

CP Training Phase I

For the next few minutes, I will be presenting the Ohio Environmental Protection Agency's (Ohio EPA) protocol and requirements for performing Phase I Environmental Site Assessments under the Voluntary Action Program (VAP). I am assuming, based upon the requirements to become a Certified Professional, that all of you are very familiar with the Phase I ESA process, at least as defined and performed under the ASTM guidelines. Therefore, I will not focus on the basics of performing Phase I ESAs, but on the key elements of Environmental Assessments in accordance with the VAP. I am also assuming that you have read, or will in the near future read, the VAP rules in their entirety.

We will look at the following elements of VAP Phase I Assessments in our time together:

- 1) Purpose of VAP Phase I Assessments
- 2) The End Result of VAP Phase I Assessments
- 3) How VAP Phase I Assessments Differ from other Phase I ESAs
- 4) Use of Historical Reports in the VAP
- 5) Components of a VAP Phase I Assessments
- 6) Role of Certified Professionals

I. Purpose of VAP Phase I Assessments

Phase I ESAs are performed for a variety of reasons ranging from:

- lending institution requirements for loans;
- price negotiation on a property;
- evaluating the real environmental liability of the property;
- documenting the condition of the property when you enter and when you terminate a lease
- and to provide CERCLA liability protection.

However, the purposes of the VAP Phase I Assessment are two-fold: 1) to characterize a site for participation in VAP; and, 2) to determine if there have been releases of hazardous substances or petroleum onto the site and to then determine the necessity and the scope of a Phase II Property Assessment.

When a VAP Phase I Assessment is performed instead of the typical ASTM-standard Phase I ESA, it is obvious that the intent is to potentially take the site through the voluntary program for an eventual no further action and covenant not to sue. Therefore, it is critical that issues that may reveal the site or portions of the site to be ineligible for inclusion in the VAP be identified early, which is usually accomplished during the Phase I process. For instance, an underground storage tank (UST)-related issue may be identified during the Phase I that would need to be addressed under the Bureau of Underground Storage Tank Regulations (BUSTR) program before that area of the site could be considered in the NFA letter. Likewise, a hazardous waste storage unit may need to go through proper closure under RCRA before this area can be included in the NFA. Another portion of this training program will address eligibility issues; however, the important point to remember during the VAP Phase I process is to identify all eligibility issues so they can be addressed early in the VAP process.

The second purpose of a VAP Phase I is to “determine whether there is reason to believe that any releases of hazardous substances or petroleum products have or may have occurred on, underlying, or are migrating onto or from the property.

For those well versed in the ASTM Phase I Standard, the above definition is somewhat similar to the term “Recognized Environmental Conditions” (RECs) which is defined by ASTM as “the presence or likely presence of any hazardous substance or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into ground, groundwater, or surface water of the property”.

II. End Result of VAP Phase I Assessment

The end result of performing the VAP Phase I Assessment would be either: 1) No releases or suspected releases identified; or, 2) releases or suspected releases are identified with corresponding recommendations for conducting a Phase II property Assessment.

It is possible, although unlikely, that the result of the VAP Phase I Assessment would indicate that there have been no releases of hazardous substances or petroleum products on the subject property or migrating onto or beneath the subject property from an off-site source. The reason that this is generally unlikely in a practical sense is that the purpose of the VAP is to prepare a no further action (NFA) and receive a covenant not to sue (CNS) for a property. If there is no reason to suspect that the property has environmental issues, then most property owners, developers, and lending institutions, have little need to get closure from the state through this program.

There have been exceptions; however, the overwhelming majority of the VAP sites have Phase II investigations and some type of remedial solution associated with them. This trend is changing slightly with the awarding of Clean Ohio Fund (COF) Grant money to abate asbestos containing materials. If the only issue associated with a property that has received COF monies have been for the abatement of asbestos containing material AND there have been no indications of releases of these materials to the soil or groundwater during abatement, there would not be a necessity to perform a Phase II ESA.

However, if friable or Category I asbestos is present at the Property, which could have resulted in a release to environmental media onsite, then compliance with the VAP applicable standards is required. Therefore a Phase II property assessment would need to be performed.

