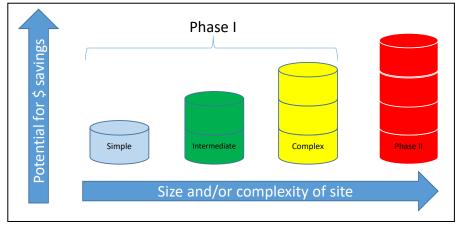
A White Paper by Dennis Papa, PE, BCEE, Principal of dpSTUDIO environmental consulting & design LLC November 2016

Executive Summary

Phase I Environmental Site Assessments (ESAs) are often used as a means to consider environmental liability prior to acquisition of real property. The main purpose, and in many cases the ONLY purpose for a "simple" Phase I, is to qualify the purchaser for the *innocent landowner defense* provisions of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980. To provide a common standard for a thorough Phase I, the U.S. EPA has endorsed the guidance developed by the American Society for Testing and Materials (ASTM) and its E1527-2013 standard, which has largely become the industry benchmark for ESAs while satisfying EPA's "Standards and Practices for All Appropriate Inquiries", or AAI requirements. The current ASTM standard has introduced some additional elements that a user can take advantage of when considering the environmental and historical conditions on or adjacent to a property.

Where the simple Phase I ESA is sufficient for certain mergers & acquisitions (M&A), the environmental professional you engage should be able to offer more in-depth research when considering Additional complex assets. considerations relate to how certain properties with hazardous materials or releases must be handled after transfer, where requirements vary widely by state. A prudent approach for ESAs on intermediate sites - such as light industrial, and manufacturing



commercial facilities where past or present operations are suspected of causing some environmental impacts – is to consider that a potentially contaminated property could fall into a lengthy regulatory process and require cleanup or subsequent use and deed restrictions. Complex operating facilities may still need more in-depth investigation, such as environmental health and safety audits or thorough reviews of existing environmental permits. More important for complex facilities than in cases of simple or intermediate sites, the Phase I ESA establishes a baseline prior to ownership. For properties with recognized environmental conditions, this allows a clear delineation of responsibility whereby conditions can be attributed to the prior owner/operators and not attached to the new owners or management team. After the Phase I, it may still be necessary to perform a Phase II ESA, perhaps to quantify baseline conditions before transfer or as required by regulators and insurance underwriters. A typical Phase II is likely to include sampling and analysis of environmental media and perhaps regulatory response and remedial action. However, a few small steps beyond the typical Phase I can reduce the need for intrusive investigations and still limit the new owner's liability.

Assessment Type	Benefits	Applicable Asset Type
Simple Phase I	Primarily for liability protection and innocent landowner defense	Undeveloped real estate, office, housing, greenfield sites
Intermediate Phase I	Quantify cost of liabilities, save \$	Light industrial, manufacturing, commercial centers
More complex Phase I	Establish baseline conditions and protections during ownership and following divesture	Legacy industrial, manufacturing with history of uses, brownfields
Phase II	Intrusive sampling to define environmental conditions	Potential for on-site/off-site releases, remedial investigations

1. Protecting Your Liability – The "Simple" Phase I

Simple

Phase I Environmental Site Assessments (also known as "Phase I" or "Phase I ESA") have become a well-known tool when considering environmental liability prior to acquisition of real property. Reasons for conducting a Phase I, and subsequent guidance on how to perform them and who is qualified to do so, began to emerge following the Comprehensive Environmental Response,

Compensation and Liability Act (CERCLA) of 1980. It took until the early 1990s to begin to develop standards that were largely agreed upon in the regulated community. But even with more than 30 years of sometimes intense debate and numerous standards from both federal and state regulators, there still remain some misunderstandings about Phase Is and their role in property transactions.

The main purpose, and in many cases the ONLY purpose, for a "simple" Phase I is to qualify the purchaser for the *innocent landowner defense* provisions of CERCLA. This allows a prospective purchaser a means to avoid legal liability for pre-existing environmental conditions that are mainly related to surface and subsurface contamination. Phase I ESAs are not a comprehensive environmental due diligence review nor are they an environmental compliance audit.

To provide a common standard that ensures a thorough Phase I is being performed, the U.S. EPA has endorsed the guidance developed by the American Society for Testing and Materials (ASTM), an international organization that produces standards for a range of technical practice areas, including environmental site assessments. The current ASTM Phase I standard, E1527, saw early development in 1993, was further revised in 2005, and was updated to its current version in 2013. The E1527-2013 standard has become an industry benchmark for environmental site assessments. EPA further solidified the role of the ASTM Standard in environmental due diligence investigations when it released, also in 2005 and updated in 2013, "Standards and Practices for All Appropriate Inquiries." Often referred to as "all appropriate inquiry", or simply AAI, it established the specific regulatory requirements and standards for evaluating environmental conditions on a property, and formally recognized that Phase I ESAs conducted according to the ASTM Standard will be recognized as compliant with AAI. The AAI also requires that Phase Is be certified and conducted under the responsible charge of an *environmental professional*, who possesses the minimum amount of education, training, and experience specified in the ASTM standard.

