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LETTER AND U S EPA REGION III COMMENTS ON DRAFT SITE INSPECTION REPORT
AREAS OF CONCERN 1, 2, 6, 7 AND 8 NWS FISC WILLIAMSBURG VA
8/15/2011
U S EPA REGION III



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029**

August 15, 2011

Ms. Krista Parra
NAVFAC MIDLANT, Building N-26
Hampton Roads Restoration Product Line, Code OPHREV4
9742 Maryland Avenue
Norfolk, VA 23511-3095

Subject: Comments on the Draft Site Inspection Report: Areas of Concern 1,2,6,7 and 8.

Ms. Parra:

Thank you for the opportunity to review the subject document. EPA would like to provide the following comments at this time.

EPA RPM General Comment 1: There are a multiple instances in this document that are inconsistent with EPA Guidance and some revisions will need to be made or an explanation should be provided as to why they would be appropriate. Examples would be: averaging groundwater samples, applying dilution attenuation factors directly to groundwater samples (typically DAFs are used for and applied to soil migration to groundwater), screening risks from individual chemical against the 5×10^{-5} cancer and 0.5 HQ screening level (should be cumulative risk for the site not on a per chemical basis), and taking the mean HQ of soil samples and screening them out.

Further, much of the above is not consistent with the Human Health Screening Methodology (A.2) in Appendix A of this document.

EPA RPM General Comment 2: A number of chemicals which did not have screening values were screened out by being compared to screening values of other similar explosives. Please provide the actual compound they were compared to, the actual screening value used, and how that number was developed. Please revise each instance of this in the document for transparency purposes (note that not all instances of this are noted in the comments).

EPA RPM General Comment 3: Please include risk screening tables similar to the Example Risk Screening tables (attached) at the end of each Section for transparency purposes. These tables should include all COPCs that passed through the screening process.

Section 2

EPA RPM Comment 1: Page 2-1. Although the investigation methodology etc... from the previous investigation are not included in the report, I assuming all sample data are. Correct?

Section 3

EPA RPM Comment 2: Page 3-13. This is an incorrect application of dilution attenuation factors. DAF are utilized the project what we may see in groundwater from a soil sample value. Applying a DAF directly to a groundwater sample makes no sense and is not consistent with EPA guidance. Please revise.

EPA RPM Comment 3: Page 3-15. Groundwater. It is unclear as to why we would average groundwater samples. Wells should be evaluated on a per well basis.

EPA RPM Comment 4: Page 3-17. Eco Risk Evaluation. Eco Risks should be calculated for these sites. Although the size of the sites may be small, they are essentially all habitat (forested cover etc... not a parking lot).

EPA RPM Comment 5: Page 3-17. It is highly unlikely that an Arsenic hit of nearly 50ppm at CAA01-SO04 from Table 3-1 is attributed to background. This is almost an order of magnitude above our background number. Please carry Arsenic through as a COPC.

Section 4

EPA RPM Comment 7: AOC 2 should be considered a solid waste landfill which would be subject to Virginia State regulations.

EPA RPM Comment 8: Page 4-3. A number of drums were found in the area of AOC2TT05-AOC2TT10, AOC2TT13 and AOC2TT14, yet no samples were collected in this area according to Figures 4-4, 4-5, and 4-6. Please collect samples from this area.

EPA RPM Comment 9: Page 4-5. "Not considered a CERCLA Source". This is still improper disposal which would be subject to Virginia State regulations.

EPA RPM Comment 10: Page 4-6. The PCB discussion states that PCBs were detected above residential screening at the duplicate of A2-TP01, but then goes on to say that Aroclor 1260 was not detected in the soil at A2-TP01. Presumably the original A2-TP01 and its' duplicate were taken from the same location and not separate samples correct? I do realize it is possible for an original sample and a dup. to have different detections, but the paragraph implies one sample was within the waste and one was from the native soil below the waste. Also, it appears an interim removal action will be prepared to remove the waste from Area 2. This should be used as the rationale as to why the Aroclor 1260 detection is not of concern. Confirmation samples following the removal should include PCB analysis due to a high degree of uncertainty associated with the contaminants distribution.

EPA RPM Comment 12: According to Figure 4-3 there is a “Significant Geophysical Anomaly” in the North West corner of the site that was not investigated.

EPA RPM Comment 13: Areas 1b and Area 3 are dumps that don't appear to have to have been sampled according to the figures. Please provide rationale in a RTC as to why this would be acceptable. Presumably the response would be the types of materials disposed would not be expected to create contamination, however, it is highly that any disposing that occurred was an orderly disposal of specific material. Environmental sampling should be conducted to ensure there was no disposal of hazardous materials.

