



CONSERVATION EVALUATION AND MONITORING ACTIVITY

Site Assessment and Soil Testing for Contaminants Activity

DEFINITION

An environmental assessment of the site and soil suitability for use in the cultivation of crops in urban or suburban areas.

CRITERIA

General Requirements

A Conservation Evaluation and Monitoring Activity (CEMA) is the assessment, monitoring, or recordkeeping activities required to plan, implement, or determine the effectiveness of conservation practices as described herein.

The CEMA includes the performance of work and documentation of the tasks, results, interpretations, and other activities described herein.

Qualified Individuals as stipulated in this section perform environmental site assessments and soil test collection.

Prior to initiation of the CEMA, the client will schedule a conference with the Qualified Individual as stipulated in this section and Natural Resources Conservation Service (NRCS) field office staff to ensure an understanding of the client objectives, required deliverables, and characteristics of the CEMA tasks. The meeting between all parties may take place in person or electronically.

The Qualified Individual will complete tasks as described in the **DELIVERABLES** section.

The Qualified Individual will maintain an ongoing record of CEMA related discussions with the client documented on a conservation assistance notes form (CPA-6) or other format that includes all components of the CPA-6 (client objectives, dates of assistance, all parties present, notes of significant information, alternatives considered, and decisions reached). Any correspondence related to the development of the CEMA will be included in the record.

The Qualified Individual may use any of the Conservation Practice Documents, such as tools, guidance, templates, etc. located in the state's Field Office Technical Guide.

Technical Requirements

Basic Site Assessment

Qualified Individuals have certification for conservation plan development and job approval authority as appropriate. Qualified Individuals may include Technical Service Providers or State or Federal Agency Partners.

The site assessment activities include interviewing owners, operators, and occupants; reviewing

historical sources of information and federal, state, tribal and local government records; and performing visual site inspections. Refer to **DELIVERABLES** section for requirements.

History of Site

ASTM-E1527 “Environmental Site Assessments: Phase I Environmental Site Assessment Process

The Qualified Individual must be an environmental professional defined as someone who has one of these qualifications:

- Professional Engineer’s or Professional Geologist’s license or registration and three years of full-time relevant experience.
- Licensed or certified by a state, tribe, or the Federal government to perform All Appropriate Inquiries and have three years of full-time relevant experience.
- Bachelor’s degree or higher in science or engineering and five years of relevant, full-time work experience.
- Ten years of relevant, full-time work experience.

Phase I Environmental Site Assessments (ASTM 1527) and All Appropriate Inquiry (Standards and Practices for All Appropriate Inquiries 40 C.F.R 312) are the industry standards for identifying potential environmental concerns according to previous uses of the property.

Refer to **DELIVERABLES** section for specific tasks and activities.

Further Site Assessment and Soil Testing

ASTM-E1903 “Environmental Site Assessments: Phase II Environmental Site Assessment Process

The Qualified Individual must be an environmental professional as defined above. The Qualified Individual develops a sampling plan to evaluate the potential presence of contamination from hazardous substances and petroleum on the property and determines the sources and exposures. They will identify chemicals of concern, sample and test soil, and further investigate areas of concern.

Refer to **DELIVERABLES** section for specific tasks and activities.

DELIVERABLES

These deliverables apply to Conservation Evaluation and Monitoring Activity (CEMA) 207 - Site Assessment and Soil Testing for Heavy Metals and Other Contaminants.

Two copies (hardcopy or electronic) of the CEMA must be developed—one for the client and one for the NRCS field office. At the client’s request, the Technical Service Provider (TSP) can deliver NRCS’s copy to the NRCS Field Office. An Additional copy of the plan should also be uploaded on NRCS Registry.

1. Cover Page

Cover page reporting the following information:

- a) Client information: Name, farm bill program, contract number, and contract item number.
- b) Qualified Individual information: name, address, phone number, email, appropriate license number, and county of service.
- c) Farm identification:
 - i. Farm name, owner name, street address, and county/state.
 - ii. Primary phone number of the client.
- d) Statement that services provided:
 - i. Comply with all applicable Federal, State, Tribal, and local laws and requirements.
 - ii. Meet applicable NRCS program requirements.
 - iii. Are consistent with the conservation program goals and objectives for which the program contract was entered into by the client.
- e) Qualified Individual printed name, signature and date.
- f) Client acceptance statement:
 - i. A statement that the information represents existing conditions.
 - ii. Signature of the client and date the client received the report.
- g) Block for NRCS reviewer acceptance (to be completed by NRCS).

