



# THE MEMPHIS DEPOT TENNESSEE

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## ADMINISTRATIVE RECORD COVER SHEET

AR File Number 68



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STATE OF TENNESSEE  
DEPARTMENT OF ENVIRONMENT AND CONSERVATION  
MEMPHIS ENVIRONMENTAL FIELD OFFICE  
SUITE E-645, PERIMETER PARK  
2500 MT. MORIAH  
MEMPHIS, TENNESSEE 38115

July 8, 1994

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

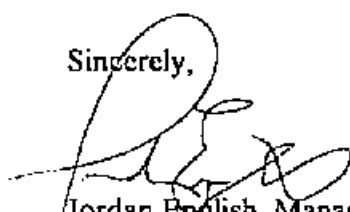
Re: Draft Final Environmental Assessmnt, Removal Action for Groundwater, Draft  
Final Site Management Plan, Draft Final Community Relations Plan, for DDRC,  
TDSF #79-736

Dear Mr. Novitzke:

The Tennessee Division of Superfund (TDSF) Memphis Field Office (MFO) has reviewed the Draft-Final Environmental Assessmnt, Removal Action for Ground Water received in this office on 8/17/93, the Draft Final Site Management Plan (SMP) received in this office on 4/4/94, and the Draft Final Community Relations Plan received in this office on 4/19/94.

Pursuant to the intent of the Federal Facilities Agreement (FAA) being currently negotiated the Tennessee Department of Environment and Conservation (TDEC) is providing the attached comments. Should you have any questions or concerns regarding this review or the Site in general please call at (901) 368-7953

Sincerely,

  
Jordan English, Manager  
Memphis Field Office  
Tennessee Division of Superfund

c: TDSF, NCO  
TDSF, MFO  
Allison Humphris  
United States Environmental Protection Agency  
Federal Facilities Branch  
345 Courtland Street, N.E.  
Atlanta, GA 30365

**Tennessee Department of Environment and Conservation  
Division of Superfund  
Comments for  
Draft Final  
Environmental Assessment  
Removal Action for Ground Water  
7/6/94**

The Tennessee Division of Superfund (TDSF) Memphis Field Office (MFO) has reviewed the Draft-Final Environmental Assessment, Removal Action for Ground Water for the Defense Depot (Site) in Memphis, Shelby County, Tennessee which was received in this office on 8/17/93.

**General Comments:**

The consistency of comparisons between alternatives is poor. Far too often cost is addressed as the limiting factor, without any regard to effectiveness.

Metals have not been included as a contaminant of concern although the only two valid sampling events indicate metals elevated above MCL's (Pump test analysis is not valid because it allows significant dilution from surrounding uncontaminated groundwater).

TDSF's greatest concern is that only one of the alternatives retained, and none selected, adequately address the contaminants that may have previously migrated away from Dunn Field. The perception is that the intent is to allow these potential contaminants to attenuate and continue to migrate and potentially contaminate other portions of the fluvial aquifer or the Memphis Sand aquifer. TDSF does not intend to concur with any IRM alternative that fails to address this issue. Public acceptance of this is unlikely if communicated properly.

**Specific Comments:**

Section 1.3, Page 1-3--The wording "Jackson-Claiborne Formation" should be changed to "Jackson-Upper Claiborne confining unit"

Section 1.4, Page 1-4--There is a slight discrepancy in where waste is described being buried. On page 1-2 the location of hazardous waste is described as the northwest portion of Dunn Field. On page 1-4 it is described as being on the west half of Dunn Field. I understand that the waste is to the north and west and perhaps should be worded this way in both passages.

Section 1.5, Page 1-5--As commented on in the Engineering report comments it sounds as though you are looking for an excuse not to include metals as contaminants of concern. The fact that for two consecutive years metals were detected above MCL's indicates the probability that they indeed are contaminants of concern. The fact that they were not detected above MCL's in 1992 indicates that the most contaminated portion of the plume may have migrated off-Site. No information is provided in this passage to indicate if samples were collected during similar seasons. Variations could be seasonal (wet vs. dry) or represent container leakage events.

Section 1.5, Page 1-5--The wording "reduce these contaminants from migrating" in addition to being bad grammar fails to convey the fact that contaminants which have already migrated past Dunn Field boundaries may not be captured.

Section 2.1, Page 2-1--The statement "...and reverse the migration of the contaminants already down gradient." is misleading. It fails to address the fact that all contaminant migration down gradient may not be reversed.

Figure 2.1, Page 2-2--If this figure represents the plume extent then we have the information necessary to properly place extraction wells. If this figure represents a hypothetical plume extent then it is misleading. This figure can be salvaged if in the legend you qualify the cross-hatched area as "hypothetical extent of plume contamination". If the edges of this hatched area represent the limits of control then question marks placed on this "perimeter" will help convey this to the reader.

Figure 2.1, Page 2-3--The last sentence of this ¶ should have the word "presently" inserted before the word "...known...".

Section 2.3, Page 2-7--The last of the first full ¶ is vague. How many inches/feet below flood stage will water levels be raised?

Section 3.1.1.2, Page 3-2, Last ¶--If the intent of this IRM is to prevent Memphis Sand aquifer contamination then why not look nearer their potential connection point?

