



# THE MEMPHIS DEPOT TENNESSEE

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## ADMINISTRATIVE RECORD COVER SHEET

AR File Number 155

GENERAL

155

1

File: 541.410.D  
C.G.

155



Engineers  
Planners  
Economists  
Scientists

March 20, 1996

130845.PR.RC

Mr. Julian Savage  
U.S. Army Engineering Huntsville Support Center  
4820 University Square  
CEHNC-PM  
Huntsville, AL 35816-1822

Subject: Defense Depot Memphis, Tennessee, Response to TDEC Comments

Dear Julian:

I have enclosed a draft response to TDEC comments on the Generic RI/FS Work Plan, Generic QAPP, Generic HSP, and Screening Sites FSP. Please review these responses and forward any comments on the proposed responses to me by April 3. Several of the comments may require changes to the documents. If you are in agreement with the proposed responses, DDMT can issue the letter to TDEC and we can issue errata sheets as necessary.

Please call me at (334) 271-1445, ext. 310, if you have any questions or would like to discuss this submittal.

Sincerely,

CH2M HILL

A handwritten signature in cursive script, appearing to read "Mark Corey".

Mark Corey  
Project Manager

Enclosure  
mgm96-CR6/045.doc

cc: Harold Roach/DDMT  
Christine Kartman/DDMT  
Julett Denton/CEHNC  
Scott Bradley/CEHNC

Greg Underberg/ORO  
Mark Nielsen/ATL  
Leslie Shannon/MGM

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Mr. Terry Templeton, P.G.  
Tennessee Department of Environment and Conservation  
Suite E-645, Perimeter Park  
2510 Mt. Moriah  
Memphis, TN 38115

Subject: Response to Comments

Dear Mr. Templeton:

We have received your comments on the final plans, which include the Generic Health and Safety Plan (HSP), Generic Quality Assurance Project Plan (QAPP), Generic Remedial Investigation/Feasibility Study Work Plan (RI/FS WP), and the Screening Sites Field Sampling Plan (FSP). Our responses to your comments are numbered to correspond to the numbered comments in your letter. Pages that will be reissued are specified in our responses to the comments.

**Generic RI/FS Work Plan-Specific Comments:**

✓1. Section 2.2.5, former Table 2-1, page 2-6

The Division is not clear on why this table was deleted. The Division does not object to the levels of dioxin and furan being reported. The original comment concerned format of the table.

***DDMT Response to Specific Comment 1:***

Table 2-1 reported maximum concentrations for dioxin and furan that were observed before OH Materials performed removal of the PCP Dip Vat site. Therefore, the maximum values reported in Table 2-1 are not representative of residual contaminants remaining at the site. Including the table might be misleading. The location of the former PCP Dip Vat will be investigated as a screening site (Site 42).

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2. Section 2.2.5, third paragraph, last sentence, page 2-7

It appears that no response was provided for the original comment on this sentence.

**DDMT Response to Specific Comment 2:**

This sentence will be deleted. A new page 2-7 will be issued.

3. Section 3.1.1.1, Figure 3-1, page 3-4

The Division was unable to readily ascertain the changes on the revised figure. Please clarify.

**DDMT Response to Specific Comment 3:**

The comments submitted by TDEC on October 4, 1994, make no references to Figure 3-1.

Therefore, no changes were made. Please clarify. - Key map and Law Report, 1990 added

4. Section 3.6, Table 3-11, page 3-71

The Division was unable to readily ascertain the changes in the revised table. Please clarify.

**DDMT Response to Specific Comment 4:**

The comments submitted by TDEC on October 4, 1994, make no references to Table 3-11.

Therefore, no changes were made. Please clarify. Key map & Law Report, 1990 added

5. Section 3.7, page 3-77

Although the last paragraph was joined with the preceding one as suggested, it appears that no text was rewritten.

**DDMT Response to Specific Comment 5:**

The final paragraph of Section 3.7 on page 3-77 will be rewritten as follows and a new page will be issued:

ATSDR has identified no pathways for contaminants. do not reach residents off base. we can not take  
 "DDMT employees would potentially be exposed primarily to constituents identified in surficial soils and surface water. The exposure pathways associated with surficial soil about exposure  
 contaminants include inhalation, dermal absorption, and incidental ingestion of fugitive dust. in general  
 The primary exposure pathway associated with surface water constituents includes dermal like this.  
 absorption due to incidental contact. Continues No pathways have been identified, we should back

Hills  
 Mr. White

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Quarrels sampling  
stormwater do not  
indicate contaminants  
are leaving the vic  
installation vic  
storm drain.  
We cannot talk  
about this in  
present tense.

