

Final Report

HRS Scoring Results for Fort McClellan

Prepared for:

U.S. Army Environmental Center
Installation Restoration Division
Aberdeen Proving Ground
Maryland 21010-5401

Prepared by:

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December 17, 1995

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1. INTRODUCTION

ERM was requested by the U.S. Army Environmental Center to conduct an HRS scoring of the hazardous waste sites at Fort McClellan Army base in Anniston, Alabama to determine if the Post qualified for the National Priorities List (NPL). Another contractor had scored Fort McClellan in 1993 based solely on data from Landfill 3. That score was driven mostly by the Ground Water Pathway and by one surface water sample. Since then, new sampling information has become available for Landfill 3, and for additional sources (sites) as a result of the ongoing RI/FS. Because of the extent of the sampling, six sources can now be evaluated. Furthermore, the sources can be scored for multiple Pathways. The six sources have been scored as a composite, as EPA does, as well as individually.

Careful research was conducted on human targets for each of the sites to ensure that current population values were being used. In particular, some of the population values used in the 1993 scoring seemed high.

Recent ground water samples from the RI/FS have shown no evidence of contamination in the two Weaver production wells. In addition, as part of the ongoing RI/FS, off-base wells will be drilled around Landfill 3 and samples of private drinking water wells will be taken to determine the presence of any contamination of potable water by Landfill 3. These results can be incorporated in the HRS scoring when they become available.

2. SCORING RESULTS

No individual source at Fort McClellan scored higher than 14.5. When the sources were aggregated, the HRS score for the main portion of Fort McClellan was calculated to be 16.15 using PreScore Version 3.0. The 1993 score, based solely on Landfill 3, was 16.08¹. The separate Pelham Range area was not included in this score. Table 1 summarizes the results of the scoring. The complete printout of this score is in Appendix D.

¹A factor of ten error was found in the landfill area calculation used in this score. As a result, based on the data used, the score should have been 29.55. However, the population values used in that scoring were much higher than current research supports. The current scoring uses the most up-to-date and accurate data available to arrive at the score of 16.5.

Table 1: Combined HRS Scoring Results for Fort McClellan

Pathway	Likelihood of Release	Waste Characteristics	Targets	Score
Ground Water	550	32	121	25.81
Surface Water (Overland)				
Drinking Water	550	32	5	1.07
Human Food	550	320	0	0
Environment	550	320	0	0
(GW to SW)				
Drinking Water	550	32	5	1.07
Human Food	550	180	0	0
Environment	550	320	0	0
Soils Resident	550	18	162	19.38
Nearby	50	18	1	0.01
Combined Score				19.4
Air	Not Scored			Not Scored
Final HRS Score				16.15
Note: Wetlands were evaluated as part of this scoring.				

Table 1 illustrates the separate pathways, their individual scores, and the components of each pathway score: Likelihood of Release, Waste Characteristics, and Targets. Of these three scoring categories, the Likelihood of Release scores are the highest possible (550) except for Nearby Soils. The Waste Characteristics scores show a lot of variation, but only the Surface Water and Ground Water Pathway scores contribute substantially to the final Pathway scores. The Target scores are generally low, limiting the effect of all but two of the four exposure Pathways, Ground Water and Soils, to resident populations. The maximum score for any individual Pathway is 100.

The remaining sections of this report summarize and highlight the key information used in the scoring.

3. SITES INCLUDED IN SCORING

Six sources (sites) were included in this HRS scoring of Fort McClellan. These sites were selected based on the availability of data and possible risk. Table 2 lists the sites along with descriptive information on each one and the overall HRS score for each site.

Table 2: Sites Included in Current HRS Scoring

Site	Area/ Volume	Description	Pathways Scored	Site Score
Former Landfill 1	2 acres	Reportedly operated from 1945 to 1947. No disposal records	Ground Water Surface Water	4.73
Former Landfill 2	4 acres	In operation from 1947 until an unknown ending date.	Ground Water Surface Water	4.39
Former Landfill 3	22 acres	In operation from 1946 to 1967	Ground Water Surface Water Soil Exposure	14.5
Area T 5	11.4 acres	Toxic Hazards and Decontamination Training Area. In operation from 1961 - 1973. Training in detection and decontamination of toxic agents was conducted.	Ground Water Surface Water	0.3
Area T 24A	112 cu. yd	Chemical Munitions Disposal Training Area. Decontamination of toxic agent contaminated equipment was practiced.	Ground Water Surface Water	0.0
Area T 38	72 cu. yd	Technical Escort Reaction Area - for training personnel in techniques for toxic hazard elimination due to mishaps during transportation. Some toxic agent storage present.	Ground Water Surface Water Soil Exposure	3.13

The highest scoring individual site was Former Landfill 3 with a score of 14.5. All of the remaining sites scored under 5. Thus, none of the individual sites were eligible for inclusion on the NPL, nor was the Post overall, as shown in Table 1.

These sites are indicated on the attached copy of the USGS Quad Map composite for the main base. More detailed pathway scoring information for each site is contained in Appendix B.

4. *PATHWAYS SCORED*

As illustrated in Table 2, multiple pathways were evaluated for the Fort McClellan composite HRS score. The same pathways were evaluated for each site.

5. *POPULATION ASSUMPTIONS/CALCULATIONS*

The Ground Water Pathway was the highest scoring Pathway. Of the six sites scored, Landfill 3 was the primary Ground Water Pathway pollutant source due to the location of sizeable populations using ground water within the target distance limits. Local water utilities were contacted to determine their current coverages, since it was suspected that they were expanding their services around the Post (e.g., while the town of Weaver's population is only 2,715, its water department serves a population of 6,650).

The populations, and the rationale for their determination are contained in Table 3.

Table 3: Population Values for Ground Water Pathway - Landfill 3

Target Distance Category (Miles)	Population used	Remarks
Between 0 to 1/4	0	These persons receive their drinking water from the City of Anniston. Anniston's water supply comes from wells located outside the 4 mile distance limit.
Between 1/4 to 1/2	0	These persons receive their potable water from the City of Anniston and Calhoun County.
Between 1/2 to 1	0	Same as above. In addition, the Lake Reilly well is located within this target distance. However, Lake Reilly is a recreational area and persons there are considered "transient individuals" for HRS scoring.
Between 1 to 2	2,696	A Weaver production well (Well #2) is located in this target distance. It is one of two production wells supplying a population of 6,650 in the Weaver area. This well is part of a blended system and contributes about 40 percent of the water supplied to these residents. There are also several private drinking water wells located in the vicinity of McMinn Airfield and Cane/Cave Creeks and a well serving a trailer park of about 10 homes.

Target Distance Category (Miles)	Population used	Remarks
Between 2 to 3	4,059	The second of two Weaver production wells (Well #3) is within this target distance, and contributes 60 percent of the water supplied to residents. Some residents located north of and near to Cane Creek are believed to have private drinking water wells (25 homes were counted using a USGS topographic map.)
Between 3 to 4	41	15 homes located along Cane Creek were counted in this Target Distance Limit. These homes are believed to have private wells.
	Total: 6,796	

Groundwater Pathway Targets are likely to be the most affected by exposures from these sites.

6. *WETLANDS INFORMATION*

National Wetlands Inventory maps were used to determine qualifying wetlands. Because no contamination was found in the wetlands, those data had no impact on the scores originally reported in the interim report on Fort McClellan. However, there are a number of wetlands around the Post, some of them very near the sites under evaluation. A discussion of the potential impact of the wetlands contamination is contained in Appendix C.

7. *CONCLUSION*

Based on the data used for this evaluation, Fort McClellan does not qualify as an NPL site since its HRS score of 16.5 is below the qualifying value of 28.5. A similar conclusion was reached by EPA through its own independent evaluation. EPA notified the installation of its results the week after this scoring was completed. A copy of EPA's letter is contained in Appendix A.

8. REFERENCES

Department of Defense. *Defense Priority Model, User's Manual, FY 94 Version*. Jan. 1994.

Environmental Science and Engineering, Inc. *Reassessment of Fort McClellan, Anniston, ALA.*, Report No. 110A, January 1984.

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U.S. Army Toxic And Hazardous Materials Agency. *Installation Assessment Of Fort McClellan, Volumes 1 and 2. Report No. 110*, April 1977.

U.S. EPA. *40 CFR Part 300, Hazard Ranking System*. Federal Register, Volume 55, No. 241, Dec. 14, 1990.

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Appendix A: EPA Letter Regarding HRS Scoring of Fort McClellan



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

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

4WD-FFB

DEC 07 1994

Certified Mail
Return Receipt Requested

Commanding Officer
Fort McClellan
Attn: ATZN-DEH
Fort McClellan, AL 36205-5000

SUBJ: Hazard Ranking System Evaluation

Dear Sir:

The United States Environmental Protection Agency (EPA) has reviewed the information provided by the U.S. Army for Fort McClellan, AL for purposes of evaluating the facility using the Hazard Ranking System (HRS) for possible inclusion on the National Priorities List (NPL). Based upon the latest information provided by the Army, EPA is placing Fort McClellan in the No Further Remedial Action Planned (NFRAP) category for HRS purposes at this time . .

In accordance with the provisions of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) and as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA), and in conformance with the HRS, this site does not warrant further evaluation for inclusion on the NPL. However, if additional information is received that supports listing, a reassessment of the site may occur. If you have questions about this NFRAP decision, please contact Mr. Robert H. Pope at (404)347-3016.

Sincerely yours, *J.D.*

Jon D. Johnston

Jon D. Johnston, Chief
Federal Facilities Branch
Waste Management Division

cc: Dan Cooper, ADEM

Appendix B: Individual HRS Scores for Fort McClellan Sites

Table B-1: Scoring Results for Old Landfill 1 at Fort McClellan

Pathway	Likelihood of Release	Waste Characteristics	Targets	Score
Ground Water	550	18	76	9.12
Surface Water (Overland)				
Drinking Water	550	18	5	0.6
Human Food	550	56	0	0
Environment	550	6	0	0
(GW to SW)				
Drinking Water	550	18	5	0.6
Human Food	550	56	0	0
Environment	550	6	0	0
Surface Water				0.6
Soils				
Resident	550	6	61.5	2.46
Nearby	50	6	1	
Combined Score				2.46
Air	Not Scored			Not Scored
Final HRS Score				4.73

Table B-2: Scoring Results for Old Landfill 2 at Fort McClellan

Pathway	Likelihood of Release	Waste Characteristics	Targets	Score
Ground Water	550	18	73	8.76
Surface Water (Overland)				
Drinking Water	550	18	5	0.6
Human Food	550	56	0	0
Environment	550	180	0	0
(GW to SW)				
Drinking Water	550	6	5	0.2
Human Food	550	18	0	0
Environment	550	10	0	0
Surface Water				0.6
Soils Resident	0	0	0	0
Nearby	0	0	0	0
Combined Score				0
Air	Not Scored			Not Scored
Final HRS Score				4.39

Table B-3: Scoring for Old Landfill 3 for Fort McClellan

Pathway	Likelihood of Release	Waste Characteristics	Targets	Score
Ground Water	550	32	120	25.6
Surface Water (Overland)				
Drinking Water	550	32	5	1.07
Human Food	550	320	0	0
Environment	550	320	0	0
(GW to SW)				
Drinking Water	550	0	5	0
Human Food	550	0	0	0
Environment	550	00	0	0
Surface Water				1.07
Soils				
Resident	550	18	100	12
Nearby	50	18	1.47	0.02
Combined Score				12.02
Air	Not Scored			Not Scored
Final HRS Score				14.5

Table B-4: Score for Area T-5 at Fort McClellan

Pathway	Likelihood of Release	Waste Characteristics	Targets	Score
Ground Water	500	0	49	0
Surface Water (Overland)				
Drinking Water	550	0	5	0
Human Food	550	0	0	0
Environment	550	0	0	0
(GW to SW)				
Drinking Water	500	18	5	0.6
Human Food	500	100	0	0
Environment	500	56	0	0
Surface Water				0.6
Soils				
Resident	0	0	0	0
Nearby	0	0	0	0
Combined Score				
Air	Not Scored			Not Scored
Final HRS Score				0.3

Table B-5: Scoring for Area T-38 at Fort McClellan

Pathway	Likelihood of Release	Waste Characteristics	Targets	Score
Ground Water	550	18	52	6.24
Surface Water (Overland)				
Drinking Water	550	18	5	0.6
Human Food	550	56	0	0
Environment	550	100	0	0
(GW to SW)				
Drinking Water	100	18	5	0.11
Human Food	100	32	0	0
Environment	100	180	0	0
Surface Water				0.11
Soils Resident	550	0	0	0
Nearby	5	0	1	0
Combined Score				0
Air	Not Scored			Not Scored
Final HRS Score				3.13

Note: Site T-24A's score was 0.0. Its table is not included.

Appendix C: Additional Wetlands Discussion

WETLANDS EVALUATION AND THE HAZARD RANKING SYSTEM (HRS) SCORE FOR FORT MCCLELLAN

There are a substantial number of wetlands at Fort McClellan. Since none are currently contaminated, they have little effect on the HRS score. However, if only one sample showed contamination in a wetland, the score for that site, and the aggregate score would exceed 28.5, making Fort McClellan eligible for inclusion on the National Priorities List. The six sources at Fort McClellan comprising the aggregate are Former Landfill 1, Former Landfill 2, Former Landfill 3, Area T 5, Area T 24A, and Area T 38. Several of these sources are located near streams and could potentially impact the water quality. Furthermore, wetland areas exist within the streams. Former Landfill 2 is particularly close to wetlands.

The surface water pathway of HRS evaluates risks to sensitive environments such as wetlands. These risks are based on contaminant concentrations and the hazardous substance migration paths for the sources of concern. The surface water segment of a migration path begins with the Probable Point of Entry (PPE) for contaminants and extends 15 miles downstream to the Target Distance Limit (TDL). Table C-1 below lists concentration levels and sample locations of contaminants found in intermittent streams on Post and the sources believed to be associated with them.

Table C-1: Contaminants Identified in Intermittent Streams at Fort McClellan

Source	Level of Contamination / Sample ID
T 5	Level II / T5-D02
T 24A	Potential (no contamination found)
T 38	Potential (no contamination found)
OLF 3	Level I / OLF-W05 Level II / OLF-D03 Level II / OLF - W03
OLF 2	Level II / LF2-D02
OLF 1	Level II / LF1-W02

Note: Samples collected by SAIC as part of the Remedial Investigation of Fort McClellan.
 A "W" in the sample ID name indicates surface water sample.
 A "D" in the sample ID name indicates a sediment sample.
 OLF-D03 and OLF-W03 were collected from the same general location.
 Level II concentrations are above natural background values.
 Level I concentrations represent values equal to or above Maximum Contamination Levels (MCLs) / bench mark values set by the EPA or state.

A number of different types of wetlands at the Post have been identified by both the U.S. Army Corps of Engineers and by the Fish and Wildlife Service. However, only wetlands identified by the Fish and Wildlife Service on the National Wetlands Inventory (NWI) maps have been evaluated for the HRS scoring of Fort McClellan, since EPA clearly recognizes and classifies NWI categories. While the NWI maps list many wetland types, only those wetlands defined under 40 CFR 230.3 are eligible to be evaluated with the HRS. Also, in accordance with the HRS Guidance Manual, any wetlands associated with intermittent streams were excluded from the evaluation.

Table C-2 lists the HRS recognized wetland types located within the TDL of the six sources being investigated. These wetlands exist along portions of Cane and Cave Creeks.

Table C-2: HRS Wetlands

NWI Designation	Explanation
PFO1A	Palustrine/Forested/Broad -Leaved Deciduous/ Temporarily Flooded
PFO1Ax	Palustrine/Forested/Broad-Leaved Deciduous/Temporarily Flooded/Excavated
PFO1C	Palustrine/Forested/Broad-Leaved Deciduous/Seasonally Flooded
PSS1A	Palustrine/Scrub-Shrub/Broad-Leaved Deciduous/Temporarily Flooded
PEM1Ch	Palustrine/Emergent/Broad-Leaved Deciduous/Seasonally Flooded/Diked
PSS1C	Palustrine/Scrub-Shrub/Broad-Leaved Deciduous/Seasonally Flooded
PUBHh*	Palustrine/Unconsolidated Bottom/Permanently Flooded/Diked

Note: An asterisk marks those NWI designated wetlands which are only eligible as an HRS wetland if emergent hydrophytes are present (e.g., sedges and mare's tail).

The majority of wetlands identified within the TDL are of the PFO1A designation.

R4SBCx is a wetland designation not identified in the table above. This wetland covers a considerable portion of Cave Creek in the vicinity of OLF3 and OLF2. The HRS Guidance Manual incorrectly considers this wetland category eligible as an HRS wetland if emergent

hydrophytes are present. This is incorrect because emergent hydrophytes are not present in this type of wetland according to its definition (i.e., emergent hydrophytes can't be found in a wetland classified as a riverine stream bed).

It may be worth noting that, as mentioned on the NWI maps, there is a chance for error in the identification of wetlands due to the use of aerial photography in defining wetlands. Therefore, it is possible that a detailed, on-the-ground-survey of the area in question might result in a revision of wetland boundaries.

There are a total of 2.48 miles of HRS qualified wetlands downstream of the sources at Fort McClellan. This number was obtained by measuring the perimeter of individual wetlands shown to exist on NWI maps, along the TDL for all six sources. All of the wetlands were subject to potential contamination. However, the length of HRS qualified wetlands could increase as well as the HRS score if a number of the intermittent flowing streams were reclassified as perennially flowing streams. The Surface Water Pathway for Former Landfill 2 provides a good example of this.

Former Landfill 2 is adjacent to Cave Creek. A sediment sample taken about 90 yards downstream from it may have had nickel contamination. It should also be pointed out that because the USGS maps classified the stream as intermittent, it was not evaluated as a wetland and had little impact on the score. However, there are conflicting data from field reconnaissance reports as to whether that portion of Cave Creek is intermittent or perennially flowing. If it truly is perennially flowing, then the NWI wetlands would be scored. Therefore, assuming the contamination can be linked to the landfill, Fort McClellan's HRS score would exceed 28.5 (31.63).

Appendix D: Full HRS Scoring Printout for Fort McClellan

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1. Site Name: Ft. McClellan, Aggregate Score
(as entered in CERCLIS)
2. Site CERCLIS Number: ?
3. Site Reviewer: Kenneth R. Marion
4. Date: 28 October 1994
5. Site Location: Anniston, Calhoun, Alabama
(City/County,State)
6. Congressional District: 3rd.
7. Site Coordinates: Single
Latitude: 33°42'00.0" Longitude: 85°47'00.0"

Site Description

1. Setting: Suburban
2. Current Owner: Federal
3. Current Site Status: Inactive
4. Years of Operation: Inactive Site,from and to dates:
5. How Initially Identified: Unknown
6. Entity Responsible for Waste Generation:
 - Federal Facility
 - Military
7. Site Activities/Waste Deposition:
 - Other -
 - Municipal Landfill

Waste Description

8. Wastes Deposited or Detected Onsite:

- Other -
- Organic Chemicals
- Solvents
- Pesticides/Herbicides
- Metals
- Municipal Waste

Response Actions

9. Response/Removal Actions:

- Site Access Has Been Restricted

RCRA Information

10. For All Active Facilities, RCRA Site Status:

- Not Applicable

Demographic Information

11. Workers Present Onsite: No

12. Distance to Nearest Non-Worker Individual: > 10 Feet - 1/4 Mile

13. Residential Population Within 1 Mile: 1660.0

14. Residential Population Within 4 Miles: 14781.0

Water Use Information

15. Local Drinking Water Supply Source:

- Ground Water (within 4 mile distance limit)

16. Total Population Served by Local Drinking Water Supply Source: 6850.0

17. Drinking Water Supply System Type for Local Drinking
Water Supply Sources:

- Municipal (Services over 25 People)

18. Surface Water Adjacent to/Draining Site:

- Stream

1. Site Name: Ft. McClellan. Aggregate Score
(as entered in CERCLIS)
2. Site CERCLIS Number: ?
3. Site Reviewer: Kenneth R. Marion
4. Date: 28 October 1994
5. Site Location: Anniston, Calhoun, Alabama
(City/County,State)
6. Congressional District: 3rd.
7. Site Coordinates: Single

Latitude: 33°42'00.0" Longitude: 85°47'00.0"

	Score
Ground Water Migration Pathway Score (Sgw)	25.81
Surface Water Migration Pathway Score (Ssw)	1.07
Soil Exposure Pathway Score (Ss)	19.4
Air Migration Pathway Score (Sa)	0
Site Score	16.15

EPA uses the terms "facility," "site," and "release" interchangeably. The term "facility" is broadly defined in CERCLA to include any area where hazardous substances have "come to be located" (CERCLA Section 109(9)), and the listing process is not intended to define or reflect boundaries of such facilities or releases. Site names, and references to specific parcels or properties, are provided for general identification purposes only. Knowledge regarding the extent of sites will be refined as more information is developed during the RI/FS and even during implementation of the remedy.

