

RESPONSE TO COMMONWEALTH OF VIRGINIA
DEPARTMENT OF ENVIRONMENTAL QUALITY
COMMENTS ON THE DRAFT FINAL ENGINEERING EVALUATION/
COST ANALYSIS FOR SITES 4, 16, AND 21 REMOVAL ACTIONS,
NAVAL WEAPONS STATION, YORKTOWN VIRGINIA

These responses have been prepared to address comments received from the Commonwealth of Virginia Department of Environmental Quality (VDEQ), regarding the "Draft Final Engineering Evaluation/Cost Analysis (EE/CA) for Sites 4, 16, and 21 Removal Actions, Naval Weapons Station, Yorktown, Virginia" (Baker/WESTON, May 1993). The comments were transmitted to Mr. Thomas Black, Public Affairs Officer at the Naval Weapons Station (WPNSTA), in a letter dated 16 June 1993.

GENERAL COMMENTS

1. Throughout the document the E&S (Erosion and Sedimentation) Plan is cited. The DEQ does not have a copy of this plan on file for reference.

In addition, the removal of the surficial debris will be beneficial in facilitating future RI/FS work (e.g., ground penetrating radar (GPR) and electro-magnetic (EM) surveys. The E&S plans, along with the Work Plans for the removal actions to be performed at Sites 4, 16, and 21, are currently being revised. These plans will be submitted, upon their completion, to the VDEQ and the EPA for review and comment.

2. The removal action is proposed to help alleviate threats to human health and the environment. However, no baseline risk assessment has been performed to identify these risks.

The various types of surface debris (e.g., drums, scrap metal, wood and concrete) present at the three sites pose physical hazards to WPNSTA personnel and ecological receptors via accidental contact. The potential for environmental contamination also exists due to the presence of the surface debris and the ash pile. The removal of the surface debris and the ash pile would permanently eliminate the physical hazards to human health and the environment due to these materials, and would also remove potential sources of contamination from the three sites. In addition, the removal of the surficial debris will be beneficial in facilitating future RI/RS work (e.g., ground penetrating radar (GPR) and electro-magnetic (EM) surveys.

3. In many locations in the document, the Virginia Department of Environmental Quality (DEQ or VDEQ) is identified as the Virginia Department of Waste Management, VDWM, VDW, or DWM. These identifiers should consistently read DEQ or VDEQ Waste Division.

The text will be changed to read VDEQ.

4. On page 4-5, a discussion of Removal Action Alternative 1 begins. In summary, Alternative 1 consists of the following: (1) Complete removal of the ash pile at Site 4 including six inches of underlying soil. A composite sample of the ash pile will then be analyzed for hazardous waste characteristics, followed by proper disposal determined by the analytical results; (2) Drums and other "hard waste" on the surface of Sites 16 and 21, along with other surficial debris and its "associated" soil, will be disposed. As is stated on page 4-5, "No testing is conducted under this response action to determine if all the wastes have been removed." As this is the case, it is unclear how it can be determined that the objectives of the removal action have been met, namely reduction in source, toxicity or mobility of the waste. It appears that additional source material will be left intact on the sites, in the area below 1 foot below ground surface (bgs). Also, compositing of the material in the ash pile for analysis is not a good decision. Compositing would serve to dilute any hot spots in the ash pile and its six inches of underlying soil. According to Ms. Norton, extensive sampling will take place, and all the waste will be removed. However, this is not made clear in the document.

The sampling that would be performed under Alternative 1, as presented in the revised EE/CA, consists of grab soil samples collected from the ash pile, waste material, and battery excavations, to be analyzed for volatile organic compounds (VOCs), base/neutral acid compounds (BNAs), metals and cyanide, pesticides/polychlorinated biphenyls (PCBs), explosives, and total petroleum hydrocarbons (TPH). This modification is intended to provide additional information about those areas (namely the battery and waste material areas) which will be addressed in later studies, and to confirm the adequate removal of the ash pile and associated soils.

The drums and other "hard waste", surficial debris, and associated soils will be removed to a depth of 1 ft below ground surface under Alternative 1. This removal would achieve the objective of reducing the source of potential contamination. The goal of the removal action to be selected based on the evaluations in this EE/CA is to address surficial wastes, not to attempt to remove the landfilled materials. These areas will be addressed as part of future RI/FS activities.

