as commonly believed or not contaminated at all.

Are there standards for conducting Phase I Environmental Site Assessments?

A Phase I ESA must be conducted in compliance with EPA's **All Appropriate Inquiries (AAI)** Final Rule, or

follow the standards set forth in the **ASTM E1527-05** Phase I Environmental Site Assessment Process to obtain protection from potential liability under CERCLA as an innocent landowner, a contiguous property owner, or a bona fide prospective purchaser.

Who conducts Phase I Environmental Site Assessments?

Phase I ESAs must be conducted by an **environmental professional** to comply with the AAI Final rule. A person who is not an environmental professional (as defined by AAI) may assist in conducting a Phase I ESA if the individual is under the supervision of a person meeting the definition of an environmental professional.

What is included in a Phase I Environmental Site Assessment?

A Phase I ESA involves the review of federal, state, and local records; a visual inspection of the property; and interviews with current and/or past owners, occupants, operators, and local government officials. A Phase I ESA does not involve sampling or laboratory analysis.

What is not included in a Phase I Environmental Site Assessment?

Neither samples are taken, nor tests performed during a Phase I ESA. No soil, groundwater, surface water, air, building materials, or any other substances associated with the site are tested or analyzed.

The person or entity requesting the Phase I ESA may wish to acquire additional, non-scope, information at the same time that a Phase I ESA is conducted.

Non-scope considerations may include investigation of asbestos-containing materials, radon, lead-based paint, lead in drinking water, or wetlands status.

What is in a Phase I Environmental Site Assessment report?

There is no required format for the Phase I ESA report, but a good report provides the client with relevant information in a format that is accurate, concise, and easy to read.

A typical report may contain these parts:

- Executive Summary – summarizes potential environmental concerns identified on the property, or on adjacent or nearby properties.
- Introduction
 - o Purpose – why was the work conducted.
 - o Methodology – how was the work conducted.
 - o Scope of Services – what work was done. Generally includes a statement that the work complies with AAI or ASTM standards.
 - o Warranty and Limitations – Generally explains that the work was conducted in a manner consistent with acceptable practices for conducting Phase I ESAs.
- Qualifications Statements and Signature – certain statements of credentials and qualifications, and the signature of the environmental professional conducting the Phase I ESA are required to comply with the AAI final rule.
- Subject Property (Site) Description – gives location and legal description of the property. It typically include descriptions of immediate boundaries, property dimensions, current use, zoning, buildings and improvements, utilities and easements, topography and surface water drainage patterns, presumed or known direction of groundwater flow, general description of the geology, and soil characteristics of a subject property.
- Adjacent and Near Properties Description – describes current land use of properties immediately adjacent to and/or near the subject property. The goal is to look at properties to a distance at which potential environmental concerns on those properties would no longer represent a concern to the subject property.
- Records Research
 - o Historical Records – includes reviews of historical information sources such as topographic maps, aerial photographs, city directories, fire insurance maps, and chain-of-title summaries in an effort to determine all past land uses of the site (since the site was developed) and adjacent properties.
 - o Regulatory Agencies Records – this is typically a standard records search of regulatory agency databases of properties within 1/8 to 1 mile of the subject property. The report should summarize the sites that are potential environmental concerns to the subject property.
 - o Physical Setting – review of sources of geology, hydrogeology, topography and drainage information pertinent to the site.
- Interviews – information about the site and adjacent properties disclosed through persons knowledgeable about those properties. These persons may include present or past property owners, operators, and occupants, as well as neighbors or local government officials.
- Other Information – in the course of the Phase I ESA, the contractor may become aware of other information that is useful to the entity or person who requested the work. For example, there may potentially be asbestos-containing materials present; information about radon gas concentrations or wetlands status may have been disclosed.
- Potential Environmental Concerns – potential environmental concerns related to the subject property or adjacent/near properties are reported.
- Data Gaps – a required topic by the AAI final rule.
- Findings and Opinions
 - o Recognized Environmental Concerns – presents significant environmental concerns associated with a subject property or adjacent/near properties.
 - o Opinion of the Environmental Professional – the AAI final rule requires a written report documenting the results and includes an

opinion of an environmental professional as to whether all appropriate inquiries conducted identified conditions indicative of releases or threatened releases of hazardous substances on, at, in, or to the subject property. Additionally, the report must include an opinion regarding additional appropriate investigation, if the environmental professional has such an opinion.

- Recommendations – the report may contain recommendations about what steps should be taken to address any concerns.
- Appendices – includes copies of reproducible information sources reviewed during the Phase I ESA, as well as an area vicinity map and site diagram detailing any potential environmental concerns.

How long is the Phase I Environmental Site Assessment valid?

For liability protection under CERCLA, a Phase I ESA is valid for one year. After one year, it becomes obsolete. Hence, a Phase I ESA must be conducted within one year prior to purchase of the property, with certain aspects conducted or updated within 180 days of the purchase date (i.e., site inspection, interviews, local records search, environmental professional's declaration).

Additional Resources

- All Appropriate Inquiries – Fact sheets, the final rule, and other information:
<http://www.epa.gov/brownfields/regneg.htm>
- Brownfields – EPA Website containing brownfields program information:
<http://www.epa.gov/brownfields/index.html>
- SMARTe – An Internet tool for land reuse planning and revitalization:
<http://www.smarte.org>
- American National Standards Institute – To purchase a copy of the ASTM standards:
<http://webstore.ansi.org>

Glossary of Terms

All Appropriate Inquiries (AAI) • A process of evaluating a property's environmental conditions and assessing potential liability for any contamination. All appropriate inquiries must be conducted to obtain certain protections from liability under the federal Superfund Law (CERCLA).

ASTM • American Society for Testing and Materials

ASTM International Standard E1527–05 • The title for this standard is "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process."

CERCLA • Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended.

Due diligence • Due care, the effort made by an ordinarily prudent or reasonable party to avoid harm to another party.

Environmental Professional • Defined by the AAI rule as someone with 1) a current Professional Engineer's or Professional Geologist's license or registration from a state or U.S. territory with three years equivalent full-time experience; 2) a baccalaureate or higher degree from an accredited institution of higher education in a discipline of engineering or science and five years equivalent full-time experience; or 3) the equivalent of 10 years full-time experience.

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