

**RESPONSE TO COMMENTS FROM THE  
STATE OF MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION –  
BUREAU OF REMEDIATION AND WASTE MANAGEMENT  
ON THE DRAFT COMPLETION REPORT  
INVESTIGATION AND REMOVAL OF RELOCATED SOILS, SITE 17  
NAVAL AIR STATION BRUNSWICK, MAINE**

<b>Commentor: Claudia Sait, MEDEP - Project Manager-Federal Facilities Bureau of Remediation &amp; Waste Management</b>	
<b>Comment Issue Date: 3 November 2009</b>	<b>Navy Response Date: 19 November 2009</b>

Pursuant to Section VI of the Naval Air Station, Brunswick, Maine Federal Facility Agreement (Oct 1990), as amended, the Maine Department of Environmental Protection (MEDEP) has reviewed the draft “Completion Report, Investigation and Removal of Relocated Soils, Site 17”, dated October 2009, prepared by ECC. Based on that review MEDEP has the following comments and issues.

**GENERAL COMMENTS:**

1. The removal of the relocated soils was executed effectively, other than the delay due to a greater tonnage of soil than initially planned for. The field investigation determined with reasonable confidence where the relocated soil was placed, and removed it for disposal. The data show there are residual pesticides remaining at the edges of the excavation that need to be considered along with the data from the recent Remedial Investigation (RI). (No response required.)

***Response: Noted.***

2. The stained strip of soil (Photo 8) found in the excavation warrants consideration and possibly further evaluation. The regular shape of the staining suggests it is related to a former drainage, pipeway or other utility line, and it is aligned with the former pesticide building location across the street. It is also aligned with an area on the north side of the road that was excavated to 4 feet, where MW-NASB-097 is located. If this was a drainage ditch or other discharge point it is not recognized in the current conceptual site model, and the detection of tetrachloroethene (PCE) (in addition to multiple pesticides) warrants additional confirmation before site risks are assessed.

***Response: Noted.***

**SPECIFIC COMMENTS:**

3. Section 2.1, Locating Area of Relocated Soils, 1<sup>st</sup> sentence: “The location of the relocated soil was determined ...”

Please consider adding “approximate” before location.

**Response: Agreed.** The first sentence will be revised to read; “The approximate location of the relocated soils was determined....”

4. Section 2.2, Test Pits Excavation and Preliminary Soil Sampling: The preliminary soil sampling results are not addressed in this section but is in Section 3.1. Please add a sentence referring readers to Section 3.1.

**Response: Agreed.** The last sentence of the second paragraph under Section 2.2 will be revised to read; “The analytical results of the soil samples collected during the test pit phase of this project are discussed in Section 3.1 of this report, and are summarized in Table 1.”

5. Section 2.3 Waste Characterization Sampling, page 5: The disposal and handling of the soils has been an important factor in resolving the buried contaminated soil concerns at Site 17, and disposal and reuse of soils has been an issue at other sites on the base. If the disposal characterization data are available please include them in the appendix to the report.

**Response: Agreed.** The last sentence in Section 2.3 will be revised to read; “The signed Material Profile and a waste characterization summary table (provided by the disposal facility Recupere Sol, Inc.) are provided in Appendix C.”

The two samples collected for waste characterization are identified as BNAS-01 and BNAS-02 in the summary table. Results from the test pit sampling are also on the summary table. For clarification as to which samples are the waste characterization samples referenced in the revised sentence, the first sentence in Section 2.3 will be revised to read; “A total of two waste characterization samples (BNAS-01 and BNAS-02) were collected on...”

6. Section 2.4, Excavation and Disposal of Relocated Soils, para 4: “It was decided by stakeholders...”

MEDEP suggests the following language: *The remaining relocated soils (9 ft by 19 ft area) was left in place until...*

**Response: Agreed.** “It was decided by stakeholders...” will be deleted from this sentence. The third sentence in paragraph 4, Section 2.4, will be revised to read; “The remaining relocated soils (9 ft by 19 ft area) was left in place until an amendment to the original import/export agreement...”