The sampling that will be performed under the chosen alternative (Alternative 2) includes confirmation sampling of the ash pile excavation, waste excavations, and the excavated soils. All sampling conducted under Alternative 2 will be grab samples; no compositing will be done. All of the ash pile (from Site 4) and all of the batteries from the three sites will be removed.

5. On page 4-5, it is stated under Alternative 1 that any water that enters the excavation at Site 4 will be pumped, stored, sampled and disposed in accordance with Commonwealth of Virginia regulations. Please be advised that any wastewater found to be contaminated with any levels (from total levels analysis) above background cannot be considered "clean", and may not be returned to the ground or to another surface water body at the installation. The wastewater should either be drummed and disposed as solid or hazardous waste, as

appropriate, or discharged to the sanitary sewer system with the permission of the appropriate Sanitation District.

Comment acknowledged. Any water that enters the excavation will be pumped out, temporarily stored, and sampled for HW characteristics and any other analysis required by the selected disposal facility, or by the sanitation district, as appropriate. The water may also be processed, if determined to be feasible, through the carbon units that are currently in operation at WPNSTA Yorktown prior to discharge to the Hampton Roads Sanitation District, based on the analytical results.

6. On page 4-5, it is stated that drums containing non-solidified contents will be rinsed and placed in a "clean liquids drum". As the rinseate does not represent clean liquid, the analysis and disposition of this material is uncertain. Please clarify.

The phrase "clean liquids drum" was meant to indicate a liquids drum that was clean. The text will be revised to read "new liquids drum" for clarification.

7. On page 4-8, a brief description of possible on-site treatment alternatives is discussed. However, this discussion is not detailed enough, and should not be included in the EE/CA unless the treatment alternatives are part of the proposed removal action alternatives.

The possible on-site treatment alternatives will be removed from the text.

8. Section 4.3 discusses selective removal of identified waste materials. As I discussed with Ms. Norton, it seems contrary to the intent of the removal action to identify possible sources of additional contamination during the removal action, but then to leave the wastes in place because they were below a certain action depth. Ms. Norton stated that this would not be the case; rather, all identified "hard wastes" would be removed from the site. The EE/CA should be modified to reflect the actual activities which will take place during the removal action.

Selective removals of waste materials will be performed as part of Alternative 2. The ash pile at Site 4 and all of the batteries at the three sites will be removed. These materials pose immediate potential threats to human health and the environment. The batteries will continue to leach metals into the groundwater, surface water, sediment, and soils. Their removal will be beneficial in that the source will be eliminated. The batteries at these sites are, for the most part, present in concentrated areas and can be addressed relatively easily at a moderate removal cost. The intent of the removal action selected, as stated previously, is to remove surficial waste materials and debris. The "hard wastes" that are present in the landfills will be addressed as part of the continuing RI/FS process at WPNSTA Yorktown.

The ash pile presents a hazard in that runoff from the pile contributes to explosives contamination in the surrounding soils and surface water. The removal

of the ash pile can be achieved relatively simply and will mitigate a potential, ongoing source of contamination in the vicinity of Site 4.

The removal actions proposed at Sites 4, 16, and 21 are meant to remove potential surficial sources of contamination and physical hazards which exist at these sites. The screening factors which are used to evaluate alternatives include protectiveness, or the ability of the alternative to be protective of the environment and human health. The chosen alternative does provide protection of human health and the environment through the removal of potential sources of contamination.

The selection criteria to evaluate alternatives also includes reasonable cost. Including the removal of all the "hard wastes" (i.e., mine casings, drums, construction debris) would increase the costs of the alternatives dramatically. This elevated cost would result in the elimination of all of the alternatives under consideration and, therefore, provide no protection to human health and the environment. Based on the available funding, the removal actions will provide an interim benefit by removing the surficial sources; the remaining wastes/contamination will be addressed as part of WPNSTA's continuing RI/FS process.

9. Will any dewatering of excavated soils take place? If so, how will the wastewater be managed? Please bear in mind that any discharge to an off-site location may require a VPDES discharge permit, as is stated on page 3-6.

The need for dewatering of soils is not anticipated as part of the removal actions. However, if the dewatering of soils is deemed necessary, the discharge will be disposed on-site, which does not require a permit.

10. Again it should be noted, as is stated on page 5-5, that no confirmation sampling takes place under Alternative 1. It may be prudent to sample remaining contaminant levels at the time of removal rather than during a later phase of the RI process to determine how the remaining contaminants are biodegrading, migrating and/or attenuating with time.