GROUND WATER MIGRATION PATHWAY Factor Categories & Factors	Maximum Value	Value Assigned	
Aquifer: Surficial			
Aquifer: Surficial			
1. Observed Release	550	550	
2. Potential to release			
2a. Contaminant	10	10	
2b. Net Precipitation	10	10	
2c. Depth to Aquifer	5	5	
2d. Travel Time	35	35	
2e. Potential to Release [[lines 2a(2b+2c+2d)]]	500	500	
3. Likelihood of Release	550	550	550
Waste Characteristics			
4. Toxicity/Mobility	*	1.00E+04	
5. Hazardous Waste Quantity	*	100	
6. Waste Characteristics	100	32	32
Targets			
7. Nearest Well	50	1.80E+01	
8. Population			
8a. Level I Concentrations	**	0.00E+00	
8b. Level II Concentrations	**	0.00E+00	
8c. Potential Contamination	**	9.80E+01	
8d. Population (lines 8a+8b+8c)	**	9.80E+01	
9. Resources	5	5.00E+00	
10. Wellhead Protection Area	20	0.00E+00	
11. Targets (lines 7+8d+9+10)	**	1.21E+02	1.21E+02
12. Targets (including overlaying aquifers)	**	1.21E+02	
13. Aquifer Score	100	25.81	25.81
GROUND WATER MIGRATION PATHWAY SCORE (Sgw)	100	25.81	25.81

* Maximum value applies to waste characteristics category.

** Maximum value not applicable.

PREscore 3.0 - PRESCORE.TCL File 07/25/94 PAGE: 3
 SURFACE WATER OVERLAND/FLOOD MIGRATION COMPONENT SCORESHEET
 Ft. McClellan, Aggregate Score - 11/08 94

COMPONENT Factor Categories & Factors	Maximum Value	Value Assigned	
DRINKING WATER THREAT			
Likelihood of Release			
1. Observed Release	550	550	
2. Potential to Release by Overland Flow			
2a. Contaminant	10	10	
2b. Runoff	25	25	
2c. Distance to Surface Water	25	25	
[lines 2a(2b+2c)]	500	500	
3. Potential to Release by Flood			
3a. Contaminant (Flood)	10	10	
3b. Flood Frequency	50	25	
3c. Potential to Release by Flood	500	250	
(lines 3a x 3b)			
4. Potential to Release (lines 2d+3c)	500	500	
5. Likelihood of Release	550	550	550
Waste Characteristics			
6. Toxicity/Persistence	*	1.00E+04	
7. Hazardous Waste Quantity	*	100	
8. Waste Characteristics	100	32	32
Targets			
9. Nearest Intake	50	0.00E+00	
10. Population			
10a. Level I Concentrations	**	0.00E+00	
10b. Level II Concentrations	**	0.00E+00	
10c. Potential Contamination	**	0.00E+00	
10d. Population (lines 10a+10b+10c)	**	0.00E+00	
11. Resources	5	5.00E+00	
12. Targets (lines 9+10d+11)	**	5.00E+00	5.00E+00
13. DRINKING WATER THREAT SCORE	100	1.07	1.07

*Maximum value applies to waste characteristics category.

**Maximum value not applicable.

PREscore 3.0 - PRESCORE.TCL File 07/25/94 PAGE: 4
 SURFACE WATER OVERLAND/FLOOD MIGRATION COMPONENT SCORESHEET
 Ft. McClellan, Aggregate Score - 11/08/94

SURFACE WATER OVERLAND/FLOOD MIGRATION COMPONENT	Maximum Value	Value Assigned	
Factor Categories & Factors			
HUMAN FOOD CHAIN THREAT			
Likelihood of Release			
14. Likelihood of Release (same as line 5)	550	550	550
Waste Characteristics			
15. Toxicity/Persistence/Bioaccumulation	*	5.00E+08	
16. Hazardous Waste Quantity	*	100	
17. Waste Characteristics	1000	320	320
Targets			
18. Food Chain Individual	50	0.00E+00	
19. Population			
19a. Level I Concentrations	**	0.00E+00	
19b. Level II Concentrations	**	0.00E+00	
19c. Pot. Human Food Chain Contamination	**	0.00E+00	
19d. Population (lines 19a+19b+19c)	**	0.00E+00	
20. Targets (lines 18+19d)	**	0.00E+00	0.00E+00
21. HUMAN FOOD CHAIN THREAT SCORE	100	0	0

*Maximum value applies to waste characteristics category.

**Maximum value not applicable.

PREscore 3.0 - PRESCORE.TCL File 07/25/94 PAGE: 5
 SURFACE WATER OVERLAND/FLOOD MIGRATION COMPONENT SCORESHEET
 Ft. McClellan, Aggregate Score - 11/08/94

SURFACE WATER OVERLAND/FLOOD MIGRATION COMPONENT	Maximum Value	Value Assigned	
Factor Categories & Factors			
ENVIRONMENTAL THREAT			
Likelihood of Release			
22. Likelihood of Release (same as line 5)	550	550	
Waste Characteristics			
23. Ecosystem Toxicity/Persistence/Bioacc.	*	5.00E+08	
24. Hazardous Waste Quantity	*	100	
25. Waste Characteristics	1000	320	320
Targets			
26. Sensitive Environments			
26a. Level I Concentrations	**	0.00E+00	
26b. Level II Concentrations	**	0.00E+00	
26c. Potential Contamination	**	0.00E+00	
26d. Sensitive Environments	**	0.00E+00	
(lines 26a+26b+26c)			
27. Targets (line 26d)	**	0.00E+00	0.00E+00
28. ENVIRONMENTAL THREAT SCORE	60	0	0
29. WATERSHED SCORE	100	1.07	1.07
30. SW: OVERLAND/FLOOD COMPONENT SCORE (Sof)	100	1.07	1.07

*Maximum value applies to waste characteristics category.

**Maximum value not applied.

PREscore 3.0 - PRESCORE.TCL File 07/25/94 PAGE: 6
GROUND WATER TO SURFACE WATER MIGRATION COMPONENT SCORESHEET
Ft. McClellan, Aggregate Score - 11/08/94

GROUND WATER TO SURFACE WATER MIGRATION COMPONENT	Maximum Value	Value Assigned	
Factor Categories & Factors			
DRINKING WATER THREAT			
Likelihood of Release to Aquifer			
Aquifer: Surficial			
1. Observed Release	550	550	550
2. Potential to Release			
2a. Contaminant	10	10	
2b. Net Precipitation	10	10	
2c. Depth to Aquifer	5	5	
2d. Travel Time	35	35	
2e. Potential to Release [lines 2a(2b+2c+2d)]	500	500	
3. Likelihood of Release	550	550	
Waste Characteristics			
4. Toxicity/Mobility/Persistence	*	1.00E+04	
5. Hazardous Waste Quantity	*	100	
6. Waste Characteristics	100	32	32
Targets			
7. Nearest Intake	50	0.00E+00	
8. Population			
8a. Level I Concentrations	**	0.00E+00	
8b. Level II Concentrations	**	0.00E+00	
8c. Potential Contamination	**	0.00E+00	
8d. Population (lines 8a+8b+8c)	**	0.00E+00	
9. Resources	5	5.00E+00	
10. Targets (lines 7+8d+9)	**	5.00E+00	5.00E+00
11. DRINKING WATER THREAT SCORE	100	1.07	1.07

*Maximum value applies to waste characteristics category.

**Maximum value not applicable.

PREscore 3.0 - PRESCORE.TCL File 07/25/94 PAGE: 7
 GROUND WATER TO SURFACE WATER MIGRATION COMPONENT SCORESHEET
 Ft. McClellan, Aggregate Score - 11/08/94

GROUND WATER TO SURFACE WATER MIGRATION COMPONENT	Maximum Value	Value Assigned	
Factor Categories & Factors			
HUMAN FOOD CHAIN THREAT			
Likelihood of Release			
12. Likelihood of Release (same as line 3)	550	550	550
Waste Characteristics			
13. Toxicity/Mobility/Persistence	*	5.00E+07	
14. Hazardous Waste Quantity	*	100	
15. Waste Characteristics	1000	180	180
Targets			
16. Food Chain Individual	50	0.00E+00	
17. Population			
17a. Level I Concentrations	**	0.00E+00	
17b. Level II Concentrations	**	0.00E+00	
17c. Pot. Human Food Chain Contamination	**	0.00E+00	
17d. Population (lines 17a+17b+17c)	**	0.00E+00	
18. Targets (lines 16+17d)	**	0.00E+00	0.00E+00
19. HUMAN FOOD CHAIN THREAT SCORE	100	0	0

*Maximum value applies to waste characteristics category.

**Maximum value not applicable.

PREscore 3.0 - PRESCORE.TCL File 07/25/94 PAGE: 8
 GROUND WATER TO SURFACE WATER MIGRATION COMPONENT SCORESHEET
 Ft. McClellan, Aggregate Score - 11/08/94

GROUND WATER TO SURFACE WATER MIGRATION COMPONENT (CONTD) Factor Categories & Factors ENVIRONMENTAL THREAT	Maximum Value	Value Assigned	
Likelihood of Release			
20. Likelihood of Release (same as line 3)	550	550	550
Waste Characteristics			
21. Ecosystem Tox/Mobility/Persis./Bioacc.	*	5.00E+08	
22. Hazardous Waste Quantity	*	100	
23. Waste Characteristics	1000	320	320
Targets			
24. Sensitive Environments			
24a. Level I Concentrations	**	0.00E+00	
24b. Level II Concentrations	**	0.00E+00	
24c. Potential Contamination	**	0.00E+00	
24d. Sensitive Environments (lines 24a+24b+24c)	**	0.00E+00	
25. Targets (line 24d)	**	0.00E+00	0.00E+00
26. ENVIRONMENTAL THREAT SCORE	60	0	0
27. WATERSHED SCORE	100	10.7	10.7
28. SW: GW to SW COMPONENT SCORE (Sgs)	100	1.07	1.07

*Maximum value applies to waste characteristics category.

**Maximum value not applicable.

SOIL EXPOSURE PATHWAY Factor Categories & Factors	Maximum Value	Value Assigned	
RESIDENT POPULATION THREAT			
Likelihood of Exposure			
1. Likelihood of Exposure	550	550	550
Waste Characteristics			
2. Toxicity	*	1.00E+04	
3. Hazardous Waste Quantity	*	10	
4. Waste Characteristics	100	18	18
Targets			
5. Resident Individual	50	4.50E+01	
6. Resident Population			
6a. Level I Concentrations	**	0.00E+00	
6b. Level II Concentrations	**	1.65E+01	
6c. Resident Population (lines 6a+6b)	**	1.65E+01	
7. Workers	15	0.00E+00	
8. Resources	5	0.00E+00	
9. Terrestrial Sensitive Environments	***	1.00E+02	
10. Targets (lines 5+6c+7+8+9)	**	1.62E+02	1.62E+02
11. RESIDENT POPULATION THREAT SCORE	**	1.60E+06	1.60E+06

*Maximum value applies to waste characteristics category.

**Maximum value not applicable.

***No specific maximum value applies, see HRS for details.

SOIL EXPOSURE PATHWAY Factor Categories & Factors	Maximum Value	Assigned Value	
NEARBY POPULATION THREAT			
Likelihood of Exposure			
12. Attractiveness/Accessibility	100	5.00E+00	
13. Area of Contamination	100	1.00E+02	
14. Likelihood of Exposure	500	5.00E+01	
Waste Characteristics			
15. Toxicity	*	1.00E+04	
16. Hazardous Waste Quantity	*	10	
17. Waste Characteristics	100	18	
Targets			
18. Nearby Individual	1	0.00E+00	
19. Population Within 1 Mile	**	2.00E+00	
20. Targets (lines 18+19)	**	2.00E+00	2.00E+00
21. NEARBY POPULATION THREAT SCORE	**	1.80E+03	1.80E+03
SOIL EXPOSURE PATHWAY SCORE (Ss)	100	19.4	19.4

*Maximum value applies to waste characteristics category.

**Maximum value not applicable.

AIR MIGRATION PATHWAY Factor Categories & Factors	Maximum Value	Value Assigned	
Likelihood of Release			
1. Observed Release	550	0	
2. Potential to Release			
2a. Gas Potential to Release	500	0	
2b. Particulate Potential to Release	500	0	
2c. Potential to Release	500	0	
3. Likelihood to Release	550	0	0
Waste Characteristics			
4. Toxicity/Mobility	*	0.00E+00	
5. Hazardous Waste Quantity	*	0	
6. Waste Characteristics	100	0	0
Targets			
7. Nearest Individual	50	0.00E+00	
8. Population			
8a. Level I Concentrations	**	0.00E+00	
8b. Level II Cocentrations	**	0.00E+00	
8c. Potential Contamination	**	0.00E+00	
8d. Population (lines 8a+8b+8c)	**	0.00E+00	
9. Resources	5	0.00E+00	
10. Sensitive Environments		0.00E+00	
10a. Actual Contamination	***	0.00E+00	
10b. Potential Contamination	***	0.00E+00	
10c. Sens. Environments (lines 10a+10b)	***	0.00E+00	
11. Targets (lines 7+8d+9+10c)	**	0.00E+00	0.00E+00
AIR MIGRATION PATHWAY SCORE (Ss)	100	0.00E+00	0.00E+00

*Maximum values applies to waste characteristics category.

**Maximum value not applicable.

***No Specific maximum value applies, see HRS for details.

WASTE QUANTITY

Ft. McClellan, Aggregate Score - 11/08/94

1. WASTESTREAM QUANTITY SUMMARY TABLE, SOURCE: Former Landfill #3

a. Wastestream ID		
b. Hazardous Constituent Quantity (C) (lbs.)	0	
c. Data Complete?		NO
d. Hazardous Waste Stream Quantity (W) (lbs)	0	
e. Data Complete?		NO
f. Wastestream Quantity Value (W/5,000)	0.00E+00	

2. SOURCE HAZARDOUS WASTE QUANTITY FACTOR TABLE

a. Source ID	Former Landfill #3	
b. Source Type	Landfill	
c. Secondary Source Type	NA	
d. Source Vol. (yd3/gal) / Source Area (ft2)	0	958320
e. Source Volume/Area Value	2.82E+02	
Value (sum of 1b)	0.00E+00	
g. Data Complete?	NO	
Value (sume of 1f)	0.00E+00	
i. Data Complete?	NO	
Value (2e, 2f, or 2h)	2.82E+02	

Source Hazardous Substances	Depth (feet)	Liquid	Concent.	Units
Benz(a)anthracene	< 2	NO	1.6E-01	ppm
Chlordane	< 2	NO	5.7E-01	ppm
Chrysene	< 2	NO	8.3E-02	ppm
Phenanthrene	< 2	NO	8.7E-02	ppm
Pyrene	< 2	NO	2.1E-01	ppm

Documentation for Source Type:

"Former Landfill #3 was the Post sanitary landfill in operation between 1946 and 1967."

Reference: 12, p. 1-33.

Documentation for Source Area:

The landfill is 22 acres in area.

Reference: 12, p. 1-33.

WASTE QUANTITY

Ft. McClellan, Aggregate Score - 11/08/94

1. WASTESTREAM QUANTITY SUMMARY TABLE, SOURCE: Former Landfill #1

a. Wastestream ID		
b. Hazardous Constituent Quantity (C) (lbs.)	0	
c. Data Complete?		NO
d. Hazardous Waste Stream Quantity (W) (lbs)	0	
e. Data Complete?		NO
f. Wastestream Quantity Value (W/5,000)	0.00E+00	

2. SOURCE HAZARDOUS WASTE QUANTITY FACTOR TABLE

a. Source ID	Former Landfill #1	
b. Source Type	Landfill	
c. Secondary Source Type	NA	
d. Source Vol. (yd3/gal) / Source Area (ft2)	0	87120
e. Source Volume/Area Value	2.56E+01	
Value (sum of 1b)	0.00E+00	
g. Data Complete?	NO	
(WSQ) Value (sume of 1f)	0.00E+00	
i. Data Complete?	NO	
Value (2e, 2f, or 2h)	2.56E+01	

Documentation for Source Type:

"Former Landfill #1 reportedly operated as the Post sanitary landfill between 1945 and 1947.

Reference: 12, p. 1-31.

Documentation for Source Area:

The landfill site covers approximately 2 densely wooded acres.

Reference: 12, p. 1-31.

1. WASTESTREAM QUANTITY SUMMARY TABLE, SOURCE: Former Landfill #2

a. Wastestream ID		
b. Hazardous Constituent Quantity (C) (lbs.)	0	
c. Data Complete?		NO
d. Hazardous Waste Stream Quantity (W) (lbs)	0	
e. Data Complete?		NO
f. Wastestream Quantity Value (W/5,000)	0.00E+00	

2. SOURCE HAZARDOUS WASTE QUANTITY FACTOR TABLE

a. Source ID	Former Landfill #2	
b. Source Type	Landfill	
c. Secondary Source Type	NA	
d. Source Vol. (yd3/gal) / Source Area (ft2)	0	174240
e. Source Volume/Area Value	5.12E+01	
(HCQ) Value (sum of 1b)	0.00E+00	
g. Data Complete?	NO	
(WSQ) Value (sume of 1f)	0.00E+00	
i. Data Complete?	NO	
Value (2e, 2f, or 2h)	5.12E+01	

Documentation for Source Type:

"Former Landfill #3 was used as the Post sanitary landfill after the closure of Former Landfill #1 and was active from 1947 to an unknown date."

Reference: 12, p. 1-33.

Documentation for Source Area:

The landfill covers approximately 4 acres.

Reference: 12, p. 1-33.

1. WASTESTREAM QUANTITY SUMMARY TABLE, SOURCE: Area T-38

a. Wastestream ID		
b. Hazardous Constituent Quantity (C) (lbs.)	0	
c. Data Complete?		NO
d. Hazardous Waste Stream Quantity (W) (lbs)	0	
e. Data Complete?		NO
f. Wastestream Quantity Value (W/5,000)	0.00E+00	

WASTE QUANTITY

Ft. McClellan, Aggregate Score - 11/08/94

2. SOURCE HAZARDOUS WASTE QUANTITY FACTOR TABLE

a. Source ID	Area T-38	
b. Source Type	Contaminated Soil	
c. Secondary Source Type	NA	
d. Source Vol. (yd3/gal) / Source Area (ft2)	72	0
e. Source Volume/Area Value	2.88E-02	
Value (sum of 1b)	0.00E+00	
g. Data Complete?	NO	
Value (sume of 1f)	0.00E+00	
i. Data Complete?	NO	
Value (2e, 2f, or 2h)	2.88E-02	

Source Hazardous Substances	Depth (feet)	Liquid	Concent.	Units
Aldrin	< 2	NO	5.5E-03	ppm
Iron	< 2	NO	1.5E+05	ppm

Documentation for Source Type:

"Area T-38 (Technical Escort Reaction Area) is located on the Main Post west of Reservoir Hill." The site was used for training escort personnel in techniques of eliminating toxic hazards in case of an accidental spill during transport. Toxic agents and munitions were stored in this area. These included GB, VX, and HD. Extensive decontamination was conducted on this site for reported spills and contaminated training aids.