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Hill's  
re write

at this point  
only the  
should be  
sanctions  
and the

"Residents and neighbors of DDMT are potentially exposed to constituents in surface water runoff flowing through drainage swales and channels. Dermal absorption through wading is the primary exposure route and is most likely to occur to children playing in the drainage channels. Residents of Memphis could potentially be exposed to identified constituents in the groundwater. The exposure pathway entails contaminated groundwater from the uppermost aquifer (the Fluvial Aquifer) migrating to the Memphis Sand Aquifer. The Memphis Sand Aquifer could transport the constituents to one of the MLGW wellfields. Although no areas of hydraulic connection have been confirmed in the vicinity of DDMT to date, investigations are underway to verify the existence of a potential interconnection.

"Fishermen and recreational users of nearby creeks are potentially affected by constituents present in the surface runoff. The primary exposure route is though dermal absorption of water deposited on the skin or ingestion of animal species that bioaccumulate constituents in their body tissues."

#### 6. Section 5.3.2.1, Figure 5-1, page 5-1

The Division was unable to readily ascertain the changes on the revised figure. Please clarify.

#### **DDMT Response to Specific Comment 6:**

A note was added to Figure 5-1 to clarify that "Onsite soil locations are to be field selected. Sample locations will be placed on areas unaffected by facility operations and drainage."

#### 7. Section 5.3.2.4, last paragraph, page 5-15

The Division is unclear how deletion of the sentence referring to the figure that shows Fluvial Aquifer Sampling Locations addresses the previous comment for this section, especially considering that the figure (number 5-4) is now present without a reference in the text. Please clarify.

#### **DDMT Response to Specific Comment 7:**

The previous comment was addressed by adding the last three sentences of the second to the last paragraph of the subsection. The sentences describe additional wells that will be sampled as part of the overall groundwater strategy. The following sentence will be added as the second sentence of the second full paragraph on page 5-15 to reference Figure 5-4, and a new page will be issued:

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"These anticipated Fluvial Aquifer monitoring well sampling locations are shown in Figure 5-4."

✓ 8. Section 5.3.2.5, page 5-17

Questions about the response to the Division's comment on this section were discussed with Leslie Shannon of CH2M HILL prior to the Regional Project Manager's Meeting at DDMT on October 25, 1995. Leslie also provided documentation of the revisions. The underlying issue was discussed at the Regional Project Manager's Meeting. The Division acknowledges that the issue raised by the Division's previous comment is also addressed in the OU-4 Field Sampling Plan. However, as was discussed, a statement referencing this in the RI/FS, if nothing else, would be appropriate.

***DDMT Response to Specific Comment 8:***

The following will be added to the end of the first paragraph of Section 5.3.2.5 on page 5-17 and a new page will be issued:

"The Memphis Sand Aquifer will not be sampled as part of the background sampling effort. However, the groundwater quality of the Memphis Sand Aquifer beneath DDMT will be evaluated as part of the OU-4 investigation (OU-4 FSP Section 4.6)."

**Generic QAPP**

✓ 1. Section 1-1, Project Objectives, p.p. 1-1 and 1-2

It appears that the words "Contract Laboratory" are missing between the end of p. 1-1 and the beginning of p. 1-2.

***DDMT Response to Comment 1:***

The following will be added to the first sentence on page 1-2 before the word "Program" and a new page will be issued:

"Contract Laboratory"

✓ 2. Section 5.4.2.5, Well Design, Bentonite Seal and Grout, pp. 5-15 and 5-16

The Division is not sure that the changes in language in this section reflect the full intent of the Division's comment. If the intention is to specify that pure bentonite alone is to be used for grouting, the revised language is not clear. In this case, please further revise the section

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to avoid uncertainty. If the intention is not to specify pure bentonite alone as grout, please state the rationale for this.

***DDMT Response to Comment 2:***

The third sentence of the subsection entitled "Bentonite Seal and Grout" will be replaced with the following sentence and new pages will be issued:

"A pure bentonite grout, consisting of a coarse-grained solid (Bariod Benseal, American Colloid, Volclay, or equal), will be placed from the top of the bentonite seal to within 2 feet of ground surface."

