

ARE YOU PREPARED FOR THE TRANSITION? UPGRADING TO ASTM E1527-21 FOR PHASE I SITE ASSESSMENTS

DECEMBER 2023



Scott Davis
SVP, Industry Engagement, ERIS
sdavis@erisinfo.com
Visit my [LinkedIn page](#)



In December 2022, the U.S. Environmental Protection Agency (EPA) [amended](#) its All Appropriate Inquiries (AAI) rule to reference ASTM International's updated Phase I Environmental Site Assessment (ESA) standard, [E1527-21](#).

The rule, which took effect on Feb. 13, 2023, allowed the prior standard, E1527-13, to be used for one more year. But beginning Feb. 14, 2024, E1527-13 can no longer be used to satisfy [AAI requirements](#) under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). While the revised [standard is not an EPA regulation and is not required for AAI compliance](#), it is now widely recognized as the industry standard for Phase I assessments, which are [required for most CRE transactions](#).

“All ASTM standards are revised at least **ONCE EVERY EIGHT YEARS** to reflect current market practices”


All ASTM standards are revised at least once every eight years to reflect current market practices. While the new ESA standard is similar to the prior version, there are some notable differences, including revised and new definitions, increased scope of historical research, and new requirements related to environmental liens and activity and use restrictions, as described below.

Updated, New Definitions

The definitions of “Recognized Environmental Condition” (REC), “Controlled REC” (CREC), and “Historical REC” (HREC) have been updated to provide greater clarity. For example, a REC is defined as:

“The presence of hazardous substances or petroleum products in, on, or at the subject property due to a release to the environment; (2) the likely presence of hazardous substances or petroleum products in, on, or at the subject property due to a release or likely release to the environment; or (3) the presence of hazardous substances or petroleum products in, on, or at the subject property under conditions that pose a material threat of a future release to the environment.”

Notably, the updated REC definition now includes the word “likely,” which refers to a condition that “is neither certain nor proved but can be expected or believed by a reasonable observer based on the logic and/or experience of the environmental professional, and/or available evidence, as stated in the report to support the opinions given.” The new appendix breaks down the anatomy of a REC, including a



logic diagram (if this, then that) and hypothetical examples to help users understand how to apply the various terms. The new standard also clarifies the distinction between a REC and an HREC, emphasizing that an HREC is not a REC.

Additionally, there are new definitions to explain existing concepts, like “property use limitation” and “significant data gap,” to help EPs better understand what these terms mean. Specifically, ASTM replaced “property use restriction,” which was not previously defined, with “property use limitation,” which is defined as a “limitation or restriction on current or future use of a property in connection with a response to a release, in accordance with the applicable regulatory authority or authorities that allows hazardous substances or petroleum products to remain in place at concentrations exceeding unrestricted use criteria.” A “significant data gap” is “a data gap that affects the ability of the environmental professional to identify a REC.”

The “Big 4” for Historical Research

Under the [2013 standard](#), environmental consultants only had to review as many [historical sources](#) as needed to identify whether past uses could have led to a REC. The revised standard requires the review of at least four historical sources (aerial photographs, topographic maps, fire insurance maps, and city directories) for both the subject property and adjoining properties. The historical sources must be reviewed if they are reasonably ascertainable, applicable to the subject property, and likely to be useful in determining whether activities were conducted that would be expected to result in a release.

“The revised standard requires the review of **AT LEAST FOUR HISTORICAL SOURCES** for both the subject property and adjoining properties”

If the subject property was used for industrial, manufacturing, and now retail purposes, the environmental professional must review additional historical resources, such as building department records, interviews with persons knowledgeable about past uses, property tax files, and zoning/land use records if they are likely to identify a more specific use and are reasonably ascertainable. One primary goal behind these new requirements is to determine whether a property was previously used for dry cleaning, which is the [leading source of environmental liability in CRE transactions](#).

“To qualify for CERCLA liability defenses, **USERS MUST RESEARCH TITLE RECORDS** to identify environmental liens and activity and use limitations (AULs)”

Environmental Liens and Activity and Use Limitations

To qualify for CERCLA liability defenses, users must research title records to identify environmental liens and activity and use limitations (AULs). Previously, searches often stopped at the last change in title, which might not have identified active liens or AULs. The new standard clarifies that users must research title records back to 1980. Note that this is not the environmental professional's responsibility. The standard clarifies that EPs only need to identify whether they received land title records from the user and that the user identified all AULs or environmental liens. Third-party vendors may provide the research service for users as long as the search meets the 2021 standard.

Emerging Contaminants

Although EPA has [proposed a rule](#) to designate certain per- and polyfluoroalkyl substances (PFAS) as CERCLA hazardous substances, the proposed regulations have not been finalized. Therefore, PFAS are not considered a REC under 1527-21. However, the revised standard adds emerging contaminants to the “non-scope issues” list that users may want to evaluate as a business risk. It also notes that “once the emerging contaminants are defined to be a hazardous substance under CERCLA, as interpreted by EPA regulations and the courts, these substances must be evaluated within the scope of E1527.” The most recent regulatory agenda indicates that the proposed rule will be [finalized in March 2024](#), so PFAS is an issue that needs to be monitored closely as new regulations emerge.

“Once the emerging contaminants are **DEFINED TO BE A HAZARDOUS substance** under CERCLA, as interpreted by EPA regulations and the courts, **THESE SUBSTANCES MUST BE EVALUATED** within the scope of E 1527”

Additional Changes

Other noteworthy changes include:

- **Significant Data Gaps** – EPs must now identify significant data gaps (the definition is explained above) in the Findings section of the report, and they are encouraged to opine on what additional research is needed to resolve those gaps.
- **Report Contents** – all reports must contain site plans and color photographs with captions to improve reporting documentation and to make ESA reports more consistent throughout the industry (most consultants already do this). The conclusion must include RECs, CRECs, and significant data gaps. The revised standard also states that “Subject Property” is the appropriate term for describing the site of the assessment.
- **Site Reconnaissance** – the revised standard clarifies language about the scope and objectives of the site visit to make it easier to understand without substantively changing the scope of work. 🏡



Learn more about these changes and how the updated standard will impact environmental professionals and other user groups at our upcoming ERIS [Webinar](#).

[Register Now >>](#)

ABOUT SCOTT DAVIS

Scott joined ERIS with the merger of GeoSearch in December 2020. Scott was a founding partner and the Chief Operating Officer of GeoSearch for over 23 years. Upon his arrival at ERIS, Scott was responsible for the development and implementation of ERIS operational strategies and service processes. As of March 2022, Scott was appointed Senior Vice President, Industry Engagement, to oversee ERIS' significant activities in the market, engaging with customers, association interests, tradeshow, and developing webinars, podcasts, and promoting industry thought leadership. Additionally, Scott has a significant depth of industry experience including project management, technical support for numerous environmental assessments, feasibility studies, and wetland determinations throughout the United States while working at Carter & Burgess, Maxim Engineering, Huntington and Southwestern Labs. Scott is the treasurer for the Industry Council on the Environment (ICE), founder and board member of the Central Texas Association of Environmental Professionals, and the Vice President of Municipal Utility District 23.

ERIS has the solutions ready to help satisfy the requirements of ASTM's E1527-21.

Ask your Regional Account Manager for more information. >>



ONE-STOP SHOP FOR ENVIRONMENTAL PROPERTY DUE DILIGENCE

1-866-517-5204 | info@erisinfo.com | erisinfo.com