A concrete decontamination pad was used at this site. There is an unconfirmed report of the burial of a drum of mustard in the southern portion of the site. A former disposal pit area was reportedly used to dispose of decontaminants and other hazardous wastes at the site.

Reference: 12, p. 1-23.

Documentation for Source Volume:

The area of the disposal pit is approximately 10 ft by 10 ft by 20
ft deep

Reference: 12, 1-23, and 3-50.

Documentation for Source Area:

Reference:

1. WASTESTREAM QUANTITY SUMMARY TABLE, SOURCE: Area T-5

a. Wastestream ID		
b. Hazardous Constituent Quantity (C) (lbs.)	0	
c. Data Complete?		NO
d. Hazardous Waste Stream Quantity (W) (lbs)	0	
e. Data Complete?		NO
f. Wastestream Quantity Value (W/5,000)	0.00E+00	

WASTE QUANTITY

Ft. McClellan, Aggregate Score - 11/08/94

2. SOURCE HAZARDOUS WASTE QUANTITY FACTOR TABLE

a. Source ID	Area T-5	
b. Source Type	Contaminated Soil	
c. Secondary Source Type	NA	
d. Source Vol. (yd ³ /gal) / Source Area (ft ²)	0	496584
e. Source Volume/Area Value	1.46E+01	
Value (sum of 1b)	0.00E+00	
g. Data Complete?	NO	
(WSQ) Value (sume of 1f)	0.00E+00	
i. Data Complete?	NO	
Value (2e, 2f, or 2h)	1.46E+01	

Documentation for Source Type:

Area T-5 is a former Toxic Hazards Detection and Decontamination Training Area. This site was used to train students in the methods of detecting and decontaminating toxic agents, including HD, GB, and VX. The quantities of agent used for training purposes ranged from 20 to 40 milliliters per exercise. Site 2 may have been the location of a 110 gallon HD spill. Available evidence indicates that the contaminated soil was chemically decontaminated and removed.

Reference: 12, p. 1-17.

Documentation for Source Area:

11.4 acre wooded site

Reference: 12, p. 1-17.

1. WASTESTREAM QUANTITY SUMMARY TABLE, SOURCE: Area T-24A

a. Wastestream ID		
b. Hazardous Constituent Quantity (C) (lbs.)	0	
c. Data Complete?		NO
d. Hazardous Waste Stream Quantity (W) (lbs)	0	
e. Data Complete?		NO
f. Wastestream Quantity Value (W/5,000)	0.00E+00	

2. SOURCE HAZARDOUS WASTE QUANTITY FACTOR TABLE

a. Source ID	Area T-24A	
b. Source Type	Surface Impoundment	
c. Secondary Source Type	Burn Pit	
d. Source Vol. (yd ³ /gal) / Source Area (ft ²)	112	0
e. Source Volume/Area Value	4.48E+01	
(HCQ) Value (sum of 1b)	0.00E+00	
g. Data Complete?	NO	
(WSQ) Value (sume of 1f)	0.00E+00	
i. Data Complete?	NO	
Value (2e, 2f, or 2h)	4.48E+01	

Documentation for Source Type:

Area T-24A was a Chemical Munitions Disposal Training Area. This site was used for munitions disposal training with CG, BZ, GB, and HD. Two square burning pits, each 16 feet on a side, were used for training exercises and were enclosed by a fenced area measuring 40 by 80 meters. The depths of the pits are unknown, however, standard operating procedures recommended a depth of 6 feet.

Reference: 12, p. 1-20.

Documentation for Source Volume:

Two square burning pits, each 16 feet on a side and approximately 6 feet deep.

Reference: 12, p. 1-20.

WASTE QUANTITY

Ft. McClellan, Aggregate Score - 11/08/94

1. WASTESTREAM QUANTITY SUMMARY TABLE, SOURCE:

a. Wastestream ID		
b. Hazardous Constituent Quantity (C) (lbs.)	0	
c. Data Complete?		NO
d. Hazardous Waste Stream Quantity (W) (lbs)	0	
e. Data Complete?		NO
f. Wastestream Quantity Value (W/5,000)	0.00E+00	

WASTE QUANTITY

Ft. McClellan, Aggregate Score - 11/08/94

3. SITE HAZARDOUS WASTE QUANTITY SUMMARY

No. Source ID	Migration Pathways	Vol. or Area Value (2e)	Constituent or Wastestream Value (2f,2h)	Hazardous Waste Qty. Value (2k)
1 Former Landfill #3	GW-SW-SE	2.82E+02	0.00E+00	2.82E+02
2 Former Landfill #1	GW-SW	2.56E+01	0.00E+00	2.56E+01
3 Former Landfill #2	GW-SW	5.12E+01	0.00E+00	5.12E+01
4 Area T-38	GW-SW-SE		2.88E-02	0.00E+00
5 Area T-5	GW-SW	1.46E+01	0.00E+00	1.46E+01
6 Area T-24A	GW-SW	4.48E+01	0.00E+00	4.48E+01
7			0.00E+00	0.00E+00

Documentation for Net Precipitation:

Data obtained from Climatological Data Annual Summary, Alabama,
1990, Vol. 96, No. 13, NOAA.

Reference: 12, Table 1-4, p. 1-40.

Aquifer: Surficial

Type of Aquifer: Non Karst

Overlying Aquifer: 0

Interconnected with: 0

Documentation for Surficial Aquifer:

Bedrock underlying Former Landfill #3 is mapped as Cambrian Rome Formation and consists of interlayered red to green shale and siltstone, and red to light gray sandstone. The Rome Formation attains an aggregate thickness of approximately 1,000 feet in Calhoun County. The flow direction for ground water at this site appears to be to the west and northwest under a hydraulic gradient of approximately .07 ft./ft.

Bedrock beneath Former Landfill #2 consists of Ordovician Limestone with thin beds of black shale. It attains an aggregate thickness of 230 ft. in Calhoun County. The ground water flow direction is south to southeast toward Cave Creek. The calculated hydraulic gradient is .018 ft/ft.

Former Landfill #1, T-38, T-24a, and T-5 all appear to be underlain by the Weisner Formation, locally a sandstone and quartzite with thin-bedded shale.

Reference: 12, and 5, See Figure of geologic formations-Main Post

OBSERVED RELEASE

No.	Well ID	Well Type	Distance (miles)	Level of Contamination
4	T38-G06	Monitoring Well	0.000	Level I
5	T38-G07	Monitoring Well	0.000	Level I
6	LF1-G01	Monitoring Well	0.000	Level I
8	LF2-G02	Monitoring Well	0.000	Level I
9	LF2-G03	Monitoring Well	0.000	Level I
10	OLF-G02	Monitoring Well	0.000	Level I
11	OLF-G03	Monitoring Well	0.000	Level I

Documentation for Well Weaver Well No. 3:

See the comment for Weaver Well #2.

Reference: 12, p. 4-5.

Documentation for Well Lake Reilly Well:

SAIC estimated that 200 persons were supplied by this well.
However, no population was assigned to this well as it is used for
recreation and the users can be considered transient.

Reference: 12, p. 4-14.

Documentation for Well LF1-G01:

alpha-BHC was also discovered at at conc. of .0028 ug/L

Reference: 17

Documentation for Well LF2-G01:

This well appears to be upgradient of the landfill.
Methylisobutylketone conc. is 5.4 ug/L.

Reference: 17

PREscore 3.0 - PRESCORE.TCL File 07/25/94 PAGE: 37
GROUND WATER PATHWAY LIKELIHOOD OF RELEASE Surficial AQUIFER
Ft. McClellan, Aggregate Score - 11/08/94

12	OLF-G04	Monitoring Well	0.000	Level I
13	OLF-G07	Monitoring Well	0.000	Level I
14	OLF-G08	Monitoring Well	0.000	Level I

Well						
No.	Hazardous Substance	Concent.	MCL	Cancer	RFD	Units
4	Bis (2-ethylhexyl) phthalate	3.4E+01	0.0E+00	2.5E+00	7.0E+02	ppb
4	Dichloroethylene, trans-1,2-	9.3E+01	1.0E+02	0.0E+00	7.0E+02	ppb
4	Tetrachloroethane, 1,1,2,2-	2.0E+03	0.0E+00	1.8E-01	0.0E+00	ppb
4	Tetrachloroethene	1.3E+01	5.0E+00	6.7E-01	3.5E+02	ppb
4	Trichloroethylene	3.0E+02	5.0E+00	3.2E+00	0.0E+00	ppb
5	Carbon Tetrachloride	4.1E+01	5.0E+00	2.7E-01	2.5E+01	ppb
5	Chloroform	9.2E+00	0.0E+00	5.7E+00	3.5E+02	ppb
5	Dinitrobenzene, 1,3-	5.6E-01	0.0E+00	0.0E+00	3.5E+00	ppb
6	Bis (2-ethylhexyl) phthalate	2.1E+01	0.0E+00	2.5E+00	7.0E+02	ppb
6	Dinitrobenzene, 1,3-	5.7E-01	0.0E+00	0.0E+00	3.5E+00	ppb
8	Aldrin	1.7E-02	0.0E+00	2.1E-03	1.1E+00	ppb
9	Arsenic	3.2E+00	5.0E+01	2.0E-02	1.1E+01	ppb
10	Acetone	2.2E+01	0.0E+00	0.0E+00	3.5E+03	ppb
10	DDD	7.8E-03	0.0E+00	1.5E-01	0.0E+00	ppb
10	Lead	1.7E+02	1.5E+01	0.0E+00	0.0E+00	ppb
11	Tetrachloroethene	1.3E+00	5.0E+00	6.7E-01	3.5E+02	ppb
12	DDE	1.9E-02	0.0E+00	1.0E-01	0.0E+00	ppb
12	Dichlorobenzene, 1,2-	2.3E+00	6.0E+02	0.0E+00	3.2E+03	ppb
12	Endosulfan (I or II)	1.6E-02	0.0E+00	0.0E+00	2.1E+02	ppb
12	Endrin	8.1E-02	2.0E+00	0.0E+00	1.1E+01	ppb
12	Heptachlor	7.9E-02	4.0E-01	7.8E-03	1.8E+01	ppb
12	Nitroglycerine	1.7E+00	0.0E+00	0.0E+00	0.0E+00	ppb
13	Pentachlorophenol	3.3E+00	1.0E+00	2.9E-01	1.1E+03	ppb
13	Tetrachloroethane, 1,1,2,2-	3.3E+01	0.0E+00	1.8E-01	0.0E+00	ppb
13	Trichloroethylene	1.3E+01	5.0E+00	3.2E+00	0.0E+00	ppb
14	Trinitrobenzene, 1,3,5-	3.3E+00	0.0E+00	0.0E+00	1.8E+00	ppb

=====

Observed Release Factor 550

Documentation for Well Weaver Well No. 2:

Weaver Wells #2 and #3 serve a total population of 6650. Well #3 supplies 60 percent of the water used in the blended system. Therefore, Well #2 supplies roughly 2660 persons and Well #3 supplies approximately 3990 persons.

Reference: 12, p. 4-5.

Documentation for Well Trailer Park Well :

The water clerk at Weaver said that a well located near the McMinn Airfield serves about 10 residences at a trailer park.

Reference:

Documentation for Well Choccolocco Well:

The well at Choccolocco Corridor is used for Bivouac Activities. This well is located upgradient to the local ground water flow direction. The exact location of this well is not clear.

Reference: 1, Vol. 1, p. I-18.

POTENTIAL TO RELEASE

Containment

Containment Factor 10

Net Precipitation

Net Precipitation Factor 10

Depth to Aquifer

A. Depth of Hazardous Substances 63.60 feet

Documentation for Depth of Hazardous Substances:

Well OLF-7 at Former Landfill #3 was the deepest well found to have contamination. The depth of this well is 63.63 feet. This depth is used to represent the lowest known point at which a hazardous substance was discovered in the area of the landfill.

Reference: 13, Appendix I, p. 1-140.

B. Depth to Aquifer from Surface 13.90 feet

Documentation for Depth to Aquifer from Surface :

The depth to aquifer was determined from a table of ground water elevations at the former landfill area. Well OLF-2 had the shallowest water table measurement of 13.91 ft. BLS.

Reference: 12, Table 3-1, p. 3-4.

C. Depth to Aquifer (B - A) 0.00 feet

Depth to Aquifer Factor 5

Travel Time

Are All Layers Karst? NO

Documentation for Karst Layers:

Karst conditions are not mentioned in any of the available geologic references covering Fort McClellan.

Reference:

Thickness of Layer(s) with Lowest Conductivity 3.90 feet

Documentation for Thickness of Layers with Lowest Conductivity:

Assuming the depth to the base of the trenches in the landfill is 10 ft. (pure guess) and the depth to the top of the aquifer is 13.91 feet (depth to water in well OLF-2), then the thickness of the layer is 3.91 feet.

Reference: 12, Table 3-1, p. 3-4.

Hydraulic Conductivity (cm/sec) 1.0E-07

Documentation for Hydraulic Conductivity:

From Table 3-6 in the HRS Summary Report it assigns hydraulic conductivities for clay and silt geologic materials of .00000001 cm/sec and .000001 cm/sec. respectively. Based on the description for the soils present at the former landfill on page 3-2 in the SAIC SI Report (silt and clay soils) the hydraulic conductivity chosen was the average of those shown above - .0000001 cm/sec.

Reference: 9

Travel Time Factor

35

=====

Potential to Release Factor 500

Aquifer:

Type of Aquifer: Non Karst

Overlaying Aquifer: 0

Interconnected with: 0

OBSERVED RELEASE

No.	Well ID	Well Type	Distance (miles)	Level of Contamination
- N/A and/or data not specified				

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Observed Release Factor	0
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POTENTIAL TO RELEASE

Containment

Containment Factor 10

Net Precipitation

Net Precipitation Factor 10

Depth to Aquifer

A. Depth of Hazardous Substances 0.00 feet

B. Depth to Aquifer from Surface 0.00 feet

C. Depth to Aquifer (B - A) 0.00 feet

Depth to Aquifer Factor 5

Travel Time

Are All Layers Karst? NO

Thickness of Layer(s) with Lowest Conductivity 0.00 feet

Hydraulic Conductivity (cm/sec) 0.0E-00

Travel Time Factor 35

=====

Potential to Release Factor 500

PREscore 3.0 - PRESCORE.TCL File 07/25/94 PAGE: 45
 GROUND WATER PATHWAY WASTE CHARACTERISTICS
 Ft. McClellan, Aggregate Score - 11/08/94

Source: 1 Former Landfill #3

Source Hazardous Waste Quantity Value: 281.86

Hazardous Substance	Toxicity Value	Mobility Value	Toxicity/Mobility Value	
Benz(a)anthracene	1000	2.00E-09	2.00E-06	
Chlordane		10000	2.00E-07	2.00E-03
Chrysene		100	2.00E-09	2.00E-07
Phenanthrene		100	2.00E-05	2.00E-03
Pyrene		100	2.00E-09	2.00E-07

PREscore 3.0 - PRESCORE.TCL File 07/25/94 PAGE: 46
GROUND WATER PATHWAY WASTE CHARACTERISTICS
Ft. McClellan, Aggregate Score - 11/08/94

Source: 2 Former Landfill #1

Source Hazardous Waste Quantity Value: 25.62

Hazardous Substance	Toxicity Value	Mobility Value	Toxicity/Mobility Value
Pyrene	100	2.00E-09	2.00E-07

Source: 3 Former Landfill #2

Source Hazardous Waste Quantity Value: 51.25

Hazardous Substance	Toxicity Value	Mobility Value	Toxicity/ Mobility Value
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PREscore 3.0 - PRESCORE.TCL File 07/25/94 PAGE: 48
GROUND WATER PATHWAY WASTE CHARACTERISTICS
Ft. McClellan, Aggregate Score - 11/08/94

Source: 4 Area T-38

Source Hazardous Waste Quantity Value: 0.03

Hazardous Substance	Toxicity Value	Mobility Value	Toxicity/ Mobility Value
Aldrin	10000	2.00E-07	2.00E-03
Iron	100	1.00E-02	1.00E+00

Source: 5 Area T-5

Source Hazardous Waste Quantity Value: 14.61

Hazardous Substance	Toxicity Value	Mobility Value	Toxicity/ Mobility Value
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Source: 6 Area T-24A

Source Hazardous Waste Quantity Value: 44.80

Hazardous Substance	Toxicity Value	Mobility Value	Toxicity/ Mobility Value
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PREscore 3.0 - PRESCORE.TCL File 07/25/94 PAGE: 51
GROUND WATER PATHWAY WASTE CHARACTERISTICS
Ft. McClellan, Aggregate Score - 11/08/94

Hazardous Substances Found in an Observed Release

Well No.	Observed Release Hazardous Substance	Toxicity Value	Mobility Value	Toxicity/Mobility Value
4	Bis (2-ethylhexyl) phthalate	100	1.00E+00	1.00E+02
4	Dichloroethylene, trans-1,2-	100	1.00E+00	1.00E+02
4	Tetrachloroethane, 1,1,2,2-	10	1.00E+00	1.00E+01
4	Tetrachloroethene	100	1.00E+00	1.00E+02
4	Trichloroethylene	10	1.00E+00	1.00E+01
5	Carbon Tetrachloride	1000	1.00E+00	1.00E+03
5	Chloroform	100	1.00E+00	1.00E+02
5	Dinitrobenzene, 1,3-	10000	1.00E+00	1.00E+04
6	Bis (2-ethylhexyl) phthalate	100	1.00E+00	1.00E+02
6	Dinitrobenzene, 1,3-	10000	1.00E+00	1.00E+04
8	Aldrin	10000	1.00E+00	1.00E+04
9	Arsenic	10000	1.00E+00	1.00E+04
10	Acetone	10	1.00E+00	1.00E+01
10	DDD	100	1.00E+00	1.00E+02
10	Lead	10000	1.00E+00	1.00E+04
11	Tetrachloroethene	100	1.00E+00	1.00E+02
12	DDE	100	1.00E+00	1.00E+02
12	Dichlorobenzene, 1,2-	10	1.00E+00	1.00E+01
12	Endosulfan (I or II)	100	1.00E+00	1.00E+02
12	Endrin	10000	1.00E+00	1.00E+04
12	Heptachlor	1000	1.00E+00	1.00E+03
12	Nitroglycerine	10	1.00E+00	1.00E+01
13	Pentachlorophenol	100	1.00E+00	1.00E+02
13	Tetrachloroethane, 1,1,2,2-	10	1.00E+00	1.00E+01
13	Trichloroethylene	10	1.00E+00	1.00E+01
14	Trinitrobenzene, 1,3,5-	10000	1.00E+00	1.00E+04

Toxicity/Mobility Value from Source Hazardous Substances:	2.00E-03
Toxicity/Mobility Value from Observed Release Hazardous Substances:	1.00E+04
Toxicity/Mobility Factor:	1.00E+04
Sum of Source Hazardous Waste Quantity Values:	4.18E+02
Hazardous Waste Quantity Factor:	100
Waste Characteristics Factor Category:	32

PREscore 3.0 - PRESCORE.TCL File 07/25/94 PAGE: 53
GROUND WATER PATHWAY TARGETS FOR AQUIFER Surficial
Ft. McClellan, Aggregate Score - 11/08/94

Population by Well

No.	Well ID	Sample Type	Distance (miles)	Level of Contamination Population
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- N/A and/or data not specified

Level I Population Factor: 0.00

Level II Population Factor: 0.00

Potential Contamination by Distance Category

Distance Category (miles)	Population	Value
> 0 to 1/4	0.0	0.00E+00
> 1/4 to 1/2	0.0	0.00E+00
> 1/2 to 1	0.0	0.00E+00
> 1 to 2	2696.0	2.94E+01
> 2 to 3	4059.0	6.78E+01
> 3 to 4	41.0	4.00E-01

Potential Contamination Factor: 98.000

Documentation for Target Population > 0 to 1/4 mile Distance Category:

There were 15 homes within the 1/4 mile target distance as counted from the Fort McClellan Training Map, 1:25,000 Scale, 1986. The average number of persons per household for this part of the country is 2.75, according to the 1990 U.S. Census Bureau study. This translates into a total population of 41 persons living adjacent to the main Post. However, these persons are not included in "house count" because they reportedly receive their water from wells located outside the applicable target distance of 4 miles. These persons receive their drinking water from the City of Anniston water supply. Anniston obtains its potable water from a spring located approximately 5 miles southwest of the main Post and a reservoir located south of the town of Choccolocco.

