



Phase I Environmental Site Assessment (ESA)

A Phase I ESA is a research study intended to assess the environmental condition of a property and identify potential areas where petroleum or hazardous substances may have been released. A Phase I ESA determines if any recognized environmental conditions (“RECs”) exist on the property.

Purpose of a Phase I ESA:

- Assess potential impacts from petroleum or hazardous substances that may impede redevelopment.
- Establish baseline conditions for liability protection.
- Support property sale/acquisition activities.
- Provide documentation typically required by lenders to secure loans.

The Phase I ESA is comprised of the following:

1. **Site Visit and Interview:** Involves a site visit and interview(s) with the property owner, current occupant(s), and/or other persons knowledgeable about the site. Site visits typically take two hours and interviews are generally limited to 30 minutes.
2. **Desktop Study:** A property background check is conducted that includes reviewing current and historical documents and regulatory databases to determine if any potential environmental concerns or RECs exist that may impact property reuse.
3. **Phase I Report:** A Phase I ESA Report is prepared summarizing the findings of the site visit, interviews, and desktop study. A digital copy of the report is provided to property owner that formally confirms status on environmental conditions.

Shelf Life: 1 year (some components must be updated after 6 months)

Estimated Timeline to complete assessment: 4-8 weeks.

Phase II Environmental Site Assessment (ESA)

A Phase II ESA follows a Phase I ESA, as needed, and involves a physical study of the soils and groundwater where samples are collected and analyzed to characterize the type, distribution and extent of hazardous substances in the environment, if present.

Purpose of a Phase II ESA:

- Evaluate the findings of the Phase I ESA (if RECs are identified).
- Determine if a release has occurred.
- Delineate the extent of contamination (if present).
- Support efforts to obtain regulatory closure from the state environmental agency.

The Phase II ESA is comprised of the following:

1. **Work Plan:** Includes preparation of a Work Plan for submittal to the U.S. Environmental Protection Agency (EPA), and as applicable the Colorado Office of Public Safety (OPS) and the Colorado

Department of Public Health and Environment (CDPHE) for approval to proceed with sampling activities.

2. **Fieldwork:** Upon approval of the Work Plan, drilling apparatus is brought on to the site to collect samples of the soil, groundwater, soil vapor, etc. and will be sent to laboratory to be analyzed. Upon receipt of the results, the type, distribution, and extent of petroleum or hazardous substances (if present) will be defined.
3. **Report:** A Phase II ESA Report will be prepared summarizing the work performed, analytical results, and conclusions. A digital copy of the report will be provided to the property owner.

Shelf Life: Indefinite (+/- changes in site conditions, sampling methods, regulations, etc.)

Estimated Timeline to complete assessment: 6-12 weeks.

Regulated Building Materials (RBM) Survey

A RBM survey involves the physical collection of potentially hazardous materials generally associated with buildings. Small samples of potentially contaminated materials are collected and tested to confirm if regulated substances are present. The most suspect hazardous materials are asbestos, PCBs, and lead paint.

Purpose of a RBM Survey:

- Determine if asbestos containing materials (ACM), lead-based paint (LBP), Polychlorinated Biphenyls (PCBs), or other hazardous substances are present in building materials.
- Evaluate regulations that apply to the disturbance or disposal of confirmed hazardous materials and prepare plan of action before undertaking a building remodel, renovation or demolition.

The RBM survey is comprised of the following:

1. **Work Plan:** A Work Plan is prepared for submittal to the EPA and CDPHE for approval prior to initiating sampling activities. (Note: A cursory review of exterior and interior building conditions may be necessary to aid in developing a sampling strategy.)
2. **Fieldwork:** After the Work Plan is approved, building material samples will be collected and submitted to a laboratory for analysis.
3. **Report:** The RBM Survey Report will be prepared to summarize the work performed, testing results and conclusions. A digital copy of the report will be provided to the property owner.

Shelf Life: Indefinite (+/- changes in site conditions, sampling methods, regulations, etc.)

Estimated Timeline to complete survey: 4-8 weeks.

Analysis of Brownfield Cleanup Alternatives (ABCA)

An ABCA is an analysis of remediation options to be pursued that are potentially capable of achieving the required level of cleanup as required by EPA, OPS or CDPHE.

Purpose of an ABCA:

- Evaluate technical and economic feasibility of cleanup alternatives with reuse plans and redevelopment strategies.
- Evaluate and select preferred alternative.
- Support efforts to apply for an EPA Cleanup Grant.

Shelf Life: Indefinite (+/- changes in site conditions, sampling methods, regulations, etc.)

Estimated Timeline to complete alternatives analysis: 6-8 weeks.

Corrective Action Plan (CAP)

A CAP is a detailed remediation plan specifying the actions to be taken to remediate the environmental condition to the required level of cleanup.

Purpose of a CAP:

- Detailed implementation plan for selected cleanup alternative.
- Detailed cost estimate for selected cleanup alternative.
- Places property/ownership in position to pursue federal and state “cleanup” grants and low-interest loans.

Shelf Life: Indefinite (+/- changes in site conditions, sampling methods, regulations, etc.)

Estimated Timeline to complete plan: 6-8 weeks.