If there are no other contaminants of concern at the Property and no releases of ACM to environment have been identified, then the CP can stop with the Phase I assessment. However, if the Property has a building which is undergoing demolition or renovation, and even if a release to environmental media has not occurred, the CP must still verify that the asbestos abatement activities have complied with “all other applicable laws and rules.”

Lead based paint is addressed similarly to asbestos: that is, if lead paint is released into environmental media, then VAP applicable standards must be met. If lead remediation at a property is taking place, then the volunteer must demonstrate compliance with any other appropriate rules and laws. These issues of asbestos and lead are respectively addressed in VAP Technical Decision Compendiums. If no releases have been identified, as defined above, then

the Certified Professional (CP), upon authorization from the Volunteer, can complete the NFA checklist and NFA letter for potential submittal to the Ohio EPA for a CNS-

(Lead based paint remediation is not covered under the Clean Ohio Fund anymore)

The more likely end result of the VAP Phase I Assessment would be that releases of hazardous substances have or may have occurred on or have migrated onto the subject property. Therefore, a Phase II Assessment would be recommended in one or more Identified Areas where these releases have or may have occurred. We will discuss Identified Areas later in the presentation. These Identified Areas must be discussed in the Phase I Assessment report and depicted on a figure. These Identified Areas then provide the basis for performing a Phase II Property Assessment.

Releases could be from an on-site source (e.g. on-site leaking containers) or from an off-site source that has or may have impacted the subject site property (e.g. adjacent gas station with documented leaking underground storage tanks (USTs)).

Furthermore, these releases could be:

- A current release;
Examples of current releases could be leaking ASTs observed on the property during the site inspection of the Phase I, or the site currently being listed as a leaking UST site, or an adjacent property that is contaminating the subject site.
 - A documented historical release;
- or,
- A suspected release.

Even though there may be no indications of a current release, historical releases to the environment may be identified through Agency file reviews, historical environmental reports, or through site interviews. Even if these issues have been investigated in the past and determined to be properly evaluated and deemed to be of no environmental concern, they still need to be labeled as Identified Areas and must be evaluated during the VAP process. An example would be if the subject site had an historic release from a UST, and the area was investigated and either remediated to below the applicable standards under the BUSTR program or shown to have no soil or groundwater contamination above these standards. If the BUSTR report was supported by data from a laboratory that did not hold certification within the VAP at the time of analyses for the particular analytes, then the non CL data must be confirmed with VAP CL data.

Another way a release can be indicated at a subject site in the VAP Phase I process would be through suspected releases on-site, or at adjacent properties with the potential to impact the subject site. An example would be the presence or historic presence of a dry cleaning operation or vapor degreaser on site or at an off-site property that is located up-gradient from the subject site.

III. How VAP Phase I Assessments Differ from other Phase I ESAs

There is specific guidance and requirements in the VAP Phase I Rule that must be followed in performing Phase I Assessments. It is strongly recommended that, before and during the Phase I process, not only the Phase I rules be reviewed, but also the portion of the NFA Checklist that pertains to legal and site descriptions, ownership, eligibility issues, historic uses and issues,

property inspection requirements, and reporting requirements. This review would minimize the chances of missing any information required under the Phase I rule and potentially jeopardize the issuance of the NFA or receipt of a CNS.

The Ohio EPA VAP has prepared an Assessment Type Comparison Chart for the various types of investigations including: VAP Protocol, ASTM E1527-00, ASTM E1527-05 which will go into effect in the fall of 2006, the newly promulgated All Appropriate Inquiry (AAI) that will be enacted in November 2006, USEPA Preliminary Assessments, and everything in between (like limited Phase I ESAs and transaction screens). The comparison of criteria between the different assessments is included in the table shown in the next 2 slides.