Reference: 3

Documentation for Target Population > 1/4 to 1/2 mile Distance Category:

44 homes were counted in the 1/4 to 1/2 mile target distance category for the former landfill, using the Fort McClellan Training Map. The numbers of homes counted excluded homes located east of highway 21 and those homes near Sherman Heights, as these other two localities are served by water supply companies with water sources outside of the 4 mile limit for scoring purposes. Only populations served by the two Weaver wells and private wells located near McMinn Airfield and Cane Creek are being evaluated for scoring. The estimated 200 persons thought to be served by the Lake Reilly Well (200 persons is the number chosen in the SAIC, "Site Investigation Report") were not counted because these persons are considered transient.

Reference: 3,12

Documentation for Target Population > 1/2 to 1 mile Distance Category:

Reference:

Documentation for Target Population > 1 to 2 miles Distance Category:

There are several private wells located in the vicinity of Cane Creek and McMinn Airfield.

Reference:

Documentation for Target Population > 2 to 3 miles Distance Category:

There are about 25 homes located in the 2 to 3 mile TDL in the vicinity of Cane Creek. These homes are thought to have private wells.

Reference:

Documentation for Target Population > 3 to 4 miles Distance Category:

15 homes are found in the 3 to 4 mile TDL in the vicinity of Cane Creek. These homes are believed to be using private wells.

Reference:

Nearest Well

Level of Contamination: Potential

Distance in miles: 0.40

Nearest Well Factor: 1.80E+01

Documentation for Nearest Well:

The drinking water well at Lake Reilly is about 2,370 feet from Well OLF-3 at Former Landfill #3. This is less than 1/2 mile away from the former landfill. No information is provided on this well, but it is assumed to be screened in the surficial aquifer.

Reference: 12, pp. 4-5 and 4-12.

Resources

Resource Use: YES

Resource Factor: 5.00E+00

Documentation for Resources:

Lake Reilly is located within one half mile from the former landfill. Lake Reilly is used for recreation purposes. Lake Reilly is a spring fed lake.

Reference: 12, pp. 4-5 and 4-12.

Wellhead Protection Area

No wellhead protection area

Wellhead Protection Area Factor: 0.00E+00

Documentation for Wellhead Protection Area:

No wellhead protection areas exist within the target distance limit.

Reference:

PREscore 3.0 - PRESCORE.TCL File 07/25/94 PAGE: 58
GROUND WATER PATHWAY TARGETS FOR AQUIFER
Ft. McClellan, Aggregate Score - 11/08/94

Population by Well

No.	Well ID	Sample Type	Distance (miles)	Level of Contamination	Population
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- N/A and/or data not specified

Level I Population Factor: 0.00

Level II Population Factor: 0.00

Potential Contamination by Distance Category

Distance Category (miles)	Population	Value
> 0 to 1/4	0.0	0.00E+00
> 1/4 to 1/2	0.0	0.00E+00
> 1/2 to 1	0.0	0.00E+00
> 1 to 2	0.0	0.00E+00
> 2 to 3	0.0	0.00E+00
> 3 to 4	0.0	0.00E+00

Potential Contamination Factor: 0.000

Nearest Well

Level of Contamination: N.A.

Nearest Well Factor: 0.00E+00

Resources

Resource Use: NO

Resource Factor: 0.00E+00

Wellhead Protection Area

No wellhead protection area

Wellhead Protection Area Factor: 0.00E+00

PREscore 3.0 - PRESCORE.TCL File 07/25/94 PAGE: 60
SURFACE WATER PATHWAY SEGMENT SUMMARY
Ft. McClellan, Aggregate Score - 11/08/94

No. Segment ID	Segment Type	Water Type	Start Point (mi)	End Point (mi)	Average Flow (cfs)
1	River	Fresh	0.00	0.00	0

OBSERVED RELEASE

No.	Sample ID	Sample Type	Distance (miles)	Level of Contamination		
				DW	HFC	Env
1	T5-D02	Sediment	0.040	Level II	Level II	Level II
2	LF1-D02	Sediment	0.040	Level II	Potential	Level II
3	LF1-W02	Aqueous	0.040	Level II	Potential	Level II
4	LF2-D02	Sediment	0.050	Level II	Potential	Level II
5	OLF-W05	Aqueous	0.075	Level I	Potential	Level I
6	OLF-W03	Aqueous	0.075	Level II	Level II	Level II
7	OLF-D03	Sediment	0.075	Level II	Potential	Level II

Sample No.	Hazardous Substance	Concent.	Units
1	Arsenic	1.2E+01	ppb
1	Di-n-butyl phthalate	4.1E+00	ppb
1	Lead	2.5E+02	ppb
2	Arsenic	1.4E+01	ppb
3	Chlorobenzene	1.9E+00	ppb
4	Nickel	6.8E+00	ppb
5	Lead	7.1E+01	ppb
6	Lindane	4.1E-03	ppb
7	Aluminum	6.1E+04	ppb
7	Lead	2.3E+01	ppb

=====
 Observed Release Factor 550

Documentation for Observed Release, Sample T5-D02:

Creek sediment samples at Area T-5

Reference: 17

Documentation for Observed Release, Sample LF1-D02:

Creek sediment samples at Former Landfill #1

Reference: 17

Documentation for Observed Release, Sample LF1-W02:

Surface water sample from creek adjacent to former landfill #1.

Reference: 17

Documentation for Observed Release, Sample LF2-D02:

Sediment sample from creek south of Former Landfill #2.

Reference: 17

Documentation for Observed Release, Sample OLF-W05:

The location of this sampling point for Former Landfill #3 is not known by the reviewer..

Reference: 17

PREscore 3.0 - PRESCORE.TCL File 07/25/94 PAGE: 63
SURFACE WATER PATHWAY OVERLAND FLOW/FLOOD COMPONENT LIKELIHOOD OF RELEASE
Ft. McClellan, Aggregate Score - 11/08/94

Documentation for Observed Release, Sample OLF-W03:

This sample point location is not known by the reviewer.

Reference: 17

Documentation for Observed Release, Sample OLF-D03:

The aluminum concentration may be from natural conditions.

Reference: 17

POTENTIAL TO RELEASE

Potential to Release by Overland Flow

Containment

No.	Source ID	HWQ Value	Containment Value
1	Former Landfill #3	2.82E+02	10
2	Former Landfill #1	2.56E+01	10
3	Former Landfill #2	5.12E+01	10
4	Area T-38	2.88E-02	10
5	Area T-5	1.46E+01	10
6	Area T-24A	4.48E+01	10

=====
 Containment Factor: 10

Documentation for Overland Flow Containment, Source Former Landfill #3:

Tributaries to Cave Creek are on or adjacent to the landfill. The landfill was operated using the trench and fill method. No containment features present.

Reference: 5, Figure ES-1b, Property Information Composite

Documentation for Overland Flow Containment, Source Area T-38:

Reference:

Documentation for Overland Flow Containment, Source Area T-5:

Lead contamination was discovered in sediment samples collected immediately downgradient from the site.

Reference: 17,

Documentation for Overland Flow Containment, Source Area T-24A:

site is not contained

Reference:

Distance to Surface Water

Distance to Surface Water: 0.0 feet

Distance to Surface Water Factor: 25

Documentation for Distance to Surface Water:

Intermittent streams exist on the fringes of Former Landfill #3 and a stream runs through the eastern boundary of Area T-5.

Reference: 12, Figure 1-15, p. 1-35, and ref. 1, p. 4-12.

Runoff

A. Drainage Area: 1001.0 acres

Documentation for Drainage Area:

Western portion of Installation.

Reference:

B. 2-year, 24-hour Rainfall: 4.0 inches

Documentation for Rainfall:

Guess based on approximate 2-year, 6-hour rainfall.

Reference: 14

C. Soil Group: D
Fine-textured soils with very low infiltration rates

Documentation for Soil Group:

The soils found in the area of the former landfill area of the Rarden-Montevallo-Lehew association. The soil types found here consist of silts and clays. Also see driller's logs for more information on soil types.

Reference: 5, figure 2-4a, and Ref. 12, p. 1-51

Runoff Factor: 25

=====
Potential to Release by Overland Flow Factor: 500

Potential to Release by Flood

No.	Source ID	HWQ Value	Flood Containment Value	Flood Frequency Value	Potential to Release by Flood
1	Former Landfill #3	2.82E+02	10	25	250
3	Former Landfill #2	5.12E+01	10	25	250

=====
 Potential to Release by Flood Factor: 250

Documentation for Flood Containment, Source Former Landfill #3:

There is no containment at the former landfill to guard against flooding.

Reference:

Documentation for Flood Frequency, Source Former Landfill #3:

According to Figure 2-3a, Site Plan with Flood Plains Main Post and Choccolocco Corridor, the former landfill is located within the 100 year flood plain.

Reference: 5

Documentation for Flood Frequency, Source Former Landfill #1:

The landfill is adjacent to the floodplain of an unnamed intermittent stream.

Reference: 12, p. 1-31.

Documentation for Flood Frequency, Source Former Landfill #2:

The landfill is located in the floodplain of Cave Creek.

Reference: 12, p. 1-33.

Documentation for Flood Frequency, Source Area T-38:

site not in a floodplain

Reference: 5, Figure 2-3a, p. 2-9.

Documentation for Flood Frequency, Source Area T-5:

site is not in a floodplain

Reference: 5, Figure 2-3a, Floodplains

Documentation for Flood Frequency, Source Area T-24A:

site is not located in a floodplain

Reference: 5, Figure 2-3a, p. 2-9.

PREscore 3.0 - PRESCORE.TCL File 07/25/94 PAGE: 70
 SW PATHWAY: OVERLAND/FLOOD DRINKING WATER THREAT WASTE CHARACTERISTICS
 Ft. McClellan, Aggregate Score - 11/08/94

Source: 1 Former Landfill #3

Source Hazardous Waste Quantity Value: 281.86

Hazardous Substance	Toxicity	Persistence	Toxicity/	
	Value	Value	Persistence Value	
Benz(a)anthracene	1000	1.00E+00	1.00E+03	
Chlordane	10000	1.00E+00	1.00E+04	
Chrysene	0	1.00E+00	0.00E+00	
Phenanthrene	0	4.00E-01	0.00E+00	
Pyrene	100	1.00E+00	1.00E+02	

PREscore 3.0 - PRESCORE.TCL File 07/25/94 PAGE: 71
SW PATHWAY: OVERLAND/FLOOD DRINKING WATER THREAT WASTE CHARACTERISTICS
Ft. McClellan, Aggregate Score - 11/08/94

Source: 2 Former Landfill #1

Source Hazardous Waste Quantity Value: 25.62

Hazardous Substance	Toxicity Value	Persistence Value	Toxicity/Persistence Value
Pyrene	100	1.00E+00	1.00E+02

Source: 3 Former Landfill #2

Source Hazardous Waste Quantity Value: 51.25

Hazardous Substance	Toxicity Value	Persistence Value	Toxicity/ Persistence Value
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PREscore 3.0 - PRESCORE.TCL File 07/25/94 PAGE: 73
SW PATHWAY: OVERLAND/FLOOD DRINKING WATER THREAT WASTE CHARACTERISTICS
Ft. McClellan, Aggregate Score - 11/08/94

Source: 4 Area T-38

Source Hazardous Waste Quantity Value: 0.03

Hazardous Substance	Toxicity Value	Persistence Value	Toxicity/Persistence Value
Aldrin	10000	1.00E+00	1.00E+04
Iron	0	1.00E+00	0.00E+00

PREscore 3.0 - PRESCORE.TCL File 07/25/94 PAGE: 74
SW PATHWAY: OVERLAND/FLOOD DRINKING WATER THREAT WASTE CHARACTERISTICS
Ft. McClellan, Aggregate Score - 11/08/94

Source: 5 Area T-5

Source Hazardous Waste Quantity Value: 14.61

Hazardous Substance	Toxicity Value	Persistence Value	Toxicity/ Persistence Value
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Source: 6 Area T-24A

Source Hazardous Waste Quantity Value: 44.80

Hazardous Substance	Toxicity Value	Persistence Value	Toxicity/ Persistence Value
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Hazardous Substances Found in an Observed Release

Sample No.	Observed Release Hazardous Substance	Toxicity Value	Persistence Value	Toxicity/Persistence Value
1	Arsenic	10000	1.00E+00	1.00E+04
1	Di-n-butyl phthalate	10	1.00E+00	1.00E+01
1	Lead	10000	1.00E+00	1.00E+04
2	Arsenic	10000	1.00E+00	1.00E+04
3	Chlorobenzene	100	7.00E-04	7.00E-02
4	Nickel	100	1.00E+00	1.00E+02
5	Lead	10000	1.00E+00	1.00E+04
6	Lindane	10000	1.00E+00	1.00E+04
7	Aluminum	100	1.00E+00	1.00E+02
7	Lead	10000	1.00E+00	1.00E+04

Toxicity/Persistence Value from Source Hazardous Substances:	1.00E+04
Toxicity/Persistence Value from Observed Release Hazardous Substances:	1.00E+04
Toxicity/Persistence Factor:	1.00E+04
Sum of Source Hazardous Waste Quantity Values:	4.18E+02
Hazardous Waste Quantity Factor:	100
Waste Characteristics Factor Category:	32

Level I Concentrations

Sample ID: OLF-W05
Sample Medium: Aqueous
Location: 0.07 miles

Hazardous Substance	Hazardous Substance Concentration	DW MCL Benchmark Concentration	Units
Lead	7.1E+01	1.5E+01	ppb

Documentation for OLF-W05:

The location of this sampling point for Former Landfill #3 is not known by the reviewer..

Reference: 17

Level II Concentrations

Sample ID: T5-D02
 Sample Medium: Sediment
 Location: 0.04 miles

Hazardous Substance	Hazardous Substance Concentration	DW MCL Benchmark Concentration	Units
Arsenic	1.2E+01	N.A.	ppb
Di-n-butyl phthalate	4.1E+00	N.A.	ppb
Lead	2.5E+02	N.A.	ppb

Documentation for T5-D02:

Creek sediment samples at Area T-5

Reference: 17

Sample ID: LF1-D02
 Sample Medium: Sediment
 Location: 0.04 miles

Hazardous Substance	Hazardous Substance Concentration	DW MCL Benchmark Concentration	Units
Arsenic	1.4E+01	N.A.	ppb

Documentation for LF1-D02:

Creek sediment samples at Former Landfill #1

Reference: 17

Sample ID: LF1-W02
 Sample Medium: Aqueous

PREscore 3.0 - PRESCORE.TCL File 07/25/94 PAGE: 80
 SW PATHWAY: OVERLAND FLOW/FLOOD COMPONENT DRINKING WATER THREAT TARGETS
 Ft. McClellan, Aggregate Score - 11/08/94

Location: 0.04 miles

Hazardous Substance	Hazardous Substance Concentration	DW MCL Benchmark Concentration	Units
Chlorobenzene	1.9E+00	0.0E+00	ppb

Documentation for LF1-W02:

Surface water sample from creek adjacent to former landfill #1.

Reference: 17

Sample ID: LF2-D02
 Sample Medium: Sediment
 Location: 0.05 miles

Hazardous Substance	Hazardous Substance Concentration	DW MCL Benchmark Concentration	Units
Nickel	6.8E+00	N.A.	ppb

Documentation for LF2-D02:

Sediment sample from creek south of Former Landfill #2.

Reference: 17

Sample ID: OLF-W03
 Sample Medium: Aqueous
 Location: 0.07 miles

Hazardous Substance	Hazardous Substance Concentration	DW MCL Benchmark Concentration	Units
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Lindane 4.1E-03 2.0E-01 ppb

Documentation for OLF-W03:

This sample point location is not known by the reviewer.

Reference: 17

Sample ID: OLF-D03
 Sample Medium: Sediment
 Location: 0.07 miles

Hazardous Substance	Hazardous Substance Concentration	DW MCL Benchmark Concentration	Units
Aluminum	6.1E+04	N.A.	ppb
Lead	2.3E+01	N.A.	ppb

Documentation for OLF-D03:

The aluminum concentration may be from natural conditions.

Reference: 17

Most Distant Level I Sample

Sample ID: OLF-W05
 Distance from the Probable Point of Entry: 0.07 miles

Documentation for OLF-W05:

The location of this sampling point for Former Landfill #3 is not known by the reviewer..

Reference: 17

Most Distant Level II Sample

Sample ID: OLF-W03

Distance from the Probable Point of Entry: 0.07 miles

Documentation for OLF-W03:

This sample point location is not known by the reviewer.

Reference: 17

Level I Concentrations

Intake	Distance Along the In-water Segment from the Probable Point of Entry (miles)	Population
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- N/A and/or data not specified

=====

Population Served by Level I Intakes: 0.0

Level I Population Factor: 0.00E+00

Level II Concentrations

Intake	Distance Along the In-water Segment from the Probable Point of Entry (miles)	Population
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- N/A and/or data not specified

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Population Served by Level II Intakes: 0.0

Level II Population Factor: 0.00E+00

Potential Contamination

Intake ID	Average Annual Flow (cfs)	Population Served
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- N/A and/or data not specified

Type of Surface Water Body	Total Population	Dilution-Weighted Population
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- N/A and/or data not specified

=====

Dilution-Weighted Population Served
 by Potentially Contaminated Intakes: 0.0

Potential Contamination Factor: 0.0

Nearest Intake

Location of Nearest Drinking Water Intake: N.A.

Nearest Intake Factor: 0.00

Resources

Resource Use: YES

Resource Value: 5.00E+00

Documentation for Resources:

According to the water clerk for the town of Weaver, cattle drink from Cane Creek.