The revised EE/CA contains confirmatory sampling of the ash pile excavation, and sampling of the battery and waste material excavations. These samples will be analyzed for VOCs, BNAs, metals and cyanide, pesticides/PCBs, explosives, and TPH. The results of the analyses for the ash pile excavation will be compared against the risk-based criteria provided in the EPA guidance document provided in Appendix C of the revised EE/CA, and excavation will continue until the concentrations are below the criteria. The information from the sampling of the other excavated areas will be used in future RI/FS activities (e.g., ecological/baseline risk assessments).

11. On page 5-6, Alternative 2 staging areas for excavated wastes are discussed. As I conveyed to Ms. Norton, the DEQ has some reservations regarding the use of staging areas. According to the EE/CA, the soils have been characterized based upon composited soil

samples. Therefore, the actual characterization of the soils to be excavated is questionable. These soils may, in fact, be hazardous waste. In this case, the staging areas represent hazardous waste piles. While permits are not required at NPL sites, this exemption is contingent upon the fact that substantive permit requirements are complied with. In this case, if the excavated soils are hazardous, these staging areas would have to be placed upon some type of polymer sheeting which forms to the liner requirements for waste piles found in the Virginia Hazardous Waste Management Regulations. If the soils are not hazardous, but are still contaminated, it would still be appropriate to use this same type of liner for the staging areas. The specifics of the staging areas is not addressed in the EE/CA.

The EE/CA states that a separate staging area may be necessary. The staging areas will be lined with the appropriate grade of plastic sheeting and bermed to prevent the migration of contaminants from the waste piles. The piles will also be covered with plastic sheeting to minimize rainwater intrusion and the possibility of runoff from rain events.

12. For Alternative 1, as stated on page 5-7, it is described that following excavation, the excavated areas will be backfilled with clean, low permeability fill material. However, for Alternative 2, as is described on page 5-21, will be backfilled with the excavated, staged, potentially contaminated soils from which surficial waste materials have been separated. As I discussed with Ms. Norton, I spoke with John Ely of DEQ's Compliance and Enforcement Program regrading this matter. Backfilling contaminated soils without a landfill permit, either for hazardous or solid wastes, is not allowed.

Since Yorktown NWS is a NPL site, however, the permit exemption exists provided substantive requirements are complied with. The substantive requirements for a landfill permit consist of a proper RCRA lining system, leachate collection system, RCRA cap, cover, etc., in accordance with the Virginia Solid Waste Management Regulations or Virginia Hazardous Waste Management Regulations, as applicable. It would be impractical to comply with the substantive requirements for a landfill at a site where the final remedy would probably require removal of the liner, cap, cover, etc. Therefore, the advisability of backfilling these contaminated soils is questionable, especially without sampling the soils prior to backfilling. Mr. Ely stated that if analysis is performed and risk calculations performed on the soils to be backfilled to show that backfilling will not pose a threat to human health and the environment, the requirements for the landfill substantive requirements can be waived. Ms. Norton stated in our phone conversation that the installation was intending to sample these soils heavily with the intent of performing the baseline risk assessment. However, the EE/CA does not reflect this information.

Clean backfill soil will be utilized for the excavated areas. This will consist of low-permeability soils and/or soils which are capable of sustaining vegetative cover similar to the natural cover in these areas. The excavated soils will be sampled to determine the appropriate disposal method. The EE/CA will be changed accordingly.

13. The phrase "associated soils" is used throughout the report to identify those soils which will be disposed in addition to the hard wastes which are excavated. However, since no analyses

of wastes remaining in place is to be performed, it is unclear how associated soils will be identified and how it will be determined if all associated soils have been excavated.

"Associated soils," for the purpose of the EE/CA, means soils that are excavated along with removed wastes. It is not the intent of the removal action to remove all affected soils. For the ash pile excavation, the analytical results will be compared against the EPA risk-based criteria provided in Appendix C of the revised EE/CA. Residual contamination in the waste material and battery excavations will be addressed as part of the continuing RI/FS process for the three sites.

14. It is stated on page 5-22 that prior to backfilling the ash pile with clean fill, samples from the excavation will be analyzed for explosives. However, as indicated on page 2-14, other contaminants have been identified in the soils around the ash pile. It would be useful to analyze for all these contaminants now, as it may help avoid the need for future work at the site.

The analytical parameters for the soil samples to be collected from the ash pile, waste material, and battery excavations have been expanded to include VOCs, BNAs, metals and cyanide, pesticides, PCBs, explosives, and TPH.

