

**Response to Susan Curry, Member of the CAG
Questions/Comments on the Phase 2 Field Investigation Planning Guide**

Simplified: 37 Questions after reading the Phase II Field Investigation Planning Guide

1. Page 4: Is it possible to have a list of the Phase I questions that have been removed from Table I?

The Phase I questions are included in the Phase I Field Investigation Planning Guide, which was previously provided to the CAG prior to the Phase I Field Investigation. Only those actions fully completed during Phase I were removed from the Phase 2 Field Investigation Planning Guide, all others were carried through in the Guide. Questions removed after completion of Phase I field activities include: 1, 2, 3, 8, 9, 10, 14, 16, 17, 18, 23, 24, 26, 27, 28, 29, 31, 32, 33, and 34.

2. Questions # 4, #11, and # 20: Why is this Action going to help you fill the data gap? Please explain why two wells help to determine groundwater flow direction/gradient or ground water depth?

A total of six wells are scheduled to be installed at the BoRit Site (two wells at each of the three parcels). Data from these six bedrock wells will be used to estimate the groundwater flow gradient. Additionally, the locations were strategically chosen so that data from the wells can be used to determine whether groundwater may be influencing surface water.

3. Question #5: Is the Phase 2 air sampling looking to learn whether the soil cover that EPA has already placed on the Park is sufficient protection for the community?

The purpose of this sampling is to ensure the stream bank stabilized areas are not being cross-contaminated during the next phases of the Removal Actions. EPA is performing activity-based sampling (ABS) on seven locations throughout the Whitpain Park property. Of these seven locations, EPA plans to conduct ABS at one location on the stream bank (completed Removal Action areas) along the Park.

4. May we see maps of all proposed locations for the air sampling equipment and ABS locations; as well as wells and piezometers? With regards to new wells, why were these locations chosen and not others?

Maps identifying these locations will be provided in the Phase 2 Site Management Plan (SMP), which is currently being produced. After this document is finalized, it will be shared with the CAG.

The proposed locations were chosen based on discussions between EPA's and our contractor's, CDM, hydrogeologists. Also, see response to Question #2 above.

5. Questions #5 near bottom (also page 8 top): Where is “surface water runoff believed to exit the site”? Are there more than one “exits”?

Any areas of the Site that are topographically higher than surrounding areas are potential areas where surface water runoff is possible.

Yes, there could be a number of areas where surface runoff could exit the Site.

6. Questions #6 and # 13: Since EPA Removal actions are currently ACTIVE and have applied dirt or gravel over the whole park site, is it even reasonable to expect ANY burrowing animals yet? Wouldn't it be a better Proposed Action to walk a half-mile upstream and to walk down to the Ambler Asbestos site to observe burrowing animals, as well as to note potential ecological risks (such as trees growing and falling over) that are found in the undisturbed upstream and downstream sites? If you are planning to visit during the growing season, does this mean in spring, and summer, and fall of 2011. Would it also include 2012?

Given the active Removal activities which are in various phases of completion, current use by burrowing animals is expected to be limited primarily to those areas which have already been restored and are infrequently used, and those areas where the habitat has not yet been disturbed. The presence of burrowing animals at the Ambler Asbestos Superfund Site serves to demonstrate their presence in the area and their propensity to exploit suitable habitat. If suitable habitat is provided at the BoRit Site, burrowing animals adapted to those habitats are likely to eventually inhabit the Site. The ecological risk assessment will evaluate those species or suitable surrogate receptors. The habitat evaluation will be based on the current and anticipated restoration "plans" for the site, observations of the surrounding habitats, as well as onsite habitat surveys.

While EPA and U.S. Fish and Wildlife Service biologists have been onsite for several reconnaissance activities over the past few years, EPA expects its contractor will perform a habitat survey in Fall 2010. The intent of the habitat survey is primarily to document the types of terrestrial and aquatic/wetland habitats that are present on the BoRit Site. The habitat profile will provide the basis for determining the floral and faunal species that may be present on the Site and that may be exposed to Site contaminants. EPA recognizes that the proposed survey will be limited in describing the full community of avian, mammalian, herptile and fish species that may use this Site because of the seasonal nature of the survey as well as the ongoing activities and disturbances to the habitat currently present at the site. Based on both the habitats found to be present on the BoRit Site, as well as those expected based on the ongoing and planned restoration activities, a comprehensive list of species that have been observed, or that are expected to occur in these habitats in southeast Pennsylvania, will be compiled. This list will be developed from direct observations, existing area-specific reports (such as available Audubon reports and other reports that may exist), and other sources of wildlife habitat information for the southeast region of Pennsylvania. From this list, those species that are expected to have the greatest potential for contaminant exposure based on habitat use, feeding behavior, foraging range, etc. will be selected as ecological receptors for the ecological risk assessment. Thus, by defining the habitat types,

we can then identify the potential species, which may be a more comprehensive list than using only observed species both on and in the vicinity of the Site.