Reference:

Source: 1 Former Landfill #3

Source Hazardous Waste Quantity Value: 281.86

Hazardous Substance	Toxicity Value	Persistence Value	Bio-Value	Persistence/accum. Value	Toxicity/Bioaccum. Value
Acetone	10	7.00E-04		5.00E-01	3.50E-03
Aldrin	10000	1.00E+00		5.00E+01	5.00E+05
Arsenic	10000	1.00E+00		5.00E+02	5.00E+06
Benz(a)anthracene	1000	1.00E+00		5.00E+04	5.00E+07
Bis (2-ethylhexyl) phthalate	100	1.00E+00		5.00E+04	5.00E+06
Carbon Tetrachloride	1000	4.00E-01	5.00E+01	2.00E+04	
Chlordane	10000	1.00E+00		5.00E+04	5.00E+08
Chloroform	100	4.00E-01		5.00E+00	2.00E+02
Chrysene	0	1.00E+00		5.00E+02	0.00E+00
DDD	100	1.00E+00		5.00E+04	5.00E+06
DDE	100	1.00E+00		5.00E+04	5.00E+06
Dichlorobenzene, 1,2-	10	4.00E-01		5.00E+01	2.00E+02
Dichloroethylene, trans-1,2-	100	4.00E-01		5.00E+01	2.00E+03
Dinitrobenzene, 1,3-	10000	1.00E+00	5.00E+00	5.00E+04	
Endosulfan (I or II)	100	1.00E+00	5.00E+03	5.00E+05	
Endrin	10000	1.00E+00		5.00E+03	5.00E+07
Heptachlor	1000	4.00E-01		5.00E+03	2.00E+06
Lead	10000	1.00E+00		5.00E+03	5.00E+07
Nitroglycerine	10	1.00E+00		5.00E+01	5.00E+02
Pentachlorophenol	100	1.00E+00		5.00E+02	5.00E+04
Phenanthrene	0	4.00E-01		5.00E+01	0.00E+00
Pyrene	100	1.00E+00		5.00E+01	5.00E+03
Tetrachloroethane, 1,1,2,2-	10	4.00E-01		5.00E+00	2.00E+01
Tetrachloroethene	100	4.00E-01		5.00E+01	2.00E+03
Trichloroethylene	10	4.00E-01		5.00E+01	2.00E+02
Trinitrobenzene, 1,3,5-	10000	4.00E-01		5.00E+00	2.00E+04

Source: 2 Former Landfill #1

Source Hazardous Waste Quantity Value: 25.62

Hazardous Substance	Toxicity Value	Persistence Value	Bio-accum. Value	Toxicity/Persistence/Bioaccum. Value
Pyrene	100	1.00E+00	5.00E+01	5.00E+03

Source: 3 Former Landfill #2

Source Hazardous Waste Quantity Value: 51.25

Hazardous Substance	Toxicity Value	Persistence Value	Bio-accum. Value	Toxicity/Persistence/Bioaccum. Value
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PREscore 3.0 - PRESCORE.TCL File 07/25/94 PAGE: 89
SW PATHWAY: OVERLAND/FLOOD HUMAN FOOD CHAIN THREAT WASTE CHARACTERISTICS
Ft. McClellan, Aggregate Score - 11/08/94

Source: 4 Area T-38

Source Hazardous Waste Quantity Value: 0.03

Hazardous Substance	Toxicity Value	Persistence Value	Bio-accum. Value	Toxicity/Persistence/Bioaccum. Value
Aldrin	10000	1.00E+00	5.00E+01	5.00E+05
Iron	0	1.00E+00	5.00E-01	0.00E+00

Source: 5 Area T-5

Source Hazardous Waste Quantity Value: 14.61

Hazardous Substance	Toxicity Value	Persistence Value	Bio-accum. Value	Toxicity/Persistence/Bioaccum. Value
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Source: 6 Area T-24A

Source Hazardous Waste Quantity Value: 44.80

Hazardous Substance	Toxicity Value	Persistence Value	Bio- accum. Value	Toxicity/ Persistence/ Bioaccum. Value
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Hazardous Substances Found in an Observed Release

Sample No.	Observed Release Hazardous Substance	Toxicity Value	Persistence Value	Bio-accum. Value	Toxicity/Persistence/Bioaccum. Value
1	Arsenic	10000	1.00E+00	5.00E+02	5.00E+06
1	Di-n-butyl phthalate	10	1.00E+00	5.00E+03	5.00E+04
1	Lead	10000	1.00E+00	5.00E+03	5.00E+07
2	Arsenic	10000	1.00E+00	5.00E+02	5.00E+06
3	Chlorobenzene	100 7.00E-04	5.00E+01	3.50E+00	
4	Nickel	100	1.00E+00	5.00E+02	5.00E+04
5	Lead	10000	1.00E+00	5.00E+03	5.00E+07
6	Lindane	10000	1.00E+00	5.00E+02	5.00E+06
7	Aluminum	100	1.00E+00	5.00E+01	5.00E+03
7	Lead	10000	1.00E+00	5.00E+03	5.00E+07

Toxicity/Persistence/Bioaccumulation Value from Source Hazardous Substances:	5.00E+08
Toxicity/Persistence/Bioaccumulation Value from Observed Release Hazardous Substances:	5.00E+07
Toxicity/Persistence/Bioaccumulation Factor:	5.00E+08
Sum of Source Hazardous Waste Quantity Values:	4.18E+02
Hazardous Waste Quantity Factor:	100
Waste Characteristics Factor Category:	320

Level I Concentrations

- N/A and/or data not specified

Level II Concentrations

Sample ID: T5-D02
 Sample Medium: Sediment
 Location: 0.04 miles

Hazardous Substance	Hazardous Substance Concentration	FDAAL Benchmark Concentration	Units
Arsenic	1.2E+01	N.A.	ppb
Di-n-butyl phthalate	4.1E+00	N.A.	ppb
Lead	2.5E+02	N.A.	ppb

Documentation for T5-D02:

Creek sediment samples at Area T-5

Reference: 17

Sample ID: OLF-W03
 Sample Medium: Aqueous
 Location: 0.07 miles

Hazardous Substance	Hazardous Substance Concentration	FDAAL Benchmark Concentration	Units
Lindane	4.1E-03	N.A.	ppb

Documentation for OLF-W03:

This sample point location is not known by the reviewer.

Reference: 17

Most Distant Level I Sample

- N/A and/or data not specified

Most Distant Level II Sample

Sample ID: OLF-W03

Distance from the Probable Point of Entry: 0.07 miles

Documentation for OLF-W03:

This sample point location is not known by the reviewer.

Reference: 17

Level I Concentrations

Fishery	Annual Production (pounds)	Human Food Chain Population Value
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- N/A and/or data not specified

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Sum of Human Food Chain Population Values: 0.00E+00

Level I Concentrations Factor: 0.00E+00

SW PATHWAY: OVERLAND FLOW/FLOOD COMPONENT HUMAN FOOD CHAIN THREAT TARGETS

Ft. McClellan, Aggregate Score - 11/08/94

Level II Concentrations

Fishery	Annual Production (pounds)	Human Food Chain Population Value
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- N/A and/or data not specified

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Sum of Human Food Chain Population Values: 0.00E+00

Level II Concentrations Factor: 0.00E+00

Potential Contamination

	Annual Production (pounds)	Type of Surface Water Body	Average Annual Flow (cfs)	Pop. Value (Pi)	Dilution Weight (Di)	Pi*Di
Fishery						

- N/A and/or data not specified

=====

Sum of (Pi*Di): 0.00E+00

Potential Human Food Chain Contamination Factor: 0.00E+00

Food Chain Individual

Location of Nearest Fishery: N.A.

Food Chain Individual Factor: 0.00

Source: 1 Former Landfill #3

Source Hazardous Waste Quantity Value: 281.86

Hazardous Substance	Eco-	Persistence toxicity Value	Bio- toxicity Value	Ecotoxicity/	
				Persistence/ accum. Value	Bioaccum. Value
Acetone		100	7.00E-04	5.00E-01	3.50E-02
Aldrin		10000	1.00E+00	5.00E+04	5.00E+08
Arsenic		10	1.00E+00	5.00E+01	5.00E+02
Benz(a)anthracene		10000	1.00E+00	5.00E+04	5.00E+08
Bis (2-ethylhexyl) phthalate		1000	1.00E+00	5.00E+04	5.00E+07
Carbon Tetrachloride	100	4.00E-01	5.00E+01	2.00E+03	
Chlordane		10000	1.00E+00	5.00E+04	5.00E+08
Chloroform		10	4.00E-01	5.00E+00	2.00E+01
Chrysene		1000	1.00E+00	5.00E+03	5.00E+06
DDD		10000	1.00E+00	5.00E+04	5.00E+08
DDE		10000	1.00E+00	5.00E+04	5.00E+08
Dichlorobenzene, 1,2-		100	4.00E-01	5.00E+01	2.00E+03
Dichloroethylene, trans-1,2-		1	4.00E-01	5.00E+01	2.00E+01
Dinitrobenzene, 1,3-	100	1.00E+00	5.00E+00	5.00E+02	
Endosulfan (I or II)	10000	1.00E+00	5.00E+03	5.00E+07	
Endrin		10000	1.00E+00	5.00E+04	5.00E+08
Heptachlor		10000	4.00E-01	5.00E+04	2.00E+08
Lead		1000	1.00E+00	5.00E+03	5.00E+06
Nitroglycerine		100	1.00E+00	5.00E+01	5.00E+03
Pentachlorophenol		100	1.00E+00	5.00E+03	5.00E+05
Phenanthrene		1000	4.00E-01	5.00E+03	2.00E+06
Pyrene		0	1.00E+00	5.00E+01	0.00E+00
Tetrachloroethane, 1,1,2,2-		100	4.00E-01	5.00E+00	2.00E+02
Tetrachloroethene		100	4.00E-01	5.00E+01	2.00E+03
Trichloroethylene		100	4.00E-01	5.00E+01	2.00E+03
Trinitrobenzene, 1,3,5-		100	4.00E-01	5.00E+00	2.00E+02

Source: 2 Former Landfill #1

Source Hazardous Waste Quantity Value: 25.62

Hazardous Substance	Eco- toxicity Value	Persistence Value	Bio- accum. Value	Ecotoxicity/ Persistence/ Bioaccum. Value
Pyrene	0	1.00E+00	5.00E+01	0.00E+00

Source: 3 Former Landfill #2

Source Hazardous Waste Quantity Value: 51.25

Hazardous Substance	Eco- toxicity Value	Persistence Value	Bio- accum. Value	Ecotoxicity/ Persistence/ Bioaccum. Value
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Source: 4 Area T-38

Source Hazardous Waste Quantity Value: 0.03

Hazardous Substance	Eco-toxicity Value	Persistence Value	Bio-accum. Value	Ecotoxicity/Persistence/Bioaccum. Value
Aldrin	10000	1.00E+00	5.00E+04	5.00E+08
Iron	10	1.00E+00	5.00E-01	5.00E+00

Source: 5 Area T-5

Source Hazardous Waste Quantity Value: 14.61

Hazardous Substance	Eco- toxicity Value	Persistence Value	Bio- accum. Value	Ecotoxicity/ Persistence/ Bioaccum. Value
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Source: 6 Area T-24A

Source Hazardous Waste Quantity Value: 44.80

Hazardous Substance	Eco- toxicity Value	Persistence Value	Bio- accum. Value	Ecotoxicity/ Persistence/ Bioaccum. Value
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Hazardous Substances Found in an Observed Release

Sample No.	Observed Release Hazardous Substance	Eco-toxicity Value	Persistence Value	Bio-accum. Value	Ecotoxicity/Persistence/Bioaccum. Value
1	Arsenic	10	1.00E+00	5.00E+01	5.00E+02
1	Di-n-butyl phthalate	1000	1.00E+00	5.00E+03	5.00E+06
1	Lead	1000	1.00E+00	5.00E+03	5.00E+06
2	Arsenic	10	1.00E+00	5.00E+01	5.00E+02
3	Chlorobenzene	1000	7.00E-04	5.00E+01	3.50E+01
4	Nickel	10	1.00E+00	5.00E+02	5.00E+03
5	Lead	1000	1.00E+00	5.00E+03	5.00E+06
6	Lindane	10000	1.00E+00	5.00E+02	5.00E+06
7	Aluminum	100	1.00E+00	5.00E+01	5.00E+03
7	Lead	1000	1.00E+00	5.00E+03	5.00E+06

SW PATHWAY: OVERLAND FLOW/FLOOD ENVIRONMENTAL THREAT WASTE CHARACTERISTICS

Ft. McClellan, Aggregate Score - 11/08/94

Ecotoxicity/Persistence/Bioaccumulation Value from Source Hazardous Substances:	5.00E+08
Ecotoxicity/Persistence/Bioaccumulation Value from Observed Release Hazardous Substances:	5.00E+06
Ecotoxicity/Persistence/Bioaccumulation Factor:	5.00E+08
Sum of Source Hazardous Waste Quantity Values:	4.18E+02
Hazardous Waste Quantity Factor:	100
Waste Characteristics Factor Category:	320

Level I Concentrations

Sample ID: OLF-W05
 Sample Medium: Aqueous
 Location: 0.07 miles

Hazardous Substance	Hazardous Substance Concentration	AWQC Benchmarks Concentrations		Units
		FRESH	SALT	
Lead	7.1E+01	3.2E+00	5.6E+00	ppb

Documentation for OLF-W05:

The location of this sampling point for Former Landfill #3 is not known by the reviewer..

Reference: 17

Level II Concentrations

Sample ID: T5-D02
 Sample Medium: Sediment
 Location: 0.04 miles

Hazardous Substance	Hazardous Substance Concentration	AWQC Benchmarks Concentrations		Units
		FRESH	SALT	
Arsenic	1.2E+01	N.A.	N.A.	ppb
Di-n-butyl phthalate	4.1E+00	N.A.	N.A.	ppb
Lead	2.5E+02	N.A.	N.A.	ppb

Documentation for T5-D02:

Creek sediment samples at Area T-5

Reference: 17

Sample ID: LF1-D02
 Sample Medium: Sediment
 Location: 0.04 miles

Hazardous Substance	Hazardous Substance Concentration	AWQC Benchmarks Concentrations		Units
		FRESH	SALT	
Arsenic	1.4E+01	N.A.	N.A.	ppb

Documentation for LF1-D02:

Creek sediment samples at Former Landfill #1

Reference: 17

Sample ID: LF1-W02
 Sample Medium: Aqueous

Location: 0.04 miles

Hazardous Substance	Hazardous Substance Concentration	AWQC Benchmarks Concentrations		Units
		FRESH	SALT	
Chlorobenzene	1.9E+00	0.0E+01	0.0E+01	ppb

Documentation for LF1-W02:

Surface water sample from creek adjacent to former landfill #1.

Reference: 17

Sample ID: LF2-D02
 Sample Medium: Sediment
 Location: 0.05 miles

Hazardous Substance	Hazardous Substance Concentration	AWQC Benchmarks Concentrations		Units
		FRESH	SALT	
Nickel	6.8E+00		N.A.	ppb

Documentation for LF2-D02:

Sediment sample from creek south of Former Landfill #2.

Reference: 17

Sample ID: OLF-W03
 Sample Medium: Aqueous
 Location: 0.07 miles

Hazardous Substance	Hazardous Substance Concentration	AWQC Benchmarks Concentrations		Units
		FRESH	SALT	

Lindane 4.1E-03 8.0E-02 8.0E-02 ppb

Documentation for OLF-W03:

This sample point location is not known by the reviewer.

Reference: 17

Sample ID: OLF-D03
 Sample Medium: Sediment
 Location: 0.07 miles

Hazardous Substance	Hazardous Substance Concentration	AWQC Benchmarks Concentrations		Units
		FRESH	SALT	
Aluminum	6.1E+04		N.A.	ppb
Lead	2.3E+01		N.A.	ppb

Documentation for OLF-D03:

The aluminum concentration may be from natural conditions.

Reference: 17

Most Distant Level I Sample

Sample ID: OLF-W05
 Distance from the Probable Point of Entry: 0.07 miles

Documentation for OLF-W05:

The location of this sampling point for Former Landfill #3 is not known by the reviewer..

Reference: 17

Most Distant Level II Sample

Sample ID: OLF-W03
Distance from the Probable Point of Entry: 0.07 miles

Documentation for OLF-W03:

This sample point location is not known by the reviewer.

Reference: 17

Level I Concentrations

Sensitive Environment	Distance from Probable Point of Entry to Sensitive Env. (miles)	Sensitive Environment Value
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- N/A and/or data not specified

Sum of Sensitive Environments Values: 0

Wetlands

Wetland	Distance from Probable Point of Entry to Wetland (miles)	Wetlands Frontage (miles)
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- N/A and/or data not specified

Total Wetlands Frontage: 0.00 Miles Total Wetlands Value: 0

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 Sum of Sensitive Environments Value + Wetlands Value: 0.00E+00

Level I Concentrations Factor: 0.00E+00

SW PATHWAY: OVERLAND FLOW/FLOOD COMPONENT ENVIRONMENTAL THREAT TARGETS

Ft. McClellan, Aggregate Score - 11/08/94

Level II Concentrations

Sensitive Environment	Distance from Probable Point of Entry to Sensitive Env. (miles)	Sensitive Environment Value
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- N/A and/or data not specified

Sum of Sensitive Environments Values: 0

Wetlands

Wetland	Distance from Probable Point of Entry to Wetland (miles)	Wetlands Frontage (miles)
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- N/A and/or data not specified

Total Wetlands Frontage: 0.00 Miles Total Wetlands Value: 0

=====
Sum of Sensitive Environments Value + Wetlands Value: 0.00E+00

Level II Concentrations Factor: 0.00E+00

Potential Contamination

Sensitive Environments

Type of Surface Water Body	Sensitive Environment	Sensitive Environment Value
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Wetlands

Type of Surface Water Body	Sensitive Environment	Wetlands Frontage	Wetlands Value
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- N/A and/or data not specified

Type of Surface Water Body	Sum of			Dj(Wj+Sj)
	Sum of Sens. Environment Values(Sj)	Wetland Frontage Values(Wj)	Dilution Weight (Dj)	

- N/A and/or data not specified

Sum of Dj(Wj+Sj): 0.00E+00
 Sum of Dj(Wj+Sj)/10: 0.00E+00

=====
 Potential Contamination Sensitive Environment Factor: 0.00E+00

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 SURFACE WATER PATHWAY GW TO SW CONTAINMENT SUMMARY
 Ft. McClellan, Aggregate Score - 11/08/94

Containment

No.	Source ID	HWQ Value	Containment Value
1	Former Landfill #3	2.82E+02	10
2	Former Landfill #1	2.56E+01	10
3	Former Landfill #2	5.12E+01	10
4	Area T-38	2.88E-02	10
5	Area T-5	1.46E+01	10
6	Area T-24A	4.48E+01	10
=====			
Containment Factor			10

Documentation for Ground Water Containment, Source Former Landfill #3:

Hazardous substances were detected in the monitoring wells surrounding the former landfill.

Reference: 12, Table 3-32.

Documentation for Ground Water Containment, Source Former Landfill #1:

no containment

Reference:

Documentation for Ground Water Containment, Source Former Landfill #2:

not contained

Reference:

Documentation for Ground Water Containment, Source Area T-38:

No containment

Reference: 12, p. 1-23.

Documentation for Ground Water Containment, Source Area T-5:

no containment

Reference:

Documentation for Ground Water Containment, Source Area T-24A:

site is not contained

Reference:

Net Precipitation

Net Precipitation (inches)	0.00
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Documentation for Net Precipitation:

Data obtained from Climatological Data Annual Summary, Alabama,
1990, Vol. 96, No. 13, NOAA.

Reference: 12, Table 1-4, p. 1-40.

Aquifer: Surficial

Type of Aquifer: Non Karst

Overlying Aquifer: 0

Interconnected with: 0

Documentation for Surficial Aquifer:

Bedrock underlying Former Landfill #3 is mapped as Cambrian Rome Formation and consists of interlayered red to green shale and siltstone, and red to light gray sandstone. The Rome Formation attains an aggregate thickness of approximately 1,000 feet in Calhoun County. The flow direction for ground water at this site appears to be to the west and northwest under a hydraulic gradient of approximately .07 ft./ft.

Bedrock beneath Former Landfill #2 consists of Ordovician Limestone with thin beds of black shale. It attains an aggregate thickness of 230 ft. in Calhoun County. The ground water flow direction is south to southeast toward Cave Creek. The calculated hydraulic gradient is .018 ft/ft.

Former Landfill #1, T-38, T-24a, and T-5 all appear to be underlain by the Weisner Formation, locally a sandstone and quartzite with thin-bedded shale.

