



**PDHonline Course C680 (1 PDH)**

---

## **Phase I ESAs – 2013 Changes**

*Instructor: Jeffrey R. Sotek, PE, CSP, CIH*

**2020**

**PDH Online | PDH Center**

5272 Meadow Estates Drive  
Fairfax, VA 22030-6658  
Phone: 703-988-0088  
[www.PDHonline.com](http://www.PDHonline.com)

An Approved Continuing Education Provider

# **Summary of Updates and Revisions to ASTM E1527 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process**

## **How E1527-13 Differs from E1527-05**

On November 1, 2005, EPA issued a Final Rule (40 CFR 312) establishing standards and practices for conducting all appropriate inquiries (AAI) as required under sections 101(35)(B)(ii) and (iii) of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), as amended. Section 312.11 of the Final Rule stated that ASTM International Standard E1527-05, “Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process” may be used to comply with the AAI requirements.

ASTM International recently revised its 2005 version of the Phase I environmental assessment standard and will be issuing a new, or revised standard, specifically ASTM E1527-13, “Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process.” The ASTM E1527-13 standard is similar to the ASTM E1527-05 standard in format, process, and areas of coverage. In fact, many of the sections in ASTM E1527-13 are taken verbatim from the ASTM E1527-05 text. The newly revised standard, although essentially congruent to the ASTM E1527-05 Phase I Environmental Assessment Standard, provides some clarifications and additional guidance for the environmental assessment of commercial properties and determining whether or not there are recognized environmental conditions at a property or conditions indicative of releases or threatened releases of hazardous substances at a property.

This document presents a summary of the changes ASTM International made to the previous E1527-05 standard. It is EPA’s finding that the new standard E1527-13 remains compliant with the AAI regulatory requirements.

ASTM International’s revisions to E1527-05 “Environmental Site Assessments: Phase I Environmental Site Assessment Process” include the following changes, resulting in the revised standard, E1527-13:

1. ASTM updated the definition of “Recognized Environmental Condition (REC).”

The new definition of REC is: “the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property due to release to the environment; under conditions indicative of a release to the environment or under conditions that pose a material threat of future release. De minimis conditions are not recognized environmental conditions.”

The revised definition aligns with the All Appropriate Inquiries Rule provision that site assessments be conducted with a goal of identifying “conditions indicative of releases and threatened releases of hazardous substances on, at, in , or to the subject property.” The revised ASTM definition of REC retains some of the additional guidance from prior versions of the E1527 standard.

2. ASTM updated its definition of “Historical Recognized Environmental Condition (HREC).”

The definition was revised to clarify that the scope and application of an HREC is limited to include only past releases that have been addressed to *unrestricted* residential use. In addition, the new term “Controlled Recognized Environmental Condition” is defined to include past releases that have been addressed but allow contamination *to remain in place*.

3. ASTM added a definition of “Controlled Recognized Environmental Condition (CREC) to the standard.”

This term was added to further clarify that “historical recognized environmental conditions (HRECs) describe conditions where past releases were addressed at a property to the level of allowing for unrestricted residential use. A “controlled environmental condition” describes the condition where previous releases at properties that underwent risk-based closures were addressed, but contaminants are allowed to remain in place under certain restrictions or conditions.

4. ASTM added a clarification to the definition of “de minimis condition.”

The revision makes it clear that environmental professionals should not use this term to describe a CREC. This revision provides the prospective property owner with added assurances that the Phase I will provide necessary and available information on past corrective actions conducted on the property and available information on contamination left in place. The previous definition of de minimis

allowed environmental professionals to dismiss, or not report this information because the definition of “de minimis” merely stated that such conditions are not the “subject of an enforcement action.”

5. ASTM revised the definition of “migrate/migration” to specifically include vapor migrations.

This revision clarifies that releases of contaminants that migrate via vapor in the subsurface or in soils are recognized environmental concerns. Prospective property owners will have the added assurance that releases that migrate onto a subject property via a vapor pathway will be identified as recognized environmental conditions.

6. ASTM revised the standard’s definition of “release” to clarify that the definition has the same meaning as the definition of release in CERCLA .

This clarification removes confusion that may have been caused by different definitions of “release” in the standard and in the CERCLA statute.

7. ASTM revised the standard’s definition of “environment” to clarify that the definition has the same meaning as the definition of environment in CERCLA.

This clarification removes confusion that may have been caused by different definitions of “environment” in the standard and in the CERCLA statute.

8. ASTM revised the scope of the “User Responsibilities” section (section 6) to clarify which aspects of the site assessment investigation may be the responsibility of the user, or prospective property owner, or the user’s chosen representative, and not necessarily the responsibility of the environmental professional.

This revision aligns with the language at 40 CFR 312.22 (Additional inquiries).

9. ASTM added additional guidance at section 8.2.2, Regulatory Agency File and Records Review, of the standard to provide a standardized framework for verifying agency information related to information obtained from key databases.

This additional guidance, and added framework for file and record reviews, clarifies that an environmental professional should make efforts to review and document the validity of information found from searches of agency databases. The result is expected to be an increase in validity of reports and an increase in the level of confidence that users, or prospective property owners, can place on site assessment results.

10. ASTM revised the language in section 12.8 (Conclusions) to allow some flexibility with regard to the wording of the conclusion statement provided by an environmental professional as part of the assessment reports conclusion statement.

The revised language allows either for the use of the suggested statements provided in Section 12.8.1 – 12.8.3, or language similar to those statements. This revision will reduce confusion and increase the level of confidence that a user, or prospective property owner, can place in the report and that it is compliant with both the ASTM standard and the AAI rule.

11. ASTM updated the information provided in the standard's non-binding appendices. Appendices are non-binding and are provided for only for background information.

These revisions have no effect upon the requirements of the standard and no effect upon compliance with the AAI rule. Information provided in the appendices is provided only for background information for the environmental professional and users (prospective property owners). A disclosure statement in the front of the appendices clarifies that EPA was not a party to the development of the appendices and that users of the standard should exercise caution when referring to the information in the appendices, in particular the legal appendix (Appendix X1) due to the fact that ongoing litigation and future court decisions could reduce the reliability of the information provided.

ASTM's revisions to Appendix X4 simply provides a suggested outline for a final report of findings, opinions, and conclusions. EPA does not require that AAI reports follow any specific outline. Users of the standard may find the suggested report format useful, but the format provided is not required for compliance with AAI or compliance with the ASTM standard.