Environmental Federation of Oklahoma

31st Annual Meeting and Trade Show

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Topic: The Dark Matter of PFAS in Environmental Real Estate Assessments

Presentation: The Changing Landscape of Phase Is, CERCLA, & Emerging Contaminants

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Environmental Real Estate Assessments and CERCLA

Topics:

1) What are Phase I Environmental Site Assessments and why are they important?
2) Comparing ASTM E1527-13 & ASTM E1527-21
3) Current state of ASTM E1527-21 – Why was the standard proposed and then vacated?
4) What is the future of ASTM E1527-21?
5) What is an “Emerging Contaminant”?

Why are Phase I ESAs Important?

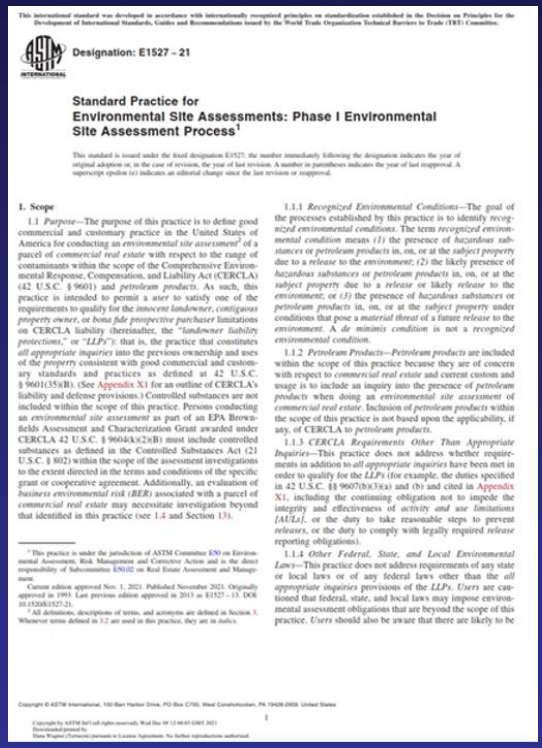
Should we buy this property?

Why are Phase I ESAs Important?

- Properly conducted environmental due diligence provides CERCLA/Superfund liability relief for buyers
- Understanding your risk of incurring environmental liability:
  - **CLEANUP COSTS!**
    - Paying for cleanup directly
    - Contributing money to someone else's cleanup
  - Potential for bodily injury/property damage claims for exposure to hazardous substances and/or petroleum products
  - Environmental liens and/or limits on use of the property, e.g., deed restrictions
  - Paying natural resource damages
  - Civil fines/penalties for violations of laws/permits
- Bank may require before lending to purchaser
- Insurance company may require purchasers and lenders to obtain environmental insurance.
- Impact on value/marketability of the property

Why are Phase I ESAs Important?

- ASTM developed a “good commercial and customary practice” for performing an “All Appropriate Inquiry”
  - First published in 1993 and amendments to the procedures came in 1994, 1997, 2000, 2005, 2013, and 2021
  - Codified into CERCLA (40 CFR 312)
- ASTM E1527 was developed to:
  - Identify existence of a hazardous substance or petroleum product on a Subject Property = **Recognized Environmental Condition**
  - Provide an Environmental Professional’s opinion regarding impact to property and the potential of impacts due to offsite sources
  - Conduct environmental due diligence using existing information sources
  - Allow for Environmental Professional’s discretion and judgment



Designation: E1527 – 21

Standard Practice for
Environmental Site Assessments: Phase I Environmental Site Assessment Process[1]

