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LETTER REGARDING U S NAVY RESPONSE TO MAINE DEPARTMENT OF
ENVIRONMENTAL PROTECTION COMMENTS ON THE SAMPLING AND ANALYSIS PLAN
FOR TOPSHAM ANNEX SITE NAS BRUNSWICK ME
8/5/2011
NAVAL AIR STATION BRUNSWICK

Sampling and Analysis Plan Addendum No. 2

Topsham Annex Site – Buildings 378, 338, 1099 & 1114 Skeet Range Debris Area (TOP 1) and Topsham Annex Debris Area (TOP 2) Topsham Annex

Naval Air Station Brunswick Brunswick, Maine

Responses to Comments from Maine Department of Environmental Protection (MEDEP) REVISION NO. 01 (08/05/2011)

General Comments:

1. Please add the areas to be investigated to the title: e.g., Sampling and Analysis Plan – Addendum No. 2, Bldgs 378, 338, 1099 & 1114, Skeet Range Debris Area (TOP 1) and Topsham Annex Debris Area (TOP 2), Topsham Annex. Also correct the date on the cover and spine text to August 2011 instead of July 2010.
Response: Concur; these changes will be made to the final document.
2. Please provide MEDEP with a detailed schedule of the proposed work.
Response: An overview of the schedule is provided below. MEDEP can contact the field staff directly to coordinate the site visit.
Mobilization/Site Preparation – 08/08/11
Field Sampling – 08/09 to 08/12/11
Submit Analytical Data to the Project Team – 08/22/11
Draft Tech Memo for Sampling – 08/29/11
EM Survey – 08/09 to 08/10/11
Test Pitting – To be scheduled early September after review of EM data
3. MEDEP requires field and laboratory data to be submitted in the agency's electronic data deliverable (EDD) format to support hardcopy tables and discussion in the report. The EDD template, contact information and supporting tables are also available online at <http://www.maine.gov/dep/rwm/egad/>. General questions may also be directed to the project geologist Chris Evans at 207-287-7656, or please contact the Database Manager Diana McKenzie at 207-287-5767, or at the contact information listed at the website. The data may be emailed as an attachment or submitted on CD with the report.
Response: Concur. The field and laboratory EDD will be provided to MEDEP under a separate cover after completion of field work and receipt of data from the laboratory (Katahdin Labs).
4. The area proposed for the Electromagnetic (EM) survey is inconsistent between Figures 2-1 and 3-5. The area discussed in the field with the Navy is closer to that shown on Figure 2-1. Also it is difficult to tell from the figure 2-1, however the EM survey must include the area with the small slumps or holes, possibly more to the south-west than the area depicted. (Also see comment 18 below.

Response: Figure 3-5 has been updated to be consistent with Figure 2-1. The area depicted within the current Figure 2-1 may be adjusted in the field in order to include the area with small slumps or holes. This adjustment would be noted in the field book and the figure within the completion report would be adjusted accordingly.

5. Please be sure that all laboratory detections are reported regardless of Potential Contaminants of Concern (PCOCs) and also all field observations are reported regardless of PCOCs.

Response: Comment noted; all constituents will be analyzed for as part of the EPH/VPH analysis and any pertinent field observations will be reported.

Specific Comments:

6. Section 1.0, Introduction, para 1, last sentence: “prior to an anticipated soil removal action at one of the areas namely, the Topsham Annex Skeet Range (TASKT) at Naval Air Station (NAS) Brunswick.”

To avoid confusion, the Topsham Annex Skeet Range is at the former Topsham Annex in Topsham, Maine not Brunswick. Please correct.

Response: Concur; these changes will be made to the final document.

7. Section 1.0, Introduction, para 2, 1st sentence: In discussions with the Navy and CH2M Hill, it was our understanding that this was a more preliminary investigation to allow the Navy to either make a finding of suitability to transfer the two residential buildings and to determine if there were any remaining issues at buildings 338 and 378. There are not enough sample points to determine nature and extent, therefore, MEDEP suggests the following language for the objectives for the workplan: “...to determine whether risk still remains in soils or groundwater in exceedance of the new MEDEP criteria for petroleum at Buildings 338, 378, 1099, and 1114 from residual contamination left in place.”

Response: Concur; these changes will be made to the final document.

8. Section 1.0, Introduction, para 2: For the two debris areas MEDEP suggests the following language for the objective: “To determine the extent and type of potentially buried materials exist at the Topsham Skeet Range Debris Area and the Topsham Debris Area that might pose a risk.” or something similar.

Response: Concur; these changes will be made to the final document.

9. Section 1, Introduction, para 3: “This scope of work has been prepared to determine if the limited soil removal actions were adequate and to determine the nature and extent of debris within the two debris areas.” MEDEP suggests the following language: “This scope of work has been prepared to determine if soils remaining in place at Buildings 338, 378, 1099, and 1114 pose a risk and to determine the existence extent and type of debris within the two potential debris areas.”