✓ 3. Section 5.4.2.6, Field Logs, pp. 5-17 and 5-18

The Division's previous comment about editing of logs has been addressed. However, the new language is still ambiguous about the disposition of the original logs. Please clarify.

***DDMT Response to Comment 3:***

The following sentence will be added to the end of the paragraph that follows the bulleted list entitled "Field Logs" and a new page 5-18 will be issued:

"The original boring logs will be given to the Huntsville COE with the final version of the RI/FS reports."

✓ 4. Section 7.3, Special Analyses, p. 7.1

The Division acknowledges that revised language in this section partially addresses the Division's comment. However, one point is still confusing. The last paragraph in this section refers to compounds that don't meet the MCL or preliminary remediation goal. Does this refer to compounds other than those listed in Table 7-3? If so, can those compounds be added to Table 7-3? (These would presumably only be compounds not meeting PRG since those with MCL's lower than reporting limits are already listed.) Also, it appears that there is room in Table 7-2 to list the MCL or PRG for each compound. If this were done, it would make Table 7-2 more informative.

***DDMT Response to Comment 4:***

The last paragraph of Section 7.3 refers only to the compounds listed in Table 7-3. The MCLs and PRGs for each media are listed in Tables 3-7 through 3-10 of the *Generic RI/FS WP*. No changes to the text are proposed.

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✓ 5. Section 14.0, Sample and Database Management, General Comment (new).

Since Section 5.6 indicates that x,y,z coordinates for new monitoring wells will be surveyed, the Division would like to know where that data will be recorded in the context of EDMS-A and EMIS. Table 14-1 does not seem to indicate a field or fields for the storage of x,y,z data. If geographic coordinates are obtained, they should be recorded in an appropriate database. Given the capability of Geographic Information Systems and the amount of data that will be gathered, it seems reasonable to at least record geographic data to allow for the possibility of spatial analysis using GIS or other interpretive software tools, including 3-D analysis.

***DDMT Response to Comment 5:***

DDMT plans to use the IGIS Data Exchange Protocol being developed by the COE. This protocol has provisions for x,y,z coordinates.

**Hazardous and Toxic Waste Health and Safety Plan**

**General Comments:**

✓ 1. Previous TDSF concerns regarding document organization and clarity appear to have been addressed by significant modifications to the document format and arrangement. Because there will be a separate HASP for OU-1 and because of the UXO and CWA aspects of site investigation, a more pronounced reference to this second HASP is in order, especially for workers who will be working at more than one OU and therefore would be covered by both HASPs. In fact, a reference to this distinction should probably also be made on the title page.

***DDMT Response to General Comment 1:***

The title page of the plan will have the following added after "Health and Safety Plan" and a new page will be issued:

"OU-2, OU-3, and OU-4"

✓ 2. The Division thinks the new format is an improvement. However, especially for the field copies, the Division believes legibility can be improved by use of a larger font. Since in many cases the "boxes" that outline each section have surplus white space, use of a larger font should not use a lot more pages.



***DDMT Response to General Comment 2:***

The document is printed in a size 10 font. This size font is the standard for HSPs because of the border that surrounds the text. No changes to the text are proposed.

**Specific Comments:**

✓ 1. Section 1.0, p. 1, SITE ACCESS

In the last paragraph, the first sentence begins "The site safety officers (SSOs) ~~is~~ <sup>are</sup> responsible...." There are several other instances of the same statement elsewhere in the document (e.g. p. 17). In this sentence "is" should be "are." In addition, this language is confusing regarding how many site safety officers there should actually be. Shouldn't there actually be just one (main) SSO with site-wide authority?

***DDMT Response to Specific Comment 1:***

DDMT will have one SSO onsite during the investigations. The references to SSO will be made singular throughout the document.

✓ 2. Section 1.2, p. 2, first paragraph

The next to last sentence begins "Figure 1 for the location...." It should be modified to begin "See Figure 1..." or "Figure 1 presents the location...."

***DDMT Response to Specific Comment 2:***

The next to the last sentence of the first paragraph of Section 1.2 on page 2 will be rewritten as follows, and a new page will be issued:

"Figure 1 shows the locations of the OUs at DDMT."