1. Scope

1.1 *Purpose*—The purpose of this practice is to define good commercial and customary practice in the United States of America for conducting an *environmental site assessment*[2] of a parcel of *commercial real estate* with respect to the range of contaminants within the scope of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) (42 U.S.C. § 9601) and *petroleum products*. As such, this practice is intended to permit a *user* to satisfy one of the requirements to qualify for the *innocent landowner*, *contiguous property owner*, or *bona fide prospective purchaser* limitations on CERCLA liability (hereinafter, the “*landowner liability protections*,” or “*LLPs*”); that is, the practice that constitutes *all appropriate inquiries* into the previous ownership and uses of the *property* consistent with good commercial and customary standards and practices as defined at 42 U.S.C. § 9601(35)(B). (See Appendix X1 for an outline of CERCLA’s liability and defense provisions.) Controlled substances are not included within the scope of this practice. Persons conducting an *environmental site assessment* as part of an EPA Brownfields Assessment and Characterization Grant awarded under CERCLA 42 U.S.C. § 9604(k)(2)(B) must include controlled substances as defined in the Controlled Substances Act (21 U.S.C. § 802) within the scope of the assessment investigations to the extent directed in the terms and conditions of the specific grant or cooperative agreement. Additionally, an evaluation of *business environmental risk* (*BER*) associated with a parcel of *commercial real estate* may necessitate investigation beyond that identified in this practice (see 1.4 and Section 13).

1.1.1 *Recognized Environmental Conditions*—The goal of the processes established by this practice is to identify *recognized environmental conditions*. The term *recognized environmental condition* means (*1*) 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*. A *de minimis condition* is not a *recognized environmental condition*.

1.1.2 *Petroleum Products*—*Petroleum products* are included within the scope of this practice because they are of concern with respect to *commercial real estate* and current custom and usage is to include an inquiry into the presence of *petroleum products* when doing an *environmental site assessment* of *commercial real estate*. Inclusion of *petroleum products* within the scope of this practice is not based upon the applicability, if any, of CERCLA to *petroleum products*.

1.1.3 *CERCLA Requirements Other Than Appropriate Inquiries*—This practice does not address whether requirements in addition to *all appropriate inquiries* have been met in order to qualify for the *LLPs* (for example, the duties specified in 42 U.S.C. §§ 9607(b)(3)(a) and (b) and cited in Appendix X1, including the continuing obligation not to impede the integrity and effectiveness of *activity and use limitations* [*AULs*], or the duty to take reasonable steps to prevent *releases*, or the duty to comply with legally required *release* reporting obligations).

1.1.4 *Other Federal, State, and Local Environmental Laws*—This practice does not address requirements of any state or local laws or of any federal laws other than the *all appropriate inquiries* provisions of the *LLPs*. *Users* are cautioned that federal, state, and local laws may impose environmental assessment obligations that are beyond the scope of this practice. *Users* should also be aware that there are likely to be

[1] This practice is under the jurisdiction of ASTM Committee E50 on Environmental Assessment, Risk Management and Corrective Action and is the direct responsibility of Subcommittee E50.02 on Real Estate Assessment and Management.

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[2] All definitions, descriptions of terms, and acronyms are defined in Section 3. Whenever terms defined in 3.2 are used in this practice, they are in *italics*.

Why are Phase I ESAs Important?

Elements of Phase I ESA:

1. Records review
2. Historical property use research
3. Site reconnaissance
4. Interviews
   - Owners and occupants
   - Local agency officials
5. Phase I Report

Comparing ASTM E1527-13 & ASTM E1527-21

Objectives of the ASTM Committee for 2021 update:

1. **Clarify existing language**
2. **Strengthen the deliverable by improving quality and consistency**

Big Picture:

- No seismic changes
- Clarification to definition of REC/CREC/HREC
- Guidance for classifying RECs vs CRECs vs HRECs
- Consistent use of the term “Subject Property”
- Modification to shelf life of E1527-21 Phase I report
- Requirement to use standard historical sources
- Inclusion of maps and photos
- Clarification for title searches
- Defining significant data gaps
- Introduction of “Emerging Contaminants”

Comparing ASTM E1527-13 & ASTM E1527-21

ASTM 1527-21 Changes:

- Clarification to definition of REC/CREC/HREC
  - Recognized Environmental Condition –
    - Defined the term “likely” – “which 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.”
    - Common misapplication discussed in ASTM Committee – Evidence of a release must be on the Subject Property (no such thing as an “off-site REC)

E1527-13 Definition

“The presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment."

E1527-21 Definition

“(1) 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."