Section 5

EPA RPM Comment 14: Page 5-4. 1918 Drum Storage Area. EPA suggests samples are collected and analyzed for VOCs, PCBs and Pesticides.

EPA RPM Comment 15: Page 5-10. Bis(2-ethylhexyl)phthalate. If the contaminant was likely attributed lab contamination, was it detected in the blanks?

EPA RPM Comment 16: Page 5-12 Ammonia Settling Pits. Check with Rob to make sure the correct chemicals were analyzed for.

EPA RPM Comment 17: Page 5-13. Ammonia Settling Pit. Groundwater Discussion. Averaging groundwater samples is not acceptable. See RPM General Comment.

EPA RPM Comment 18: Page 5-17. Mean HQ for Aluminum and Lead. See RPM General Comment

EPA RPM Comment 19: Page 5-17. DAF applied directly to groundwater sample. See EPA RPM General Comment.

EPA RPM Comment 20: Page 5-18. Mean HQ for HMX and Mercury. See EPA RPM General Comment.

EPA RPM Comment 21: Page 5-18. Groundwater discussion. Please see EPA RPM General Comment 1.

EPA RPM Comment 22: Page 5-19. Surface Soil. Bullets 1,2, and 3. See EPA RPM General Comments.

Section 6

EPA RPM Comment 23: Penniman Lake Surface Water Discussion. The argument that the screening level of 4ppb for barium is conservative should be overcome by the fact that we exceeded it by nearly 5x as well as it being detected at multiple locations. Please refine Barium as a COPC in surface water.

EPA RPM Comment 24: Page 6-5. Lead 984ppm. See EPA RPM General Comments

EPA RPM Comment 25: Page 6-6. Groundwater. Lead. See RPM General Comments.

EPA RPM Comment 26: Page 6-7. Subsurface Soil. See RPM General Comments.

EPA RPM Comment 27: Page 6-8. Groundwater. See EPA RPM General Comment.

EPA RPM Comment 28. Page 6-8. Second to last word. Typo.

EPA RPM Comment 29: Former Drum Pile. Was GPR preformed on this AOC (I may have missed it)?

EPA RPM Comment 30: Figure 6-4. From Figure 6-4 it does not appear that the actual nature of the pit has been characterized (although extent appears to have been defined). Since the path forward for the Site is a removal action, the only comment would be to analyze for a full suite of analytes during confirmation samples.

Section 7

EPA RPM Comment 31: Page 7-7. Mean Zinc. See RPM General Comments.

EPA RPM Comment 32: Page 7-8. Groundwater. See RPM General Comments.

Appendix A

EPA RPM Comment 33: Page A-5. AOC 1 South. Lead 698ppm. See EPA RPM General Comment.

EPA RPM Comment 34: Page A-7. Iron discussion. This doesn't make sense. Although Iron is an essential human nutrient, there is some science that went in to the development HQ and screening values developed. If a chemical is exceeding the screening values we can't say "it is likely that exposure to iron at the concentrations present on the site would not result in any adverse health effects". That is essentially questioning the science that went in to the development of the risk numbers. Please revise.

EPA RPM Comment 35: Page A-7. Doesn't the RAGs Guidance caution against screening something out (Thallium) because it doesn't have a screening criteria? I believe it should be carried through.

EPA RPM Comment 36: Page A-7. Aroclor-1260. Should be cumulative risk. See EPA RPM General Comments.

EPA RPM Comment 37: Page A-10. Ammonia Settling Pit Area. Lead. See RPM General Comments.

EPA Tox Comment 1: In Section 2.4 of the report, the text should confirm that surface and subsurface soil samples were collected from original soil (not fill material), where contamination, if any, would likely be found.

EPA Tox Comment 2: According to Table 2-1, in terms of organics, only TCL SVOCs were considered at AOC 6. Why wasn't the full TCL suite considered? This could represent a data gap. Fortunately, most of the subareas in AOC 6 will move forward for additional investigation; however, the 1918 Drum Storage Area dropped out. Unless strong justification can be provided for this omission, consideration should be given to collecting additional samples from the 1918 Drum Storage Area to rule out the presence of VOCs, PCBs and pesticides in soil.

If you have any questions, please contact me at 215-814-3378.

Sincerely,

A handwritten signature in black ink, appearing to read "John Burchette", is centered below the word "Sincerely,".

John Burchette
Remedial Project Manager

cc: Wade Smith, VDEQ