

PHASE II - ENVIRONMENTAL SITE ASSESSMENT (ESA)

A Phase II Environmental Site Assessment (ESA) is conducted when a Phase I ESA identifies potential environmental concerns, known as Recognized Environmental Conditions (RECs). A Phase II ESA uses environmental sampling and laboratory analysis to determine whether contamination is present and, if so, where it is located and at what concentrations. Phase II investigations are generally conducted in accordance with ASTM E1903 standards and state-specific programs. Phase II assessments involve collecting environmental data through soil, groundwater, soil gas, surface water, sediment, or building material sampling. Phase II ESA can take months-years to complete depending on site complexity.

WHAT HAPPENS DURING A PHASE II ESA?

INVESTIGATION PLANNING
Environmental professionals review Phase I findings and develop a sampling plan focused on areas of concern.

FIELD INVESTIGATION
Environmental samples may be collected from: soil, groundwater, soil vapor (soil gas), surface water, sediment, building materials (when appropriate)

LABORATORY ANALYSIS
Samples are analyzed by accredited laboratories for contaminants that may be associated with historical or current site activities.

DATA EVALUATION
Results are compared to applicable regulatory screening levels and risk-based environmental standards.

REPORTING
Findings are summarized in a technical report that describes: sampling locations, methods used, laboratory results, data interpretation, recommendations for additional investigation or corrective actions

PHASE I ESA VS. PHASE II ESA

Unlike a Phase I ESA, which relies on record reviews and site observations, a Phase II ESA involves collecting environmental samples and laboratory testing to determine whether contamination is actually present and to better understand its nature and extent.



A PHASE II ESA HELPS ANSWER

- Is contamination present?
- What are the contaminants?
- Where is contamination located?
- Has contamination migrated beyond the source area?
- Are there potential risks to people, property, or the environment?
- Is additional investigation or cleanup needed?

POSSIBLE OUTCOMES OF A PHASE II ESA

No further action required (NFA) When...

- ✓ No contamination detected
- ✓ Contamination detected below regulatory standard levels

Additional Action Required When....

- ✓ Contamination detected, requiring further investigation
- ✓ Contamination requires cleanup or risk management

MORE INFORMATION

EPA - Assessing a Brownfield Site
EPA - Brownfields All Appropriate Inquiries
Agency for Toxic Substances and Disease Registry
Phase I ESA - Factsheet

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