In comparing VAP Phase I Assessments with the most commonly performed Phase I (ASTM-00 1527-05), the following additional requirements must be performed to satisfy the VAP Phase I Rule:

- 1) The Certified Professional may not issue an NFA letter without performing a walk-over of the property and making a determination that the information in the Phase I is complete and reliable as it pertains to the Phase I Rule, and all the required aspects of the Phase I Rule have been addressed.
- 2) A chain-of-title must be performed.
- 3) Agency files must be reviewed as part of the Phase I including: USEPA files, Ohio EPA files, Ohio Department of Natural Resource (ODNR) files for oil and gas wells and water wells, BUSTR files, Emergency Response files included the State Emergency Response Commission (SERC) and the Local Emergency Planning Commission (LEPC), and local health department files. File reviews under the ASTM process are only warranted if there appears to be a concern, whereas all files must be reviewed under the VAP Phase I Rule.
- 4) All Identified Areas must be depicted on a figure map and discussed in the report. In addition the following additional maps are required as part of the report: a USGS 7.5-minute topographic map showing the property boundary; a property map identifying structures, features and property boundary; a map showing all sites within ½-mile radius of the property.
- 5) There are detailed and specific requirements pertaining to handling de minimus releases and are not left to subjective professional judgment.
- 6) Unlike the ASTM-00, ASTM-05, and the AAI Phase I ESAs, the purpose of the VAP Phase I is not for establishing “Innocent Landowner Defense” under CERCLA.

IV. Use of Historic Reports

The VAP Phase I Rule allows for the use of historic reports in some instances, as follows:

- 1) Any Phase I ESA dated after December 16, 1996 used to support an NFA must meet the requirements of this Phase I Rule. In other words, there is no provision that will allow Phase I ESAs performed after this date that are not in accordance with the Rule to be modified, amended, or supplemented to meet the requirements. The Phase I would have to be redone following the VAP Phase I Rules.
- 2) Any Phase I ESA performed not as part of some voluntary action prior to December 16, 1996 could be modified to meet the requirements of the VAP Phase I Rule. However, even if the older Phase I is amended, a separate Phase I must be completed in accordance with the VAP Phase I Rule to address the time between the date of the historical report and the date the NFA will be issued.

Furthermore, even if the pre-1996 report is supplemented or amended, it must still be included in the historical review section of the current VAP Phase I ESA to ensure that the CP has not missed any potential Identified Areas or contaminants of concern that were apparent during the historical Phase I, but which may not have been detected during the current investigation. For example, extensive stained soil may have been noted in the historic Phase I, but during the current Phase I, the area is paved with asphalt with no signs of contamination. This historic REC would have to be considered an Identified Area.

V. Components of a VAP Phase I Assessment

The purpose of this portion of the presentation is not to train CPs or prospective CPs on how to perform Phase I ESAs. I am assuming all of you have extensive experience in performing Phase I ESAs. The purpose is simply to highlight general requirements and any specific items required by VAP.

The following “preliminary” steps should be performed BEFORE the VAP Phase I Assessment is implemented:

- 1) Make sure the boundaries of the property to be included in the Phase I are understood. This may seem like an obvious point, but there have often been misunderstandings on which portions of a site are to be included in a subsequent no further action. Legal descriptions are essential in the preparation of an NFA, so property boundaries of the assessment should be fully understood at the beginning of the Phase I process.
- 2) Make sure that the NFA Checklist is reviewed prior to implementing the work, so VAP Phase I and eligibility requirements are not overlooked during the Phase I process.
- 3) Obtain government files as soon as the project begins. There is generally a long lag time in obtaining government files, and these files often have significant bearing on the Phase I findings and potential eligibility issues. Ohio EPA prefers that files are reviewed at the district offices instead of ordering copies from the Agencies to assure all the files are reviewed.

A. Historic and Current Use of Property

As part of the VAP Phase I, a continuous history of the uses of the property must be determined, starting with current use and tracing back to when the property was first used for industrial or commercial use.

Historical use information can be obtained through the same variety of sources that are used when performing an ASTM Phase I ESA including:

- Interviews with facility personnel, especially those who have been associated with the site for many years
- Sanborn (Fire Insurance) maps
- Aerial photographs
- City directories
- Property tax files, land title records, building department records

In addition, unlike the ASTM standard, a review of the chain-of-title for the subject site must be obtained or performed to determine previous ownership and identifiable historic uses of the subject site.

- Historical topographic maps

B. Environmental History Review

Not only must the historic use be identified for the subject site, but the history of environmental issues must be investigated to determine if there is, or has been, reason to suspect releases at the subject site and to assist in determining if there are any VAP eligibility issues pertaining to the site. This portion of the Phase I process is critical, because, as in many cases, the current property evaluation may indicate no environmental issues, but the site may have a history of environmental issues that may or may not have been resolved.

