



# THE MEMPHIS DEPOT TENNESSEE

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## ADMINISTRATIVE RECORD COVER SHEET

AR File Number 110



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File:  
C.G. 541,460.5

## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4

345 COURTLAND STREET, N.E.  
ATLANTA, GEORGIA 30365

4WD-FFB

MAY 05 1995

**RECEIVED**  
MAY 10 1995

Commander  
Defense Distribution Depot Memphis  
Attn: DDMT-WP (Mr. Frank Novitzki)  
2163 Airways Road  
Memphis, Tennessee 38114-5210

SUBJ: Defense Distribution Depot Memphis (DDMT), TN  
EPA I.D. TN4 210 020 570

Dear Mr. Novitzki:

EPA has completed its review of the following documents:

- o Draft Final Generic RI/FS Work Plan (March 1995);
- o Generic Quality Assurance Plan (February 1995);
- o Screening Sites Field Sampling Plan (SSFSP) (March 1995);
- o Operable Unit 1 FSP (March 1995);
- o Operable Unit 2 FSP (March 1995);
- o Operable Unit 3 FSP (April 1995);
- o Operable Unit 4 FSP (March 1995).

EPA's comments on these documents are enclosed with this letter. As stated in the comments, EPA will not be reviewing the Draft Final Health and Safety Plan (February 1995). If you have any questions about these comments, please contact me at 404/347-3555, vmx. 6431.

Sincerely,

Martha Berry  
Remedial Project Manager  
Federal Facilities Branch

Enclosure

cc: James W. Morrison, TDEC  
John Romeo, COE

EPA COMMENTS  
DRAFT FINAL RI/FS DOCUMENTS  
CH2MHILL

DRAFT FINAL GENERIC RI/FS WORK PLAN, MARCH 1995

1. Page 3-6, paragraph 5: EPA does not necessarily concur that only the filtered or dissolved metal analytical results are representative of the mobile fraction of the metallic species in the groundwater.
2. Page 3-20, paragraph 4: This paragraph seems to indicate that if metals are found in a particular groundwater sample at levels above the MCL by total metal analysis but below the MCL by dissolved metals analysis, then the assumption would be either: (1) the metals were naturally occurring; or (2) the metals were not mobile. EPA does not concur with this assumption. EPA understands the concern that sedimentation in the groundwater sample is artificially boosting the levels of metals in the sampling result, but believes that this problem can be minimized using appropriate sampling techniques.
3. Chapter 3: It is assumed by EPA that this section is meant as a preliminary assessment of potential current risks and not as a description of the exposure pathways to be assessed in the baseline risk assessment.
4. Page 3-50, Section 3.5.2: EPA assumes from this discussion that CH2MHill is using the risk based levels developed in EPA Region IX because it believes that those numbers are more conservative than the levels listed in the Region III tables. This assumption should be verified and, if there are any exceptions to this assumption, then the more conservative number for that particular chemical should be used.
5. Pages 3-60 - 3-62, Table 3-10: EPA suggests also using the NOAA ER-Ls as PRGs for sediment.
6. Page 5-19, Section 5.6: EPA thinks that having a detailed outline of the BRA prepared and approved by all parties prior to the actual submittal of the document is an excellent idea. The earlier in the RI/FS process this can be accomplished the better.
7. Page 5-23, Section 5.11: It should be remembered that the FS document itself should not contain a recommendation for the remedy. Should the Contractor wish to convey this information to its client, it should be contained in a separate letter.

SECTION 5.3.2 - Background Sampling Plan (reviewed separately as a new section)