15. On page 5-28, it is stated that using Alternative 2, wastes are removed, significantly reducing the potential threat of exposure to base personnel and animal populations, the potential for the waste material to migrate and the threat of hazardous substances, pollutants, or contaminants in drums or other containers to be released onto the surface. Based upon the information contained in the EE/CA, I do not agree with this statement. Leaving wastes in place below the 1 foot bgs level, and backfilling contaminated soils will not significantly reduce the potential for contaminant migration. On the contrary, actively managing what may currently be a stabilized site could result in further contamination and greater risk to human health and the environment. Contaminated soils which are disturbed and left on the surface could cause contaminated run off from the site, which could further contaminate soil, surface water and groundwater at the site. Also, as is described for Alternative 2, surficial wastes will be separated from non-associated soils and other wastes, by mechanical means or by hand, as necessary. This "by hand" separation of waste where explosives are involved seems to threaten human health. Based upon this, it appears that Alternative 1, as proposed, is the more protective alternative because contaminated soils are removed, not backfilled. As I stated to Ms. Norton, based upon the information provided in the report, it is unclear why Alternative 2 is the preferred alternative for remediation. Ms. Norton stated that the intended method of removal action is not accurately reflected in the EE/CA, nor is the EE/CA detailed enough to provide all the information necessary.

The removal of the waste as outlined under Alternative 2 will significantly reduce the potential threat of exposure to human and animal populations. As stated previously, the complete removal of the ash pile and batteries will eliminate a potential source of contamination. The wastes that will be left in place below the 1 ft bgs depth will be covered with clean backfill material (see response to comment 12). This will reduce the potential for dermal contact with contaminated

media and will also lessen the potential for contaminant migration due to surface runoff and percolation through the ground surface. Engineering controls and interim measures will also be used (e.g., erosion and sedimentation controls) to minimize the contaminant migration from the sites.

All explosives-related wastes (e.g., mine casings, weapons hardware) will first be evaluated by the WPNSTA Explosive Ordnance Disposal (EOD) to ensure that the wastes are inactive. The EOD have already conducted a preliminary assessment of the various weapons casings present at the sites; the weapons that will be removed are anticipated to be inert, with slight residues possible. The majority of the hand-picked wastes will be batteries or other isolated wastes, which would not be removed effectively using mechanical equipment. The mine casings, which are anticipated to be the majority of the potential explosives-containing waste, are large and will have to be removed with equipment.

Alternative 2 is the preferred alternative because it achieves the most overall benefit to human health and the environment at reasonable cost. The backfilling of contaminated soils will not be conducted, in response to your comments; clean, low permeability soils will be used, thereby limiting potential exposure and migration pathways.

RESPONSE TO NAVAL FACILITIES ENGINEERING COMMAND
ATLANTIC DIVISION
COMMENTS ON THE DRAFT FINAL ENGINEERING EVALUATION/
COST ANALYSIS FOR SITES 4, 16, AND 21 REMOVAL ACTIONS,
NAVAL WEAPONS STATION, YORKTOWN VIRGINIA

These responses have been prepared to address comments received from the Naval Facilities Engineering Command (NAVFACENCOM) Atlantic Division (LANTDIV), regarding the "Draft Final Engineering Evaluation/Cost Analysis (EE/CA) for Sites 4, 16, and 21 Removal Actions, Naval Weapons Station, Yorktown, Virginia" (Baker/WESTON, May 1993). The comments were transmitted by Mrs. Brenda Norton, P.E., on 23 November 1993.

GENERAL COMMENTS

1. Delete all references to SOUs except on page 2-10.

All references to SOUs have been deleted, including the above noted citation, which was removed at the request of WPNSTA Yorktown personnel.

2. Put in the abbreviation list VDEQ instead of VDWM and make a global change to "VDEQ" in the text.

The text has been changed to incorporate the above-mentioned comment.

3. See Page 1-1 comments as forwarded for 2, 9 & SSA-4 EE/CA.

The text has been changed to incorporate the above-mentioned comment.

4. Page 1-2 - Third line - The new guidance for EE/CA's is "Guidance on Conducting Non-Time-Critical Removal Actions under CERCLA" dated August 1993. Do you have this new guidance? Let me know if you don't.

The text has been changed to incorporate the above-mentioned comment.

5. Page 2-1 - First paragraph under section 2.2 - 10,624 acres.

The text has been changed to incorporate the above-mentioned comment.

6. Page 2-5 - Change last paragraph to read the same as the comment for 2, 9 and SSA 4 EE/CA.

The text has been changed to reflect the above corrections, and those provided by WPNSTA Yorktown.