This environmental history review must be a continuous review from current environmental issues back to first commercial/industrial use. This information is generally obtained through the following sources:

- Historic environmental reports performed by other consultants or in-house. These reports can include Phase I ESAs, Phase II Investigations, Remediation Reports, RCRA Closure Reports, Underground Storage Tank (UST) Closure Reports, etc.
An example would be an historic UST closure report that indicated the former presence of USTs on the property. This would be considered an “Identified Area” in the VAP Phase I, regardless of whether or not an NFA from BUSTR has been issued for the closure. One thing to remember about a BUSTR NFA, it is not a “get out of jail free” card. BUSTR has been known to rescind NFA letters. Furthermore, VAP would require a Phase II Investigation in this area if a VAP Certified Laboratory was not used during the BUSTR closure process to confirm that the soil and groundwater results meet applicable VAP standards.
- Historic environmental compliance reports or plans that might shed light on the historical environmental history of the site. These can include: historic compliance evaluations, Storm Water Pollution Prevention Plans (SWPPP), Spill Prevention Control and Countermeasure (SPCC) Plans, Contingency Plans, and Hazardous Waste Generator Status.
While the purpose of the VAP Phase I is not to evaluate current or historical compliance with environmental regulations, an evaluation of this information can be used to shed light on the current and historical environmental history and to determine whether there is a likelihood of historic releases to the soil or groundwater at the subject site or whether the site is subject to comply with any reporting obligations under other regulatory programs. One example would be the historic listing of the facility as a large quantity generator (LQG) of hazardous waste. This would obviously indicate hazardous waste was generated and potentially stored at the facility in a 90-day storage area that was subject to a generator closure. This storage area would be considered an Identified Area in the VAP Phase I, and a generator closure would have to be completed for this area of the site to be eligible for the VAP and consideration in the NFA.
- Review of federal and state environmental databases for listings regarding the subject site including: NPL, CERCLIS, RCRA, Ohio EPA DERR, Ohio EPA Spills Database, BUSTR UST and LUST databases, and ODNR oil/gas/water well log databases. This information could be obtained by manually checking the individual databases; however, it is much more typical and easier to order a database search from a commercial database company. If ordering from a commercial database company, the data should always be evaluated thoroughly by the consultant to verify accuracy and how current the information is.
For example, specific databases evaluated from a commercial database company are updated quarterly to annually. Therefore, listings on the subject property and surrounding properties could be outdated. In addition, the consultant should always verify the distance, orientation,

and topographic gradient of off-site properties of concern listed in the database in relation to the subject property.

- Review of available files from the USEPA, Ohio EPA, ODNR, and BUSTR. A file review is performed based upon the findings of the database review. Files for apparently resolved issues (e.g. NFA from BUSTR, In Compliance Letter from Ohio EPA) should still be reviewed for accuracy and thoroughness.
- Review of files at the State Emergency Response Commission (SERC), the Local Emergency Planning Commission (LEPC), the local fire department, and the city or county health department should also be done to determine if there are or were sources of hazardous materials or petroleum products with the potential to impact the subject property.
- Interviews with current and/or former site personnel who are knowledgeable about current or former environmental conditions at the subject site. Interviews with personnel who have worked at the subject facility for many years are often a good resource for information and in obtaining clarification of past operations and historic releases.

C. Release History

The volunteer must include detailed information on current, recent, and historical releases of hazardous substances or petroleum at the subject site. This information is obtained from the same sources that would be used to obtain information on the environmental history of the site. Details of the releases must be described in the Phase I report, including the material that was released, amount that was released, date of the release, the extent of contamination, and what measures were taken to clean up the material that was spilled including any documentation as to the effectiveness of the clean up effort. This last point is very important, because in many instances, site personnel have taken considerable effort to clean up an area where a spill had occurred, and either they did not know to collect confirmatory samples once remediation was complete or did not believe it was necessary, since, in their “judgment”, the contamination was removed.

D. Offsite Evaluation

During the VAP Phase I Process an evaluation of off-site properties must be made to determine if hazardous substances or petroleum products from the adjacent properties may have been released on, beneath, or migrated onto the subject site.

