



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

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NAS BRUNSWICK
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June 10, 2002

Mr. Paul Burgio
Department of the Navy, Northern Division
Naval Facility-Engineering Command
10 Industrial Highway, MS 82
Lester, PA 19113-2090

Re: Topsham Annex
PCB Characterization & Removal

Dear Mr. Burgio:

The Maine Department of Environmental Protection (MEDEP) has reviewed the workplan entitled Draft Remedial Action Plan for PCB Characterization and Removal at Building 335 (DECA Commissary) Transformer Pad, Naval Air Station Brunswick, Brunswick, Maine, dated April 15, 2002, Foster Wheeler Environmental Corporation. Based on that review the Department has the following comments and issues.

General Comments:

1. Federal facilities are generally required to submit a detailed Quality Assurance Project Plan [QAPP] for all site work. The QAPP must contain all required elements as listed in EPA document QA/R-5, Requirements for Quality Assurance Project Plans for Environmental Data Operations. Guidance for producing a QAPP is given in the Region I, EPA-New England Compendium of Quality Assurance Project Plan Requirements and Guidance, October, 1999.

While it may not be necessary to go the effort of a full blown QAPP it is necessary to provide a basic document which ensures that the data gathered for this project is of sufficient quality to make regulatory decision and verify clean up.

Analytes of interest should be identified, and project action limits given. Project action limits are any regulatory limits that may be applicable to the given situation. These are given solely to assess whether laboratory reporting limits are low enough to allow appropriate evaluation of the site.

Sample locations should be defined, and sample procedures described. Standard Operating Procedures [SOP] should be included for all sampling to be completed in the investigation. Sample preservation procedures should be given here as well.

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Field QC samples should be defined, frequencies and evaluation criteria set. In most cases field or equipment blanks, and field duplicates are used. Frequency should be given in terms of percentage of samples, and batches of samples. For example a field duplicate may be taken for every 20 samples [5%] but also for each "batch", so if only 5 samples are taken for a given media, there should still be 1 field duplicate for that media even though that is more than 5%.

Sample handling procedures, including sample holding times, and how samples will be delivered to the analytical laboratory must be described.

Analytical information should include: Analytical Laboratory; Analytical Methods and Laboratory SOPs; Laboratory reporting limits and MDLs; Lab QC requirements/ method performance criteria; and Lab data reduction/ review/ reporting. Although MEDEP is not recommending that Performance Evaluation [PE] samples be required for every analytical batch of samples, MEDEP does recommend that the analytical laboratory participate in routine PE studies for the analytes of interest, and that results of these PE studies be evaluated prior to starting the analytical work.

Data validation: It is recommended that 3rd party data validation by EPA Region 1 guidelines Tier II be completed on data collected for regulatory purposes.

In addition it is recommended that some mechanism for verifying that all project workers are aware of the sampling and analytical requirements of the project be developed.

2. Throughout this document there are references to Naval Air Station, Brunswick, Maine, being the location of the site. The site is located at Topsham Annex, Topsham, Maine. Please correct where necessary throughout the document.
3. It is unclear from the workplan when composite samples are proposed exactly what is being composited. This must be clearly documented in this report and in the QAPP.
4. The workplan proposes to collect soil prior to removal and analyze it using immunoassay field analysis. If the Navy wants to use immunoassay as an in field tool to direct the removal of soil that is acceptable. However immunoassay kits are prone to false negatives, therefore any sample with a negative result would have to be sent to a certified lab for confirmation if it is used to delineate the PCB contamination. MEDEP recommends removal of the concrete and the two feet of soil under it, that two feet of soil out (horizontally) from the concrete transformer pad be removed to a vertical depth of two feet. This material would be disposed of as Toxic Substance Control Act (TSCA) Polychlorinated Byphenols (PCB) waste greater than 50 ppm. In the event of visual staining of the soil the removal will be extended until staining is no longer evident. Confirmation samples would be taken along the sidewalls and bottom of the excavation for verification and sent to a lab for analysis.

If this is not acceptable and the Navy prefers to delineate the plume edge samples should be taken at 0-3" and used for 0-1'.