Response: Concur; these changes will be made to the final document.

10. Section 1, Introduction, para 4:

- a.) There are analytes (SVOCs and PCBs) proposed in this plan which were not included in the SAP for the Naval Exchange. The workplan must include a table that outlines the analytes, project screening levels, method detection limit, reporting limits must be included. (It may be possible to reference the workplan from East Brunswick if the MEGs and RAGs are current or use the Areas of Potential Concern Workplan).

Response: Comment noted. The following text will be added to the final document “In addition, laboratory QA/QC protocols will be in accordance with the Tetra Tech EC, Inc. (Tetra Tech) document “Final Work Plan for TPH Soil Remediation and Investigation Activities”(Tetra Tech, 2006) and will utilize the

most current Maximum Exposure Guidelines (MEGs) and Soil Remedial Action Guidelines (RAGs)."

- b.) Regarding the Health and Safety Plan, please be sure to revise it to include the evacuation route from Topsham rather than the Naval Air Station and update any necessary phone numbers since the Base has closed.
Response: The appropriate sections of the Health and Safety Plan will be revised as requested. Updated copies of the evacuation route and necessary phone numbers will be provided to the field team.
11. Table 1-1:
- a.) Please revise area headings from TOP-01 and 02 to Skeet Range Debris Area and Topsham Annex Debris Area per Section 2.0, paragraph 1, bullets 5 & 6 which state: "TOP-01: Filled area (referred to herein as the Skeet Range Debris Area; TOP 2: Former oil/water separator and debris area (referred to herein as the Topsham Annex Debris Area)." CH2M Hill use of Skeet Range Debris Area and Topsham Annex Debris Area are more descriptive and preferred by MEDEP.
Response: Concur; these changes will be made to the final document.
- b.) Please add the collection of VOCs to the required analysis for the potential test pitting for the debris areas. An FID should be used on the soils from the test pits and VOCs samples (not homogenized) taken based on the readings using an Encore® sampler or something similar. Please be sure to indicate the lamp that will be used in the FID.
Response: Concur; the collection of samples for VOCs has been added to Table 1-1 and the text updated accordingly. AGVIQ-CH2M HILL proposes to utilize a 11.7-eV PID for headspace measurements in accordance with MEDEP petroleum field sampling procedures (Refer to response to comment No. 15.a) for health and safety reasons.
12. Section 2, Site Background, para 3: Please briefly discuss the concentrations of Diesel Range Organics left in place at buildings 338, 1099, and 1114 after the removal action in 2006 and the exceedances at building 378 initiating this investigation. Otherwise be sure to include it in the final report on this investigation.
Response: Comment noted. This will be included within the "Site Background" section of the completion report for this investigation.
13. Figure 2-1: Please revise area headings from TOP-01 and 02 to Skeet Range Debris Area and Topsham Annex Debris Area per Section 2.0, paragraph 1, bullets 5 & 6.
Response: Concur; these changes will be made to the final document.
14. Section 3.0, Scope of Work, para 2: Please revise based on comments 7 and 8 above.
Response: Comment noted. The text will be updated per responses to comments 7 and 8 above.
15. Section 3.2, Soil Sampling:
- a.) MEDEP petroleum field sampling procedures have changed. Please see the document at <http://www.maine.gov/dep/rwm/ust/sop/pdf/ts004.pdf> for details about the current practices. In general, there is no correlation between PID results and EPH/VPH concentrations. PID results may be useful for gasoline-contaminated soils, but are not applicable for fuel oils. Because gasoline is not a chemical of concern at this site, MEDEP recommends using the oleophilic dye shake test for assessing petroleum contamination extent in the field. Instead of using a PID to determine where to collect EPH/VPH samples, MEDEP recommends sampling wherever the shake test has positive results. If the Navy decides to conduct PID sampling in addition to the shake test, please use the new SOP (at the above webpage) for PID sampling not the old one described in Appendix A.

MEDEP recommends taking a sample every 1-2' feet or use professional judgment based on field conditions.

Response: Comment noted regarding the updated SOP for PID sampling. The text will be updated to show this change and the new SOP will be included as Appendix A.

Paragraph 3 of Section 3.2 has been changed to "Headspace measurements will be performed continuously at 2-foot intervals (or as applicable, based on field conditions) to the entire depth of each borehole for health and safety reasons. Headspace measurements will be completed using a 11.7-eV PID in accordance with MEDEP petroleum field sampling procedures. A copy of this procedure is included in Appendix A. In addition to headspace measurements, based on field conditions and using professional judgment, a petroleum soil-water shake test (Cheiron Resources, Ltd. product or equivalent) will be performed at every borehole above the water table and/or at the soil and groundwater interface. Field conditions which may require soil-water shake tests includes, but is not limited to, petroleum odor, staining, and/or discoloration. Soil-water shake tests will be performed and in accordance with MEDEP Draft SOP TS005 (Appendix B)."