This evaluation can be accomplished initially by reviewing the environmental database report that was obtained for the subject site. The search radius for off-site properties should be set at least at one-half mile from the subject property. In addition, a “curb-side” inspection of properties adjacent to and nearby the subject site should be performed, without entering onto these properties, to determine the condition of the properties and to identify any obvious indications of environmental impairment with the potential to impact the subject site.

Based upon the results of the database review, the inspection of these off-site properties, and the proximity and orientation to the subject site, further investigation may be necessary. This investigation would include a review of available environmental files for these properties from applicable local, state, and federal agencies for these off-site properties. The agency file review would assist in determining the extent of contamination, the potential of these properties to impact the subject site, and, if necessary, the design of a Phase II Property Assessment for the subject site.

E. Property Inspection

This is a critical component of the VAP Phase I Process. The site inspection assists in determining whether any releases of hazardous substances or petroleum products have or may have occurred on or beneath the subject site, or if adjacent properties are impacting the subject site with hazardous substances or petroleum.

It is important that the entire property, including all interior and exterior portions, is inspected. It is unacceptable to state that certain portions of the property were not accessible during the inspection and to assume the portion of the site not inspected is not impacted.

The consultant must identify in the Phase I report any physical obstructions that limited the visibility of conditions on the property during the site inspection. Furthermore, if extensive ground cover is present (e.g. snow) that prohibits the evaluation of staining or petroleum on the ground, a re-inspection of the site may be warranted, if the CP has reason to believe there may have been releases in portions of the site.

At a minimum, VAP requires the following areas to be inspected, evaluated, and discussed in the Phase I report:

- 1) All areas where hazardous substances or petroleum products are or have been located, which would include current and historic locations of storage, usage, or transport of these substances. All past and present ASTs, UST systems, pipelines, production areas where chemicals are used, oil and gas wells, on-site landfills, lagoons, pits, wastewater treatment areas, oil and chemical storage areas, and RCRA satellite and 90-day storage areas must be inspected. The consultant must not only note the presence of these items, but also evaluate the condition of these items to determine the potential of any releases to the environment in these areas. Examples would be inspecting ports of existing USTs for product, cracks in the pavement in chemical storage areas, and staining around oil and gas wellheads and storage tanks.
- 2) All pipes, drains, storm and sanitary sewer outfalls, and catch basins should be inspected for evidence of any releases to them.
- 3) All areas of spills, stressed vegetation, discolored soils, or areas of filling. Also, note all points of unauthorized and permitted discharges.
- 4) Note the topographic conditions, both natural and manmade, at and surrounding the site. Also note all bodies of water on the site, both manmade and natural, including storm water retention basins, drainage channels, creeks, rivers, ponds, lakes, etc.
- 5) Identify all migration conduits that chemical releases may enter, including: basements, sewers, utility lines, etc.
- 6) Inspect properties adjacent to the subject site, without entering the properties, to determine potential sources of contamination that could impact the subject site.

F. Identified Areas

One of the main purposes of the VAP Phase I is to list and describe all Identified Areas at the subject site. As mentioned earlier, an Identified Area is defined in the VAP Phase I Rule as “a location at a property where a release of hazardous substances or petroleum has or may have occurred”.

Each of the Identified Areas must be depicted on a figure and discussed in detail in the Phase I Report. These Identified Areas in the Phase I will provide the basis for the VAP Phase II

Investigation. Each of the Areas can be redelineated or eliminated if the results of the Phase II support this action.

Some examples of Identified Areas in a VAP Phase I would be:

- Presence or former presence of a UST onsite
- Leaking UST property up-gradient of the site
- Chemical and/or oil storage area
- Presence or former presence of a dry cleaning facility on site or up-gradient of the site
- PCB-containing transformers onsite
- Presence or former presence of a paint booth onsite
- Staining on ground or stressed vegetation not defined as de minimus (see below)
- Listing of the site in an environmental database that may have indicated a release to soil or groundwater

G. De Minimus Releases

Oftentimes, when following the ASTM standard, the term “de minimus” is a very subjective term and, in some cases, may go way beyond what should be considered de minimus. In some instances, volunteers may think that because a site is used for industrial purposes, high concentrations of petroleum hydrocarbons that might be present in environmental media beneath the site should be considered “de minimus”. In other instances, some may erroneously conclude that the presence of a dry cleaner on a property is “de minimus” because the property is zoned for commercial use and there are no water wells in the area. However, in the VAP Phase I Rule, there is more objectivity in the definition of what can be considered as a “de minimus” release. In order to demonstrate that a release is de minimus, VAP has established certain requirements that must be met in order for a release to be considered de minimus. These requirements are the following:

- 1) The type of hazardous material or petroleum product that was released must be determined.