7. Page 2-7 - See same comment for 2, 9 & SSA 4 EE/CA.

These sections have been deleted based on comments received from WPNSTA Yorktown.

8. See same comments regarding permits or authorizations as noted on the cover sheet forwarding comments on 2, 9 & SSA 4.

The references to permits have been modified to reflect the comments provided.

9. Page 3-1 - first sentence under 3.1 ARARs need to be rewritten - Removal Actions DO NOT have to attain ARARs. Reference here should be NCP 300.415(i) which says you have to attain ARARs "to the extent practicable."

The text has been changed to incorporate the above-mentioned comment.

10. Page 3-16 and 3-17 - Same comment regarding "shotgunning" ARARs - Other Potential ARARs or TBCs - You should put a small paragraph discussing why each of these may or may not apply as ARARs or TBCs - See sample pages attached to 2, 9 & SSA 4 comments. Don't just list all potential ARARs. Make sure they have to be considered or that they apply.

The bullets have been expanded to provide additional information as to how the ARARs may apply to the removal actions.

11. Page 3-17 - Under 3.4 DISPOSAL REQUIREMENTS - Second paragraph, delete the "Note:". This is not necessary.

The above-noted sentence has been deleted from the text.

12. Page 4-3 - Table 4-1, Item No. 2. Interim Controls and Monitoring - Change the "X" to "---". This response action has been screened out so it should not be applicable.

This was already done with the current version of the EE/CA.

13. Page 5-3 - Third bullet - "ARARs such as NEPA and NCP" Please delete. NEPA and the NCP are NOT ARARs.

The above-noted sentence has been deleted from the text.

14. Page 5-6 - Last Paragraph - "Staging" as a word is misunderstood. See comment 11 from VDEQ.

The staging issue has been addressed in the response to comments provided by the VDEQ.

15. Page 5-21 - Paragraph 5.3.1.2. Third sentence - See VDEQ comment #12.

The excavations will be filled with low-permeability soils. The EE/CA text has been changed accordingly.

RESPONSE TO U.S. ENVIRONMENTAL PROTECTION AGENCY
COMMENTS ON THE DRAFT FINAL ENGINEERING EVALUATION/
COST ANALYSIS FOR SITES 4, 16, AND 21 REMOVAL ACTIONS,
NAVAL WEAPONS STATION, YORKTOWN VIRGINIA

These responses have been prepared to address comments received from the U.S. Environmental Protection Agency (US EPA), Region III, regarding the "Draft Final Engineering Evaluation/Cost Analysis (EE/CA) for Sites 4, 16, and 21 Removal Actions, Naval Weapons Station, Yorktown, Virginia" (Baker/WESTON, May 1993). The comments were transmitted to Mr. Thomas Black, Public Affairs Officer at the Naval Weapons Station (WPNSTA), in a letter dated 16 June 1993.

GENERAL COMMENTS

1. For areas where explosive compounds have been burned which include TNT (and possibly RDX), media sampling analysis should be expanded to include cyanide compounds. An important aspect of TNT reactivity involves redox reactions between the reactive methyl group and the nitro groups, a type of reaction which can be initiated by various energetic stimuli including thermal, photochemical and chemical. Thus, all types of nitro compounds react easily with bases forming diverse types of products. In the case of TNT, the 2,4,6-trinitrobenzyl anion is formed initially and rapidly, and is a highly reactive species thought to be intermediate in the many reactions of TNT conducted under basic conditions. The cyanide ion can form from a complex of this anion.

Cyanide has been detected around the burning grounds at the former West Virginia Ordnance Works facility, where off-spec TNT was open-burned. Therefore, for Site 4 please include cyanide analyses in future sampling events.

The concern for the presence of cyanide is unclear. In "Military Explosives" (Technical Manual TM-9-1300-214, Department of the Army, 1984), the cyanide (CN⁻) ion can form a complex with the 2,4,6-trinitrobenzyl ion. The cyanide ion must be present from another source, since open burning degradation does not generate the CN⁻ ion. Electron impact degradation can generate HCN after several steps, but these conditions are different than those generated under simple open burning.

As part of the sampling activities performed during the Round One RI activities at WPNSTA Yorktown, cyanide analyses were performed on surface soil samples at several TNT sites. No cyanide was detected above the method detection limit in any of the samples analyzed. In addition, cyanide was not present in any of the compounds historically burned at Site 4. However, cyanide analysis has been added to the analytical parameter list for the confirmatory sampling.