5. Add a section on remedial objectives and goals.
6. MEDEP inspection of the transformer pad area revealed an embankment roughly to the northeast with a driveway leading to the back of the commissary. There is a storm drain located within this driveway. It will be necessary to sample the storm drain for PCBs to ensure that PCB oils or sediment contaminated with PCBs have not reached this storm drain.

7. The Navy or its contractor should be review the work plan for compliance with the State of Maine, Hazardous Waste Management Rules and revise as appropriate.

Specific Comments:

8. Title Page:

The location is Topsham Annex, Topsham, Maine.

9. Page 1, Section 1.0.

The commissary is located at Topsham Annex, Topsham, Maine.

10. Page 1, Section 1.1, para 1:

“FWENC has been tasked with performing the following: mobilization and site preparation, delineation of PCB contaminated soil, relocation of Commissary power, excavation, confirmation sample collection, waste characterization, off-site disposal, and site restoration.”

Please revise as follows: “FWENC has been tasked with performing the following: mobilization and site preparation, delineation of PCB contaminated soil, relocation of Commissary power, *removal of contaminated soil and concrete*, confirmation sample collection, waste characterization, off-site disposal, and site restoration.”

11. Page 2, Section 2.0:

Correct the site description to reflect information on Topsham Annex, Topsham, Maine.

12. Page 2, Section 2.1:

Please revise as follows: “The Commissary (Building 335) (35 Dominion Ave, Topsham, ME) is located between Dominion Avenue and Republic Avenue. The transformer is located on the east side of the commissary adjacent to Republic Avenue and provides power to the building. The topography of the site area is characterized as flat and exhibits little relief. The surface grade consists of a level field of grass and paved access roads. The transformer is located on relatively flat ground with short steep embankment to a driveway leading to the back of the commissary. A storm drain is located downgradient of the transformer in this driveway.”

13. Page 2, Section 2.2:

The term “activity” is military jargon and should be avoided, therefore either define the term “activity” which is used in this paragraph and in other places in this workplan or replace it with more appropriate language.

14. Page 4, Section 3.1:

MEDEP needs to be notified two weeks in advance of this removal action in order to have staff on site to observe initial sampling, removal activities, and confirmation sampling. Please add that MEDEP will notified prior to the sampling and removal, here and other appropriate locations within the document.

15. Page 4, Section 3.2, para 1:

As discussed above, it is acceptable to use immunoassay field analysis to direct the removal, however if this method is used please identify who will perform the analysis and that person's qualifications. Also add the detection limit of the field kits.

16. Page 4, Section 3.2, para 2:

If immunoassay field analysis is going to be performed please provide more details on what exactly is being composited. Also how will the sample points be identified and documented. Explain how the sample will be composited.

17. Figure 2:

This diagram should include the slope and the location of the driveway and storm drain in relationship to the transformer pad.

18. Page 6, Section 3.3:

Sampling the area where the transformer is going to be relocated is acceptable but not required by MEDEP, therefore MEDEP will not provide comments on the sampling procedure or analytical acceptability.

19. Page 6, Section 3.3:

The recommendation to use poly sheeting during the soil removal activity was a good one so MEDEP is recommends using it during this phase also.

20. Page 7, Section 3.4:

Please add that poly sheeting will be placed on the ground under the swing area to prevent any errant soil or concrete from contacting clean soil.

21. Page 7, Section 3.5:

Please identify where exactly the contaminated soil and concrete will be stored until being shipped off for disposal.

22. Page 7, Section 3.6:

This section needs to include more detail on sample collection, documentation, location and compositing procedure, and analytical detection limits. An explanation of how the results will be interpreted since they will be composited must be included. Again please explain exactly how many and/or the depth of the samples to be composited. See comment #1.

Confirmation sampling should be designed to meet TSCA regulations for verification sampling of self implementing clean up as outlined in subpart O (§§761.280-761.298). Grids should be laid out at 1.5 meters. Composites should be made up of no more than four sampling points and the detection limit must be low enough to mathematically calculate whether a point exceeds the action level.

