

TITLE: Differences Between Phase I Assessment Requirements for the VAP and ASTM E1527-13 (All Appropriate Inquiry)

DATE EFFECTIVE: December 2011

HISTORY: Update of VA30006.11.001 - Revision was necessary to reflect changes in the rule citations that became effective in August 2014.

KEYWORDS: Phase I assessment, all appropriate inquiry (AAI), ASTM E1527-13, landowner liability protection, identified area (IA), recognized environmental condition (REC)

RULE/ AUTHORITY: OAC 3745-300-06, 40 CFR § 312 (AAI Final Rule), CERCLA § 101 (35)(B)

QUESTION: What are the differences between a Phase I assessment conducted to meet VAP rule requirements and an assessment conducted to meet ASTM E1527-13 (i.e., AAI) requirements?

ANSWER: Although there are similarities between ASTM E1527-13 and VAP rule requirements for “Phase I assessments,” there are some significant differences between the two standards. Similarities include the fact that both require a historical assessment of the property’s environmental history with the goal of identifying areas of known or suspected release of hazardous substances or petroleum. To do this both standards require:

- Review of historical information and government databases/files.
- Interviews with persons familiar with operations on the property.
- Site inspection and walkover.
- Designation of areas or issues of concern where hazardous substances or petroleum may have been released.
- Documentation of the Phase I assessment and its findings in a Phase I assessment report.

The differences between the two standards become apparent when comparing the specific requirements included in both standards.

One of the biggest differences is the overall purpose between the two assessments. The ASTM E1527-13 standard complies with U.S. EPA's AAI rule, which is intended to provide landowner liability protection under CERCLA¹. An AAI compliant Phase I assessment is also required for U.S. EPA brownfield grants; however, ASTM E1527-13 is not specifically written for this purpose. Whereas, the VAP Phase I assessment is intended to be the first step in the voluntary action at a property and should eventually be included with additional documentation as supporting documentation for no further action letter issued by a certified professional.

A table attached to this technical guidance compendium provides details of the differences between the two standards. The table focuses on the differences and not the similarities (of which there are many) between the two standards. It is also not a replacement for reading and understanding all the various requirements included within each standard. The differences between the two standards are grouped into the following six categories:

- Some general differences between the two standards.
- Records review process, including document review and retrieval.
- The interview process, including who conducts the interviews and who is required to be interviewed.
- The site inspection and walk-over step of the assessment.
- Differences between recognized environmental conditions (RECs) and identified areas (IAs).
- Differences between how the assessment is documented in each Phase I assessment report.

Although there are many differences between the two standards the majority of Phase I assessments will be more similar than they are different. This is true for both the assessment itself and the documentation included in the Phase I assessment report. It is those unique situations where the various requirements of the two standards result in different conclusions or outcomes that professionals must guard against. Because every assessment is unique, it is always good practice to understand the differences and

¹ The Comprehensive Environmental Response, Compensation and Liability Act employs strict liability. Parties provided protection from CERCLA liability include innocent land owners (CERCLA 101(35)(A)), contiguous property owners (CERCLA 107 §(q)), bona fide prospective purchasers (CERCLA 101 §§ (4) and 107(r)), and state or local government that acquires ownership or control involuntarily through bankruptcy, tax delinquency or abandonments (CERCLA §101(20)(D)).

Look out for those unique situations that result in the need to review additional information or designate an area or issue of concern (e.g., RECs or IAs) where the other standard may not indicate one.

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CONTACT:

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Acronym list for Tables 1 and 2

BUSTR	Bureau of Underground Storage Tank Regulations
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CERCLIS	Comprehensive Environmental Response, Compensation and Liability Information System
CNS	Covenant Not to Sue
CORRACTS	RCRA Corrective Action Sites
CP	Certified Professional
DERR	Division of Environmental Response and Revitalization
EP	Environmental Professional
ERNS	Emergency Response Notification System
IA	Identified Area
NFA letter	No Further Action letter
NFRAP	No Further Remedial Action Plan (Former CERCLIS sites where no further remedial action is planned under CERCLA)
NPL	National Priorities List
OAC	Ohio Administrative Code
Ohio DNR	Ohio Department of Natural Resources
Ohio EPA	Ohio Environmental Protection Agency
OSHA	Occupational Safety and Health Administration
Ph1	Phase I Environmental Assessment (ASTM) or Phase I Property Assessment (VAP)
Ph2	Phase II Property Assessment
REC	Recognized Environmental Condition
RCRA	Resource Conservation and Recovery Act
TSD Facility	Hazardous Waste Treatment, Storage and Disposal Facility
U.S. EPA	United States Environmental Protection Agency
UST	Underground Storage Tank system