7. Question # 13, #38 and # 39: RE: “at locations which appear to be critical with respect to potential remedial action activities.” - may we know where these park and pile locations are and why they may be “critical to potential remedial action activities”?

The soil borings for the geotechnical analysis will be collected at the locations which appear to be critical with respect to pile stability (based on a review of topographic mapping) and considering the locations of any potential park facilities (if available).

A Site map with the planned locations will be provided in the Phase 2 Site Management Plan (SMP), which is currently being produced. After this document is finalized, it will be shared with the CAG.

8. Question #38: Why is soil moisture content of importance? Won't this change with the weather?

A geotechnical analysis will be conducted to determine if subsurface conditions can provide enough stability to perform potential remedial activities (e.g., capping, excavation, treatment, etc.). In order to conduct such an analysis, laboratory testing of various soil parameters, including soil moisture content, will be performed on soil collected from both the asbestos park and pile parcels.

Yes, soil moisture will change with the weather.

Will there be any attempt to sample under worse-case scenarios?

No, EPA does its best to sample at natural, ambient conditions.

Do you make projections of soil stability based on some formula of what the moisture content was at time of sampling?

There is not a mathematical formula used to directly evaluate soil stability based on moisture content at the time the soil is sampled. Moisture content is one of several parameters that is considered when evaluating the engineering behavior of soils.

9. Question #12: Is “percent moisture” an air factor or a soil factor – is it establishing one of the climate factors at the time of sampling or something else?

Activity based sampling (ABS) is the process of collecting air samples from the breathing zone of samplers engaged in realistic representative activities (e.g., raking, mowing, digging, etc.) that may disturb asbestos-contaminated sources. Prior to performing ABS, soil samples will be collected and analyzed to determine the percent moisture at the planned ABS locations. The purpose of this percent moisture analysis is to determine if the soil is above

50 percent moisture. If so, ABS may not be performed because moist fibers may not become airborne during ABS.

10. Question #12 middle: May we know the proposed 4 locations for “property extent” ABS – will these be restricted to steep slope run-off areas?

In mid-August 2010, soil samples were collected along the Park, in front of the Reservoir and in front of the Asbestos Pile. EPA has not received the soil results from the samples that were collected in mid-August 2010. Based upon the results, EPA will determine if activity-based sampling (ABS) will be performed at those locations.

A Site map with the sampled locations will be provided in the Phase 2 Site Management Plan (SMP), which is currently being produced. After this document is finalized, it will be shared with the CAG.

If so, will there be any borings at residential areas or only ABS raking?

There will be a soil composite sample collected in any residential yard where the activity-based sampling (ABS) raking scenario is performed.

11. Question #12: Why would any of the 4 proposed ABS pile locations not be available and therefore subject to change?

With the dynamic work that EPA’s Removal Program is currently performing, some activity-based sampling (ABS) locations may be moved to represent conditions that have not had clean fill placed at the surface.

12. Question #39 Data Gaps: May we know what is on the list of “potential remedial alternatives” and what “potential future uses” EPA is considering?

The potential remedial alternatives have not been determined at this time. However, possible remedial alternatives to be evaluated could include no action, capping, treatment and excavation, and just excavation. EPA does not select future uses for the Site.

13. Question #14, Investigative Question: What is meant by “visible slag” at the pile? May we see a map of it’s location and extent?

Slag is a material formed during the smelting or refining of metals or from coal mining. During the Phase 1 investigations, slag was observed on the ground surface in the open area near the entrance gate of the Asbestos Pile. The origin of the slag is unknown, which is why it is being proposed for sampling during Phase 2.

The location of the slag will be included on the sampling map to be included in the Phase 2 Site Management Plan (SMP), which is currently being produced. After this document is finalized, it will be shared with the CAG.