Reference: 12, and 5, See Figure of geologic formations-Main Post

OBSERVED RELEASE

No.	Well ID	Well Type	Distance (miles)	Level of Contamination
4	T38-G06	Monitoring Well	0.000	Level I
5	T38-G07	Monitoring Well	0.000	Level I
6	LF1-G01	Monitoring Well	0.000	Level I
8	LF2-G02	Monitoring Well	0.000	Level I
9	LF2-G03	Monitoring Well	0.000	Level I
10	OLF-G02	Monitoring Well	0.000	Level I
11	OLF-G03	Monitoring Well	0.000	Level I

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 SURFACE WATER PATHWAY GW TO SW COMPONENT LIKELIHOOD OF RELEASE
 Ft. McClellan, Aggregate Score - 11/08/94

12	OLF-G04	Monitoring Well	0.000	Level I
13	OLF-G07	Monitoring Well	0.000	Level I
14	OLF-G08	Monitoring Well	0.000	Level I

Well No.	Hazardous Substance	Concent.	MCL	Cancer	RFD	Units
4	Bis (2-ethylhexyl) phthalate	3.4E+01	0.0E+00	2.5E+00	7.0E+02	ppb
4	Dichloroethylene, trans-1,2-	9.3E+01	1.0E+02	0.0E+00	7.0E+02	ppb
4	Tetrachloroethane, 1,1,2,2-	2.0E+03	0.0E+00	1.8E-01	0.0E+00	ppb
4	Tetrachloroethene	1.3E+01	5.0E+00	6.7E-01	3.5E+02	ppb
4	Trichloroethylene	3.0E+02	5.0E+00	3.2E+00	0.0E+00	ppb
5	Carbon Tetrachloride	4.1E+01	5.0E+00	2.7E-01	2.5E+01	ppb
5	Chloroform	9.2E+00	0.0E+00	5.7E+00	3.5E+02	ppb
5	Dinitrobenzene, 1,3-	5.6E-01	0.0E+00	0.0E+00	3.5E+00	ppb
6	Bis (2-ethylhexyl) phthalate	2.1E+01	0.0E+00	2.5E+00	7.0E+02	ppb
6	Dinitrobenzene, 1,3-	5.7E-01	0.0E+00	0.0E+00	3.5E+00	ppb
8	Aldrin	1.7E-02	0.0E+00	2.1E-03	1.1E+00	ppb
9	Arsenic	3.2E+00	5.0E+01	2.0E-02	1.1E+01	ppb
10	Acetone	2.2E+01	0.0E+00	0.0E+00	3.5E+03	ppb
10	DDD	7.8E-03	0.0E+00	1.5E-01	0.0E+00	ppb
10	Lead	1.7E+02	1.5E+01	0.0E+00	0.0E+00	ppb
11	Tetrachloroethene	1.3E+00	5.0E+00	6.7E-01	3.5E+02	ppb
12	DDE	1.9E-02	0.0E+00	1.0E-01	0.0E+00	ppb
12	Dichlorobenzene, 1,2-	2.3E+00	6.0E+02	0.0E+00	3.2E+03	ppb
12	Endosulfan (I or II)	1.6E-02	0.0E+00	0.0E+00	2.1E+02	ppb
12	Endrin	8.1E-02	2.0E+00	0.0E+00	1.1E+01	ppb
12	Heptachlor	7.9E-02	4.0E-01	7.8E-03	1.8E+01	ppb
12	Nitroglycerine	1.7E+00	0.0E+00	0.0E+00	0.0E+00	ppb
13	Pentachlorophenol	3.3E+00	1.0E+00	2.9E-01	1.1E+03	ppb
13	Tetrachloroethane, 1,1,2,2-	3.3E+01	0.0E+00	1.8E-01	0.0E+00	ppb
13	Trichloroethylene	1.3E+01	5.0E+00	3.2E+00	0.0E+00	ppb
14	Trinitrobenzene, 1,3,5-	3.3E+00	0.0E+00	0.0E+00	1.8E+00	ppb

=====
 Observed Release Factor 550

Documentation for Well Weaver Well No. 2:

Weaver Wells #2 and #3 serve a total population of 6650. Well #3 supplies 60 percent of the water used in the blended system. Therefore, Well #2 supplies roughly 2660 persons and Well #3 supplies approximately 3990 persons.

Reference: 12, p. 4-5.

Documentation for Well Weaver Well No. 3:

See the comment for Weaver Well #2.

Reference: 12, p. 4-5.

Documentation for Well Lake Reilly Well:

SAIC estimated that 200 persons were supplied by this well.
However, no population was assigned to this well as it is used for
recreation and the users can be considered transient.

Reference: 12, p. 4-14.

Documentation for Well LF1-G01:

alpha-BHC was also discovered at at conc. of .0028 ug/L

Reference: 17

Documentation for Well LF2-G01:

This well appears to be upgradient of the landfill.
Methylisobutylketone conc. is 5.4 ug/L.

Reference: 17

Documentation for Well Trailer Park Well :

The water clerk at Weaver said that a well located near the McMinn
Airfield serves about 10 residences at a trailer park.

Reference:

Documentation for Well Choccolocco Well:

The well at Choccolocco Corridor is used for Bivouac Activities.
This well is located upgradient to the local ground water flow
direction. The exact location of this well is not clear.

Reference: 1, Vol. 1, p. I-18.

POTENTIAL TO RELEASE

Ground Water to Surface Water Angle

Probable Point of Entry	0.00	miles
Angle Theta	0	

Containment

Containment Factor	10	
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Net Precipitation

Net Precipitation Factor	10	
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Depth to Aquifer

A. Depth of Hazardous Substances	63.60	feet
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Documentation for Depth of Hazardous Substances:

Well OLF-7 at Former Landfill #3 was the deepest well found to have contamination. The depth of this well is 63.63 feet. This depth is used to represent the lowest known point at which a hazardous substance was discovered in the area of the landfill.

Reference: 13, Appendix I, p. 1-140.

B. Depth to Aquifer from Surface	13.90	feet
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Documentation for Depth to Aquifer from Surface :

The depth to aquifer was determined from a table of ground water elevations at the former landfill area. Well OLF-2 had the shallowest water table measurement of 13.91 ft. BLS.

Reference: 12, Table 3-1, p. 3-4.

C. Depth to Aquifer (B - A)	0.00	feet
Depth to Aquifer Factor	5	
<u>Travel Time</u>		
Are All Layers Karst?	NO	

Documentation for Karst Layers:

Karst conditions are not mentioned in any of the available geologic references covering Fort McClellan.

Reference:

Thickness of Layer(s) with Lowest Conductivity	3.90	feet
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Documentation for Thickness of Layers with Lowest Conductivity:

Assuming the depth to the base of the trenches in the landfill is 10 ft. (pure guess) and the depth to the top of the aquifer is 13.91 feet (depth to water in well OLF-2), then the thickness of the layer is 3.91 feet.

Reference: 12, Table 3-1, p. 3-4.

Hydraulic Conductivity (cm/sec) 1.0E-07

Documentation for Hydraulic Conductivity:

From Table 3-6 in the HRS Summary Report it assigns hydraulic conductivities for clay and silt geologic materials of .00000001 cm/sec and .000001 cm/sec. respectively. Based on the description for the soils present at the former landfill on page 3-2 in the SAIC SI Report (silt and clay soils) the hydraulic conductivity chosen was the average of those shown above - .0000001 cm/sec.

Reference: 9

Travel Time Factor 35

=====

Potential to Release Factor 500

Source: 1 Former Landfill #3

Source Hazardous Waste Quantity Value: 281.86

Hazardous Substance	Toxicity Factor Value	Persist. Value	Mobility Value	Toxicity/ Mobility/ Persistence
Benz(a)anthracene	1000	1.00E+00	2.00E-09	2.00E-06
Chlordane	10000	1.00E+00	2.00E-07	2.00E-03
Chrysene	0	1.00E+00	2.00E-09	0.00E+00
Phenanthrene	0	4.00E-01	2.00E-05	0.00E+00
Pyrene	100	1.00E+00	2.00E-09	2.00E-07

SW PATHWAY: GW TO SW COMPONENT DRINKING WATER THREAT WASTE CHARACTERISTICS
 Ft. McClellan, Aggregate Score - 11/08/94

Source: 2 Former Landfill #1

Source Hazardous Waste Quantity Value: 25.62

Hazardous Substance	Toxicity Factor Value	Persist. Value	Mobility Value	Toxicity/Mobility/Persistence
Pyrene	100	1.00E+00	2.00E-09	2.00E-07

Source: 3 Former Landfill #2

Source Hazardous Waste Quantity Value: 51.25

Hazardous Substance	Toxicity Factor Value	Persist. Value	Mobility Value	Toxicity/ Mobility/ Persistence
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SW PATHWAY: GW TO SW COMPONENT DRINKING WATER THREAT WASTE CHARACTERISTICS
Ft. McClellan, Aggregate Score - 11/08/94

Source: 4 Area T-38

Source Hazardous Waste Quantity Value: 0.03

Hazardous Substance	Toxicity Factor Value	Persist. Value	Mobility Value	Toxicity/Mobility/Persistence
Aldrin	10000	1.00E+00	2.00E-07	2.00E-03
Iron	0	1.00E+00	1.00E-02	0.00E+00

Source: 5 Area T-5

Source Hazardous Waste Quantity Value: 14.61

Hazardous Substance	Toxicity Factor Value	Persist. Value	Mobility Value	Toxicity/ Mobility/ Persistence
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Source: 6 Area T-24A

Source Hazardous Waste Quantity Value: 44.80

Hazardous Substance	Toxicity Factor Value	Persist. Value	Mobility Value	Toxicity/ Mobility/ Persistence
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Hazardous Substances Found in an Observed Release

Observed Release Hazardous Substance	Toxicity Factor Value	Persist. Value	Toxicity/ Persistence
Acetone	10	7.00E-04	7.00E-03
Aldrin	10000	1.00E+00	1.00E+04
Arsenic	10000	1.00E+00	1.00E+04
Bis (2-ethylhexyl) phthalate	100	1.00E+00	1.00E+02
Carbon Tetrachloride	1000	4.00E-01	4.00E+02
Chloroform	100	4.00E-01	4.00E+01
DDD	100	1.00E+00	1.00E+02
DDE	100	1.00E+00	1.00E+02
Dichlorobenzene, 1,2-	10	4.00E-01	4.00E+00
Dichloroethylene, trans-1,2-	100	4.00E-01	4.00E+01
Dinitrobenzene, 1,3-	10000	1.00E+00	1.00E+04
Endosulfan (I or II)	100	1.00E+00	1.00E+02
Endrin	10000	1.00E+00	1.00E+04
Heptachlor	1000	4.00E-01	4.00E+02
Lead	10000	1.00E+00	1.00E+04
Nitroglycerine	10	1.00E+00	1.00E+01
Pentachlorophenol	100	1.00E+00	1.00E+02
Tetrachloroethane, 1,1,2,2-	10	4.00E-01	4.00E+00
Tetrachloroethene	100	4.00E-01	4.00E+01
Trichloroethylene	10	4.00E-01	4.00E+00
Trinitrobenzene, 1,3,5-	10000	4.00E-01	4.00E+03

SW PATHWAY: GW TO SW COMPONENT DRINKING WATER THREAT WASTE CHARACTERISTICS
Ft. McClellan, Aggregate Score - 11/08/94

Toxicity/Mobility/Persistence Value from Source Hazardous Substances:	2.00E-03
Toxicity/Mobility/Persistence Value from Observed Release Hazardous Substances:	1.00E+04
Toxicity/Mobility/Persistence Factor:	1.00E+04
Sum of Source Hazardous Waste Quantity Values:	4.18E+02
Hazardous Waste Quantity Factor:	100
Waste Characteristics Factor Category:	32

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SW PATHWAY: GW TO SW COMPONENT DRINKING WATER THREAT TARGETS
Ft. McClellan, Aggregate Score - 11/08/94

Level I Concentrations

Sample ID: OLF-W05
Sample Medium: Aqueous
Location: 0.07 miles

Hazardous Substance	Hazardous Substance Concentration	DW MCL Benchmark Concentration	Units in Upper Aquifer ?	Observed in Upper Aquifer ?
Lead	7.1E+01	1.5E+01	ppb	YES

Documentation for OLF-W05:

The location of this sampling point for Former Landfill #3 is not known by the reviewer..

Reference: 17

Level II Concentrations

Sample ID: T5-D02
 Sample Medium: Sediment
 Location: 0.04 miles

Hazardous Substance	Hazardous Substance Concentration	DW MCL Benchmark Concentration	Units	Observed in Upper Aquifer ?
Arsenic	1.2E+01	N.A.	ppb	YES
Di-n-butyl phthalate	4.1E+00	N.A.	ppb	NO
Lead	2.5E+02	N.A.	ppb	YES

Documentation for T5-D02:

Creek sediment samples at Area T-5

Reference: 17

Sample ID: LF1-D02
 Sample Medium: Sediment
 Location: 0.04 miles

Hazardous Substance	Hazardous Substance Concentration	DW MCL Benchmark Concentration	Units	Observed in Upper Aquifer ?
Arsenic	1.4E+01	N.A.	ppb	YES

Documentation for LF1-D02:

Creek sediment samples at Former Landfill #1

Reference: 17

Sample ID: OLF-D03
 Sample Medium: Sediment

PREscore 3.0 - PRESCORE.TCL File 07/25/94 PAGE: 135
SW PATHWAY: GW TO SW COMPONENT DRINKING WATER THREAT TARGETS
Ft. McClellan, Aggregate Score - 11/08/94

Location: 0.07 miles

Hazardous Substance	Hazardous Substance Concentration	DW MCL Benchmark Concentration	Units	Observed in Upper Aquifer ?
Aluminum	6.1E+04	N.A.	ppb	NO
Lead	2.3E+01	N.A.	ppb	YES

Documentation for OLF-D03:

The aluminum concentration may be from natural conditions.

Reference: 17

Most Distant Level I Sample

Sample ID: OLF-W05

Distance from the Probable Point of Entry: 0.07 miles

Documentation for OLF-W05:

The location of this sampling point for Former Landfill #3 is not known by the reviewer..

Reference: 17

Most Distant Level II Sample

Sample ID: OLF-D03

Distance from the Probable Point of Entry: 0.07 miles

Documentation for OLF-D03:

The aluminum concentration may be from natural conditions.

Reference: 17

Level I Concentrations

Intake	Distance Along the In-water Segment from the Probable Point of Entry (miles)	Population
- N/A and/or data not specified		

Population Served by Level I Intakes: 0.0

Level I Population Factor: 0.00E+00

Level II Concentrations

Intake	Distance Along the In-water Segment from the Probable Point of Entry (miles)	Population
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- N/A and/or data not specified

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Population Served by Level II Intakes: 0.0

Level II Population Factor: 0.00E+00

Potential Contamination

Intake ID	Average Annual Flow (cfs)	Population Served
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- N/A and/or data not specified

Type of Surface Water Body	Total Population	Dilution-Weighted Population
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- N/A and/or data not specified

=====

Dilution-Weighted Population Served
 by Potentially Contaminated Intakes: 0.0

Potential Contamination Factor: 0.0

Nearest Intake

Location of Nearest Drinking Water Intake: N.A.

Nearest Intake Factor: 0.00

Resources

Resource Use: YES

Resource Value: 5.00E+00

Documentation for Resources:

According to the water clerk for the town of Weaver, cattle drink
 from Cane Creek.

Reference:

Source: 1 Former Landfill #3

Source Hazardous Waste Quantity Value: 281.86

Hazardous Substance	Toxicity Value	Persist. Value	Mobility Value	Bio-Value	Tox./Mobil./	
					Persistence/accum. Value	Bioaccum. Value
Acetone		10	7.00E-04	1.00E+00	5.00E-01	3.50E-03
Aldrin		10000	1.00E+00	2.00E-07	5.00E+01	1.00E-01
Arsenic		10000	1.00E+00	1.00E-02	5.00E+02	5.00E+04
Benz(a)anthracene		1000	1.00E+00	2.00E-09	5.00E+04	1.00E-01
Bis (2-ethylhexyl) phthalate		100	1.00E+00	2.00E-07	5.00E+04	1.00E+00
Carbon Tetrachloride		1000	4.00E-01	1.00E-02	5.00E+01	2.00E+02
Chlordane		10000	1.00E+00	2.00E-07	5.00E+04	1.00E+02
Chloroform		100	4.00E-01	1.00E+00	5.00E+00	2.00E+02
Chrysene		0	1.00E+00	2.00E-09	5.00E+02	0.00E+00
DDD		100	1.00E+00	2.00E-07	5.00E+04	1.00E+00
DDE		100	1.00E+00	2.00E-07	5.00E+04	1.00E+00
Dichlorobenzene, 1,2-		10	4.00E-01	1.00E-02	5.00E+01	2.00E+00
Dichloroethylene, trans-1,2-		100	4.00E-01	1.00E+00	5.00E+01	2.00E+03
Dinitrobenzene, 1,3-		10000	1.00E+00	1.00E-02	5.00E+00	5.00E+02
Endosulfan (I or II)		100	1.00E+00	2.00E-05	5.00E+03	1.00E+01
Endrin		10000	1.00E+00	2.00E-03	5.00E+03	1.00E+05
Heptachlor		1000	4.00E-01	2.00E-05	5.00E+03	4.00E+01
Lead		10000	1.00E+00	2.00E-05	5.00E+03	1.00E+03
Nitroglycerine		10	1.00E+00	1.00E+00	5.00E+01	5.00E+02
Pentachlorophenol		100	1.00E+00	1.00E-02	5.00E+02	5.00E+02
Phenanthrene		0	4.00E-01	2.00E-05	5.00E+01	0.00E+00
Pyrene		100	1.00E+00	2.00E-09	5.00E+01	1.00E-05
Tetrachloroethane, 1,1,2,2-		10	4.00E-01	1.00E-02	5.00E+00	2.00E-01
Tetrachloroethene		100	4.00E-01	1.00E-02	5.00E+01	2.00E+01
Trichloroethylene		10	4.00E-01	1.00E-02	5.00E+01	2.00E+00
Trinitrobenzene, 1,3,5-		10000	4.00E-01	1.00E+00	5.00E+00	2.00E+04

Source: 2 Former Landfill #1

Source Hazardous Waste Quantity Value: 25.62

Hazardous Substance	Toxicity Value	Persist. Value	Mobility Value	Bio-accum. Value	Tox./Mobil./Persistence/Bioaccum. Value
Pyrene	100	1.00E+00	2.00E-09	5.00E+01	1.00E-05

SW PATHWAY: GW TO SW COMPONENT HUMAM FOOD CHAIN THREAT WASTE CHARACTERISTICS
Ft. McClellan, Aggregate Score - 11/08/94

Source: 3 Former Landfill #2

Source Hazardous Waste Quantity Value: 51.25

Hazardous Substance	Toxicity Value	Persist. Value	Mobility Value	Bio-accum. Value	Tox./Mobil./ Persistence/ Bioaccum. Value
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PREscore 3.0 - PRESCORE.TCL File 07/25/94 PAGE: 142
 SW PATHWAY: GW TO SW COMPONENT HUMAM FOOD CHAIN THREAT WASTE CHARACTERISTICS
 Ft. McClellan, Aggregate Score - 11/08/94

Source: 4 Area T-38

Source Hazardous Waste Quantity Value: 0.03

Hazardous Substance	Toxicity Value	Persist. Value	Mobility Value	Bio-accum. Value	Tox./Mobil./ Persistence/ Bioaccum. Value
Aldrin	10000	1.00E+00	2.00E-07	5.00E+01	1.00E-01
Iron	0	1.00E+00	1.00E-02	5.00E-01	0.00E+00

SW PATHWAY: GW TO SW COMPONENT HUMAM FOOD CHAIN THREAT WASTE CHARACTERISTICS
Ft. McClellan, Aggregate Score - 11/08/94