If MEDEP is interpreting the proposed confirmation sampling correctly, four bottom samples will be taken in each quadrant and composited into one sample. A total of four composited bottom samples (one for each quadrant) will be sent for analysis. (Making 16 sampling locations composited into four analytical samples.) Four side wall samples will be taken along each side-two at 0-1' and two at 1-2'. The samples taken at the same depth will be composited. There will be 32 sampling locations composited into 16 composite samples (8 from 0-1' and 8 from 1-2'). Please confirm that the proposed frequency (if interpreted correctly) meets the requirements in subpart O. If not please correct.

Also the State prefers confirmation surface samples be taken 0-6" (these may be used in place of 0-1').

23. Page 10, Section 4.2.1:

Please revise as follows: "The PCB cleanup for the Commissary area is less than 1 ppm PCBs to meet regulatory requirements for residential cleanup due to the proximity of the site to a school. The immunoassay test ..."

24. Page 10, Section 4.3:

Please provide specific information on where the remediation waste will be stored. Please be aware that Topsham Annex is not a secure military facility like Brunswick Naval Air Station and there is no hazardous waste storage facility at Topsham Annex. Any PCB waste generated from this action would have to be stored in accordance with State of Maine, Hazardous Waste Management Rules, Chapter 851, Sections 8 & 13.

25. Page 11, Section 4.3:

Shipment of hazardous waste must also meet the requirements of State of Maine, Hazardous Waste Management Rules, Chapter 851 section 7. (A State of Maine Hazardous Waste Manifest must also be used for the shipment of PCB wastes.)

26. Page 13, Section 4.5:

As noted above there is a storm drain located downgradient of the transformer. The contractor should be prepared to prevent sedimentation from reaching this drain. Please revise this section as appropriate.

27. Page 12, Section 4.6, para 2:

Please revise to *State of Maine Hazardous Waste Manifest*.

28. Page 16, Section 5.0.

If, after reviewing this letter, the Navy decides to proceed with immunoassay field analysis for removal purposes, please identify the chemist who will be performing the analyses.

29. Page 17, Section 6.0.

See comment 1 above.

30. Page 18, Section 6.2.2:

MEDEP would like to see two additional tasks added: Coordinate field activity with MEDEP and ensure submission of PCB results to MEDEP prior to removal and demobilization. If this is not the appropriate place to add these items please add them in the correct section.

31. Page 19, Section 6.3.2:

Please add the following bullet: Name and address of site (e.g. Commissary, Topsham Annex, Topsham, Maine).

32. Table 1, Submittal Register:

Preliminary immunoassay test results and confirmation test results need to be submitted to MEDEP to receive concurrence with achieving the remedial action of less than 1 ppm.

33. Page 22, section 6.4.1:

See comment #1 above.

34. Draft Site-Specific Health and Safety Plan, Title Page:

Location is Topsham Annex, Topsham, Maine. Also correct in section 1.0, 1.1, and 3.0.

35. Page 1, Section 1.2:

Add Delineation of PCB's (if still proposed) and Confirmation samples to the bullets.

36. Page 3, Section 1.2.5:

Revise as follows: "FWENC will use a backhoe with a hydraulic hammer to break the concrete transformer pad into manageable pieces. *Poly sheeting will be placed onto the ground surface under the swing areas of the backhoe to prevent any PCB contaminated soil or concrete that may fall out of the bucket from contacting clean soils. ...*"

37. Page 4, Section 1.2.6:

Revise as necessary to meet subpart 0 requirements and revisions requested above.

38. Page 4, Section 1.2.8:

Please revise as follows: "Upon receipt of confirmation sample results that demonstrate that the site actions levels *of less than 1ppm* have been achieved *and with concurrence from MEDEP*, FWENC will backfill the excavation with clean backfill.

39. Page 4, Section 1.2.10:

Please provide more information on how the construction equipment will be decontaminated.

40. Page 6, Section 3:

Please correct the description of the site area as noted above in comment # 6.

Page 7 of 7

41. To speed up the subsequent review of this workplan it would be helpful to submit a red line strike out copy.

Thank you for the opportunity to review this report. If you have any questions or comments please call me at (207) 287-7713.

Respectfully,



Claudia Sait
Project Manager-Federal Facilities
Bureau of Remediation & Waste Management

Cf: File