Fundamentals: Phase I Environmental Site Assessments and Due Diligence

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I. What is "Environmental Due Diligence"?

- Due Diligence definition (Merriam Webster)
  - 1: the care that a reasonable person exercises to avoid harm to other persons or their property
  - 2: ***research and analysis of a company or organization done in preparation for a business transaction*** (as a corporate merger or purchase of securities)
- Practical definition – our Environmental vernacular
  - ***Efforts undertaken to identify whether a piece of real estate is contaminated and the resulting effect that contamination will have on the economics of the transaction***

(Adapted from Environmental Aspects of Real Estate and Commercial Transactions; 3rd Ed. 2004)

I. An Overview

- What are common types of EDD…
  - Transaction support/portfolio analysis
  - Owner internal diligence/audit
  - Desktop evaluations
  - ***Phase I ESA in accordance with ASTM Std. E1527-21***
  - Phase II ESA
  - Phase I with Limited Environmental Compliance Review
- Why do Buyers need EDD…
  - Identify environmental liabilities
  - Comply with All Appropriate Inquiry (AAI) Rule (more on this later)
  - Satisfy dealmakers, lenders, insurers
  - Improve the understanding of risk and the bottom line

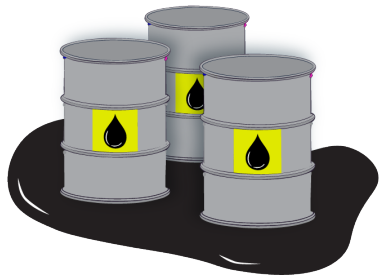
I. What is a typical “Phase I Environmental Site Assessment (ESA)”?

- Environmental assessment of a property which…
  - Uses ***existing information*** sources (i.e., not creating new data)
  - Focuses on ***hazardous substances*** (HS) and ***petroleum products*** (PP)
  - Allows for environmental ***professional judgement*** and discretion
  - Intended for commercial ***real estate transactions***
- Does Not:
  - Include ***sampling and testing*** (that’s a Phase II ESA)
  - Constitute a ***regulatory compliance audit*** (that’s a common add-on)
  - Provide a comprehensive ***basis for remediation (remedy) costs***
- Is Never:
  - A guarantee regarding impacts or contamination
  - An assessment of value or marketability of a property
  - A complete risk elimination process

II. The ASTM Standard: E1527 Overview

What is the Purpose?

- Establishes a standard for good commercial and customary practice for compliance with the ***All Appropriate Inquiry (AAI) Rule***
- Qualifies the User (purchaser, tenant, owner, or lender) for Federal liability protections
- Identifies Recognized Environmental Conditions (RECs) at a Site



II. The All Appropriate Inquiry (AAI) Rule

- EPA All Appropriate Inquiries/CERCLA Liability Protection
  - Signed into law in January 2002 under the Small Business Liability Relief and Revitalization Act (“***the 2002 Brownfields Law***”)
  - Codified under 40 CFR Part 312 in November 2006
  - More information: http://www.epa.gov/brownfields/brownfields-all-appropriate-inquiries

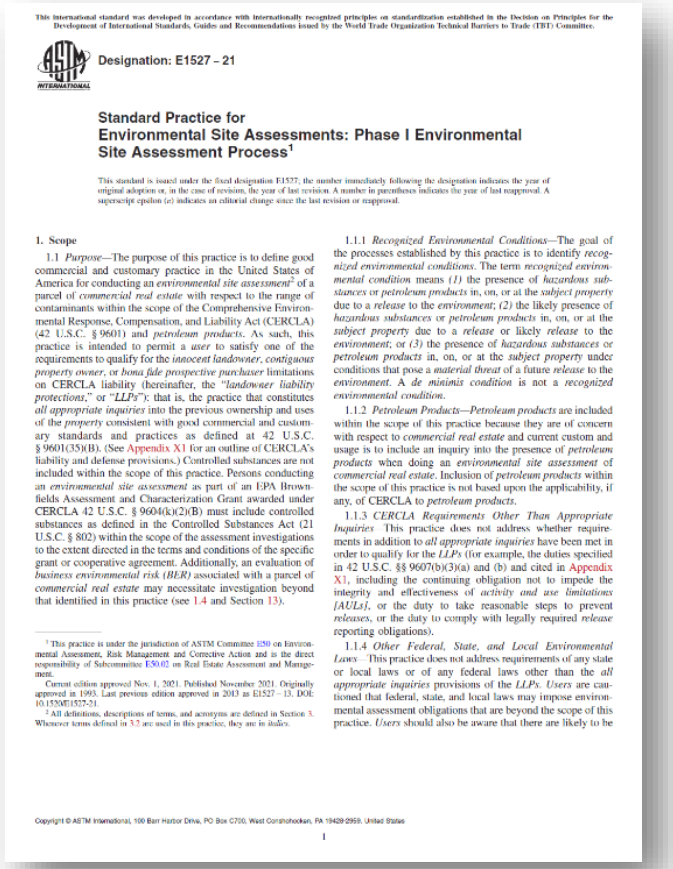
II. Landowner Liability Protections (LLP)

- **Contiguous Property Owners** - persons who own property that is contiguous…to a facility that is the only source of contamination found on the property. Such persons…had "no reason to know" prior to purchasing a property that any hazardous substance that is the subject of a release or threatened release...at the property.
- **Bona Fide Prospective Purchasers** (BFPP) - may buy property with knowledge of contamination, provided they bought the property after January 2002
- **Innocent Landowners** - persons who can demonstrate…that they "did not know and had no reason to know" prior to purchasing a property that any hazardous substance that is the subject of a release or threatened release was disposed of on, in, or at the property.

