

Phase I and II Environmental Site Assessments by a Geotechnical Engineering firm

Eyncon Engineering offers Phase I Environmental Site Assessments to help identify and assess characteristics of sites that are of environmental concern. The site assessment helps protect all parties involved in a real estate transaction, especially the purchaser and lender, from future liability. Phase I Environmental Site Assessments have become a common requirement of most commercial and industrial real estate transactions. Our services are cost effective because we are a small Engineering firm and do not have the large overhead and expenses of a large company.

Standards for the Phase I and Phase II ESAs have been established by the American Society for Testing and Materials (ASTM) to address the "All-Appropriate-Inquiry" (AAI) aspect to the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). CERCLA contains national policy and procedures for containing or removing hazardous substances that have been released, and also provides funding and guidance for cleaning up some abandoned and contaminated hazardous waste sites. Be aware of state, local, or federal regulations outside of CERCLA that have other site assessment requirements and liability protections.

What is a Phase I ESA? -The Phase I ESA involves a review of records, a site inspection, and interviews with owners, occupants, neighbors and local government officials. While sampling and laboratory analysis are not typically included in this phase, they should still be considered by an environmental professional trained in the appropriate standards. The review of government records and interviews may take a lot of time. To ensure a quality assessment, allow sufficient time for the process.

Contamination can result from activities that took place on the site. Contamination could also come from activities at a nearby property. The records and interviews will be the best sources to provide this information. Public records are available regarding the locations of properties that have been classified as contaminated by federal or state regulations. Depending on their proximity to the site, contamination could have made its way to nearby properties.

What is a Phase II ESA? -If a Phase I ESA identifies potential contamination of the site by hazardous materials, a Phase II ESA may be conducted. The Phase II ESA includes sampling and laboratory analysis to confirm the presence of hazardous materials. Some of the tests that may be performed include:

- surficial soil and water samples
- subsurface soil borings
- groundwater monitoring well installation, sampling, and analysis (may be appropriate on neighboring properties as well to determine the presence of contamination)
- drum sampling (if any were left on the property)
- sampling of dry wells, floor drains and catch basins
- transformer/capacitor sampling for Polychlorinated Biphenyls (PCBs)
- geophysical testing for buried tanks and drums
- testing of underground storage tanks

Depending on the results of the samples, the Phase II ESA should outline additional site investigation needs, and potential remedial actions that may be required to clean up the property.

Each Phase I or II ESA should be performed by a trained and experienced environmental professional. The environmental professional should follow the ASTM and AAI Standards shown in the adjacent table. This professional may be aware of other state, local or federal regulations, beyond CERCLA, that have other site assessment requirements. These requirements may be different than ASTM and AAI Standards.

Most reports are performed to meet the standards of ASTM E1527-13. Eyncon Engineering can customize reports to meet individual client or agency lender's (Fannie Mae, Freddie Mac) requirements while taking the widely varying geology and topography of the land in mind.

Hiring a firm with insufficient experience or training can only compound your risk if it fails to provide you with accurate data. Our Engineers and technicians have experience in all phases and with Structural Engineers on staff as well, we are well positioned to take projects to other phases of permitting

How to Use the ESA Results

You know if your site is contaminated. What should be done to clean it up? Use the information resulting from your Phase I and II ESAs in your purchase agreement. Possible options might be:

- require that the current landowner clean up the property prior to the sale.
- reduce the cost of the property commensurate with the cost of remediation required.
- pursue acquisition and clean up alternatives that help control your environmental liability for the property.

ASTM Standards for Conducting Environmental Site Assessments		
ESA type	ASTM standards	Other requirements
Phase I	E 1527-13 E 2247-08	AAI in 40 CFR 312; ISO 14015
Phase II	E 1903-11	

Keep in mind the question "How clean is clean?" when working out the details. You, working with the DNR, not the seller, should establish the cleanup standards based on the NR 700 regulations and your needs. An experienced environmental professional performing the ESAs can help you by proposing the most up-to-date remedial methods and providing reasonable cost estimates. All details about who pays for cleanup costs and criteria for "how clean is clean" should be included in your final contract with the seller.

What's not included in a Phase I ESA?

It's important to note that a Phase I is limited to a visual inspection along with a documentation review only. There is normally no sampling or testing during a Phase I. Should issues arise, you'd most likely need to get a Phase II done. Also, there are a number of activities which are not normally within the scope of a Phase I, which are considered to be "non-scope items" which could potentially be provided during the site investigation. These might include things like the presence of mold, asbestos, lead paint, wetlands, compliance audits, etc.

We will work with each of our clients to ensure that they fully understand the report before they proceed with their commercial real estate transaction. For more information on our Phase I Environmental Site Assessments, contact us today or request a quote.