Phase I Environmental Site Assessment
ASTM Standard E1527-13 Revision Nears Completion

The latest revision to the existing Standard for Phase I Environmental Site Assessments will be published as ASTM E1527-13 in September or October 2013. Although there has been much discussion whether the Vapor Encroachment Screening Standard (ASTM E2600-10) would be required as part of the new Phase I Standard, ASTM has decided not to require vapor assessment as part of E1527-13.

The 2005 revision of the E1527 Standard responded to the requirements of the Federal Phase I rule, All Appropriate Inquiry (AAI) found in 40 CFR Part 312. The new ASTM Standard will be more aligned with the Federal AAI, and includes new user, i.e. client (the firm/individual who requests the Phase I) obligations. An example would be a responsibility of the user to inform the Environmental Professional whether the price of the property is below market price due to environmental damage (Section 6.5).

The 2013 revision of the Phase I Standard considers the paradigm of risk-based closure of sites, the recent developments in the electronic availability of environmental information, and clarifies terms used in Phase I reports. This includes definition of the terms, *release, environment, migrate*, and *migration*. The final wording of the new definitions is not yet available. This revision also makes it clear that recommendations are not a required element of a Phase I, but can be included if desired by the user.

Other important definitions have been changed or added:

- *Recognized Environmental Condition* (**REC**) - the definition is now more aligned with AAI.
- *Historical REC* (**HREC**) - this definition is clearer now; an HREC is now a REC that has been remediated to residential standards or where unconditional closure was obtained, i.e. "clean closure". An important *caveat* here is that you need to consider if the regulations have changed before dismissing something as an HREC. For example, if a dry cleaner site received residential closure 10 years ago, you would need to consider the possibility of VI issues today that were not considered when closure was granted to determine if it were a REC or an HREC at the time the Phase I was completed.
- *Controlled REC* (**CREC**) - is a **NEW** term for a REC that has been remediated to conditional closure standards, e.g. an environmental restrictive covenant (ERC) or other type of institutional control (IC), engineering control (EC), or closure to commercial/industrial standards. Keep in mind, this term is only applicable to the site once it has received closure in writing from the appropriate regulatory agency. Even if the site is working toward this closure, it is still a REC until the closure letter/documentation is received.
- *de minimis* is also being more clearly defined and now refers to such nominal things as petroleum staining on asphalt or concrete

The SBA view of CRECs is still undecided. The CREC should fit under SBAs policy to allow a loan; however, SBA is still waiting on EPA's response to the new Standard. [Note: there were USEPA members on the committee and the language was accepted by consensus, so this is

expected.] Also, a CREC allows the SBA or other lender/buyer an additional defense to show that the site was impacted prior to their ownership. Any identified *environmental condition* should be covered by one of these four mutually-exclusive criteria.

Professional judgment is perhaps more important under the new Standard as the threshold for reporting a REC is perhaps a bit less clear. Now, a REC does not require a smoking gun (hard evidence), but can be inferred. An example would be if closed drums of hazardous waste were found during a Phase I site survey. Although a release is not known to have taken place, this should be a REC since there is the *threat* of a release. Also, any indication of a release would be a REC.

The new standard has also changed the requirement for **file review**. Now, if there is a record of a UST or a spill, etc. it is up to the Environmental Professional to **use their judgment** as to whether or not to review a file. If the Environmental Professional chooses not to review a file they must justify why not in the Phase I report.

Another key area in which Environmental Professionals will need to exercise judgment is regarding vapor intrusion (VI) issues. Sometimes it may not be enough to evaluate only the nearby facilities. Examples of sites over 1/2 mile away exist where VI issues have arisen from extended groundwater plumes. The Environmental Professional will need to perform a file review for certain types of sites to evaluate the potential for a groundwater plume to exist under the subject site.

Another key purpose for a Phase I ESA is to provide a liability perspective. The following defenses are rooted in CERCLA and state laws:

- Innocent land owner (ILO)
- Bona fide prospective purchaser (BFPP)
- Contiguous land owner (CLO)

These defenses are based on **knowledge.** However, it is not just WHAT you know and when, but also what you SHOULD know. AAI and good commercial and customary practices need to be followed to assure that information that should have been obtained is obtained and reviewed.

The Federal standard, AAI includes ten distinct elements. E1527-05 was generated in response to AAI. However, AAI simply states WHAT you need to do/know and does not tell you how to obtain that data, while E1527-05 is a recipe that tells you HOW to obtain the data. The Standard functions as an alternative to AAI.

Sect. 1.1.1 (E1527-05) cites conditions indicative of a release are reason to know a release has taken place. Remember a REC is the "presence or likely presence of conditions indicative of a release."

There are also conditions required AFTER acquisition to maintain the defenses (ILO, BFPP, CLO). Some examples would be:

- ❖ Maintain institutional or engineered controls to prevent health exposures.
- ❖ Prepare and implement an Environmental Management Plan, and
- ❖ Follow reporting requirements, e.g. for a zoning or land-use change.

Another aspect of the E1527 Standard is evaluating Business Environmental Risk (BER) which is defined as:

> "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."

BER includes items that are outside the scope of CERCLA liability. Other laws can also impose liability on a property owner or operator, such as the RCRA, TSCA, CWA and state and local laws. Additionally, many health and safety concerns, natural resource concerns and third party liability would be considered BERs, as they are not covered by CERCLA and are not required to be discussed in the Phase I.

The common non-scope BER issues referred to in the ASTM definition include:

- Asbestos,
- Lead Paint,
- Lead in Drinking Water,
- Radon,
- Wetlands,
- Ecological Resources,
- Endangered Species,
- Cultural and historic resources,
- Regulatory compliance,
- Industrial Hygiene,
- Health and Safety,
- Indoor air quality,
- Biological agents, and
- Mold

It is important for the Environmental Professional to have some information about the property prior to determining what should be included in the Phase I to address these non-scope issues.

In conclusion the new ASTM Phase I Standard includes

- incremental changes and improvements which better align with the requirements of AAI.
- Controlled REC was a significant addition that recognizes continuing obligation to prevent exposure (maintain ERC, etc.);
- some AAI-like concepts;

- the ASTM Phase I Standard is still a cookbook approach that limits variability, guides judgment and improves confidence in the report.

Click this link to view the latest screening levels:
Remediation Closure Guide Screening Levels (correct to March 1st 2013)