Table 1: Comparison of ASTM E 1527-13 and VAP Phase I Assessment Requirements

	ASTM E 1527-13 All Appropriate Inquiry (AAI)	OAC 3745-300-06 Voluntary Action Program (VAP)
GENERAL		
Overall purpose	Unless the user provides another reason, EP is required to assume the purpose is to qualify for landowner liability protection as defense against CERCLA liability. As a work product, the Ph1 report stands on its own. An AAI compliant Ph1 is also required for U.S. EPA brownfield grants.	Assumption is that the Ph1 is the first step in the voluntary action by the volunteer and that a NFA letter will be issued at some point in the future. The Ph1 will be used as a supporting document to that NFA letter.
User/volunteer responsibilities	Review title and judicial records for environmental liens or activity and use limitations. Evaluate reason for significantly lower purchase price. Provide any specialized knowledge, experience, actual knowledge, or commonly known or reasonable ascertainable information related RECs to EP.	A search for environmental liens is not required. Volunteer must provide any documentation or knowledge related to releases and possible IAs concerning the property. Volunteer is responsible for conducting a Ph1 that meets all rule requirements (note that a CP is responsible when included in NFA letter). Volunteer must evaluate the eligibility of the property to enter the VAP.
De minimis	Subjective evaluation based on professional opinion of EP. “Conditions that generally do 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 government agencies.”	VAP has specific requirements for de minimis areas and can only be applied to surficial soils. If other media are impacted or the contamination is too deep or extensive, then the de minimis provision cannot be used. The release cannot have been part of a pattern of disposal or mismanagement. Limit of 3 de minimis areas per acre. If limit is exceeded, a Ph2 must be conducted.

	ASTM E 1527-13 All Appropriate Inquiry (AAI)	OAC 3745-300-06 Voluntary Action Program (VAP)
Required professional qualifications	EP qualifications – Person meeting the education, training, and experience requirements set forth in 40 CFR § 312.10(b). No certification is required. The EP attests to meeting the required qualifications via statements included in Ph1 report.	CP qualifications – Person meeting the education, training and experience requirements set forth in OAC 3745-300-05. Professionals apply to Ohio EPA for certification under the VAP. The director of Ohio EPA issues certifications to qualified professionals. A CP initial training class is required for certification, and continuing education training classes are required to maintain certification. Ohio EPA monitors CP performance and can suspend or revoke the certification.
Update requirements	A Ph1 is valid for one year prior to acquisition of the property provided that the following components were conducted or updated within 180 days of acquisition of the property 1) interviews; 2) environmental lien search; 3) records search; 4) site visit; and 5) declaration by EP.	Ph1 must have been conducted 180 days prior to beginning a Ph2 or prior to issuance of NFA letter, or information must otherwise support, in the judgment of the CP, which conditions at the property have not changed.
RECORDS REVIEW		
Determine historical use of property	Determine history to the first developed use or 1940, whichever is earlier. The required review interval for historical records is 5 years; a lesser interval is not required. A chain of title investigation is optional. It is one of several standard historical sources that could be reviewed to establish the property’s historical use.	Determine a <u>continuous history</u> of use back to the first industrial or commercial use; i.e., establishing a continuous history is required regardless of the record review interval. The volunteer should use any or all of the following to establish the property’s historical use: 1) available historical records; 2) a chain of title investigation; and 3) interviews with persons with relevant knowledge of the property.
Document review and retrieval	For a document to be reasonably ascertainable it must be provided within 20 calendar days at nominal cost and yield relevant information without the need for extraordinary analysis of irrelevant data.	For a document to be reasonably available it must be provided within 90 calendar days. VAP rules do not set limits on the cost of retrieval or the amount of time or effort needed to analyze information.
Required database and other record searches (including search distance)	There are many similarities/overlap in the type of records included in the records search. However, there are a few differences between the sources of information that need to be checked and the required search distances. For example, although review of state and local government records is required under both VAP and ASTM, ASTM allows an EP to “opt out” of records review, if the EP can justify why the review is not warranted. (See Table 2: Standard Environmental Record Sources and Search Distance)	