2. Correspondence

- a) Conservation Assistance Notes (NRCS-CPA-6) or other format that includes all components of the CPA-6.
 - i. Brief overview of the client's objectives.
 - ii. Document each interaction with the client, include notes and results of that interaction, date, and initial.
 - iii. Document each site visit, activity in the field, results of each site visit, all parties present, date, and initials.
- b) Any correspondence relating to the development of the CEMA.

3. Maps

- a) Maps needed for the Basic Site Assessment or ASTM-E1527 "Environmental Site Assessments: Phase I Environmental Site Assessment Process to include, but not be limited to:
 - i. General location map of the implementation areas showing access roads to the location.
 - ii. Conservation Plan map (this may consist of several maps to account for the entire implementation area). This map may be obtained from the client or through client approval on CAP-70 for NRCS to release.
 - iii. Other maps, as needed, with appropriate interpretations.
- b) Maps needed for ASTM-E1903 "Environmental Site Assessments: Phase II Environmental Site Assessment Process include items a. i and ii, plus a map showing the sampling plan used to collect samples for evaluation of heavy metals or other contaminants.
- c) At a minimum, all maps developed for the CEMA will include:
 - i. Title block showing:
 - Map title.

- Client's name (individual or business).
 - Prepared with assistance from USDA – NRCS
 - Assisted By [name].
 - Name of applicable conservation district, county, and State.
 - Date prepared.
- ii. Map scale.
 - iii. Information needed to locate the assessment or monitoring area, such as geographic coordinates, public land survey coordinates, etc.
 - iv. North arrow.
 - v. Appropriate map symbols and a map symbol legend on the map or as an attachment.

4. Soil Sampling and Testing

- a) Develop a sampling plan with a map to evaluate the potential presence of contamination from hazardous substances and petroleum on the property and determines the sources and exposures.
- b) Collect soil samples following appropriate safety protocols and industry standards.
- c) Prepare soils for transport to accredited laboratory for chemical analysis of heavy metals or other contaminants.
- d) Receive soil test results of full metal panel, polycyclic aromatic hydrocarbons, and additional constituent analysis.

5. Documentation

- a) Completed forms Environmental Site Assessments (ASTM 1527), All Appropriate Inquiry (40 C.F.R 312) or NRCS Agricultural Conservation Easement Program (ACEP) HazMat Checklist and ACEP HazMat Interview. *If the assessment indicated no evidence of the presence or likely presence of any heavy metal, hazardous substance or other contaminants, then no further action to evaluate soil contamination is needed.*
- b) Results of soil test for heavy metals and other contaminants,
- c) Results and report from prior NRCS screening of heavy metals conducted by qualified NRCS uses of the portable x-ray fluorescence (pXRF)
- d) State approved risk threshold levels based on residential bare soil use for any metals detected.
- e) Conclusion statement
 - i. that the assessment has revealed no evidence of the presence or likely presence of any hazardous substances in, on, or at the site, no further action to evaluate for soil contamination is needed, OR
 - ii. the assessment revealed the presence of any hazardous substance and compared to the State approved risk threshold levels, the soil is safe for agricultural reuse, OR
 - iii. the contamination found at the property exceeds State approved risk thresholds for the proposed agricultural reuse. NRCS will refer the client to US EPA Brownfields and Land Revitalization Program.

References

- ASTM International. 2013. E1527 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process.
- ASTM International. 2011. E1903 Standard Practice for Environmental Sites Assessments: Phase II Environmental Site Assessment Process.
- USDA Natural Resources Conservation Service. Field Office Technical Guide.
<https://efotg.sc.egov.usda.gov/#/>
- USDA Natural Resources Conservation Service. National TSP Website.
<https://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/technical/tsp/>
- USDA Natural Resources Conservation Service. National TSP Resources.
<https://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/programs/technical/tsp/?cid=nrcseprd1417414>
- USDA Natural Resources Conservation Service. Manuals Title 440-Programs Part 528 - Agricultural Conservation Easement Program (ACEP), 528.203 ACEP Onsite Evaluation Documents A. Hazardous Materials Field Inspection Checklist B. Hazardous Materials Landowner Interview
<https://directives.sc.egov.usda.gov/ViewerFS.aspx?hid=36843>