

## Technical Brief for Environmental Professionals & Commercial Real Estate Lenders

### Webinar Q & A: Revisions to ASTM E 1527-13 Standard

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On March 28, 2013, I moderated an EDR Insight webinar titled [Revisions to the ASTM E 1527 Standard: Three Insiders' Perspectives](#), featuring a trio of ASTM Task Group members who shared their unique perspectives from the environmental, lending and legal sectors.

The three panelists were:



[Paul Zovic](#),  
Senior Advisor at Endpoint  
Solutions in Milwaukee



[Daria Milburn](#)  
VP, Manager REVAL/  
Environmental Risk  
SunTrust Banks in Charlotte



[Chris McCormack](#)  
Attorney with Pullman &  
Comley LLC in Bridgeport

The presentations focused on the technical aspects of the revised standards, one lenders' response and how the revisions tie into CERCLA liability protections and the AAI rule.

One of the most interesting aspects of hosting an event this large was reviewing the questions submitted as Paul, Daria and Chris presented. More than 1,500 environmental consultants, risk managers, attorneys and other professionals tuned in, and the flood of questions that came in provide a first-hand look into how environmental professionals are reacting to the changes.

The questions from the audience were more extensive than could be covered in the available timeframe so I asked panelists to submit their answers, which are provided below with attribution to each speaker.

#### Agency File Reviews

**Q:** *Regarding Agency File Reviews, does an interview with the project manager at the regulatory agency count as a file review?*

**Paul Zovic:** No; however, the Standard goes on to say that:

As an alternative [to the file review], the *environmental professional* may review files/records from an alternative source(s) (for example, on-site records, user provided records, records from local government agencies, **interviews with regulatory officials** or other individuals knowledgeable about the environmental conditions that resulted in the standard environmental record source listing, etc.). A summary of the information obtained from the file/record review shall be included in the report and the *environmental professional* must include in the report his/her opinion on the sufficiency of the information obtained from the files/records review to evaluate the existence of a *recognized environmental condition*, *historical recognized environmental condition*, *controlled recognized environmental condition*, or a *de minimis condition*.

**Q:** *Paul, you discussed file review for suspect RECs and HRECs of the project site and ADJACENT properties. What about nearby but NON-ADJACENT properties within the ASTM search radius with RECs, HRECs, or CRECs, is there a need to review files beyond immediately adjacent properties?*

**Zovic:** The Standard only addresses file reviews in the context of the property and adjoining properties. However, if in the EP's opinion additional information is required for other, non-adjoining properties, it is the EP's responsibility to determine if the identification of RECs on the property requires reviewing those other files. In this regard, this is no change from the current Standard.

## REC-HREC-CREC Determinations

**Q:** For an HREC, is formal agency sign-off required? Or is a self-directed cleanup also acceptable?

**Zovic:** The new HREC definition recognizes self-directed cleanups; the key is that the remaining contamination must be below the most stringent cleanup standard (i.e., no Activity and Use Limitations):

*historical recognized environmental condition—a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority.*

**Q:** What if you're dealing with a situation involving a closed LUST without written documentation of closure?

**Zovic:** A release of a hazardous substance or petroleum product to the environment that was not cleaned up or if the contaminant levels are above the most stringent criteria, the release is a REC.

**Q:** Did I hear that institutional "controls" qualify as CREC?

**Zovic:** A controlled recognized environmental condition is defined as follows:

a *recognized environmental condition* resulting from a past *release of hazardous substances or petroleum products* that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with *hazardous substances or petroleum products* allowed to remain in place subject to the implementation of required controls (for example, *property use restrictions, activity and use limitations, institutional controls, or engineering controls*).

**Q:** A property is granted NFA status with petroleum constituents in groundwater above background and above the state's own most restrictive clean-up goals. No AUL or EC/IC are assigned. Having documented these findings, will the NFA be an HREC & REC (Closed by agency but still a release) or a CREC?

**Zovic:** I am not sure there is enough information to provide a full and complete answer to this one. Other details such as regulatory jurisdiction, planned land use, current standards vs standards at time of NFA, user's risk tolerance and reason for performing, etc.

**Q:** Is an AST that has a second containment system considered a REC?

**Zovic:** It could be anything:

- Evidence of release or past release not addressed = REC
- Past release cleaned up with no AUL = HREC
- Past release, addressed with AUL/IC/EC = CREC
- Tank and secondary containment in very poor condition (epic fail imminent) = REC (material threat)

**Q:** How does the new standard include BERs? How are we to include BERs into a report?

**Zovic:** BERs are non-scope issues. A discussion of some of the more common BER issues was added in the (non-binding, non-mandatory) appendix for general information purposes only.