	ASTM E 1527-13 All Appropriate Inquiry (AAI)	OAC 3745-300-06 Voluntary Action Program (VAP)
INTERVIEWS		
Who should be interviewed?	ASTM tends to be more specific about who to interview and when to interview them. ASTM standard has specific requirements for 1) key site manager; 2) occupants; 3) past interviewees; 4) past owners, operators or occupants; <u>5) state and local government officials</u> ; and 6) owners or occupants of adjacent properties for abandoned sites. ASTM sets criteria for reasonable attempts to interview and how to handle incomplete answers or answers of varying quality.	VAP tends to be more general in its requirements and expects all specified groups to be interviewed after making reasonable attempts to locate and conduct interviews. Persons who need to be interviewed include 1) key property personnel; 2) persons who reside on or within areas surrounding the property; and 3) persons who are or were employed at or within areas surrounding the property who have knowledge relevant to historical uses, operation, and environmental conditions at the property or surrounding properties.
Who should conduct interview?	If the EP doesn't, then a person under the supervision of the EP with sufficient experience and training can. The EP must at a minimum help plan the interviews.	The VAP rules do not specify who should conduct the interview. A sufficient number and quality of interviews must be conducted so that persons with relevant knowledge have the opportunity to provide as much information as is reasonably possible.
SITE VISIT		
Who should conduct site visit?	If the EP doesn't, then a person under the supervision of the EP with sufficient experience and training can. The EP must at a minimum help plan the site visit.	Not specified in VAP rules for Ph1, but CP must conduct site walk-over prior to issuing NFA letter.

	ASTM E 1527-13 All Appropriate Inquiry (AAI)	OAC 3745-300-06 Voluntary Action Program (VAP)
Prior to site visit	Request that user identify a person as the key site manager who has good knowledge of the uses and physical characteristics of the property. The key site manager, property owner and user must be asked to provide relevant documents (listed in Section 10.8.1 of ASTM standard) and any proceedings (e.g., enforcement actions, notice of violations, etc.) involving property to EP. However, only user is required to provide information. EP must then review documentation prior to or at the beginning of the site visit.	Because the volunteer is responsible for conducting the Ph1, requirements similar to those required by ASTM are not applicable. VAP rules are silent on when information needs to be provided to others, except that the volunteer must provide any relevant information to CP prior to requesting a NFA letter. The requirement to determine the property’s VAP eligibility would be similar to disclosure about proceedings involving the property, as required by ASTM.
Property/building inspection	Inspection of all exterior areas of the property, including all buildings and structures. Inspect all interior accessible common areas used by public and occupants, maintenance and repair areas, and <u>representative sample of occupant spaces</u> .	Physical inspection of all areas of the property, including interior and exterior of all buildings and structures.
RECs vs IAs		
Definition	REC – Presences or likely presence of any hazardous substance or petroleum products on a property under conditions that indicate an existing release, past release, or material threat of a release to the environment of any hazardous substances or petroleum products.	IA – A location at a property where a release of hazardous substances or petroleum has or may have occurred.
Contaminants of concern	<p>1) Hazardous substances – defined pursuant to CERCLA 42 USC § 9601 (14), as interpreted by US EPA regulations and the courts. (Definition is broader in scope than the one used by the VAP).</p> <p>2) Petroleum products – defined as those contaminants included within the meaning of the petroleum exclusion of CERCLA.</p> <p>3) Controlled substances (for U.S. EPA brownfield grants only) as defined by the federal Controlled Substances Act.</p>	<p>1) Hazardous substances – definition is interpreted to mean those contaminants listed in 40 CFR § 302.4.</p> <p>2) Petroleum – defined as oil or petroleum of any kind or in any form (definition lists examples).</p>

