



Maryland
Department of
the Environment

FACTS ABOUT: Voluntary Cleanup Program Phase I Environmental Site Assessments

The VCP, by statute, requires submittal of a Phase I Environmental Site Assessment (ESA) prepared in accordance with the American Society for Testing and Materials (now known as ASTM International) for each VCP application submitted. This requirement includes any subsequent applications submitted after the initial application. This fact sheet presents standards, practices, and technical considerations for ESAs at eligible properties applying for participation in the VCP.

In general, a Phase I ESA includes the following: 1) a review of current and historical records pertaining to the subject property and adjacent properties (includes a review of State and federal regulatory databases); 2) a site reconnaissance; 3) interviews with past and present owners, operators and occupants of the property as well as with government officials. The objective of the Phase I is to identify recognized environmental conditions (RECs), including controlled RECs (CRECs) and historic RECs (HRECs) at the property and help identify areas of potential concern, such as storage locations for chemical use and disposal, buried tanks, and environmentally-sensitive land uses. In addition, a preliminary analysis to develop an initial understanding of potential vapor migration should be performed using the readily ascertainable information available.

While the VCP allows and encourages submittal of the Phase I ESA in an electronic format, the VCP also requires submittal of a hard copy of the entire document, including all appendices for review purposes. It is not possible for the VCP to review and compare multiple large documents in electronic format.

For the purposes of the VCP, Phase I ESA information must be less than one year old. Please note that this requirement is less stringent than the six month timeframe currently defined under ASTM and federal All Appropriate Inquiry (AAI) Final Rule (40 CFR 312). The one year requirement also applies to use of the Phase I for submittal of subsequent applications by different entities or for a change in use.

VCP ESAs must follow the current standards and principles established by the ASTM. The transaction screen process, which can be used to help supplement information in the Phase I, is not acceptable for the purpose of providing sufficient information regarding the nature and extent of contamination to assist in making informed business decisions about the property; and where applicable, providing the level of knowledge necessary to satisfy one of the requirements for the potential landowner liability protections offered under CERCLA. The ASTM guidance notes that achieving these objectives may require the performance of more than a single iteration of assessment. The intent of ASTM guidance is to foster an iterative approach to Phase II assessments and allows the user to terminate the investigation at the point where sufficient data



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have been generated to meet the user's objectives. In addition, the Phase I ESA must also meet all requirements of the federal All Appropriate Inquiry (AAI) Final Rule (40CFR312).

Future Use and Development: Although not necessarily part of the Phase I ESA, it is imperative that the application package include information regarding the anticipated future use of the property and any development plans, such as planned future construction or landscaping or any changes in current business operations. Examples of proposed alterations to the property include grade changes, demolition of buildings, and construction of new structures or additions, extensions of public water or sewer, and installation of storm water management systems. There is often confusion on how specific uses, including but not limited to single family homes, day care centers or playgrounds, fit into the proposed VCP property use descriptions for future use of the property. The VCP project manager cannot adequately advise the applicant on sampling requirements and/or remediation requirements without an accurate description of the proposed future use of the property and without being advised of the potential redevelopment plans. The applicant also should include a schedule for all site development activities, if available.

The VCP Application Checklist (an attachment to the VCP application form) summarizes the essential components of ESAs that must be submitted for potential VCP properties. The following items are presented as a supplement to the application checklist. Including these components in an application package will help minimize the need for document revisions, additional submissions, and field remobilizations.

As discussed above, the ASTM and AAI are the relevant standards to meet when conducting a Phase I ESA for submittal to the VCP, however the VCP has additional specific requirements for documentation that may be included as part of the Phase I ESAs described below. If the Phase I ESA submitted to the VCP under the one-year deadline does not include this documentation, other documentation should be submitted that provides the relevant information.

A. Legal Description of Property: The VCP requires submittal of a current tax parcel map that clearly defines the property boundaries. If multiple parcels are included in the VCP application, please ensure that the tax map shows each parcel. Tax parcel maps can be obtained from local county agencies and via the internet using the Real Property Data search at the website for Maryland Department of Assessment and Taxation (<http://sdat.resiusa.org/RealProperty/Pages/default.aspx>). If a tax map is not obtainable, please provide a current land survey. In the event that a Phase I ESA was completed for a property with differing boundaries than the VCP application, it is best to submit an explanation page describing and acknowledging the difference as the determination issued upon completion of the VCP will be based on the application form and not the Phase I ESA.

B. Property Ownership: An abstract of a property ownership should be provided that covers records of ownership, leases, land contracts, easements, liens, and other encumbrances for all parcels (or lots) included in the VCP application for the property. The property ownership



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documentation must extend to either 1940 or the earliest developed agricultural, commercial or industrial use, whichever is earlier. The recommended format for property ownership abstract is either in tabular format clearly delineating the date, grantor and grantee of each property transaction or a flow chart showing the same. Subdivisions or consolidations should also be shown. A title insurance policy does not need to be provided.

C. Property Operations: If a business was likely to have stored or handled Controlled Hazardous Substances (CHS) or petroleum (oil) products, the site assessment should include copies of Material Safety Data Sheets (MSDSs) and the storage and handling procedures that the business followed. The potential for environmental impact from these procedures should also be discussed.

D. Historical Documents: Any historical document provided as documentation to the Phase I, including but not limited to, fire insurance maps, land title records and aerial photographs, and previous environmental assessments must be provided to the VCP in a legible format. Specifically, in the case of fire insurance maps, the applicant should ensure that all text on the figures is readable and that the provider of the map provides a zoomed in version of the map when necessary.