✓ 3. Section 1.2, p. 2, next to last paragraph and Figure 1, p. 3

Because of the importance of the two statements in this paragraph, they should be italicized, underlined, or emphasized in some other manner. Similarly, an annotation on Figure 1 indicating OU-1's exclusion from this SSHP would seem to be appropriate.

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***DDMT Response to Specific Comment 3:***

The next to the last paragraph of Section 1.2 on page 2 will be *italicized*. In addition, the following note will be added to Figure 1, at the top of the page in a bold print. A new page and figure will be issued.

**"Work at OU-1 is not covered in this SSHP because there is a potential for CWM and/or UXO."**

✓ 4: Figure 4, p. 11

The legibility and utility of this figure is questionable due to the apparent lack of quality of the aerial photograph. Is there another way to more effectively utilize this photograph, perhaps by utilizing an overlay sheet?

***DDMT Response to Specific Comment 4:***

Figure 4 is a color copy of a figure in the *CWM Archives Search Report*. The Figure covers OU-1, which is outside the scope of this HSP. Figure 3 is a clear version of Figure 4.

✓ 5: Figure 5, p. 13

The last item in the legend should be "Tennessee Department of Environment and Conservation", not "Tennessee Department of Environmental Conservation."

***DDMT Response to Specific Comment 5:***

The last item in the legend of Figure 5 will be changed to the following, and a new Figure will be issued:

"Tennessee Department of Environment and Conservation"

✓ 6: Table 2, p. 15

Under "Tennessee Dept. of Conservation and Environment" please complete the phone number for Terry Templeton as 368-7957. Also, this section should be headed "Tennessee Department of Environment and Conservation", not "Tennessee Dept. of Conservation and Environment."

Mr. Terry Templeton, P.G.  
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***DDMT Response to Specific Comment 6:***

An updated communications summary will be added to the document that reflects the comments listed above.

✓ 7. Section 3.1.2, p. 19

The top row of this table represents symptoms and the bottom row represents treatments. It might be helpful to add a label to the table rows that specifies this.

***DDMT Response to Specific Comment 7:***

Section 3.1.2 on page 19 will be clarified by labeling the top row "Symptoms" and the bottom row "Treatment," and a new page will be issued.

✓ 8. Section 3.8, p. 25

Is the LEL for any of the listed contaminants of concern such that it ought to be listed in this table?

***DDMT Response to Specific Comment 8:***

Table 6.1 on page 43 contains a column entitled "Action Levels." The action levels listed for the row entitled "CGI: MSA 260 or 261" includes the combustible compounds listed in Section 3.8.

✓ 9. Figures 7 and 8, pp. 47 and 48

Is there a reason there is not a figure that provides a schematic diagram for level B decon?

***DDMT Response to Specific Comment 9:***

The decon diagram for Level C is provided in the plan. The Level B decon procedure is the same as for Level C.

✓ 10. Section 7.2.4, p. 51

The entry for "water disposal method" does not seem to fit properly under the heading "Personnel." Please clarify, perhaps with an additional heading on this page to replace one of the headings that is unused.

Mr. Terry Templeton, P.G.  
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***DDMT Response to Specific Comment 10:***

The "water disposal method" located in Section 7.2.4, page 51, will be moved to Section 7.2.2 and inserted as Step 7 of the decontamination procedure, and new pages will be issued.

✓ 11. Section 8.0, p. 51

There is an out of place slash (/) character in front of the first bullet.

***DDMT Response to Specific Comment 11:***

DDMT acknowledges the typo "f" inserted in front of the first bullet.

✓ 12. Section 11.6, p. 55 (also reference p. 53)

Page 53 suggests a continuous blast on the air horn as an example "EMERGENCY, EVACUATE" signal. Section 11.6 actually specifies three short blasts on an air horn as the site evacuation signal. This difference might cause confusion. In addition, unless the three short blasts are repeated several times (blast-blast-blast--pause-- blast-blast-blast--pause-- blast-blast-blast--pause--, etc. ), three short blasts alone may conceivably not be heard by all persons. Please revise the evacuation signals and make references to them internally consistent.

***DDMT Response to Specific Comment 12:***

Section 10.2, page 53, last dash under the third bullet "Continuous air horn-EMERGENCY, EVACUATE" will be changed to the following, and a new page will be issued:

"Three short air horn blasts repeated three times-EMERGENCY, EVACUATE"

Section 11.6, page 55, the following will be inserted after "Three short blast on air horn":

"repeated three times (the SSO will carry an air horn)."