	ASTM E 1527-13 All Appropriate Inquiry (AAI)	OAC 3745-300-06 Voluntary Action Program (VAP)
Release exclusions	ASTM does not exclude any releases. In fact, it specifically includes conditions that are in compliance with the law.	VAP excludes certain types of releases from the definition of a VAP release. See OAC 3745-300-01(A)(116). In general, there is no VAP release when the release 1) originates from engine exhaust; 2) is nuclear material regulated by the Atomic Energy Act that is not mixed with hazardous substances or petroleum; 3) is a federally permitted release; 4) is regulated by OSHA; or 5) results from the normal application of fertilizer.
Historical REC	This is a defined term under ASTM, whereas the VAP allows for exceptions to IAs based on releases previously addressed by other regulatory programs. Therefore, in concept ASTM and VAP are very close to each other on this issue. However, ASTM allows designation of historical RECs for all regulatory programs, whereas VAP only exempts programs falling under the jurisdiction of BUSTR, Ohio EPA or U.S. EPA.	This is a defined term under ASTM, whereas the VAP allows for exceptions to IAs based on releases previously addressed by other regulatory programs. Therefore, in concept ASTM and VAP are very close to each other on this issue. However, ASTM allows designation of historical RECs for all regulatory programs, whereas VAP only exempts programs falling under the jurisdiction of BUSTR, Ohio EPA or U.S. EPA.
Controlled REC	Generally defined in ASTM as a past release previously addressed by a regulatory program that required controls on the property due to contamination remaining of the property. This condition has special designation of Controlled REC under ASTM.	VAP does not have a comparable term for IAs. All release areas previously addressed by other regulatory programs that required controls due to contamination remaining in place are IAs under the VAP and must be further investigated in a VAP Ph2.
Material threat of a release	Definition of REC includes a material threat of a release (even if no current or past release is suspected) as being a REC. This can also apply to operating facilities where tanks are in use and have not been abandoned but are extensively rusted and might soon fail causing a release. By definition, a material threat of a release is where, based on the opinion of the EP, there is an observable threat likely to lead to a release at some point in the future that might result in impact to public health or environment.	Threatening conditions are not considered VAP IAs unless an actual release is suspected. A CNS from Ohio EPA does not cover new or future releases. Instead, a new release would have to be addressed with a new NFA letter and CNS. Volunteers are always free to address threatening conditions before a release occurs. Note that included in the VAP's definition of release, abandoned drums, containers, etc. containing hazardous substances or petroleum are considered to be within the scope of the definition of a VAP release.

	ASTM E 1527-13 All Appropriate Inquiry (AAI)	OAC 3745-300-06 Voluntary Action Program (VAP)
PHASE 1 REPORT		
Site photographs	Often included as documentation in report, but they are not required	Color photographs with date are <u>required</u> to be included in report
Identification of limitations or qualifications; additions, deletions, or deviations; and data gaps	<p>ASTM allows for deviations, etc. from ASTM practice as long as it is documented in report.</p> <p>The standard requires the following:</p> <p>If certain information is excluded from report, the EP must explain reasons for doing so, such as a confidentiality agreement. All additions, deletions and deviations from the ASTM practice must be listed in detail. Deviations, etc. are not the same as data gaps. Significant data gaps must be identified in the report.</p>	<p>VAP does not allow deviations from the rules. Information cannot be excluded due to confidentiality agreements, etc. Only exception for not including documentation is when it is not reasonably available.</p> <p>VAP rules require the following:</p> <p>The report must include a statement of limitations or qualifications that impact the Ph1, including the identification and explanation of sources not reviewed because the sources were not reasonably available.</p>
Findings and opinions (ASTM) or conclusions (VAP)	Identify known or suspected RECs, historical RECs, or de minimis conditions in a findings section. RECs shall be listed in conclusions section of report.	Identify areas with known or suspected contamination and any de minimis and previously addressed areas. If IAs are present, <u>must identify the hazardous substance or petroleum</u> to assess during a Ph2. Identification refers to the type of contaminants, but not necessarily an analyte list for a Ph2.