II. ASTM E1527 Overview

Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process

- ***1993: First published***
- 1997 and 2000: Revisions (not overhauls)
- 2002: Brownfields Act – cites E1527 as meeting interim standard to gain **AAI** protection
- ***2005: Significant changes*** – introduces the **REC**. Officially recognized as meeting AAI
- 2013: Expansion over 2005 version - **Vapor migration** consideration, Regulatory file reviews required, Revised REC definition, updates Historical RECs & added Controlled RECs
- ***2021: Released in November/December - Cleaned up definitions of many elements*** ***(***Controlled Recognized Environmental Conditions [CRECs], Historical Recognized Environmental Conditions [HRECs], Material Threat, *De Minimis* Conditions, Business Environmental Risk [BER] and Environmental Professional [EP])***; introduced new definitions, more clearly touches on Non-Scope Considerations (evaluating for emerging contaminants)***



This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.

Designation: E1527 – 21

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

This standard is issued under the fixed designation E1527; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ε) indicates an editorial change since the last revision or reapproval.

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*.

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II. ASTM E1527 Applicability to Emerging Compounds

- The AAI Rule and ASTM apply to **only hazardous substances** (HS) and **petroleum products** (PP) as these are defined **Federally under CERCLA**
- Contaminants of Emerging Concern are potentially not currently HS or PP under CERCLA, CWA, CAA, etc.
- Per- and polyfluoroalkyl substances (PFAS):
  - USEPA added perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS), including their salts and structural isomers to CERCLA in July 2024
  - Other PFASs are still not listed under CERCLA. Until regulated at the Federal level, chemicals such as PFAS cannot be the sole substance to trigger a REC.
- Unregulated, emerging contaminants should be considered under a Business Environmental Risk (BER)

II. ASTM E1527 Overview

Key Definitions

- ***Recognized Environmental Conditions (RECs)***
- Controlled Recognized Environmental Conditions (CRECs)
- Historical Recognized Environmental Conditions (HRECs)
- Material Threat
- *De Minimis* Conditions
- Business Environmental Risk (BER)
- Environmental Professional (EP)
- New definitions in 2021 version

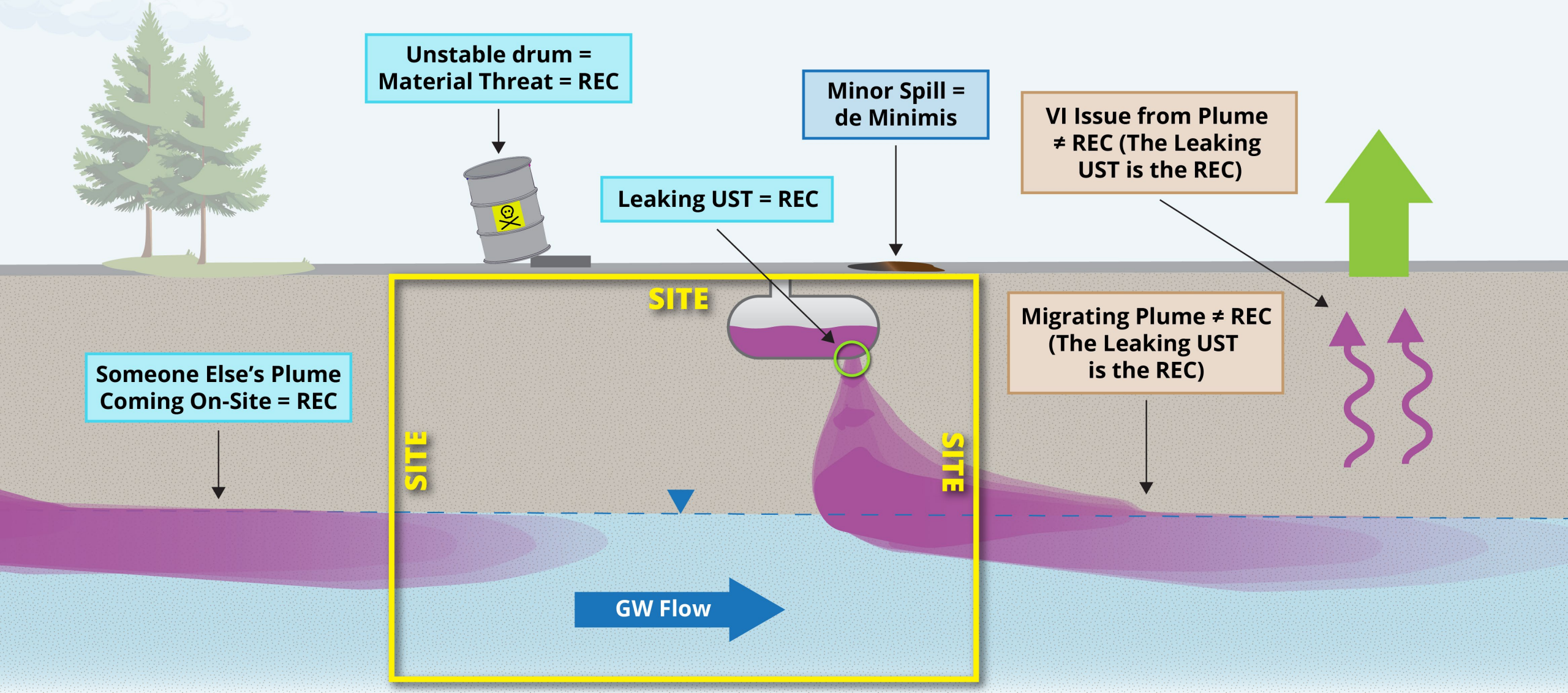
***Note*:**
These definitions and others in the Standard should be specifically used to outline the rationale for characterizing each finding