Some Specific Benefits of a Simple Phase I. The current E1527-2013 ASTM standard has introduced some additional elements that a user can take advantage of when considering the environmental and historical conditions on or adjacent to a property or facility. Understanding that a simple Phase I may not cover all regulatory issues for a property or facility, the primary goal of any Phase I must be to at least identify *recognized environmental conditions* (RECs). ASTM has provided a specific definition for RECs and some subsets of these for better clarification.

<u>RECs, HRECs, & CRECs</u> – The definition of recognized environmental condition has been simplified to be more in line with CERCLA:

"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 the pose a material threat of a future release to the environment. De minimis conditions are not recognized environmental conditions." (A de minimis condition is defined in ASTM 1527-13 as 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).

ASTM also clarified the definition of Historical REC (HREC) to emphasize where a past REC has been addressed to the satisfaction of regulatory authorities and meets unrestricted residential use criteria. In other words, the property is not required to have use restrictions, activity and use limitations (AULs), institutional controls, or engineering controls.

To address situations where a REC does exist under such controls, ASTM added Controlled REC (CREC) to the E1527-2013 standard to define "a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority …" such as through a no further action letter or some inplace controls or use limitations. This addresses sites where no further remediation is required but where residual contamination could exist that is not likely to interfere with property transfer or future use.

A key takeaway here is that HRECs and CRECs, when properly evaluated by an environmental professional, are useful distinctions for a prospective purchaser, inasmuch as they define situations where there is sufficient regulatory support, or a "closure letter" and that significant further investigation is not needed to confirm innocent landowner provisions.

<u>Vapor Migration</u> – EPA does not exclude vapor as a form of contamination. To remain consistent, the E1527-2013 ASTM standard now requires that vapor migration be considered along with solid and liquid forms in a Phase I ESA. A definition for migration is provided, and vapor intrusion into a building, for example, will need to be considered on the same basis as for contaminants in soil or groundwater. A standard already exists, ASTM E2600, in case a more thorough examination of a vapor REC is needed as follow up to the Phase I.

<u>A Stronger Recommendation for Agency File Review</u> – ASTM added a new section to the E1527-2013 standard to address review of regulatory records, which states that if the target property or any adjoining property is identified in a government records search, then pertinent regulatory files and/or records associated with the listing should be reviewed, or a justification provided as to why a review is not needed. Since agency file reviews have been considered to be an important part of Phase I ESAs for many users, a good, thorough Phase I should already consider this need. However, in areas where contaminated sites or redevelopments are likely, some more thorough, and therefore potentially more time-consuming and costly, searching is prudent to best identify the potential RECs, CRECs, or need for a Phase II. Such searching could involve a visit to state regulators, requesting records through Freedom of Information Act (FOIA), or an online search. Ample time prior to closing should be allowed in such circumstances.

<u>Other Not so Simple Considerations</u> – Does a simple Phase I, with all of the above elements properly addressed by your Environmental Professional, therefore satisfy AAI and allow CERCLA liability defense? No, unless the buyer also conducts a title search for any recorded environmental cleanup liens or activity and use limitations (AULs) on the property. Liens and AULs may be recorded as deed restrictions that limit or prohibit drinking water wells on the property or future residential use, for example. This requirement can be provided by the EP, but it is the responsibility of the user of the Phase I to make this clear since a typical scope of work for a Phase I will exclude such a review or state that it is the user's responsibility to provide a title search and lien/AUL search.

<u>There is a Limited Shelf Life for a Phase I</u> – The ASTM standard declares that a Phase I ESA is presumed to be valid if it is completed less than 180 days prior to closing date, and can be updated if it was performed within one year. After a **one year period**, a new Phase I must be performed to be considered valid.

2. Other Advantages of a Phase I – The Intermediate Phase I to Quantify Costs of Environmental Liabilities



The environmental professional you engage to perform a Phase I assessment should not be limited to reviewing only existing reports provided by the facility or that are available in the data room. A more in-depth research of information from state regulatory files, such as previous ESAs, permits, and correspondence will shed more light on environmental conditions.

Additional considerations relate to how certain properties with hazardous materials or releases must be handled after transfer. Requirements can vary widely by state. For example, Michigan due

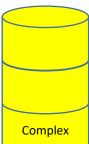
care laws regulate access and response activities related to contaminated sites. Other states, such as New Jersey and Indiana, have industrial property transfer laws with penalties for noncompliance. Due care obligations are not necessarily related to an owner or operator's liability and can apply to non-liable parties. Be sure your environmental professional examines these requirements and performs the necessary investigation beyond a simple Phase I.