	ASTM E 1527-13 All Appropriate Inquiry (AAI)	OAC 3745-300-06 Voluntary Action Program (VAP)
Map requirements	No map requirements, but suggested table of contents includes location and legal description.	The VAP has specific map requirements: 1) Property location map (7.5 minute USGS topographic map) with property boundary and surrounding features. 2) Property map that identifies significant structures, features, and property boundaries. 3) Map of identified areas and other areas on the property, including de minimis and previously addressed areas. 4) Map of off-property sites that may be impacting property.
Required written statements and signatures	Conclusion section of report must include one of two concluding statements about compliance with the ASTM standard and whether or not RECs exist (see ASTM Sections 12.8.1 or 12.8.2). An EP statement about professional qualifications is also required (see ASTM Sections 12.13.1 and 12.13.2). The wording of these statements must be substantially similar to that indicated in the ASTM standard. Finally, the report must be signed by the EPs responsible for the report.	Written recommendation stating either 1) a NFA letter can be issued; or 2) a Ph2 is required to obtain a NFA letter. CP does not sign the Ph1 report but will issue the NFA letter, which includes the Ph1 report, under affidavit, if requested by volunteer.
Other report requirements	Inclusion of a legal description for property is optional. List qualifications of the EP and other personnel conducting site interviews and reconnaissance. Only current and past uses of the property need to be identified in report.	Identify property including 1) name and job title of each person conducting investigation; 2) summary of current and intended use of property (note that past uses are summarized as part of the property use history); 3) results of the eligibility evaluation; and 4) asbestos summary and asbestos survey, if one was performed.

Table 2: Standard Environmental Record Sources and Search Distance

Standard Environmental Record Source	ASTM – Minimum Search Distance (miles)	VAP – Search Distance (miles)
Federal NPL site list	1.0	0.5
Federal delisted NPL site list	0.5	--
Federal CERCLIS list	0.5	0.5
Federal CERCLIS NFRAP site list	0.5	--
Federal RCRA CORRACTS TSD facilities list	1.0	0.5
Federal RCRA non-CORRACTS TSD facilities list	0.5	
Federal RCRA generators list	Property and adjoining property	Property and adjoining property
Federal RCRA information database	--	0.5
Federal institutional control/engineering control registries	Property only	--
Federal ERNS list	Property only	0.5
State lists of hazardous waste sites identified for investigation or remediation:		
-- State-equivalent NPL	1.0	0.5 ¹
-- State-equivalent CERCLIS	0.5	0.5 ¹
State landfill and/or solid waste disposal site lists	0.5	0.5 ²
State leaking storage tank lists (specific to ASTM)	0.5	0.5 ³
State registered storage tank lists (specific to ASTM)	Property and adjoining property	Property and adjoining property
State institutional control/engineering control registries	Property only	--
State voluntary cleanup sites (specific to ASTM)	0.5	0.5 ²
State brownfield sites (specific to ASTM)	0.5	0.5 ²
State spill database (specific to VAP)	Optional to review ⁴	0.5
Ohio DNR well log information (specific to VAP)	Optional to review ⁴	Optional to review ⁴
Community right-to-know inventory reports (specific to VAP)	Optional to review ⁴	Property only
Local fire department records (specific to VAP)	Optional to review ⁴	Property only
Local health department records (specific to VAP)	Optional to review ⁴	Property only
Other state or local records, as necessary	Optional to review ⁴	Optional to review ⁴
Diligent inquiry of the environmental compliance history of the property and all persons who owned or operated the property as it relates to releases at the property and the eligibility of the property to participate in VAP. Must include a review of reasonably available information from:		
-- U.S. EPA	--	Property only
-- Ohio EPA	Optional to review ⁴	Property only
-- Ohio DNR	Optional to review ⁴	Property only
-- BUSTR	Optional to review ⁴	Property only

Notes:

- 1) Listed in VAP rules as Ohio EPA DERR files.
- 2) Not listed specifically in VAP rules but is covered by requirement to review Ohio EPA files for compliance history and eligibility of the property.
- 3) Listed in VAP rules as tanks listed with BUSTR.
- 4) If reviewed, the search distance for these records should be consistent with the record/purpose it is enhancing or supplementing.