7. Section 2.4, Excavation and Disposal of Relocated Soils, para 5, 1<sup>st</sup> sentence: Please add to this sentence that the import/export agreement was from Government Canada and EPA.

**Response: Agreed.** The first sentence in paragraph 5 will be revised to read; “Under the hazardous waste import/export agreement between the Canadian government and the USEPA, the total amount of...”

8. Section 3.1, Preliminary Soil Sampling – Test Pitting Sampling Results: Since there was no report on the results of the preliminary sampling results, please add a summary of the results in relationship to the preliminary remedial goals established for the original removal action, reference the workplan and add the preliminary results to figure 3.

**Response:** Section 3.1 does summarize the preliminary sampling results with regards to the PRGs, in addition Table 1 provides a complete summarization of each of the samples and how those results compare with the PRGs. Therefore, the text in Section 3.1 will not be edited. Figure 3 will be revised to show the preliminary results.

9. Section 3.2, Post-Excavation Soil Sampling – Confirmatory Sampling Results: “Other VOC and SVOC detection in the black-stained soil are below MEDEP Remedial Action Guidelines (RAG).

It also notable that PCE was detected in the black-stained soil at a concentration of 170 µg/kg above the leaching to groundwater standard established by the 2009 Maine RAGs. This should be noted in this section. Please revise.

**Response: Agreed.** This sentence will be deleted and replaced with the following text; “Also in this sample, one VOC, tetrachloroethene (PCE), was detected at a concentration of 140 µg/kg, which exceeds the proposed 2009 MEDEP RAG (40 µg/kg) for soils leaching to groundwater. It should be noted, however, that the Navy will follow the existing RAGs until the revised guidelines have been finalized by MEDEP.”

10. Section 4.0, Conclusions and Recommendations, Bullet 2:

a.) “However, the pesticide concentrations reported in this sample location are significantly below the PRG for subsurface soils (135,000 µg/kg).

The sub surface PRG of 135,000 µg/kg was developed for DDT only. The subsurface soil PRG for pyrethrin was 10,000. As far as MEDEP knows there were no other PRGs developed during the mid 1990’s removal action. Please rewrite this paragraph clarifying 135,000 PRG is for DDT only.

**Response: Agreed.** For clarification, the second and third sentences in Bullet 2 will be revised to read; “The additional sampling results from this soil-material (sample S17-00) reported elevated concentrations of pesticides, notably 4,4’-DDT which was reported at a concentration of 1,000µg/kg, which exceeds the surface soil 4,4’-DDT PRG of 500 µg/kg but is below the subsurface soil 4,4’-DDT PRG of 135,000 µg/kg. During the 1990’s removal action PRGs were only established for Total Pyrethrins and 4,4’-DDT.

b.) “There were no reported concentrations of VOCs or SVOCs above the surface or subsurface soil PRGs.”

There were no PRGs established for this Work Plan for VOCs and SVOCs, which had not been detected in earlier investigations. Please revise the text to reference Maine's 2009 revised Remedial Action Guidelines or the 2009 USEPA Mid-Atlantic Risk Based Concentration tables and criteria. The PCE detection (170 µg/kg) exceeds leaching to groundwater criteria for both guidelines (EPA- 2.4 µg/kg, RAGs - 40µg/kg), but not the residential soil guidelines. Please add this to the bullet.

**Response: Agreed.** The last sentence under Bullet 2 will be revised to read; "Also in this sample, one VOC, tetrachloroethene (PCE), was detected at a concentration of 170 µg/kg, which exceeds the proposed 2009 MEDEP RAG (40 µg/kg) for soils leaching to groundwater. It should be noted, however, that the Navy will follow the existing RAGs until the revised guidelines have been finalized by MEDEP."

11. Section 4, Conclusions and Recommendations, para 2: MEDEP agrees with the recommendation to include the findings for this removal action in the Remedial Investigation of this site and to evaluate the risk. (No response required.)

**Response: Noted.**