14. Question #15: How can you expect that observations of species during all the Removal Actions can be meaningful. Are you looking for fish, turtles, snakes, frogs, etc. as well as fowl? Will you consult with the Audubon reports that provoked their naming the reservoir as a special protection Waterfowl preserve? Won't the observations be different for the 4 seasons?

As described in the response to Question #6, the intent of the habitat survey is primarily to determine the types of terrestrial and aquatic/wetland habitats that are present on the BoRit Site. The habitat profile will provide the basis for determining the floral and faunal species that may be present on the Site and that may be exposed to Site contaminants. EPA recognizes that the proposed survey may be limited in describing the full community of avian, mammalian, herptile and fish species that may use this Site throughout the year. Based on the habitats found to be present on the BoRit Site, a comprehensive list of species that have been observed, or that are expected to occur in these habitats in southeast Pennsylvania, will be compiled. This list will be developed from direct observations, existing area-specific reports (such as available Audubon reports and other reports that may exist), and other sources of wildlife habitat information for the southeast region of Pennsylvania. From this list, those species that are expected to have the greatest potential for contaminant exposure based on habitat use, feeding behavior, foraging range, etc. will be selected as ecological receptors for the ecological risk assessment.

15. Question #19: May we see a map of where “seep” was observed. Is the rate of seep affected by storms?

A seep was observed on the west side of the Reservoir berm at the base, adjacent to Wissahickon Creek. The Removal Action activities may have covered over this seep, making sampling or analysis of this seep impossible during Phase 2 activities. The seep location will be included on the sampling map to be included in the Phase 2 Site Management Plan (SMP), which is currently being produced. After this document is finalized, it will be shared with the CAG.

It is not known at this time if the rate of the seep is affected by storms.

16. Question #20: Please explain why the gauges and piezometers measure anything more than water table level?

Fundamentally, a gauge is a stick installed in the surface water body that is used to measure the surface water level elevation, and a piezometer is a pipe installed in the subsurface down to the groundwater and is used to measure the groundwater level elevation.

Wouldn't a storm event both raise the piezometers due to ground infiltration as well as the stream water level due to stormwater runoff from upstream?

Yes.

What can you conclude from what you find?

The elevations of the surface water and groundwater will be used to estimate the groundwater flow gradient, which includes the water flow gradient between the subsurface (groundwater) and the surface (surface water).

17. Question #21: Will any new park, pile or reservoir locations receive piezometers? Please explain how the wells and piezometers help to determine “groundwater connectivity with the reservoir”?

Yes, EPA plans to install a total of three new piezometers on the asbestos park and pile as part of the geotechnical investigation.

Groundwater elevations from the wells and piezometers and the reservoir surface water elevations will be mapped. The mapped elevations will allow the groundwater flow gradient to be determined which will indicate if water has the potential to flow from the subsurface (groundwater) into the reservoir (surface water) or out of the reservoir and into the subsurface.

18. Question #22: How can you do an ABS “activity” for the Reservoir—do you mean on the berm? If the ABS is on the berm – aren’t the berms the least disturbed by the Removal actions? Where on a map will the 3 stationary samples be located?

The reservoir activity-based sampling (ABS) is planned for a flat area between the fence line and the berm along Maple Street. This is the area proposed by the Wissahickon Waterfowl Preserve for the lookout platform, and the ABS scenario will be done to simulate digging for possible footings.

The stationary locations will be evaluated and selected on the day of sampling depending on the direction of wind flow.

Will there be any attempt to generate winds of “the wind speed on record for this area” blowing toward the stationary samplers?

No, EPA samples at natural, ambient conditions. We do not attempt to create artificial conditions when performing stationary sampling.

19. Question #22: What does a Baseline Human Health Risk Assessment Report look like? May we see one from another site (preferably and asbestos site)?

Every Superfund site is unique in terms of the contaminants and the concentrations that are found, and thus, each human health risk assessment will be different as well.

The Remedial Investigation/Feasibility Study (RI/FS), which includes a human health risk assessment, for Ambler Asbestos Piles Superfund Site can be found online at: <http://loggerhead.epa.gov/arweb/public/pdf/162312.pdf>.

20. Question #30: RE: “Determine the extent of ACM debris washed downstream from the Site.” Doesn’t this Proposed Action belong in the Data Gap column? And if so, what is the Proposed Action for how this will be “determined”?