Section 3.1.2.1, Page 3-3, Second ¶--It seems to me that the process should be rejected primarily because these solvents do not readily biodegrade using *in situ* technologies.

Section 3.1.2.2, Page 3-4--Cost alone is not sufficient reason to reject an alternative. High cost relative to another alternative with similar effectiveness is.

Section 3.1.2.3, Page 3-6--Did you rule this method out? State explicitly.

Section 3.1.2.4, Page 3-6--Relative effectiveness against cost should be the guiding criteria.

Section 3.1.3.1, Page 3-6--When you have sufficient information to accurately define the plume downgradient locations could be selected. There may be other viable reasons for rejection of this alternative though.

Section 3.2.3, Page 3-9--"...metals treatment as required." There is information that indicates that metals are contaminants of concern. As such treatment for the metals of concern should be included.

Figure 4.5, Page 4-12--Although the map legend does not indicate a contour interval, the interval appears to be 10'. In the lower left of the map, two closed loop contours are not marked. This actually appears to be an error in contouring.

Section 4.4.3.2, Page 4-14--In the Jackson Clay bullet the last sentence needs elaboration. TDSF suggests changing the end of the sentence to read "...directly overlain by the fluvial deposit

*thus providing windows allowing for connection between the surficial aquifer and the Memphis Sands aquifer."*

Section 4.4.3.2, Page 4-14--This section is labeled Site Hydrogeology (emphasis added). In the bullet describing the Memphis Sand it is misleading, with the information presented to date, to suggest that the Memphis Sand aquifer is under confined conditions. The inclusion of the word "generally" would be appropriate if qualified with the indications of where it is not certain (Law Study potentiometric map).

Section 5.3, Page 5-4--In the last ¶ the phrase "...causing groundwater that is currently contaminated to move toward these wells.", although a correct statement, is misleading. The implication is that all contaminated groundwater will move toward these wells.

Section 6.0, Page 6-1--The last sentence in the third ¶ should be replaced with "This action limits potential contamination in the Memphis Sand aquifer to those contaminants which have already migrated beyond the capture zone of the Dunn Field west perimeter extraction wells.

**Tennessee Department of Environment and Conservation  
Division of Superfund  
Comments for  
Draft Final  
Site Management Plan  
Defense Depot Memphis Tennessee  
7/6/94**

The Tennessee Division of Superfund (TDSF) Memphis Field Office (MFO) has reviewed the Draft-Final Site Management Plan (SMP) for the Defense Depot (Site) in Memphis, Shelby County, Tennessee which was received in this office on 4/4/94.

**Specific Comments:**

Section 2.2.1, Page 7--In the next to last sentence on this page TDSF recommends changing the word "suggest" to "indicate". Consistent contamination results don't suggest they describe.

Table 2.4, Page 12--Please explain the double line segregation of Site 57 with the other sites. This should perhaps be explained in a foot-note.

Tables 2.8 & 2.9, Pages 16-17--TDSF does not concur that the PCP sites (42-46) are NFA without documentation which has been requested numerous times.

Table 2.9, Page 17--Applicable OU's would be helpful in this table.

Table 2.10, Page 19--TDSF does not concur that the PCP sites (42-46) are NFA without documentation which has been requested numerous times.

Appendix B-2--TDSF again requests copies of documentation indicating that residual contaminants are not above current levels of concern. TDEC was not an entity 1985.

Appendix C--TDSF suggests adjusting the schedule to reflect current realities, probabilities.

**Tennessee Department of Environment and Conservation  
Division of Superfund  
Comments for  
Draft Final  
Community Relations Plan  
Defense Depot Memphis Tennessee  
7/6/94**

The Tennessee Division of Superfund (TDSF) Memphis Field Office (MFO) has reviewed the Draft-Final Community Relations Plan (CRP) for the Defense Depot (Site) in Memphis, Shelby County, Tennessee which was received in this office on 4/19/94. TDSF, MFO provides the following comments.

**Specific Comments:**

Section II, Page 2--The statement in the third ¶ "This aquifer is not used for drinking water." may be incorrect. In some places in West Tennessee the fluvial aquifer may be used for drinking water. TDSF suggests adding the word "locally" at the end of this sentence.

Section III B, Page 5--Change the wording in this passage and throughout the document to reflect the RAB concept.

Section IV, Bullet D--It is not conducive to a free-flowing community dialogue to have meetings on the facility where access is so strictly controlled. The intimidation factor of your reasonable security needs suggests that an alternate RAB meeting place near the local community be utilized.

Figure 2, Page 9--This map needs redrafting. Building numbers are illegible.

Section VI, Page 10, Item F--I believe that at least initially, more than two meetings (3-5) will be required. TDSF suggests that the word "significant" be inserted before information in parenthesis. TDSF also suggests striking the DLA anticipation entirely.

Appendix A-2--The building for Governor McWhorter's address is Capitol.

Appendix A-5--All references to the TDSF, MFO should be corrected to show our new address, 2510 Mt. Moriah. No other part of our address has changed.

Appendix A-5--Please replace Floyd Heflin with James Morrison as the third TDEC contact on this page.

Appendix A-8--I don't know how critical this is, but Larry Smith is with the Mid-South Peace and Justice Center.

Appendix C-1--Please include the Memphis Shelby County Health Department repository.

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