This determination is very important, because the toxicity of some chemicals are much greater than the toxicity of others and the mobility of these substances into and through environmental media (soil, surface water, and groundwater) vary greatly. For instance, staining on the ground caused by a release of fuel oil or other heavy petroleum hydrocarbons is not nearly as much a concern as staining caused by a release of chlorinated solvents used in a vapor degreaser.

- 2) None of the constituents of the chemical/petroleum product that were released can exceed established direct contact soil standards for residential land use. One might ask how can this be determined during a Phase I process?

One way a volunteer can demonstrate compliance with this requirement is to provide a statement from persons with knowledge and circumstances of the release made through an affidavit. If this information cannot be provided, limited sampling during the Phase I process may be performed to determine if this alleged area is de minimus. Soil samples should be analyzed for constituents suspected to be present in the area of the release. VAP specifies that at least one sample from the area must be analyzed at a Certified Laboratory.

- 3) The release must be confined to surficial soils on the site (not exceeding one foot in depth). In addition, hazardous substances / petroleum products that were released

must not have impacted surface water, sediments, or groundwater beneath the property or off-site.

Surface waters would also include sewer lines – both storm and sanitary. Many times, small releases have occurred in an outdoor storage area in the immediate area of sewer catch basins. If the release appeared to have entered the sewer, it can no longer be considered de minimus.

- 4) The alleged de minimus area must be a small quantity. VAP defines small by not exceeding nine square feet on the surface and not exceeding one foot in depth. The depth of contamination can be determined either by interviewing a person knowledgeable about the release under affidavit or by advancing a soil boring in the area to determine the vertical extent.
For staining on pavement inside or outside a building, it is up to the CP to determine whether such a release has impacted environmental media.
- 5) The release was not part of a pattern of disposal or mismanagement.
One way to determine if there has been mismanagement is to ascertain if the facility is operating within the guidelines of their Storm Water Pollution Prevention Plan (SWPPP), SPCC Plan, or Contingency Plan, if they are in place for the facility. Another way a CP can determine if there has been ongoing mismanagement is by looking at the overall housekeeping of the facility. A facility that is relatively clean and has all appropriate plans in place and is abiding by these plans is not as likely to have mismanagement issues as opposed to a facility that has poor housekeeping regarding the handling and management of hazardous substances and petroleum products and are not abiding by their existing plans.

A further stipulation that VAP places on de minimus areas is that there can be no more than three de minimus areas per acre. If there are more than three, a Phase II must be performed in accordance with the Phase II Rule. Although not necessarily warranted, the volunteer can investigate de minimus areas as part of a Phase II investigation. Investigating these de minimus areas may be advantageous when other Identified Areas have to be investigated during the Phase II process. For example, significant staining may be noted around a gasoline dispensing island on site. It would make sense to collect shallow soil samples associated with the surface release while performing the subsurface investigation to evaluate any releases beneath the gasoline dispensing area.

Furthermore, a volunteer may elect to properly remediate these de minimus areas (e.g. excavating surface soils and backfilling with clean material). However, documentation must be made to verify that the requirements for de minimus release have been met. For example, confirmatory sampling following excavation would be a good way to demonstrate the second point above. However, if an alleged de minimus release has impacted surface or groundwater, the area would still need to be investigated under the Phase II Rule, even though surficial soils were remediated.

H. Report Contents

Once all the information has been gathered, evaluated, and confirmed with site contacts, a detailed Phase I Assessment Report must be prepared. Although VAP does not give specific details on the report format and all the necessary items, the report must clearly present all

Identified Areas at the site and be used to support a NFA for the site and/or be used to guide in a subsequent Phase II Investigation.