EPA does not know the full extent of asbestos-containing material (ACM) debris that has washed downstream from the Site. As a result, EPA is planning to conduct a visual survey of ACM observed along the Wissahickon Creek from the BoRit Site downstream to the Ambler Borough Wastewater Treatment Plant. Size and location of ACM material observed by the surveyor will be documented.

21. Questions #35 and #36: What is a typical range of how many months there will be between the Draft and Final RI and Feasibility Reports? Will the CAG have more than 30 days to comment on the Drafts (since we meet only monthly). If not, as soon as you see the Drafts on the horizon, will you give us a two month “heads up” warning about which month would be the earliest month for the Drafts to be published?

Because every site is different, there is not a typical or average period of time between Draft and Final Remedial Investigation/Feasibility Study (RI/FS) reports.

EPA has only completed Phase 1 of the RI. EPA plans to begin Phase 2 of the RI in Fall 2010, and there may be additional field work that is needed even after the completion of Phase 2. Since field work is ongoing, no report schedule has been determined at this time. As the BoRit Site moves through the Remedial Process, EPA will evaluate the CAG comment period on a report-by-report basis to ensure a balance of community engagement and to complete our work efficiently and effectively.

22. Question # 37: Do you already have topics for any of the 5 Community Involvement meetings?

No, our contractor, CDM, will be available to provide technical support to EPA at CAG and public meetings. The need for their assistance at meetings will be determined as we move through the Phase II investigation.

23. Question #37: What is “the spreadsheet containing information provided by various CAG members”? May we see it? If we may not see it, what kind of information does it contain? Who is in charge of updating it?

For tracking purposes and to maintain any historical information referenced in any CAG emails, EPA has tasked CDM to summarize and reference emails provided to EPA by the CAG in a spreadsheet.

EPA is willing to share the spreadsheet. If you would like to receive a copy electronically, please contact Stacie Pratt, Remedial Project Manager, at 215-814-5173, or at pratt.stacie@epa.gov.

24. Questions #42: Will there be 3 stationary air samples for each of the 8 off-Site locations for ABS?

Yes.

Or just 3 stationary units for all 8 locations?

No, three stationary air samples will be collected at each of eight offsite locations.

Have the 8 initial locations been determined?

EPA is in the process of gaining access for eight properties on West Maple Street and Mercer Hill. The locations have not been determined at this time

I know you do not have property owner permission and do not want to compromise that until you do. If those are the ideal locations, can the CAG support you in getting owner access permissions?

At this point in time, EPA does not need the CAG's assistance in gaining access. EPA is working with the property owners to gain access and appreciates the CAG's offer.

25. Question #43: I forget what times of year the 2006 and 2007 sampling took place – are the August, Sept. and October samplings during the same months as before?

As part of the Removal Assessment, stationary air samples were collected over 13 months in 2006 and 2007. In 2006, samples were collected in October and November. In 2007, samples were collected in March, May, June, July, August, and September.

Would capturing air samples on very windy days just overload the samplers?

Windy conditions have the potential to overload the samplers.

If you get any overloaded samples will you repeat the sampling?

If high volume samples are overloaded, EPA will evaluate the low volume samples that were collected concurrently and archived. If the low volume samples are also overloaded, EPA will have the high volume samples evaluated.

26. Question #45: How many background samples of soil will be taken at what depth, and may we see a map showing from which locations?

EPA has not yet determined the number of background samples that will be taken and at what depths. Due to limited planning time and the need to get out in the field and perform activity-based sampling (ABS) in the dryer months (e.g., late summer/early fall), sampling of background soil is no longer planned as part of Phase 2. This sampling will be scoped out and planned for in the future.

27. Page 18: “Keep soil moist ...” and “require robust sprayer...” Unless EPA is going to propose daily sprinkling of the park, pile and floodplains forever, this moistness and robust spraying is likely to invalidate the testing. Something doesn’t seem well thought out here. Maybe the sampling should take place after a year of non-activity, non-spraying and no artificial moistening.

The purpose of spraying water adjacent to sampling activities is to minimize the potential of dust generation during Phase 2 activities. The spraying activities will not impact the actual sampling points.

28. Page 18: “Keep vehicles off of the Site ...” Is this to prevent migration of possible surface ACM on the vehicles?

Yes.

Will Investigation vehicles need to park on the street?

The contractor plans to park vehicles at the EPA field house whenever possible.