Another prudent approach for such intermediate sites – for example light industrial, manufacturing and commercial facilities where past or present operations may have caused some environmental impacts – is to consider all scenarios and assume that a potentially contaminated property could fall into a lengthy regulatory process and require an aggressive cleanup to background levels or the most stringent requirements applied by EPA or particular state and local agencies. In these cases, the EP should gather Phase I and Phase II results if available, or recommend follow-up investigation to define the nature and extent, and more importantly, future actions, for environmental liabilities. If some regulatory response or cleanup action is required, the seller can work with the regulators to obtain its formal closure letter, often termed a "certificate of satisfactory completion," prior to or even after transfer. The closure letter should be highly sought after when considering ways to limit future liability, as it offers the blessing of the local regulators and can carry some reciprocal protections from federal regulators and courts. Deed restrictions on use, such as limiting residential development or use of groundwater for drinking, can be legally implemented, as well.

In cases where commercial and industrial properties go through this closure process, the regulators will apply the often less stringent "commercial/industrial" cleanup levels. While still designed to be protective of human health and the environment, the commercial and industrial cleanup levels are generally less expensive to implement since the protections that are emplaced take into account the controlled access and limited exposure at industrial sites, as opposed to more restrictive and therefore more expensive controls reserved for parks, schools, residential developments, and other public access properties.

<u>Potential for Savings on Investment</u> - A prospective purchaser in the absence of having a formal closure letter should consider the more stringent closure options and negotiate an acceptable price reduction or other concession to offset this scenario, even when it may not apply to current property use but could come into play in the future. The less stringent commercial/industrial levels can often mean that regulators will allow residual contamination to remain on a property if the risk presented at the time of transfer is considered acceptable. Residual contaminant levels, even though accepted in a closure letter, may still carry some environmental and business risk or require undesired use limitations. The buyer should consult with its environmental, legal, operations, and business insurance/risk team to fully consider any and all agreements.

3. Ensure you have a Thorough Baseline ESA Especially for Complex Sites



Complex operating facilities may still need more in-depth investigation, such as environmental health and safety audits or compliance review of existing environmental permits. This will ensure that proper permits are in place and the facility is in compliance with all applicable environmental laws. Another important transfer consideration for active permits is to determine if and when environmental permits can be transferred to the new owner or if they must be reissued.

More important for complex facilities than in cases of simple or intermediate sites, the Phase I ESA establishes a baseline prior to ownership. For properties with recognized environmental conditions, this allows a clear delineation of responsibility whereby conditions can be attributed to the prior owner/operators and not attached to the new owners or management team. Upon exit or sale of the asset, it will be possible to substantiate that prior environmental conditions were not the fault of the current owner/management team.

Of particular importance for private equity owners and investors of real property and assets is "indicia of ownership" and how it relates to environmental liability. An indicia of ownership refers to any circumstance that would create a belief that a given person or entity was in reality, though not technically, a member or owner of a given firm.

Why does this matter in environmental due diligence? The CERCLA regulations dive deep into indicia of ownership in order to allow lender liability protection in cases of default or foreclosure. As long as the lender does not have clear indicia of ownership, and the lender does not "participate in the management of the facility," then CERCLA allows a way out. However, a lender or other financial third party who "participates in management" can inherit environmental liabilities if they act in any manner that can be interpreted as exercising decision-making control on environmental compliance related to the facility and, in doing so, undertakes responsibility for hazardous substance handling or disposal practices. This latter scenario often can apply to equity shareholders, and no always dependent on whether acquisitions are asset vs. stock purchases.

A wide range of actions and responsibilities can be interpreted as exercising control at a level similar to that of a key site manager of a facility. Whether directly or by some unknown or poorly defined chain of command, such actions can impact the day-to-day decision-making on environmental compliance.

Bottom line: Partners and lenders in such deals should have an equal interest in the environmental baseline conditions of a facility, and fully participate in the deal to ensure an appropriate level of environmental site assessment is performed prior to closing.

4. Will You Still Need a Phase II?



After the Phase I, it may still be necessary to perform a Phase II ESA, perhaps to quantify the actual baseline condition before sale or as required by regulators or insurance underwriters. While several layers of guidance exist for typical Phase II ESAs, it is important to note that there is no one size fits all approach to intrusive investigations. A typical Phase II is likely to include some or all of the following tasks:

- Sampling and analysis of soil, groundwater, surface water, sediment, soil vapor, building materials;
- Risk assessment to quantify impacts and cleanup levels;
- Data to consider the need and scope for regulatory response & remedial action.

However, a few small steps beyond the typical Phase I can reduce the need for intrusive investigations and still limit the new owner's liability.

A final note to consider when deciding on the appropriate level of environmental site assessment for your prospective purchase: many environmental issues are specifically excluded from the scope of a simple Phase I, and additional surveys are necessary to address them and fully quantify risks and associated costs. Such potential risks include asbestos, lead-based paint, mold, wetlands and floodplains, historic resources, and others.

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