Source: 5 Area T-5

Source Hazardous Waste Quantity Value: 14.61

Hazardous Substance	Toxicity Value	Persist. Value	Mobility Value	Bio-accum. Value	Tox./Mobil./ Persistence/Bioaccum. Value
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Source: 6 Area T-24A

Source Hazardous Waste Quantity Value: 44.80

Hazardous Substance	Toxicity Value	Persist. Value	Mobility Value	Bio-accum. Value	Tox./Mobil./Persistence/Bioaccum. Value
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Hazardous Substances Found in an Observed Release

Observed Release Hazardous Substance	Toxicity Value	Persist. Value	Bio- accum. Value	Toxicity/ Persistence/ Bioaccum. Value
Acetone	10	7.00E-04	5.00E-01	3.50E-03
Aldrin	10000	1.00E+00	5.00E+01	5.00E+05
Arsenic	10000	1.00E+00	5.00E+02	5.00E+06
Bis (2-ethylhexyl) phthalate	100	1.00E+00	5.00E+04	5.00E+06
Carbon Tetrachloride	1000	4.00E-01	5.00E+01	2.00E+04
Chloroform	100	4.00E-01	5.00E+00	2.00E+02
DDD	100	1.00E+00	5.00E+04	5.00E+06
DDE	100	1.00E+00	5.00E+04	5.00E+06
Dichlorobenzene, 1,2-	10	4.00E-01	5.00E+01	2.00E+02
Dichloroethylene, trans-1,2-	100	4.00E-01	5.00E+01	2.00E+03
Dinitrobenzene, 1,3-	10000	1.00E+00	5.00E+00	5.00E+04
Endosulfan (I or II)	100	1.00E+00	5.00E+03	5.00E+05
Endrin	10000	1.00E+00	5.00E+03	5.00E+07
Heptachlor	1000	4.00E-01	5.00E+03	2.00E+06
Lead	10000	1.00E+00	5.00E+03	5.00E+07
Nitroglycerine	10	1.00E+00	5.00E+01	5.00E+02
Pentachlorophenol	100	1.00E+00	5.00E+02	5.00E+04
Tetrachloroethane, 1,1,2,2-	10	4.00E-01	5.00E+00	2.00E+01
Tetrachloroethene	100	4.00E-01	5.00E+01	2.00E+03
Trichloroethylene	10	4.00E-01	5.00E+01	2.00E+02
Trinitrobenzene, 1,3,5-	10000	4.00E-01	5.00E+00	2.00E+04

Toxicity/Mobility/Persistence/Bioaccumulation Value from Source Hazardous Substances:	1.00E+02
Toxicity/Mobility/Persistence/Bioaccumulation Value from Observed Release Hazardous Substances:	5.00E+07
Toxicity/Mobility/Persistence/Bioaccumulation Factor:	5.00E+07
Sum of Source Hazardous Waste Quantity Values:	4.18E+02
Hazardous Waste Quantity Factor:	100
Waste Characteristics Factor Category:	180

Level I Concentrations

- N/A and/or data not specified

Level II Concentrations

- N/A and/or data not specified

Most Distant Level I Sample

- N/A and/or data not specified

Most Distant Level II Sample

- N/A and/or data not specified

Level I Concentrations

Fishery	Annual Production (pounds)	Human Food Chain Population Value
---------	-------------------------------	--------------------------------------

- N/A and/or data not specified

=====

Sum of Human Food Chain Population Values: 0.00E+00

Level I Concentrations Factor: 0.00E+00

Level II Concentrations

Fishery	Annual Production (pounds)	Human Food Chain Population Value
---------	-------------------------------	--------------------------------------

- N/A and/or data not specified

=====
Sum of Human Food Chain Population Values: 0.00E+00

Level II Concentrations Factor: 0.00E+00

Potential Contamination

	Annual Production (pounds)	Type of Surface Water Body	Average Annual Flow (cfs)	Pop. Value (Pi)	Dilution Weight (Di)	Pi*Di
Fishery						

- N/A and/or data not specified

=====
 Sum of (Pi*Di): 0.00E+00

Potential Human Food Chain Contamination Factor: 0.00E+00

Food Chain Individual

Location of Nearest Fishery: N.A.

Food Chain Individual Factor: 0.00

SW PATHWAY: GW TO SW COMPONENT ENVIRONMENTAL THREAT WASTE CHARACTERISTICS

Ft. McClellan, Aggregate Score - 11/08/94

Source: 1 Former Landfill #3

Source Hazardous Waste Quantity Value: 281.86

Hazardous Substance	Eco- toxicity Value	Persist. Value	Mob. Value	Bio- accum. Value	Ecotoxicity/ Mobility/ Persistence/ Bioaccum. Value
Acetone	100	7.00E-04	1.00E+00	5.00E-01	3.50E-02
Aldrin	10000	1.00E+00	2.00E-07	5.00E+04	1.00E+02
Arsenic	10	1.00E+00	1.00E-02	5.00E+01	5.00E+00
Benz(a)anthracene	10000	1.00E+00	2.00E-09	5.00E+04	1.00E+00
Bis (2-ethylhexyl) phthalate	1000	1.00E+00	2.00E-07	5.00E+04	1.00E+01
Carbon Tetrachloride	100	4.00E-01	1.00E-02	5.00E+01	2.00E+01
Chlordane	10000	1.00E+00	2.00E-07	5.00E+04	1.00E+02
Chloroform	10	4.00E-01	1.00E+00	5.00E+00	2.00E+01
Chrysene	1000	1.00E+00	2.00E-09	5.00E+03	1.00E-02
DDD	10000	1.00E+00	2.00E-07	5.00E+04	1.00E+02
DDE	10000	1.00E+00	2.00E-07	5.00E+04	1.00E+02
Dichlorobenzene, 1,2-	100	4.00E-01	1.00E-02	5.00E+01	2.00E+01
Dichloroethylene, trans-1,2-	1	4.00E-01	1.00E+00	5.00E+01	2.00E+01
Dinitrobenzene, 1,3-	100	1.00E+00	1.00E-02	5.00E+00	5.00E+00
Endosulfan (I or II)	10000	1.00E+00	2.00E-05	5.00E+03	1.00E+03
Endrin	10000	1.00E+00	2.00E-03	5.00E+04	1.00E+06
Heptachlor	10000	4.00E-01	2.00E-05	5.00E+04	4.00E+03
Lead	1000	1.00E+00	2.00E-05	5.00E+03	1.00E+02
Nitroglycerine	100	1.00E+00	1.00E+00	5.00E+01	5.00E+03
Pentachlorophenol	100	1.00E+00	1.00E-02	5.00E+03	5.00E+03
Phenanthrene	1000	4.00E-01	2.00E-05	5.00E+03	4.00E+01
Pyrene	0	1.00E+00	2.00E-09	5.00E+01	0.00E+00
Tetrachloroethane, 1,1,2,2-	100	4.00E-01	1.00E-02	5.00E+00	2.00E+00
Tetrachloroethene	100	4.00E-01	1.00E-02	5.00E+01	2.00E+01
Trichloroethylene	100	4.00E-01	1.00E-02	5.00E+01	2.00E+01
Trinitrobenzene, 1,3,5-	100	4.00E-01	1.00E+00	5.00E+00	2.00E+02

SW PATHWAY: GW TO SW COMPONENT ENVIRONMENTAL THREAT WASTE CHARACTERISTICS
 Ft. McClellan, Aggregate Score - 11/08/94

Source: 2 Former Landfill #1

Source Hazardous Waste Quantity Value: 25.62

Hazardous Substance	Eco- toxicity Value	Persist. Value	Mob. Value	Bio- accum. Value	Ecotoxicity/ Mobility/ Persistence/ Bioaccum. Value
Pyrene	0	1.00E+00	2.00E-09	5.00E+01	0.00E+00

SW PATHWAY: GW TO SW COMPONENT ENVIRONMENTAL THREAT WASTE CHARACTERISTICS
Ft. McClellan, Aggregate Score - 11/08/94

Source: 3 Former Landfill #2

Source Hazardous Waste Quantity Value: 51.25

Hazardous Substance	Eco- toxicity Value	Persist. Value	Mob. Value	Bio- accum. Value	Ecotoxicity/ Mobility/ Persistence/ Bioaccum. Value
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SW PATHWAY: GW TO SW COMPONENT ENVIRONMENTAL THREAT WASTE CHARACTERISTICS
 Ft. McClellan, Aggregate Score - 11/08/94

Source: 4 Area T-38

Source Hazardous Waste Quantity Value: 0.03

Hazardous Substance	Eco- toxicity Value	Persist. Value	Mob. Value	Bio- accum. Value	Ecotoxicity/ Mobility/ Persistence/ Bioaccum. Value
Aldrin	10000	1.00E+00	2.00E-07	5.00E+04	1.00E+02
Iron	10	1.00E+00	1.00E-02	5.00E-01	5.00E-02

Source: 5 Area T-5

Source Hazardous Waste Quantity Value: 14.61

Hazardous Substance	Eco- toxicity Value	Persist. Value	Mob. Value	Bio- accum. Value	Ecotoxicity/ Mobility/ Persistence/ Bioaccum. Value
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Source: 6 Area T-24A

Source Hazardous Waste Quantity Value: 44.80

Hazardous Substance	Eco- toxicity Value	Persist. Value	Mob. Value	Bio- accum. Value	Ecotoxicity/ Mobility/ Persistence/ Bioaccum. Value
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Hazardous Substances Found in an Observed Release

Observed Release Hazardous Substance	Eco- toxicity Value	Persist. Value	Bio- accum. Value	Ecotoxicity/ Persistence/ Bioaccum. Value
Acetone	100	7.00E-04	5.00E-01	3.50E-02
Aldrin	10000	1.00E+00	5.00E+04	5.00E+08
Arsenic	10	1.00E+00	5.00E+01	5.00E+02
Bis (2-ethylhexyl) phthalate	1000	1.00E+00	5.00E+04	5.00E+07
Carbon Tetrachloride	100	4.00E-01	5.00E+01	2.00E+03
Chloroform	10	4.00E-01	5.00E+00	2.00E+01
DDD	10000	1.00E+00	5.00E+04	5.00E+08
DDE	10000	1.00E+00	5.00E+04	5.00E+08
Dichlorobenzene, 1,2-	100	4.00E-01	5.00E+01	2.00E+03
Dichloroethylene, trans-1,2-	1	4.00E-01	5.00E+01	2.00E+01
Dinitrobenzene, 1,3-	100	1.00E+00	5.00E+00	5.00E+02
Endosulfan (I or II)	10000	1.00E+00	5.00E+03	5.00E+07
Endrin	10000	1.00E+00	5.00E+04	5.00E+08
Heptachlor	10000	4.00E-01	5.00E+04	2.00E+08
Lead	1000	1.00E+00	5.00E+03	5.00E+06
Nitroglycerine	100	1.00E+00	5.00E+01	5.00E+03
Pentachlorophenol	100	1.00E+00	5.00E+03	5.00E+05
Tetrachloroethane, 1,1,2,2-	100	4.00E-01	5.00E+00	2.00E+02
Tetrachloroethene	100	4.00E-01	5.00E+01	2.00E+03
Trichloroethylene	100	4.00E-01	5.00E+01	2.00E+03
Trinitrobenzene, 1,3,5-	100	4.00E-01	5.00E+00	2.00E+02

Ecotoxicity/Mobility/Persistence/Bioaccummulation Value from Source Substances:	1.00E+02
Ecotoxicity/Mobility/Persistence/Bioaccummulation Value from Observed Hazardous Substances:	5.00E+08
Ecotoxicity/Mobility/Persistence/Bioaccummulation Factor:	5.00E+08
Sum of Source Hazardous Waste Quantity Values:	4.18E+02
Hazardous Waste Quantity Factor:	100
Waste Characteristics Factor Category:	320

Level I Concentrations

Sample ID: OLF-W05
Sample Medium: Aqueous
Location: 0.07 miles

Hazardous Substance	Hazardous Substance Concentration	AWQC Benchmark Concentrations		Observed in Upper Units Aquifer ?
		FRESH	SALT	
Lead	7.1E+01	3.2E+00	5.6E+00	ppb YES

Documentation for OLF-W05:

The location of this sampling point for Former Landfill #3 is not known by the reviewer..

Reference: 17

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 SW PATHWAY: GW TO SW COMPONENT ENVIRONMENTAL THREAT TARGETS
 Ft. McClellan, Aggregate Score - 11/08/94

Level II Concentrations

Sample ID: T5-D02
 Sample Medium: Sediment
 Location: 0.04 miles

Hazardous Substance	Hazardous Substance Concentration	FRESH	AWQC Benchmark Concentrations SALT	Units	Observed in Upper Aquifer ?
Arsenic	1.2E+01		N.A.	ppb	YES
Di-n-butyl phthalate	4.1E+00		N.A.	ppb	NO
Lead	2.5E+02		N.A.	ppb	YES

Documentation for T5-D02:

Creek sediment samples at Area T-5

Reference: 17

Sample ID: LF1-D02
 Sample Medium: Sediment
 Location: 0.04 miles

Hazardous Substance	Hazardous Substance Concentration	FRESH	AWQC Benchmark Concentrations SALT	Units	Observed in Upper Aquifer ?
Arsenic	1.4E+01		N.A.	ppb	YES

Documentation for LF1-D02:

Creek sediment samples at Former Landfill #1

Reference: 17

Sample ID: OLF-D03
 Sample Medium: Sediment

Location: 0.07 miles

Hazardous Substance	Hazardous Substance Concentration	AWQC Benchmark Concentrations		Observed in Upper Units Aquifer ?
		FRESH	SALT	
Aluminum	6.1E+04	N.A.	ppb	NO
Lead	2.3E+01	N.A.	ppb	YES

Documentation for OLF-D03:

The aluminum concentration may be from natural conditions.

Reference: 17

Most Distant Level I Sample

Sample ID: OLF-W05

Distance from the Probable Point of Entry: 0.07 miles

Documentation for OLF-W05:

The location of this sampling point for Former Landfill #3 is not known by the reviewer..

Reference: 17

Most Distant Level II Sample

Sample ID: OLF-D03

Distance from the Probable Point of Entry: 0.07 miles

Documentation for OLF-D03:

The aluminum concentration may be from natural conditions.

Reference: 17

Level I Concentrations

Sensitive Environment	Distance from Probable Point of Entry to Sensitive Env. (miles)	Sensitive Environment Value
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- N/A and/or data not specified

Sum of Sensitive Environments Values: 0

Wetlands

Wetland	Distance from Probable Point of Entry to Wetland (miles)	Wetlands Frontage (miles)
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- N/A and/or data not specified

Total Wetlands Frontage: 0.00 Miles Total Wetlands Value: 0

=====
 Sum of Sensitive Environments Value + Wetlands Value: 0.00E+00

Level I Concentrations Factor: 0.00E+00

Level II Concentrations

Sensitive Environment	Distance from Probable Point of Entry to Sensitive Env. (miles)	Sensitive Environment Value
-----------------------	---	-----------------------------

- N/A and/or data not specified

Sum of Sensitive Environments Values: 0

Wetlands

Wetland	Distance from Probable Point of Entry to Wetland (miles)	Wetlands Frontage (miles)
---------	--	---------------------------

- N/A and/or data not specified

Total Wetlands Frontage: 0.00 Miles Total Wetlands Value: 0

=====
 Sum of Sensitive Environments Value + Wetlands Value: 0.00E+00

Level II Concentrations Factor: 0.00E+00

Potential Contamination

Sensitive Environments

Type of Surface	Sensitive Environment	Sensitive Environment Value
Water Body		

Wetlands

Type of Surface	Sensitive Environment	Wetlands Frontage	Wetlands Value
Water Body			

- N/A and/or data not specified

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 SW PATHWAY: GW TO SW COMPONENT ENVIRONMENTAL THREAT TARGETS
 Ft. McClellan, Aggregate Score - 11/08/94

Type of Surface Water Body	Sum of			Dj(Wj + Sj)
	Sum of Sens. Environment Values(Sj)	Wetland Frontage Values(Wj)	Dilution Weight (Dj)	

- N/A and/or data not specified

Sum of Dj(Wj + Sj): 0.00E+00
 Sum of Dj(Wj + Sj)/10: 0.00E+00

=====

Potential Contamination Sensitive Environment Factor: 0.00E+00

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 SOIL EXPOSURE PATHWAY RESIDENT POPULATION THREAT LIKELIHOOD OF EXPOSURE
 Ft. McClellan, Aggregate Score - 11/08/94

Likelihood of Exposure

No.	Source ID	Level of Contamination
1	Former Landfill #3	Level I
2	Former Landfill #1	Level II
4	Area T-38	Level II

Likelihood of Exposure Factor: 550

Documentation for Area of Contamination, Source Former Landfill #3:

Area of landfill

Reference:

Documentation for Area of Contamination, Source Former Landfill #1:

Area of landfill

Reference:

Documentation for Area of Contamination, Source Area T-38:

The area of the disposal pit is 10 ft. by 10 ft. by 20 ft.

Reference:

Source No.	Hazardous Substance	Depth (ft.)	Concent.	Cancer	RFD	Units
1	Benz(a)anthracene	< 2	1.6E-01	0.0E+00	0.0E+00	ppm
1	Chlordane	< 2	5.7E-01	4.5E-01	3.5E+01	ppm
1	Chrysene	< 2	8.3E-02	0.0E+00	0.0E+00	ppm

SOIL EXPOSURE PATHWAY RESIDENT POPULATION THREAT LIKELIHOOD OF EXPOSURE
Ft. McClellan, Aggregate Score - 11/08/94

1	Phenanthrene	< 2	8.7E-02	0.0E+00	0.0E+00	ppm
1	Pyrene	< 2	2.1E-01	0.0E+00	1.7E+04	ppm
2	Pyrene	< 2	2.8E-01	0.0E+00	1.7E+04	ppm
4	Aldrin	< 2	5.5E-03	3.4E-02	1.7E+01	ppm
4	Iron	< 2	1.5E+05	0.0E+00	0.0E+00	ppm

Source: 1 Former Landfill #3

Source Hazardous Waste Quantity Value: 28.19

Hazardous Substance	Toxicity Value
Benz(a)anthracene	1000
Chlordane	10000
Chrysene	0
Phenanthrene	0
Pyrene	100

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SOIL EXPOSURE PATHWAY RESIDENT POPULATION THREAT WASTE CHARACTERISTICS
Ft. McClellan, Aggregate Score - 11/08/94

Source: 2 Former Landfill #1

Source Hazardous Waste Quantity Value: 2.56

Hazardous Substance	Toxicity Value
Pyrene	100

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SOIL EXPOSURE PATHWAY RESIDENT POPULATION THREAT WASTE CHARACTERISTICS
Ft. McClellan, Aggregate Score - 11/08/94

Source: 4 Area T-38

Source Hazardous Waste Quantity Value: 0.00

Hazardous Substance	Toxicity Value
Aldrin	10000
Iron	0

PREscore 3.0 - PRESCORE.TCL File 07/25/94 PAGE: 172
SOIL EXPOSURE PATHWAY RESIDENT POPULATION THREAT WASTE CHARACTERISTICS
Ft. McClellan, Aggregate Score - 11/08/94

Toxicity Factor:	1.00E+04
Sum of Source Hazardous Waste Quantity Values:	3.07E+01
Hazardous Waste Quantity Factor:	10
Waste Characteristics Factor Category:	18

Targets

Level I Population: 0.0 Value: 0.00

Level II Population: 16.5 Value: 16.50

Documentation for Level II Population:

A portion of the former landfill is beneath three buildings used as officers quarters. They appear to be duplexes. The population number was arrived at by multiplying 2.75 (average number of persons per household) by 6 (two residences in each building).

Reference: 18, p. 3-26.

Workers: 0.0 Value: 0.00

Documentation for Workers:

There are no workers on these properties.