Those vehicles that are “absolutely necessary” on the Site – will they always be decontaminated before leaving the site?

All vehicles will be decontaminated before leaving the Site. There are construction entrances at the Park and Asbestos Pile entrances to perform this activity.

29. Page 18: “Evaluate asbestos migration from surface water transport at the Site.” Please explain what proposed actions were going to accomplish this Approach?

Please see the response to Question #10. Soil sampling along the exterior of the property fence line will be performed to evaluate the potential for asbestos migration from surface water transport. There is no evidence of surface water transport, this is merely a precaution.

30. Page 18: Why would installing groundwater monitoring wells in bedrock be more interesting than installing wells in native soils?

Groundwater in bedrock is the potential drinking water source.

31. Page 19: What means will be employed in the investigation of ACM washed downstream. Is there a criteria of size or depth, on land, in the water, in the sediment?

EPA does not know the full extent of asbestos-containing material (ACM) debris that has washed downstream from the Site. As a result, EPA is planning to conduct a visual survey of ACM observed along the Wissahickon Creek from the BoRit Site downstream to the Ambler Borough Wastewater Treatment Plant. Size and location of ACM material observed by the surveyor will be documented. No criteria have yet been established for identifying ACM during the survey.

32. Page 19: How will you “determine flow in and out of the Reservoir”?

As discussed in response to Question #21 above, groundwater elevations from the wells and piezometers and the reservoir water elevations will be mapped. The mapped elevations will allow the groundwater flow gradient to be determined which will indicate if water has the potential to flow from the subsurface into the reservoir or out of the reservoir and into the subsurface.

Which direction concerns you the most?

At this time, neither direction is more significant than the other. Additional data collected during the Phase 2 investigation may suggest one direction is more important than the other.

33. Page 19: Will all 3 stream flows be studied, or just Wissahickon? Could you study at the mouth of the Rose Valley? Are you going to wait for Removal to be done with Tannery Run before you conduct hydrologic studies?

EPA plans to evaluate all creeks (Tannery Run, Rose Valley and Wissahickon). The Phase 2 investigation will need to work around the work being done by EPA’s Removal Program at Tannery Run. Depending on the status of the EPA Removal Program activities at the time of data collection, it may not be possible to include Tannery Run in this round of water elevations. However, elevations are planned to be collected quarterly; therefore, there should be more opportunity for data collection in the future.

34. Page 19, After Phase 2: May we be shown an earliest timeframe for each of the reports so that the CAG can be prepared to devote more time to reading and responding? Are the reports (listed in the second bullet point under After Phase 2) all in one linear sequential order, or are some of them being developed in concurrent parallel time frames?

As described in the response to Question #21, EPA has only completed Phase 1 of the Remedial Investigation (RI). EPA plans to begin Phase 2 of the RI in Fall 2010, and there may be additional field work that is needed even after the completion of Phase 2. Since field work is still ongoing, no report schedule has been determined at this time. As the BoRit Site moves through the Remedial Process, EPA will evaluate the CAG comment period on a report-by-report basis to ensure a balance of community engagement and to complete our work efficiently and effectively.

35. Page 19, tbd: What is the nearest public well to the site.

It is EPA’s understanding that the nearest public well to the Site is at the intersection of Tennis Avenue and Reiffs Mill Road, approximately 0.2 miles east of Site.

If you determine groundwater flow direction, should you also sample the well nearest to that direction even if it is not the nearest to the site?

The closest public water supply well is located within the Borough of Ambler. The sampling of this well is not currently scoped and a decision to sample the well will be made once groundwater flow is better understood at the Site.

36. Page 43: IF CDM may “discharge purge water and decontamination water to the ground surface at the Site” – shouldn’t all soil samples and air samples take place after all purge and decontamination water has been discharged? How do you cover it up so that it doesn’t get lifted by the wind when it dries out?

Initially, EPA planned to discharge purge water or decontamination water on the ground surface at the Site since any asbestos fibers found in the water would not substantially affect surface soil. It would take very high concentrations of groundwater contamination to present a risk under the scenario described in the question. However, to reduce public concern, EPA is considering taking the purge and decontamination water, drumming it up, and disposing of it off-Site.

37. Has or will the water and or sediment in the newly created retention basin be sampled?

EPA has no plans at this time to sample the water and/or sediment in the newly created retention basin.