- b.) Once Dig Safe has located the underground utilities it may be necessary to adjust some of the preliminary locations previously selected. MEDEP would like to be on site to assist in any relocation of the proposed sampling points.

Response: The site will be marked by Dig Safe prior to Monday, August 8th and mobilization is set to occur on Monday August 8th. Additional third-party utilities locate (DigSmart of Maine) will be performed on the morning of Tuesday, August 9th. Drilling is anticipated after the utility locate in order to meet the current schedule. AGVIQ-CH2M HILL employees will discuss with MEDEP to determine if sampling points need to be moved. MEDEP can contact the field staff directly to coordinate site visits.

16. Section 3.3, Well Installation and Sampling, para 1, 2nd sentence: Do you mean sand pack?
Response: Yes. The text has been updated to show this change.

17. Section 3.3, Well Installation and Sampling: For monitoring well installation, please follow the procedures outlined in SOP DR#009, Microwell Installation Protocol (instead of the L&W SOP referenced). <http://www.maine.gov/dep/rwm/rem/sops/pdf/dr009.pdf>
For low-flow sampling please use the following SOP
<http://www.maine.gov/dep/rwm/rem/sops/pdf/dr003.pdf> .
Response: Concur; these changes will be made to the final document.

18. Section 3.4 EM Survey and Test Pitting, Figure 3-5: The proposed survey extent for the Topsham Annex Debris Area includes a north-south oriented leg that covers an area unlikely to contain debris (based on topography). The proposed north-south section should be omitted but the east-west oriented leg should be enlarged to the north (to the edge of the slope) and to the south (to the oil-water separator area) and slump areas.
Response: See response to comment 4. Figure 3-5 has been updated accordingly. The following notes have been added to Figures 3-4 and 3-5 - "(1) The exact location of EM Survey will be determined based on field reconnaissance (2) Additional EM Survey may be performed if anomalies are identified outside the proposed area".

19. Section 3.4 EM Survey and Test Pitting: The workplan should allow for extending the length and width of the proposed EM and GPR survey areas if anomalies are encountered at the edges of the proposed areas so that the anomalies can be fully delineated.
Response: Concur; additional text will be added to Section 3.4.

20. Section 3.4 EM Survey and Test Pitting, Data Presentation: The five paragraphs on page 3-10 are related to test-pitting, not data presentation and should be put under a different heading.

Response: Concur; these changes will be made to the final document

21. Section 3.4 EM Survey and Test Pitting, Data Presentation, 3rd para: (See comment 15.a above.)

Response: AGVIQ-CH2M HILL will continue to use a 11.7-eV PID headspace samples for health and safety reasons. Per response to comment 15.a, professional judgment will also be utilized to determine if additional soil-dye tests should be performed. The text has been changed to "In addition to headspace measurements, based on professional judgment (odors, staining, and/or discoloration) a petroleum soil-water shake test (Cheiron Resources, Ltd. product or equivalent) will be performed on a maximum of 10 locations per test pit area in accordance with MEDEP Draft SOP TS005 (Appendix B)."

22. Section 4.0, Technical Memorandum and Recommendations: This section should summarize the work performed, any deviation from the approved workplan, any unexpected findings or observations during the implementation of the workplan, along with tables summarizing all detection regardless of the potential contaminants of concern.

Response: Concur; these changes will be made to the final document.

Additional Comments (via email):

23. RTC 2: What I was looking for here was a detailed field schedule so Gail and I can decide when to be on site. I realize that the field schedule is somewhat fluid but it will work if we keep in touch.

Response: Comment noted; MEDEP can contact the field staff directly to coordinate the site visit.

24. RTC 11.b. This is not what I thought was agree to. This is acceptable if the PID lamp is changed to a 11.7 eV. This is for VOCs not petroleum that has to be done following our guidance for unknown product. The last sentence doesn't apply here since we are discussing VOCs not petroleum.

Response: Concur; the PID lamp has been changed to 11.7 eV. The last sentence has been deleted. It should be noted that the PID readings will be used for health and safety reasons only.

25. RTC 15.a. Our guidance recommends PID for gasoline, mixed product or when we are not sure what the products is. Even then the shake test should be used. PIDs have not been proven to do a good job on old petroleum (DRO) spills that is why MEDEP has gone to the shake tests. I thought we had agreed that a PID can be used for safety purposes but the sampling of the boring would be done with the shake test. MEDEP stands by it comment.

Response: Concur; the PID lamp has been changed to 11.7 eV and will be used for health and safety reasons. In addition to headspace measurements, based on field conditions and using professional judgment, a petroleum soil-water shake test (Cheiron Resources, Ltd. product or equivalent) will be performed at every borehole above the water table and/or at the soil and groundwater interface.

26. RTC 21: See follow up comment to 11.b.

Response: Concur; these changes will be made to the final document.