**Q:** Age old question: If a UST is closed without a release, is it considered a HREC or de minimis condition?

**Zovic:** If no release documented and EP is confident that there was no release, then it is nothing.

**Q:** If a site has a known UST but no known releases associated with the UST, and the EP cannot physically evaluate the condition of the UST to assess its condition, should the EP automatically consider this a REC?

**Zovic:** Determination of REC/HREC/CRER is not a "if this—then that" process, there is no look-up table or easy answer to most findings. In this case, the EP must exercise judgment and discretion and decide that either it is not a REC (because there has been no release of HS/PP to the environment), or that based on the EP's experience, and judgment that there was likely release, and that the likely presence of HS/PP from the UST constitutes a REC.

**Q:** *What about a scenario where the EP's judgment is that a material threat exists, but there is no proof that a release occurred AND subsurface exploration tends to indicate no contamination is present? For example, an adjoining property that was historically a dry cleaner, but no regulatory records or interviewees exist due to its age AND on-site utility work or construction revealed no indication of contamination. Based on the flow chart presented, not to be discussed outside Findings, correct?*

**Zovic:** Material threat and exploration results are mutually exclusive. A material threat relates to a release that has not yet happened:

*material threat*—a physically observable or obvious threat which is reasonably likely to lead to a *release* that, in the opinion of the *environmental professional*, is threatening and might result in impact to public health or the environment.

**Q:** *A site is located within an area of regional groundwater contamination, but not a source of or party to the regional problem. Nonetheless, there is or may be impact below the subject property. Do the actions of the responsible party (parties) to control/address the regional problem have any bearing on the REC or CREC classification for the subject property?*

**Zovic:** RECs are independent of, and not necessarily connected to, the responsibility for addressing/responding. Another example is a neighboring LUST whose plume has migrated onto the property. The REC is the presence of HS/PP on the property under conditions indicating a release to the environment – the responsibility (in most situations) for response action/remediation lies with the Responsible Party (in this case the owner/operator of the neighboring LUST).

**Q:** *Doesn't the flow chart need to deal with releases that are in the process of being addressed?*

**Zovic:** No. If a release to the environment has not been addressed to the satisfaction of the appropriate agency or in the case of self-directed cleanups, to the extent acceptable to the appropriate agency, the release would almost always be a REC.

**Q:** *What if tanks show up on the Sanborn maps only (most recently 1961, not in UST database)? How would you identify them?*

**Zovic:** Inconsistent information is not too unusual. As always, the EP must take into account the totality of information (interviews, other record, etc.) and exercise judgment in identifying RECs.

**Q:** *The definition of a REC implies and it can only exist on/in the Subject Property, and not off site. If so, then please clarify would an off-site, but nearby environmental condition is defined (under the current and proposed ASTM standard practices) that is believed to be a threat to environmental conditions on the subject property.*

**Zovic:** There can be no off-site RECs. If there is information that shows an off-site release has impacted the Property, then the REC is the presence of HS/PP on the property. If there is no information/data showing that there are impacts to the Property, but the EP believes (based on experience, hydro-geological conditions, etc.) that there is likely an impact from the off-site release, the EP could call the likely presence of HS/PP on the property (resulting from the off-site release) a REC.

**Q:** *So any UST containing hazardous waste, hazardous materials or petroleum is a REC?*

**Zovic:** No.

**Q:** *How should ASTM deal with contamination onsite that meets unrestricted use under one state program but not under another program?*

**Zovic:** REC/CREC/HREC determinations are state-specific, time specific and jurisdiction-specific.

**Q:** *What if contamination is not on the site at the time of the investigation, but off-site contamination is identified that is migrating toward the site (e.g. groundwater contamination) and may become present on the site in the future. Wouldn't this constitute a REC?*

**Zovic:** No. Material threats are “physically observable or *obvious* threat which is reasonably likely to lead to a *release*...”

**Q:** *What is a material threat? ACMs and lead based paint?*

**Zovic:** No. ACM and lead-based paint are non-scope issues.

*material threat*—a physically observable or obvious threat which is reasonably likely to lead to a *release* that, in the opinion of the *environmental professional*, is threatening and might result in impact to public health or the environment.