Furthermore, the report should be structured so that a VAP reviewer can easily locate information in the report if detailed information is needed when the NFA is submitted for a Covenant not to sue.

At a minimum, A VAP Phase I Assessment Report must include:

- 1) Introduction
Besides the obvious information included in the introduction, the key points a volunteer must include in this section is the legal description of the property and a summary of the intended use of the property.
- 2) Conclusions
The conclusion has to state whether there is reason to believe that any releases of hazardous substances or petroleum have or may have occurred on, beneath, or coming from the subject property. If there is reason to believe that releases have or may have occurred, the chemicals of concern (COCs) and the Identified Areas must be presented. This information will then provide the basis for the scope of work during the VAP Phase II process. These Identified Areas could be re-evaluated or eliminated based upon the results of the Phase II Investigation.
- 3) The following maps/figures must be included in the Phase I Assessment:
 - A current USGS 7.5 minute topographic map with the property depicted, **along with longitude and latitude coordinates for the property and surrounding significant features such as roads, surface water bodies and adjacent properties.**
 - Property Map clearly depicting the site boundaries and all significant structures and features of the site. If a portion of a site is to be considered for an NFA, **this portion the boundaries of the property, as determined by a professional surveyor, of the site** must be clearly depicted on the map. **In addition, a minimum four latitude and longitude coordinates to adequately define the property boundaries must be contained on the map.**
 - Identified Areas Map. This map must include all Identified Areas of Concern that were presented in the conclusion section of the report. Areas considered to be de minimus must also be depicted on the map.
 - Area Map. This map depicts all off-site properties within one-half mile of the subject site that were identified during the Phase I that have impacted or have the potential to impact the site.
- 4) Also included in the Phase I Report are the following:
 - Explanation of all procedures used during the Assessment
 - Summary of all relevant information used to obtain the conclusions of the Assessment
 - A statement of any limitations or qualifications that impacted the Phase I Assessment
It should be noted, however, that if there are limitations that prevent a proper evaluation of the subject site so as to accurately and thoroughly complete the NFA, an additional site visit may be warranted to address these missed items.
 - Either a recommendation stating that an NFA can be prepared OR that a Phase II Assessment would be necessary to investigate the Identified Areas
 - Bibliography of References
 - Dated color photographs **depicting the current condition of the property**

- Appendices

While the VAP does not dictate exactly what appendices must be included in the report, any information used to support and document the findings of the Phase I Assessment should be included.

VI. Role of the Certified Professional (CP) During the Phase I Process

If the CP intends to utilize the Phase I Assessment in support of an NFA for the property, the CP must ensure the following:

- A. All the information in the Phase I is complete and reliable to the extent of supporting an NFA or in designing a Phase II Investigation work scope.
- B. The Phase I has been performed in accordance with the VAP requirements, as specified in the regulations.
- C. The Phase I has been performed within 180 days of issuance of the NFA. This 180-day timeframe is not from the date of the Phase I, but the date of the site inspection, file reviews, and interviews.

If this timeframe has been exceeded, a subsequent investigation (Phase I Update) must be performed to ensure that conditions have not changed since the performance of the original Phase I.

The Phase I Update must include the following:

- Chain of title should be updated and reviewed
 - Property inspection should be performed by the CP to determine if any new releases have occurred since the time the Phase I was performed
 - Determination of whether on or off site operations have caused a new release or have changed in a way that has altered the regulatory compliance of the facility (e.g. eligibility issues, closure requirements, etc.)
 - Any changes in the current or future land use of the property.
- D. The CP cannot issue an NFA without performing a walk-over of the property to make sure that the VAP Phase I requirements listed above have been met.

VII. **CONCLUSION**

The VAP Phase I Assessment is the initial and critical portion of the entire VAP process. If the Phase I is not performed properly or incompletely, the next courses of action (Phase II and potential remediation) will likely be incomplete or inaccurate. Oversights made by the consultant during the Phase I process can cause real surprises and disappointments to the volunteer. VAP Phase I Assessments are not to be taken lightly or to be performed without the oversight of a CP. I conclude by reiterating what I had stated at the beginning of this session – that it is very important that the persons doing the Phase I Assessment be fully aware of the VAP Phase I and Eligibility requirements before beginning the Phase I. Thank you.