✓ 13. Section 13.1, p. 56

"Tennessee Department of Environment and Conservation" is again referred to as "Tennessee Department of Conservation and Environment." In addition, the phone number is incorrect: the general phone number for the Tennessee Department of Environment and Conservation, Memphis Field Office, is 901-368-7939.

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***DDMT Response to Specific Comment 13:***

Section 13 will be modified by changing "Tennessee Department of Environment and Conservation" to "Tennessee Department of Conservation and Environment." Additionally, the correct phone number, 901-368-7939, will replace the current phone number in the Section. A new page will be issued.

***14. Appendix C***

Because of the different formats for the various MSDS's, please consider inserting labeled tabs to separate the chemicals. Also, why are there only MSDS's for chemicals brought on-site (see Section 3.7) rather than for all the potential contaminants of concern presented in Section 3.8? If significant numbers of MSDS's have to be added, you might consider a separate binder containing only MSDS's.

***DDMT Response to Specific Comment 14:***

MSDSs are not required for hazardous chemicals or hazardous substances that are the focus of remedial or removal action at hazardous waste sites, as outlined in Occupational Safety and Health Administration (OSHA) regulation 29 CFR 1910.1200(b)(6)(ii). The Tennessee Department of Labor (Tennessee OSHA) has identical regulations. Therefore, the MSDSs for the potential contaminants of concern will not be added to the plan.

Please call me with any questions or concerns about these comments.

Sincerely,

CH2M HILL

Harold Roach  
Project Manager

mgm96-CR6/037.doc

cc: Mike Dobbs/DDRE  
Christine Kartman/DDMT  
Julian Savage/CEHNC  
Leslie Shannon/CH2M HILL

Clarence Smith/DDRE  
John Romeo/CEHNC  
Mark Corey/CH2M HILL



## REVIEW COMMENTS

155

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DATE:

April 4, 1996

SHEET

1

OF

PROJECT:

Response to TDEC Comments

PROJECT

NO.

130845. PR. RC

REVIEWER:

Harold Roach, Chris Kantman, Denise Cooper

PHASE:

REFERENCE PAGE/SHEET No.	REVIEW COMMENTS	TYPE	DESIGNER RESPONSE
	General Comments		
	- Please prepare comments only.		
	DDMT will prepare cover letter.		
	Transmitting responses as attachment.		
	Specific Comments		
Page 2	DDMT Response to Specific Comment 3 - We replaced the map in the last version of revisions probably due to addition of Key map or Source: Lau Report 1990. He wants to know why map replaced.		
Page 2	DDMT Response to Specific Comment 4 - See Specific Comment 3 Response above.		



my ~~recommendation~~ (oh fuck!)  
recommendation.

Page 3-77 Last Paragraph:

Even though the potential for exposure to contaminants exists, the health risk assessment conducted by the Agency for Toxic Substance and Disease Registry (ATSDR) concluded that no apparent public health hazards existed for groundwater, surface water, sediment, air and soil. ATSDR came to this conclusion by comparing potentials for exposure, levels of contaminants identified at DDMT, and whether there would be any harmful effects from the these levels. As DDMT continues investigating potential sources of contamination and more information becomes available, ATSDR will update the health risk assessment of DDMT.



*Site's  
response*

## DDMT Response to Specific Comment 5:

No pathways of contamination were identified during the health assessment by ATSDR, so it is unlikely that any employee or residents would be exposed. The facility and neighbors of the Depot have been using a public water supply since the 1940's, before the disposal area had been extensively used. The public water supply is monitored and contamination from the Depot has not been detected. Additionally, the municipal water supply can be treated if necessary, so if contamination from DDMT were to reach the public water supply, it would be treated and would not become a public health problem for drinking water.

Investigation of the ~~possibility of contamination in~~ the drainage ditches ~~have been analyzed~~ through monitoring reports done quarterly of stormwater sampling and these results do not indicate that contaminants are leaving the installation through the storm drains.

*are analyzed*

At this point only fishermen and recreational users of nearby creeks <sup>could</sup> ~~only~~ potentially be affected through the ingestion of animals within these bodies of water; however, the city health department does have these areas posted to prevent fishing.