II. Key Definitions: REC

Recognized Environmental Condition (REC):

2021: (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.*

II. Phase I ESA Findings Illustrated



Special Mention: BER and the Applicability to non-HS/P and Emerging Contaminants.

Business Environmental Risk

"a risk which can have a material environmental or environmentally-driven impact on the business associated with the current or planned use of a parcel of commercial real estate, not necessarily limited to those environmental issues required to be investigated in this practice. Consideration of business environmental risk issues may involve addressing one or more ***non-scope considerations****, some of which are identified in Section 13."*

- Manner in which we identify concerns posed by the site but not specifically covered as a hazardous substance or petroleum product
- Should be carefully discussed between buyer/consultant and other stakeholders [in the ESA process] before committing to incorporating into the report (careful what you ask for)
- Notably ***could*** include emerging contaminants/issues not captured as HS or PP

II. Key Definitions: BER

- BER for non-HS or PP:
- Discussion found in Appendix Section X6.10:
  - *"…There are some substances that non-environmental professionals and others may assume to be hazardous substances that are not defined (or not yet defined) as hazardous substances under CERCLA … are not included in the scope of this practice"*
  - BUT – the section goes on to state that if the assessment is being conducted to satisfy both federal and state laws, it is permissible to include analysis and/or discussion as a Non-Scope Consideration

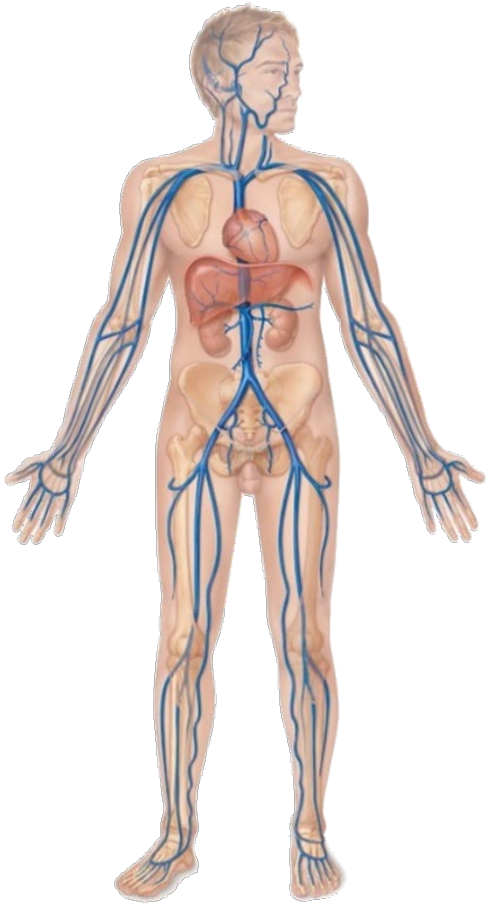
Additional Issues

- Asbestos-Containing Building Materials
- Biological agents
- Cultural and historical resources
- Ecological resources
- Endangered species
- Health and safety
- Indoor air quality
- Industrial hygiene
- Lead-Based Paint
- Mold or microbial growth conditions
- Naturally-occurring radon
- Regulatory Compliance
- *Substances not defined as HS or PP (including emerging contaminants) [this was new in 2021]*
- Wetlands

II. Elements of an ASTM Phase I ESA

Four Primary Parts

1. Records Review
2. Interviews
3. Site Reconnaissance
4. Reporting



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1. Review of historical records
2. Interview past and present owners/occupants and authorities
3. Site reconnaissance
   - Define past and present operations on/near site
   - Determine whether contamination may exist on/migrate to site
4. Draft report outlining methods and conclusions

Questions Later?

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