Comparing ASTM E1527-13 & ASTM E1527-21

ASTM 1527-21 Changes:

- Clarification to definition of REC/CREC/HREC
  - Controlled Recognized Environmental Condition –
    - CREC = Still a REC (no change)
    - A REC affecting the Subject Property that has been addressed to the satisfaction of applicable regulatory authority with hazardous substances or petroleum products allowed to remain in place subject to implementation of control (property use limitations or activity use limitations)
      - Satisfaction – Addressed to satisfaction of regulatory authorities:
        - NFAs / Closure Letters
        - Self-directed clean-ups *above* unrestricted use but meeting risk-based criteria
      - Documentation – Shall identify information that provides the property use limitations or AULs (institutional/engineering controls) in the Findings and Opinions section of Phase I ESA Report
        - Implied control **should still be relevant** at the time of performing the Phase I ESA

Comparing ASTM E1527-13 & ASTM E1527-21

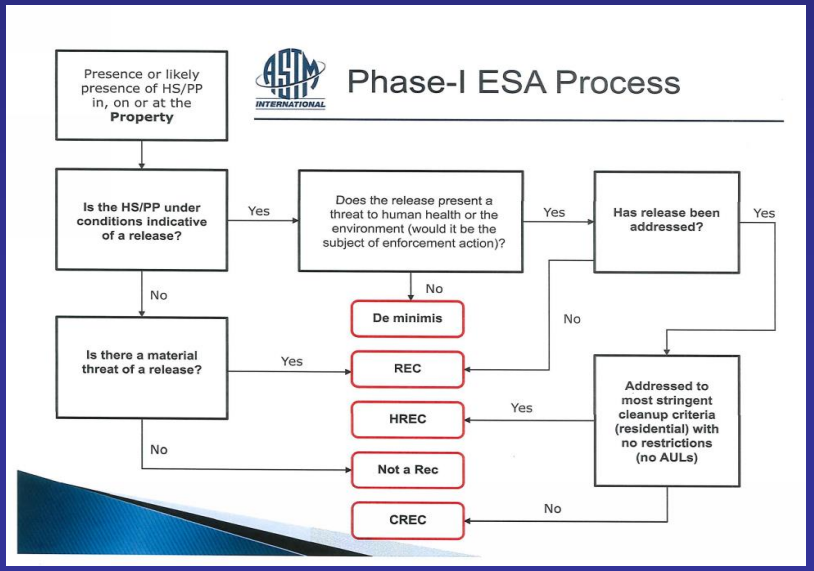
ASTM 1527-21 Changes:

- Clarification to definition of REC/CREC/HREC
  - Historical Recognized Environmental Condition –
    - HREC = Still NOT a REC (no change)
    - "a previous release of hazardous substances or petroleum products affecting the subject property that has been addressed to the satisfaction of the applicable regulatory authority or authorities and meeting unrestricted use criteria established by the applicable regulatory authority or authorities, without subjecting the property to any controls (for example activity and use limitations, or other property use limitations)."
      - Satisfaction – Addressed to satisfaction of regulatory authorities and below unrestricted use criteria:
        - NFAs / Closure Letters
        - Self-directed clean-ups
      - Environmental Professional must evaluate the past closure of a contaminated site and the environmental assessment data associated with the closure to confirm that the assessment meets current standards for unrestricted use.
        - Should have the data to support (and recommend providing in report)

Comparing ASTM E1527-13 & ASTM E1527-21

ASTM 1527-21 Changes:

- Guidance for classifying RECs vs CRECs vs HRECs
  - ASTM Committee recognized major differences of opinion between consultants whether a condition constitutes a REC, HREC and/or a CREC
    - Inconsistency/misapplications – Examples:
      - REC – Presence or likely presence (50-year-old gasoline UST – no documented release, no REC)
      - CREC/HREC – Calling off-site releases a CREC/HREC with no evidence of release to the Subject Property….the HS or PP must be present on the Subject Property to be classified as a REC/CREC!
    - Logic flow chart (Appendix X4) provided to create a step-wise evaluation process for practitioners
    - Also, 12 “real world” examples provided to further assist EP



Comparing ASTM E1527-13 & ASTM E1527-21

ASTM 1527-21 Changes:

- Consistent Use of the Term “Subject Property”
  - Rather than using a variety of terms – “site”, “subject site”, “property”, etc.
- Modification to Shelf Life of E1527-21 Phase I Report
  - A date identified upon completion of the following components - interviews, searches for recorded environmental cleanup liens, review of government records, site reconnaissance of the subject property, and the Environmental Professional Declaration
- Requirement to Use Standard Historical Sources
  - At a minimum, the “Big Four Sources” shall be reviewed in association with the subject property and adjoining properties (including across a street or alley)
    - Historical Aerial Photographs
    - Historical City Directories
    - Historical Topographic Maps
    - Historical Fire Insurance [Sanborn] Maps
  - The use of the Subject Property and Adjoining Properties should be identified – i.e. “a building is present” is not enough detail; need more specifics to describe building and how it was used

Comparing ASTM E1527-13 & ASTM E1527-21

ASTM 1527-21 Changes:

- Inclusion of Maps and Photographs
  - Photographs and a subject property map illustrating the boundaries of the subject property shall be included in all Phase I ESA Reports
- Clarification for Title Searches
  - Introduced in 2013 to identify environmental liens and Activity & Use Limitations
  - Update – Title records must be researched back to 1980 rather than just the last change in ownership
- Defining Significant Data Gaps
  - "a data gap that affects the ability of the EP to identify a REC."
  - Must be listed in the Findings section and requires a discussion in Opinion section of how data gap affected EP's ability to make conclusions for each REC
  - Environmental Professional should note whether additional information needed to resolve
- Introduction of "Emerging Contaminants"
  - Upcoming slides

Current & Future State of ASTM 1527-21

- *Current*: AAI proposed final rule incorporating E1527-21 withdrawn in May 2022 due to adverse public comments, so not adopted by EPA (*yet*)
  - EPA withdrew final rule from Federal Register to address comments in another final action, creating second comment period
  - Adverse public comments focused on:
    - Continued allowance of the 2013 standard (after 2021 standard is approved)
    - "Emerging contaminants" – PFAS/PFOA
- *Future*: EPA has not released a timeline
  - Predictions:
    - Anticipate resolution and final AAI rule proposed by end of 2022
    - E1527-13 will be retired
    - Language regarding emerging contaminants (particularly PFAS) classified as a Business Environmental Risk until such time that EPA categorizes PFAS/PFOA as CERCLA Hazardous Substance

What is an Emerging Contaminant?

- Referenced in ASTM E1527-21 Standard:
  - "Not identified as a hazardous substance by CERCLA, as interpreted by EPA regulations and the courts"
  - "Substances about which human understanding is evolving (for example, per- and polyfluoroalkyl substances, also known as "PFAS")"
    - No other compound/chemical specifically mentioned
- Environmental Professionals should consider including emerging contaminants as a Non-Scope Item, particularly in states that have adopted regulatory standards for such substances, or the adoption of regulatory standards are anticipated in the near future
  - Recommend including a statement about the emerging contaminant(s) not being regulated as a federal CERCLA hazardous substance, therefore not required to be included in the scope
- As soon as any Emerging Contaminant is listed as a Hazardous Substance, it will be considered in REC determination

What is an Emerging Contaminant?

- On August 25, 2022, a Federal Register Pre-Publication Notice stating:
  - PFOA and PFOS proposed to be listed as Hazardous Substance under CERCLA - - the ball is now officially rolling!
  - NAICS list of “potentially affected entities” including:
    - Aviation operations, carpet manufacturers, car washes, chemical manufacturing, chrome electroplating, coating/paints/varnish manufacturing, firefighting foam manufacturing, landfills, medical devices, municipal fire departments and training centers, paper mills, pesticide/insecticides, petroleum and coal production manufacturing, petroleum refineries/terminals, photo film manufacturing, polish/wax/cleaning product manufacturing, polymer manufacturing, printing facilities, textile mills, waste management and remediation services, wastewater treatment plants
    - This list is now is the cross-hairs for due diligence red flag properties
- Also anticipate proposed federal drinking water MCL in Fall 2022…..speculation the PFOA/PFOS concentration could be in part per trillion or even part per quadrillion