2. Please beware that, since the removal action areas have not been grid-sampled in their entirety, the possibility of encountering unanticipated contaminant concentrations in the soil is a real possibility. Additionally, some of the solvents disposed of in the landfills may be

listed RCRA wastes, and are therefore hazardous regardless of whether they fail TCLP or not. Please proceed with caution.

If the excavated materials indicate the possible presence of solvents or other hazardous constituents, additional analyses may be added to those specified. Otherwise, the samples will be tested for TCLP as specified.

3. Please note that the TCLP results for the removal action areas detected 2,4,5-trichlorophenol, while the sampling results from the draft RI did not detect this compound. Were the TCLP samples taken from the "worst" visually-contaminated areas at the removal sites?

As stated in the IT Testing Report for Sites 4, 16, and 21, the soil samples at Sites 4 and 16 were collected "from selected trench locations considered representative of the waste materials". The soil samples collected during the Round One Remedial Investigation (RI) program at these 2 sites were collected from the top 2 ft of the soil to evaluate immediate threats to human health and the environment. Since most of the wastes at these sites are not surficial, the absence of these compounds in the surface soil is understandable.

SPECIFIC COMMENTS

1. Page 3-11, Table 3-2

It is recommended that the title of this table be changed to: Risk-Based Cleanup Contaminant Removal Levels for Explosives at WPNSTA Yorktown.

This table has been deleted from the EE/CA. The EPA guidance manual has been added as an appendix, since compounds other than explosives will now be used for comparison of the soil samples collected from the ash pile excavation.

2. Page 3-11, Table 3-2

Please note that the referenced table has a mixed usage of the Hazard Quotient, H. Those explosive concentration removal levels calculated for $H = 1$ or 10^{-6} cancer risk include:

2,4-DNT
 HMX
 RDX
 2,4,6-TNT
 1,3,5-TNB

Those concentration removal levels calculated for $H = 0.1$ include:

2,6-DNT

It may be more appropriate to use $H = 1$ for all the removal action level concentrations. Therefore, the contaminant removal level for 2,6-DNT should be 42 mg/kg based upon $H = 1$.

See response to comment 1, above.

3. **Page 4-5, First Bullet**

Composite sampling is not recommended by EPA. Compositing tends to dilute the sample, especially in the case of volatiles. Discrete samples, taken at specified intervals, are recommended instead. Discrete samples not only give a more accurate picture of actual field conditions, they also enable one to compare the sample results with the field location. This would enable early detection of "hot spots" within the removal action areas which may contain contaminant levels which fail TCLP analyses.

Discrete samples will be collected instead of compositing. The EE/CA will be modified to reflect this correction.

4. **Page 5-8, Section 5.2.1.3**

As described above, composite sampling is not recommended.

See response No. 3.

5. **Page 5-22, Section 5.3.1.3**

As described above, composite sampling is not recommended.

See response No. 3.

6. **Page 7-2, First Bullet**

The manner in which the excavation boundaries are determined needs to be discussed in greater detail. Will there be a grid-sampling event performed at specified intervals for the entire removal action areas? With the numerous contaminants detected so far at each of the three removal action sites, the probability of discovering "hot spots" with significantly greater concentrations of contaminants, or possibly additional contaminants is real.

The ash pile will initially be excavated to remove all of the ash, plus an additional 6" of underlying soil. The excavated area will be sampled, and the results compared to the risk-based concentrations provided in the guidance document provided as Appendix C to the EE/CA. The exact sampling protocols will be outlined in the sampling plan.

The batteries and wastes will be excavated initially to the limits established through the work performed in the Testing Report. Additional excavation of the batteries will be conducted based on visual inspection and the use of metal detectors. Analytical testing will be performed in the excavated areas. The results of these analyses will be used in future RI/FS activities.

7. **Page 7-2, Second Bullet**

Beware of the TCLP analytical results listed in the Testing Report. These TCLP samples were composited and, therefore, may not be illustrative of the variation in actual field conditions that may be present at the removal action areas. Proceed with caution.

Comment acknowledged. The analytical results for TCLP samples have been used to illustrate, in addition to the results of the Round One RI, the types of contaminants and general concentrations that may be encountered.

8. Page A-3, Table A-1

What are the units for Table A-1? EPA is assuming $\mu\text{g/L}$?

As stated on page A-1, the groundwater data are presented in units of micrograms per liter ($\mu\text{g/L}$).