ME, L.L.C.  
9631 Waldrop Drive  
Huntsville, AL 35803  
(205) 880-1153

DATE: 4/3/96  
TO: Chris / Denise  
FROM: Sue  
SUBJECT: Response  
NUMBER OF PAGES: 2

COMMENTS: I think the key maps are a good  
addition for #3 & 4. Please see response  
for #5 I tried to use ATSDR's words  
for consistency. Sue

If you have any questions concerning this fax please call Sue Estes, at (205) 880-1153.

If you have any questions I  
should be back in afternoon.

Thanks,

## B. Systemic Toxicants

$$\frac{THQ \cdot AT \cdot BW \cdot 365 \text{ day/year}}{1/RfDo \cdot IRw \cdot EF \cdot ED}$$

## 3.6.2 Soil PRGs

I. Residential Scenario: Direct Contact - Soil concentration (mg/kg) =

## A. Carcinogens

$$\frac{TR \cdot AT \cdot 365 \text{ day/year}}{EF \cdot \{[SfO \cdot (IRDadj + IRIadj) \cdot 10E-6] + [SfI \cdot IRAadj \cdot (1/VF + 1/PEF)]\}}$$

## B. Systemic Toxicants

$$\frac{THQ \cdot AT \cdot 365 \text{ day/year}}{EF \cdot \{[1/RfDo \cdot (IRDadj/1E6 + IRIadj/1E6)] + [RfDi \cdot (IRAadj \cdot (1/VF + 1/PEF))]\}}$$

II. Soil to Groundwater Pathway:

$$\text{Soil concentration (mg/kg)} = \text{Groundwater PRG (mg/L)} \cdot Koc \cdot f_{oc}$$

## 3.7 Generic Conceptual Site Model

A conceptual model of DDMT environment will aid in planning the RI activities. This model considers the potential sources of contamination and the pathways for migration and exposure leading to human and environmental receptors in the site vicinity.

The potential sources of contaminants at DDMT can be geographically divided into activities within the Main Installation and activities in Dunn Field. At the Main Installation, potential sources include storage of petroleum, oils, and lubricants (POL); storage of hazardous materials (oxidizers, corrosives, reactives, and solvents); storage of excess property items (DRMO); metal cleaning and painting activities; vehicle maintenance operations; a wood treating operation (dismantled and remediated in 1985); past storage of PCB-containing transformers; and use of herbicides and pesticides around the installation. At Dunn Field, the potential sources include burial sites for past waste materials, burn sites for wastes, and a former pistol range area. ~~There is a potential for~~

contaminants by drinking surface waters or eating other species with contaminated tissues. This pathway includes fishermen that ingest aquatic species taken from surface water bodies in DDMT vicinity. Contaminants have been found in sediments from both the Golf Course Pond and Lake Danielson (OU-3). The plan view (Figure 3-8) illustrates the surface runoff pathways from DDMT toward Cane Creek to the north and Nonconnah Creek to the south.

Potential human receptors in DDMT vicinity include the following:

- Employees of DDMT
- Residents and neighbors of DDMT
- Residents of Memphis
- Fishermen and recreational users ("waders") of surface waters, including Cane Creek and Nonconnah Creek

*Paragraph to be addressed in comment*

Employees of DDMT <sup>could</sup> be exposed primarily to contaminants in surficial soils and surface water through the inhalation of fugitive dust or the dermal absorption of constituents deposited on the skin. Some incidental ingestion of soil deposited on the hands may be expected to occur. Residents and neighbors of DDMT <sup>could</sup> be exposed via surface runoff flowing through drainage swales and channels. ~~Dermal absorption through wading is the primary exposure route and is most likely to occur to children playing in the drainage channels.~~ Residents of Memphis are also potentially exposed if contaminated groundwater in the uppermost aquifer (the Fluvial Aquifer) can find a pathway into the Memphis Sand Aquifer and reach one of the MLGW wellfields. Currently, there are no confirmed pathways for this to occur. Fishermen and recreational users of the nearby creeks are potentially affected by constituents present in the surface runoff through dermal absorption from water contact or ingestion of animal species that bioaccumulate constituents in their body tissues.

### 3.8 Data Gaps

Table 3-12 attempts to summarize the data gaps from previous studies for all OUs (facilitywide data gaps) and OU-specific data gaps that will be addressed in OU-specific FSPs. Data gaps appropriate to be filled during the Screening Sites investigation also are identified.

**FINAL PAGE**

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