**Q:** *I have seen multiple interpretations of the presence of a pad-mounted transformer to be (or not be) identified as a REC during the Phase I process. Some EPs seem to automatically identify a transformer as a REC, while others take the approach that if there are no historical evidence of a release and no staining or stressed vegetation is observed during the site walk, then it would not be considered a REC. What is the view point from an attorney's or a lenders perspective with respect to this?*

**Christopher McCormack:** This question reflects that applying the REC definition requires some degree of professional judgment. The pending amended version of E1527 defines a REC as “the presence or likely presence” of hazardous substances or petroleum due to a release, under circumstances indicative of a release, or under conditions that pose a material threat of release. The transformer’s dielectric fluid is obviously “present” and presumably contains some hazardous or petroleum constituents. Staining or stressed vegetation would be “indicative.” Would a transformer in good repair present a “material threat? Some EPs tend to look for some tangible indication of a release or threat before designating something a REC. Keep in mind, however, that the Phase I report should describe conditions and features the EP decides not to designate, and should do so with enough detail that the reader can understand the decision. If you have questions, the REC definition provides a framework for asking EPs why they draw the line as they do in any given situation.

**Q:** *What about contaminated groundwater that migrates onto a property from a nearby property? Is the groundwater considered a REC/HREC/CREC?*

**Zovic:** If there is known contaminated groundwater on the property it could either be a REC, a CREC or a HREC, depending on local jurisdictional requirements.

**Q:** *Does the new standard provide clarification/definition of the "de minimis" condition. Did your slide use "or" instead of "and" in the context of do not present a threat to human health or the environment "and" that generally would not be the subject of an enforcement action. The EPA's legislative history discussed releases de minimis in "quantity." Accordingly, your example of oil on pavement from a car dripping is correct. Large "release" de minimis in concentration below residential, REC?*

**Zovic:** Yes, a de minimis conditions is:

...a condition that generally does not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.

**Q:** *Does the CREC apply to situations where closure has been granted with elevated contaminant levels (above residential) but DOES NOT include a use limitation? (we see this a lot on CA sites)*

**Zovic:** Yes.

**Q:** *If an AOC was closed/remediated, and an NFA was received, it will be listed as a HREC, however, now will it be required to re-evaluate with current standards?*

**Zovic:** Yes, and in this regard, this requirement is no different from the current standard (it is simply made clearer).

**Q:** *How would the REC /CREC designation address an on-going remediation or investigation?*

**Zovic:** If a release to the environment has not been addressed to the satisfaction of the appropriate agency or in the case of self-directed cleanups, to the extent acceptable to the appropriate agency, the release would almost always be a REC.

**Q:** *Follow up to previous answer: Are you saying any gas station with a UST should be considered a REC?*

**Zovic:** No, the EP must take into account the totality of information coupled with experience, and judgment to determine if (and why) the UST is or is not a REC.

**Q:** *It was mentioned that there is no such thing as an offsite REC; however, the material threat of a release to the subject property from an offsite source may be considered a REC. Is this correct by the new proposed definition of the REC? Or would we interpret this differently?*

**Zovic:** No. Material threats are “physically observable or obvious threat which is reasonably likely to lead to a release...”

**Q:** *Under the definition of an HREC, you would have to get obtain closure to the most stringent applicable standards. In CT, there are a lot of sites that are impacted that are not in a regulatory program. If data exists for a site and results are compared to the applicable standards (but the site is not in a regulatory program), and they are below applicable standards, can that be considered an HREC still?*

**Zovic:** Assuming all appropriate actions were taken, yes it could be an HREC.

**Q:** *Christopher, within the REC bucket, is a REC on/off, 50.1% likely is a REC, 49.9% not likely not a REC. If not, what is the standard?*

**McCormack:** There is no numerical threshold. The definition melds a number of concepts, including at least one (“likely presence”) that suggests a probabilistic orientation, but overall requires interpretation of facts (“conditions indicative of a release”) that necessarily differ from site to site. As far as “buckets” are concerned, the relevant consideration is whether a given condition fits in the REC category as opposed to the de minimis, HREC or CREC categories; the proposed revisions are intended to make those choices more bright-line propositions.

**Q:** *If an EC/IC is identified at an adjoining property and it is not known if it affects the subject property, is it a CREC or REC?*

**McCormack:** If its effect on the subject property is unknown, it might be flagged as a “data gap.” Unless the institutional or engineering controls apply to the subject property, however, it would likely not qualify as a CREC because the conditions on the subject property (assuming there are any) are not “controlled.”