E. Previous Investigations: Any previous environmental investigations at the property, including but not limited to site assessments, subsurface investigations, and groundwater sampling reports, should be provided to the VCP. Applicable analytical data reports and quality assurance and quality control documentation should also be included. Duplicate copies of reports are not necessary for multiple applications filed for contiguous properties or for multiple applicants for the same property, although the Department reserves the right to request duplicate copies to expedite the application review.

F. Department Regulatory File Review: The Phase I ESA must include a discussion of any federal and State environmental records and any other available environmental records. Files at the Department may include permits, regulatory compliance history, violations, administrative orders, consent orders, and correspondence. If the property or adjoining properties are identified on the regulatory agency file and records review, those regulatory files should be reviewed. If, in the environmental professional's opinion such a review is not warranted, the environmental professional must explain within the report the justification for not conducting the regulatory file review. To obtain information from the Department about a specific site, please submit a Public Information Act request to the PIA Coordinator, Maryland Department of the Environment, 1800 Washington Boulevard, Baltimore, Maryland 21230, telephone 410-537-4120 or fax 410 537-3998. Additional information about PIA requests can be obtained from the Department website at:

<http://mde.maryland.gov/programs/Marylander/PublicInfoAct/Pages/index.aspx>

Please note that PIA requests must be conducted as part of the property review and within an adequate time period so as to provide the obtained information in the Phase I ESA. Please note



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that contacting the Department by phone to interview project managers regarding sites does not constitute records or file review. Also note that the Land Restoration Program cannot expedite the records review and is required to refer requestors to the PIA liason to follow the PIA process for obtaining records.

G. Property Features: The Phase I ESA should describe the property's topography, surface drainage pathways, including man-made channels and drains, and receiving surface water bodies, such as wetlands, seeps, streams, rivers, lakes, and ponds. A scaled site plan should be submitted that identifies the location of each swale, trench, culvert, catch basin, sewer, drainage pathway, interior drain, and sump on the property. A written description should explain the nature and source of historic and current runoff or releases to each identified feature. The point of discharge, such as a drain field, a named or unnamed surface water body, or municipal sanitary sewer, should be described for each identified feature. Local surface water use for potable, recreational, irrigation, or commercial purposes should also be discussed.

H. Scaled Site Plan: The Phase I ESA should include a scaled site plan that clearly shows the legal boundaries and acreage of the property and the location of all existing buildings, paved areas, monitoring wells, tanks, surface water bodies, rail spurs, and other notable structures.

I. Site Plan with Utilities: The Phase I ESA should include a site plan showing the approximate location and depth of each water, sanitary, storm sewer, and natural gas pipeline currently on the property, as well as service providers for each utility.

J. Groundwater Use Investigation: The Phase I ESA should include written documentation from the State, county, municipality, and any other water authorities concerning existing potable wells, the availability of municipal water, and potential future groundwater use areas within one-half mile of the property boundary. The documentation should include a copy of the county and municipality water plan maps that depict existing service areas, planned service areas, and no-service-planned areas within a minimum of one-half mile radius of the property boundary.

It is necessary to contact State and local government departments directly because commercial information search services do not include sufficient information on municipal or domestic wells. The Department Water Supply Program (410-537-3702) may be contacted to obtain a information regarding public supply wells in the vicinity of the proposed property. The Wastewater Permits Program (410-537-3784) may be contacted to obtain information regarding all other groundwater users in the vicinity of the proposed property.

The Phase I ESA should include a scaled map with all of the identified wells, excluding test or observation wells. If available, a copy of the well permit or the permit number, screen depth, and current use of each well should be provided. If exact well addresses are unavailable, delineate likely groundwater use areas based on reported street names, subdivision names, and other information available in the well survey and other sources.



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K. Controlled and Historic RECs: The VCP does not consider closure under another program to be adequate to remove sampling requirements for a Phase II ESA. In the event that a Phase I ESA is presenting a REC as controlled or historic, it should provide specific references to the type of closure granted, any case or reference numbers, the date of closure, and a summary of the data used for closure. Providing such information allows the VCP to start determining what additional sampling or investigation requirements may be necessary related to previous conditions on the property. This is particularly true of closed Oil Control Program (OCP) cases in which impacted soil was allowed to remain on the property that is being proposed for a residential use.

L. Oversight by Other Regulatory Entities: Applicants to the VCP must identify any environmental regulatory agency involvement on the property and provide a summary of the regulated activity, program, and contact information for that entity or program. This allows different programs within the Department or other agencies to communicate and coordinate regarding site activities when necessary. Activities and regulatory oversight that should be described include, but are not limited to:

- Presence of active or abandoned underground storage tanks (USTs) and/or aboveground storage tanks (ASTs) under the OCP;
- Proposed removal of asbestos containing material;
- Previous or current hazardous waste generation;
- Former or current use of the property as a regulated or unregulated dump (either hazardous waste or solid waste);
- Active National Pollutant Discharge Elimination System (NPDES) permits and discharges;
- Active water appropriations permits; or
- Active air permits.

While the VCP attempts to coordinate activities with other programs as necessary to complete the VCP process, all regulated items or processes will be addressed by the appropriate regulatory program, not the VCP. Participation in the VCP does not allow an applicant or participant to bypass any other regulatory requirements.