Reference:

Resident Individual: Level II Value: 45.00

Resources: NO Value: 0.00

Terrestrial Sensitive Environment	Value
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Wetland	100
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Terrestrial Sensitive Environments Factor: 100.00

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SOIL EXPOSURE PATHWAY RESIDENT POPULATION THREAT TARGETS
Ft. McClellan, Aggregate Score - 11/08/94

Documentation for Terrestrial Environment Wetland:

"The landfill is located in a marshy area east of State Route 21
and north of Cane Creek."

Reference: 12, 3-88.

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 SOIL EXPOSURE PATHWAY NEARBY POPULATION THREAT LIKELIHOOD OF EXPOSURE
 Ft. McClellan, Aggregate Score - 11/08/94

Likelihood of Exposure

No. Source ID	Level of Contamination	Attractiveness/ Accessibility	Area of Contam. (sq. feet)
1 Former Landfill #3	Level I	5	958320
4 Area T-38	Level II	5	100

Highest Attractiveness/Accessibility Value: 5
 Sum of Eligible Areas Of Contamination (sq. feet): 958420
 Area of Contamination Value: 100

Likelihood of Exposure Factor Category: 50

Documentation for Attractiveness/Accessibility, Source Former Landfill #3:

a fence surrounds the site

Reference:

Documentation for Attractiveness/Accessibility, Source Area T-38:

A chain-link fence surrounds the site.

Reference: 12, p. 1-24, Figure 1-8.

Source No.	Hazardous Substance	Depth (ft.)	Concent.	Cancer	RFD	Units
1	Benz(a)anthracene	< 2	1.6E-01	0.0E+00	0.0E+00	ppm
1	Chlordane	< 2	5.7E-01	4.5E-01	3.5E+01	ppm
1	Chrysene	< 2	8.3E-02	0.0E+00	0.0E+00	ppm
1	Phenanthrene	< 2	8.7E-02	0.0E+00	0.0E+00	ppm
1	Pyrene	< 2	2.1E-01	0.0E+00	1.7E+04	ppm
4	Aldrin	< 2	5.5E-03	3.4E-02	1.7E+01	ppm
4	Iron	< 2	1.5E+05	0.0E+00	0.0E+00	ppm

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SOIL EXPOSURE PATHWAY NEARBY POPULATION THREAT WASTE CHARACTERISTICS
Ft. McClellan, Aggregate Score - 11/08/94

Source: 1 Former Landfill #3

Source Hazardous Waste Quantity Value: 28.19

Hazardous Substance	Toxicity Value
Benz(a)anthracene	1000
Chlordane	10000
Chrysene	0
Phenanthrene	0
Pyrene	100

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SOIL EXPOSURE PATHWAY NEARBY POPULATION THREAT WASTE CHARACTERISTICS
Ft. McClellan, Aggregate Score - 11/08/94

Source: 2 Former Landfill #1

Source Hazardous Waste Quantity Value: 2.56

Hazardous Substance	Toxicity Value
Pyrene	100

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SOIL EXPOSURE PATHWAY NEARBY POPULATION THREAT WASTE CHARACTERISTICS
Ft. McClellan, Aggregate Score - 11/08/94

Source: 4 Area T-38

Source Hazardous Waste Quantity Value: 0.00

Hazardous Substance	Toxicity Value
Aldrin	10000
Iron	0

PREscore 3.0 - PRESCORE.TCL File 07/25/94 PAGE: 179
SOIL EXPOSURE PATHWAY NEARBY POPULATION THREAT WASTE CHARACTERISTICS
Ft. McClellan, Aggregate Score - 11/08/94

Toxicity Factor:	1.00E+04
Sum of Source Hazardous Waste Quantity Values:	2.82E+01
Hazardous Waste Quantity Factor:	10
Waste Characteristics Factor Category:	18

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SOIL EXPOSURE PATHWAY NEARBY POPULATION THREAT TARGETS
Ft. McClellan, Aggregate Score - 11/08/94

Nearby Individual

Population within 1/4 mile: 127.0

Nearby Individual Value: 0.0

Population Within 1 Mile

Travel Distance Category	Number of People	Value
> 0 to 1/4 mile	127.0	0.4
> 1/4 to 1/2 mile	234.0	0.2
> 1/2 to 1 mile	1868.0	1.0

Population Within 1 Mile Factor: 2.0

Documentation for Population > 0 to 1/4 mile Distance Category:

Only populations surrounding Former Landfill #1, Former Landfill #2 and Area T-38 were evaluated. There are no resident populations in the zero to 1/2 mile radius surrounding Area T-38. 12 homes were found within the 0 to 1/4 mile limit around Former Landfill #3. 20 duplexes are within the 0 to 1/4 mile limit around Former Landfill #2.

Reference: 16

Documentation for Population > 1/4 to 1/2 mile Distance Category:

25 homes were counted in the vicinity of Former Landfill #3. 12 single family homes and 24 duplexes were counted in the 1/4 to 1/2 mile limit around Former Landfill #2.

Reference: 16

Documentation for Population > 1/2 to 1 mile Distance Category:

141 duplexes and 136 single family homes were counted in the TDL around Former Landfill #1. 301 homes were counted in the 1/2 to 1 mile distance category around Former Landfill #3 and an estimated population of 1040 live near Area T-38. At area T-38 the nearby population count was done for the barracks area located southwest of the site. The barracks is divided into 9 separate buildings. 5 buildings can house up to 80 residents and 4 can house up to 160 residents, each. This information was obtained from Mr. Smith at the DEH. His phone no. is 848-6196.

Reference:

OBSERVED RELEASE

No. Sample ID	Distance (miles)	Level of Contamination
- N/A and/or data not specified		

=====
Observed Release Factor: 0

Gas Migration Potential

GAS POTENTIAL TO RELEASE

Source ID	Source Type	Gas Contain. Value (A)	Gas Source Type Value (B)	Gas Migrtn. Potent. Value (C)	Sum (B+C)	Gas Potential to Rel. Value A(B+C)
- N/A and/or data not specified						

Gas Potential to Release Factor: 0

Documentation for Source Type, Source Former Landfill #3:

"Former Landfill #3 was the Post sanitary landfill in operation between 1946 and 1967."

Reference: 12, p. 1-33.

Documentation for Source Type, Source Former Landfill #1:

"Former Landfill #1 reportedly operated as the Post sanitary landfill between 1945 and 1947.

Reference: 12, p. 1-31.

Documentation for Source Type, Source Former Landfill #2:

"Former Landfill #3 was used as the Post sanitary landfill after the closure of Former Landfill #1 and was active from 1947 to an unknown date."

Reference: 12, p. 1-33.

Documentation for Source Type, Source Area T-38:

"Area T-38 (Technical Escort Reaction Area) is located on the Main Post west of Reservoir Hill." The site was used for training escort personnel in techniques of eliminating toxic hazards in case of an accidental spill during transport. Toxic agents and munitions were stored in this area. These included GB, VX, and HD. Extensive decontamination was conducted on this site for reported spills and contaminated training aids.

A concrete decontamination pad was used at this site. There is an unconfirmed report of the burial of a drum of mustard in the southern portion of the site. A former disposal pit area was reportedly used to dispose of decontaminants and other hazardous wastes at the site.

Reference: 12, p. 1-23.

Documentation for Source Type, Source Area T-5:

Area T-5 is a former Toxic Hazards Detection and Decontamination Training Area. This site was used to train students in the methods of detecting and decontaminating toxic agents, including HD, GB, and VX. The quantities of agent used for training purposes ranged from 20 to 40 milliliters per exercise. Site 2 may have been the location of a 110 gallon HD spill. Available evidence indicates that the contaminated soil was chemically decontaminated and removed.

Reference: 12, p. 1-17.

Documentation for Source Type, Source Area T-24A:

Area T-24A was a Chemical Munitions Disposal Training Area. This site was used for munitions disposal training with CG, BZ, GB, and HD. Two square burning pits, each 16 feet on a side, were used for training exercises and were enclosed by a fenced area measuring 40 by 80 meters. The depths of the pits are unknown, however, standard operating procedures recommended a depth of 6 feet.

Reference: 12, p. 1-20.

Source: Former Landfill #3

Gaseous Hazardous Substance	Hazardous Substance Gas Migration Potential Value
Benz(a)anthracene	6
Chlordane	6
Chrysene	6
Phenanthrene	11
Pyrene	6

Average of Gas Migration Potential Value for 3 Hazardous Substances: 7.667

=====

Gas Migration Potential Value From Table 6-7: 6

Source: Former Landfill #1

Gaseous Hazardous Substance	Hazardous Substance Gas Migration Potential Value
Pyrene	6

Average of Gas Migration Potential Value for 3 Hazardous Substances: 6.000

=====

Gas Migration Potential Value From Table 6-7: 6

Source: Former Landfill #2

Gaseous Hazardous Substance	Hazardous Substance Gas Migration Potential Value
-----------------------------	--

Average of Gas Migration Potential Value for 3 Hazardous Substances: 0.000
=====

Gas Migration Potential Value From Table 6-7: 0

Source: Area T-38

Gaseous Hazardous Substance	Hazardous Substance Gas Migration Potential Value
Aldrin	11

Average of Gas Migration Potential Value for 3 Hazardous Substances: 11.000

=====

Gas Migration Potential Value From Table 6-7: 11

Source: Area T-5

Gaseous Hazardous Substance	Hazardous Substance Gas Migration Potential Value
-----------------------------	--

Average of Gas Migration Potential Value for 3 Hazardous Substances: 0.000
=====

Gas Migration Potential Value From Table 6-7: 0

Source: Area T-24A

Gaseous Hazardous Substance	Hazardous Substance Gas Migration Potential Value
-----------------------------	--

Average of Gas Migration Potential Value for 3 Hazardous Substances: 0.000
=====

Gas Migration Potential Value From Table 6-7: 0

Source:

Gaseous Hazardous Substance	Hazardous Substance Gas Migration Potential Value
-----------------------------	--

Average of Gas Migration Potential Value for 3 Hazardous Substances: 0.000
=====

Gas Migration Potential Value From Table 6-7: 0

Particulate Migration Potential

PARTICULATE POTENTIAL TO RELEASE

Source ID	Source Type	Partic. Contain. Value (A)	Partic. Source Migrtn. Type Value (B)	Partic. Migrtm. Potent. Value (C)	Sum (B+C)	Partic. Potential to Rel. Value A(B+C)
- N/A and/or data not specified						

Particulate Potential to Release Factor: 0

Documentation for Source Type, Source Former Landfill #3:

"Former Landfill #3 was the Post sanitary landfill in operation between 1946 and 1967."

Reference: 12, p. 1-33.

Documentation for Source Type, Source Former Landfill #1:

"Former Landfill #1 reportedly operated as the Post sanitary landfill between 1945 and 1947."

Reference: 12, p. 1-31.

Documentation for Source Type, Source Former Landfill #2:

"Former Landfill #3 was used as the Post sanitary landfill after the closure of Former Landfill #1 and was active from 1947 to an unknown date."

Reference: 12, p. 1-33.

Documentation for Source Type, Source Area T-38:

"Area T-38 (Technical Escort Reaction Area) is located on the Main Post west of Reservoir Hill." The site was used for training escort personnel in techniques of eliminating toxic hazards in case of an accidental spill during transport. Toxic agents and munitions were stored in this area. These included GB, VX, and HD. Extensive decontamination was conducted on this site for reported spills and contaminated training aids.

A concrete decontamination pad was used at this site. There is an unconfirmed report of the burial of a drum of mustard in the southern portion of the site. A former disposal pit area was reportedly used to dispose of decontaminants and other hazardous wastes at the site.

Reference: 12, p. 1-23.

Documentation for Source Type, Source Area T-5:

Area T-5 is a former Toxic Hazards Detection and Decontamination Training Area. This site was used to train students in the methods of detecting and decontaminating toxic agents, including HD, GB, and VX. The quantities of agent used for training purposes ranged from 20 to 40 milliliters per exercise. Site 2 may have been the location of a 110 gallon HD spill. Available evidence indicates that the contaminated soil was chemically decontaminated and removed.

Reference: 12, p. 1-17.

Documentation for Source Type, Source Area T-24A:

Area T-24A was a Chemical Munitions Disposal Training Area. This site was used for munitions disposal training with CG, BZ, GB, and HD. Two square burning pits, each 16 feet on a side, were used for training exercises and were enclosed by a fenced area measuring 40 by 80 meters. The depths of the pits are unknown, however, standard operating procedures recommended a depth of 6 feet.

Reference: 12, p. 1-20.

Source: Former Landfill #3

Particulate Hazardous Substance

Benz(a)anthracene
Chlordane
Chrysene
Phenanthrene
Pyrene

Source: Former Landfill #1

Particulate Hazardous Substance

Pyrene

Source: Former Landfill #2

Particulate Hazardous Substance

Source: Area T-38

Particulate Hazardous Substance

Aldrin
Iron

Source: Area T-5

Particulate Hazardous Substance

Source: Area T-24A

Particulate Hazardous Substance

Source:

Particulate Hazardous Substance

Hazardous Substance	Toxicity Value	Gas Mobility Value	Particulate Mobility Value	Toxicity/ Mobility Value
---------------------	-------------------	--------------------------	----------------------------------	--------------------------------

Hazardous Substances Found in an Observed Release

Sample Observed Release ID	Hazardous Substance	Particulate Toxicity/ Mobility Value	Gas Toxicity/ Mobility Value
-------------------------------	---------------------	--	------------------------------------

- N/A and/or data not specified

- N/A and/or data not specified

Toxicity/Mobility Value from Observed Release Hazardous Substances:	0.00E+00
Toxicity/Mobility Factor:	0.00E+00
Sum of Source Hazardous Waste Quantity Values:	0.00E+00
Hazardous Waste Quantity Factor:	0
Waste Characteristics Factor Category:	0

AIR PATHWAY TARGETS

Ft. McClellan, Aggregate Score - 11/08/94

Actual Contamination

No. Sample ID	Distance (miles)	Level of Contamination
---------------	---------------------	------------------------

- N/A and/or data not specified

Potential Contamination

Distance Categories Subject to Potential Contamination	Population	Value
	Potential Contaminantion Factor:	0.0000

doc here

Nearest Individual Factor

Distance in miles: Potentia

- N/A and/or data not specified

doc here

Resources

Resource Value: 4.93538665663530842000000000000000000000e+257

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Actual Contamination, Sensitive Environments

Sensitive Environment	Distance (miles)	Sensitive Environment Value
-----------------------	---------------------	-----------------------------------

- N/A and/or data not specified

Actual Contamination, Wetlands

Distance Category	Wetland Acreage	Wetland Acreage Value
----------------------	--------------------	--------------------------

- N/A and/or data not specified

=====
 (Sum of Sensitive Environments + Wetlands Values)

REFERENCES

Ft. McClellan, Aggregate Score - 11/08/94

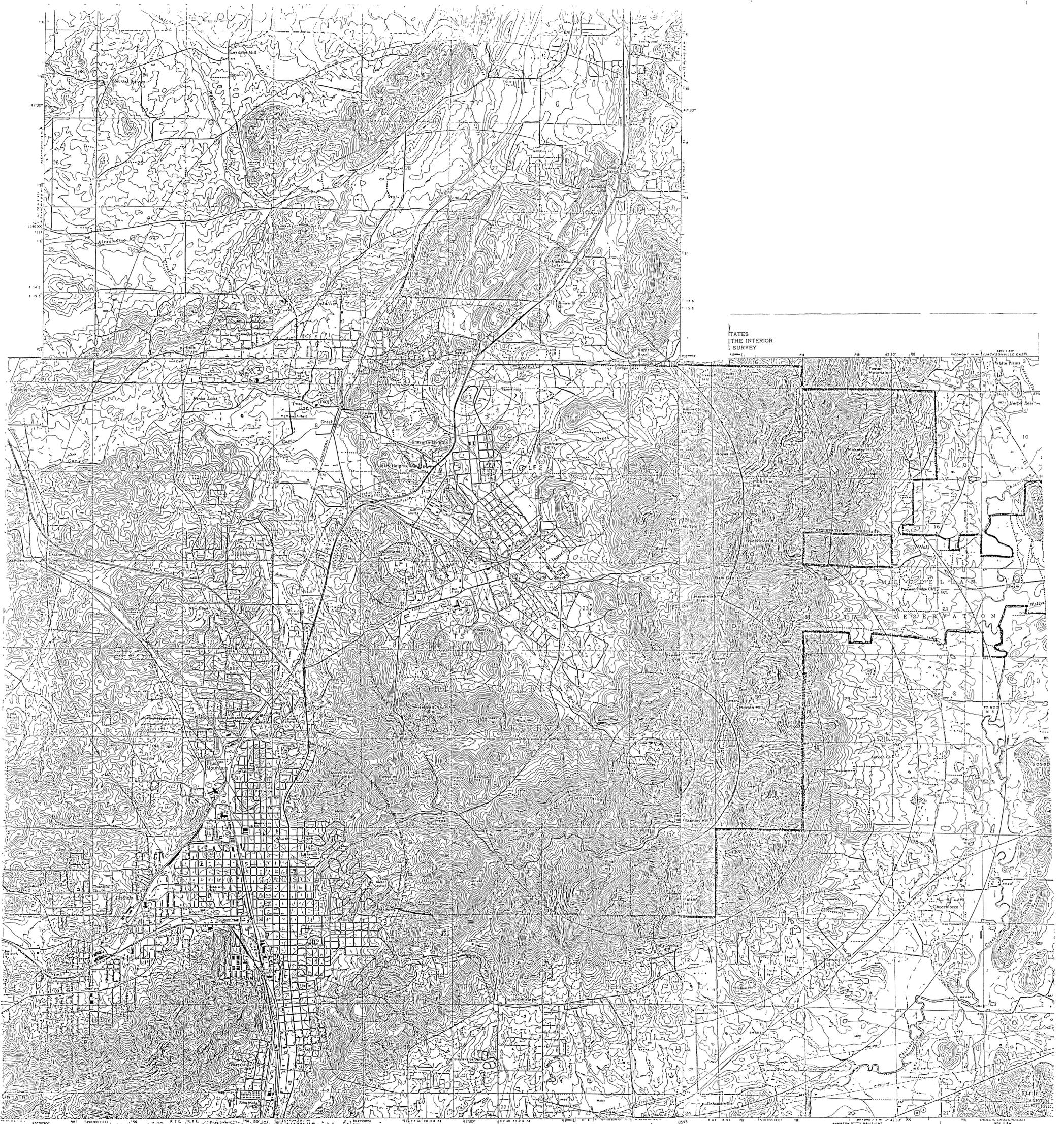
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15. Automated Defense Priority Model FY-94 Score Sheets for Former Landfill #3, Fort McClellan (Main Post), 1994.
16. Topographic Maps, 7.5 Minute Series, U.S. Geological Survey.
17. Table 1-1. Data Summary Table. Most recent sample data of sources at Fort McClellan, 1994.
18. Fort McClellan RI/SAP, April 5, 1994
(Site Location Maps)

Appendix E: Topographic Map with Population Areas



UNITED STATES
THE INTERIOR
SURVEY

Map published by the Army Map Service
Published for civil use by the Geological Survey
Control by USGS, USACGS and USCE

Scale 1:24,000
CONTOUR INTERVAL 20 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

ANNISTON, ALA.
7 5-58552 5/7 5
1956
REVISED 1972
7-SERIES 1964

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U.S. GEOLOGICAL SURVEY, WASHINGTON, D. C. 20242
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

ANNISTON, ALA.
7 5-58552 5/7 5
1956
PHOTO REVISED 1972
AND 1983 IN THE 7-SERIES 1964

U.S. GEOLOGICAL SURVEY
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JAN 9 1973
DENVER

ANNISTON, ALA.
7 5-58552 5/7 5
1956
PHOTO REVISED 1972
AND 1983 IN THE 7-SERIES 1964