**Q:** *Please define “threat” of a release in the context of a REC.*

**Zovic:** In the standard, material threat is defined as follows:

a physically observable or obvious threat which is reasonably likely to lead to a *release* that, in the opinion of the *environmental professional*, is threatening and might result in impact to public health or the environment. An example might include an aboveground storage tank system that contains a *hazardous substance* and which shows evidence of damage. The damage would represent a *material threat* if it is deemed serious enough that it may cause or contribute to tank integrity failure with a *release* of contents to the *environment*.

**Q:** *If an HREC is present on-site, can it become a REC? And if so, how?*

**Zovic:** Under the new standard, HREC and RECs are mutually exclusive. If a past release was addressed to the most stringent (current) standard, the release is now an HREC. If the past release was addressed with AULs, it is a CREC. If it didn’t need to be addressed, it is (likely) de minimis. If the release was not yet (fully) addressed it is (likely) a REC.

**Q:** *How would you classify a dry cleaner that has occupied a lot for 20 years? There are no records of spills or releases. There is a strong probability there would have been a release. Would this be a REC?*

**Zovic:** The EP must take into account the totality of information coupled with experience, and judgment to determine if (and why) the dry cleaner is or is not a REC (assuming of course, that we are speaking of an on-site dry cleaner).

**Q:** *How do the new definitions apply to adjoining properties?*

**McCormack:** They do not.

## Vapor Migration/Intrusion

**Q:** *Could you please provide a brief overview of the changes to the standard regarding Soil Vapor-related changes to the standard? How will that be added/impacted with these changes?*

**Zovic:** The new standard clearly recognizes vapor migration as a way for off-site contaminants to migrate onto the Property.

*migrate/migration*—for the purposes of this practice, “migrate” and “migration” refers to the movement of *hazardous substances or petroleum products* in any form, including, for example, solid and liquid at the surface or subsurface, and vapor in the subsurface. See **Note 4**.

**NOTE 4**—Vapor migration in the subsurface is described in Guide **E2600**; however, nothing in this practice should be construed to require application of the Guide **E2600** standard to achieve compliance with all appropriate inquiries.

**Q:** *Does vapor consideration for REC only address soil vapor, i.e. are ambient air conditions a consideration for declaring a REC? (examples: dry cleaning operations, industrial process settings)*

**Zovic:** Vapor intrusion (into a structure) and indoor air quality are out of scope issues.



**Q:** *Curious if any of the presenters anticipate any significant challenges for EPs related to the identification of RECs, HRECs, CRECs, de minimis conditions based on the new language including vapor migration as a specific contaminant pathway.*

**Zovic:** I see little wholesale change, yet a significant increase in consistency, insofar as REC/CREC/de minimis/HREC.

## Legal / AAI / CERCLA

**Q:** *Can you comment on EPA's review and status in terms of AAI compliance and how 1527-13 will be deemed adequate to gain protection?*

**McCormack:** ASTM E1527-05 was developed in parallel with the AAI rule and both were issued at almost exactly the same time. The hope this time around is that EPA will again endorse the 2013 version as an alternative to AAI in accordance with CFR Part 312. My only understanding is that EPA has the revised E1527 under review.

**Q:** *Is there even moderate risk that these E1527-13 revisions could motivate EPA to reopen the AAI rule for subsequent revisions?*

**McCormack:** EPA would only need to reopen the AAI rule on a limited basis to incorporate a reference to the revised version of E1527. What EPA might be motivated to do, or by whom or on what basis, is not a question I can answer.

**Q:** *Given the continuing obligations influence on a user's ability to keep a grip on its access to the CERCLA liability protections and how easy it can be to run afoul of those obligations, isn't applying ASTM E 1527 to gain the protections really an illusion?*

**McCormack:** If "continuing obligations" apply, the liability protection rubric still has two parts – pre-purchase AAI plus post-purchase compliance with continuing obligations. So even if E1527 Phase I or AAI inquiry doesn't complete the circle, it's a ticket you have to punch.

**Q:** *Chris, you reference the vigorous discussion concerning the nuances of "connecting the dots." Was it really resolved and, if not, why not?*

**McCormack:** As I described on the conference call, discussion on this point was typical of many on which the consensus process tends to temper individual opinions and points of view. So the final "connecting the dots" concepts may not reflect all views expressed on the subject, but those views were "really resolved" in the tangible sense that we ended up with a final consensus product after discussion and balloting.