1. Overall - EPA suggests replacing the term "background" with the term "control" sample.

2. In other areas where a statistical approach has been used, 95% has been the goal for the confidence limit. Please provide justification for setting goals lower than 95%.
3. There is concern that the proposed onsite background surface and subsurface soil sample locations (Figure 5-1, page 5-9) are inappropriate because they are located near hazardous materials storage areas which are potential contamination sources. The sample locations may be influenced by stormwater runoff from loading dock areas, parking lots, hazardous materials storage areas and equipment maintenance areas. Therefore, these proposed onsite background soil sample locations may not be representative of background conditions.
4. Page 5-8, Section 5.3.2.1, paragraph 3: The text states that for the offsite sample locations, several golf courses, parks and schools were targeted as possible background soil sampling areas. However, there is concern that offsite soil samples collected solely from these areas may give misleading results because the soils in these areas may consist of fill material and may have been graded during the land development activities, resulting in unrepresentative background soil conditions. Additionally, pesticides and herbicides are typically utilized at golf courses, parks and schools as part of routine grounds maintenance. EPA suggest that some of these samples be taken either from homeowners' yards or other areas likely to have been minimally impacted by either the facility or other urban activities.
5. Page 5-8, Section 5.3.2.1, paragraph 4: The text states that at each soil sampling location, both surface soil and subsurface soil samples will be collected and that both the surface soil and subsurface soil samples will be composited for analytical analyses. However, compositing both the surface soil and subsurface soil together is inappropriate and is discouraged. The surface soil samples and subsurface soil samples should be collected and analyzed separately in order to obtain the true background conditions for each discrete soil interval at each sample location.
6. Page 5-12, Section 5.3.2.2, paragraph 2: The text states that if analytical data for both the pond and stream sediments contain similar constituents and concentrations, then the data will be combined into a single sediment data set. However, the rationale for combining the data into a single sediment data set is unclear. Please provide additional justification for proceeding in this manner.
7. Page 5-15, Section 5.3.3.4, paragraph 4: The text states that there are several Fluvial aquifer monitoring wells located approximately 1-mile downgradient of the site (Figure 5-4, page 5-16) and that groundwater samples collected from these wells show no evidence of organic compounds. The text states, these wells are believed to be suitable as background wells. EPA is

extremely concerned about the suitability of using these downgradient wells as background and strongly suggest rethinking the use of these wells. In addition, the text does not indicate whether these wells demonstrate presence of any inorganic contamination in the groundwater. The facility is located within an urban land-use area; therefore, it is possible that urban-type activities could introduce inorganic contamination to the groundwater.

#### GENERIC HEALTH AND SAFETY PLAN, FEBRUARY 1995

EPA will not be reviewing this document.

#### GENERIC QUALITY ASSURANCE PLAN, FEBRUARY 1995

1. Page 5-18: After being rinsed twice with the pesticide grade isoproponal, the equipment should be rinsed thoroughly with organic-free water and allowed to air dry as long as possible. If organic-free water is not available, the equipment should be allowed to air dry as long as possible. Do not rinse at this stage with deionized or distilled water.

#### SCREENING SITES FIELD SAMPLING PLAN (SSFSP), MARCH 1995

1. Page 4-7, Section 20, Site 20: Of the 5 surface soil samples proposed, only one seems to be in the suspected area of contamination. Please explain the rationale of this approach.

2. Page 4-15, Section 4.1.4, Site 50 (also Sites 54, 55, and 56): In the response to comments for the FFA, additional sampling to the drainage ditches, including the consideration of sampling beneath the concrete liner (where applicable) and downstream sampling offsite was to be performed. Is that reflected here?

3. Page 4-20, Section 4.1.7, Site 62: Given that the bauxite piles are there, would it be of more value to worry less about the subsurface soil sampling and instead concentrate sampling on whether or not there has been a release?

4. Page 4-48, Section 4.3.6, Site 68: EPA will defer this question until more is known about why this area was listed as a screening site to begin with.

5. Page 4-51, Section 4.3.8, Site 73 (all grassed areas): EPA suggests addressing this as a "Control Sample" question. The levels of pesticides found in some of these areas may indeed be reflective of past pesticides applications. However, there are a couple of areas, such as the area where samples 10, 11, 42, and 43 were taken, where the pesticides levels seem very high and should be investigated.

6. Page 4.73, Section 4.4.7, Site 54: see comment #2.

7. Page 4.74, Section 4.4.8, Site 55: see comment #2.
8. Page 4.75, Section 4.4.9, Site 56: see comment #2.

**OPERABLE UNIT 1 FSP, MARCH 1995**

1. A table listing which sites have been moved into the "Early Removal" stage would be useful.

**OPERABLE UNIT 2 FSP, MARCH 1995**

1. A table listing which sites have been moved into the "Early Removal" stage would be useful.

**OPERABLE UNIT 3 FSP, APRIL 1995**

1. Page 4-5, Section 4.2.6, Site 25: It is EPA's understanding that the reason for investigating Area A is to attempt to determine whether runoff from this area is/has adversely affected the Golf Course Pond. Given the fact that six surface soil samples will be composited into one from each section of Area A, EPA is concerned that contaminants may be diluted down to levels below that which will be detected by the Level 2 field screening techniques.

2. Page 4-12, Section 4.3.6, Site 26: EPA raises the same concern as it did in Comment 1 on the OU3 FSP.

**OPERABLE UNIT 4 FSP, MARCH 1995**

1. Page 4-13, Section 4.3.4, Facility Groundwater Investigation: In the original set of EPA comments on the draft OU4 FSP, EPA requested that pesticides be added to the list of PCOCs. Given that pesticides are on the list of PCOCs for the soils and sediments of a number of the sites at DDMT, please clarify why pesticides were not included for the groundwater.

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