**Q:** *Is the use of the term "evidence" intended to invoke a legal definition or sense of that term?*

**McCormack:** No. The term "evidence" is used in E1527 in a scientific or technical sense.

**Q:** *Do lenders really view gaining the CERCLA liability protections as a realistic possibility?*

**McCormack:** I would leave that to the lenders. My own experience is that CERCLA liability protections as such are rarely if ever a significant consideration, but lenders are sensitive to environmental risk in general and to liability protections under state law that track the CERCLA standards for secured creditors.

**Q:** *Has there ever been a successful Innocent Landowner Defense under CERCLA? As of a few years ago, I heard there were none.*

**McCormack:** It depends what you mean by "successful." Reported decisions tell us only about litigated outcomes, which by definition involve contested and at least nominally contestable facts. If the Phase I ESA misses something, a contribution plaintiff will of course invite the court to second-guess the due diligence. It's difficult to compare that outcome with those where due diligence reveals no problems: those purchasers would have a good defense, but probably will never be sued.

**Q:** *Regarding the innocent purchaser defense: Where in the ASTM process does the client declare his knowledge or lack of knowledge. Are questions answered before, after, or part of completion of 1537 report? Will the new standard address types of waivers of liability?*

**McCormack:** The Phase I process includes opportunities for the User to answer questions and thus to document knowledge or lack of knowledge. E1527 encourages but does not require disclosure to the Environmental Professional. I am not clear what "waivers of liability" refers to, but don't believe E1527 speaks to the issue.

**Q:** *Chris, why wouldn't an E1527 Phase I ESA be good for a brownfields beginning point from a lawyer's point of view?*

**McCormack:** It would and it is. If by "brownfields beginning point" you mean as an initial step in a full site characterization and remedial design process, you would adapt the standard to help you identify conditions or unknowns material to site development plans.

**Q:** *What is the difference between "inferences" and an assumption?*

**McCormack:** The most common legal illustration involves one person sitting in a windowless room when another person walks in wearing a wet raincoat and shaking water off an umbrella. The first person can't see outside, but infers it's raining based on the facts observed about the coat and umbrella. Without those facts, the conclusion that it's raining would be an assumption or speculation. In the Phase I context, the notion of inference is close to the surface in the phrase "conditions indicative of a release" – the concept is that if you know certain facts, you may be able to infer others, or as in the wet umbrella example, may have difficulty avoiding the inference.

## Timing of Standard's Release

**Q:** *What is the proposed effective date? When is E 1527-13 going live? Will there be a public comment period by EPA on the revisions? When?*

**Zovic:** The ASTM committee has completed its balloting, and the standard is now in the EPA's hand for review. I think we could see a release in the September/October timeframe.

The ballot is closed on the standard, and there will be no further "public comments."

**McCormack:** This statement is true as to the ASTM process. As a matter of administrative procedure, however, EPA will have to provide an opportunity for public comment at the point where it proposes whatever rule change it pursues to put a reference to the new standard in the AAI rule.

**Q:** *If the new ASTM method is published, when will it be effective? If one starts a ESA on 8/15 and the new method is published 9/1, which method is used? Start over?*

**Zovic:** In the scenario presented, either method is likely acceptable. Remember, the changes are clarifying/updating and not wholesale re-writes.

**Q:** *Have these revisions been officially approved at this point? Any chance there will be other changes?*

**Zovic:** The ASTM committee has completed its balloting, and the standard is now in the EPA's hand for review. I think we could see a release in the September/October timeframe.

## Other Questions

**Q:** *One of the panelists used the terms "adjoining" and "adjacent" interchangeably to modify the word property. In fact, the two words have different meanings, rather subtle, but different. I believe the ASTM standard uses the term "adjoining." It might be good to remind everyone which term is recognized in the standard.*

**Zovic:** Though adjoining and adjacent are often used interchangeably in practice, the Standard uses the term "adjoining."

*adjoining properties*—any real *property* or properties the border of which is contiguous or partially contiguous with that of the *property*, or that would be contiguous or partially contiguous with that of the property but for a street, road, or other public thoroughfare separating them.

**Q:** *Who is the user as defined by ASTM and AAI?*

**McCormack:** "User" is an ASTM term not found in the AAI rule. In E1527, the "User" is the party seeking to use the standard to complete a Phase I assessment, typically an owner, lender or potential purchaser. In ASTM parlance, the "User" is distinguished from the "Producers" (not a Phase I term) who produce the product defined by the standard, in this case the Phase I ESA report.

## Questions or comments?

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