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## Briefing Document

RCRA Corrective Action Program Meeting Santa Fe, New Mexico

7 March 1996



49 CES/CEV Holloman Air Force Base, New Mexico PART I

**TABLE 1 SWMUs** 

# Table 1Solid Waste Management Units

#### 1.1 Project Overview and Objectives

Holloman AFB has conducted several investigations over a span of nine years at sites listed on Table 1 of Holloman AFB's federal Hazardous and Solid Waste Amendments (HSWA) permit. The Phase I investigations began in 1987 and concluded in 1992. Reports summarizing the Phase I investigations were submitted for review to the New Mexico Environment Department (NMED) and the U.S. Environmental Protection Agency (EPA) Region VI. The NMED and EPA Region VI reviewed the reports and provided comments, direction, and requirements for further actions at each site. Holloman AFB has conducted the Phase II activities to resolve the concerns of the regulatory agencies regarding these reports.

The Phase II activities have consisted of corrective measure studies, corrective action designs, additional Resource Conservation and Recovery Act (RCRA) facility investigations (RFIs), and additional risk assessments.

These activities began in 1992 and continued in 1995 with a Phase II RFI of seven Table 1 solid waste management units (SWMUs) and two areas of concern (AOCs). The Phase II RFI report, the Phase II RCRA Facility Investigation Report, Table 1 Solid Waste Management Units (Foster Wheeler and Radian, 1995), was submitted to the regulatory agencies to address their remaining concerns regarding the Phase I activities.

Two SWMUs, SWMU 139 (Lake Holloman) and SWMU 140 (Lake Stinky), are listed on Table 1 of the HSWA permit but have been addressed in conjunction with the RCRA closure of the sewage lagoons because they are part of the wastewater treatment plant at Holloman AFB. Several investigations and risk assessments have been performed for the lakes and sewage lagoons. Documents summarizing these investiga-

tions have been submitted to the regulatory agencies separately from other Table 1 reports.

Site investigations began in 1992 and continued in 1996 with the submittal of the Technical Memorandum, 1994 Site Investigation, Lake Holloman, Lake Stinky, and the Ditch (Radian and EBASCO, 1995) and the pending submittal in March 1996 of the Draft Final Risk Assessment Addendum, Sewage Lagoons Closure Project (Radian and Foster Wheeler, 1996). SWMUs 139 and 140 are discussed in Section 1.3.3.

#### 1.2 Project Regulatory Framework

In 1983, Holloman AFB entered into the Air Force's Installation Restoration Program (IRP) by conducting the *IRP Phase I Records Search* (CH2M Hill, 1983) that identified 42 sites. Since 1987, Holloman AFB has been actively implementing their IRP through remedial investigations (RIs), feasibility studies (FSs), and remedial actions.

In September 1991, EPA Region VI issued Holloman AFB the HSWA portion of their RCRA operating permit. The HSWA portions of the permit required that sites identified by the EPA during a 1987 RCRA facility assessment (RFA) be included in an RFI.

As appropriate, the Base must comply with the IRP and RCRA corrective action program. Both are similarly phased and ultimately intended to ensure that contaminated sites that pose a threat to human health or the environment are remediated. Since its HSWA permit was issued, Holloman AFB has integrated the two programs to reduce duplicative efforts. This approach has been embraced by EPA Region VI and the NMED.

Because the IRP began prior to the RCRA corrective action program at Holloman AFB, many of the investigation activities for the RCRA corrective action program were completed under the IRP, depending on the time of the investigation and the how the investigation was funded by the Department of Defense.

## 1.3 Summary of Table 1 Investigation Activities

Table 1 of the HSWA permit contains 40 SWMUs and AOCs, most of which are also IRP sites. They are listed in Table 1-1. Holloman has conducted the investigations at these sites in a phased approach, which satisfies both the IRP and RCRA corrective action programs.

#### 1.3.1 Phase I Activities

Holloman AFB conducted several Phase I investigations to determine the presence or absence of waste constituents and to evaluate the potential risk to human health or the environment. Information regarding these investigations is presented in the following reports:

- Dames and Moore (1987)—Confirmation/ Quantification, Stage 1 Investigation for Holloman AFB, NM.
- Walk, Haydel, and Associates (1989a)— Baseline Risk Assessment for Holloman AFB, NM.
- Walk, Haydel, and Associates (1989b)— Remedial Investigation (RI) Report, Holloman AFB, NM.
- Radian Corporation (1992a)—Remedial Investigation (RI) Report—Investigation, Study, and Recommendation for 29 Waste Sites (referred to herein as the 29 Sites RI).
- Radian Corporation (1992b)—Risk Assessment (RA) Report for the Remedial Investigation —Investigation, Study, and Recommendation for 29 Waste Sites (referred to herein as the 29 Sites RA).

To comply with their HSWA permit, Holloman AFB prepared and submitted a Phase I investigation work plan (*Chemical Data Acquisition Plan (CDAP) for 29 Waste Sites*, Radian, 1991). The work plan was approved (see the Appendix) and a Phase I RI and RA (29 Sites RI and 29 Sites RA) were completed in 1992. On the basis of the investigation results, a recommendation for each site was made. The recommendations ranged from site closeout/no further action (SC/NFA) to conducting a feasibility study/ corrective measures study (FS/CMS).

EPA Region VI and NMED reviewed the 29 Sites RI and 29 Sites RA reports and, as appropriate, provided comments, direction, and requirements for future actions at each site. Comments from EPA Region VI regarding the reports were provided to Holloman AFB in a letter dated 3 November 1992 (see the Appendix).

#### 1.3.2 Phase II Activities

In response to agency concerns, Holloman AFB prepared the RCRA Phase II Facility Investigation Work Plan, Table 1 Solid Waste Management Units (Phase II Work Plan) (Holloman AFB, 1993). This work plan was approved by EPA Region VI on 25 January 1994 (see the Appendix).

Holloman AFB implemented the Phase II activities to address the agency concerns through several separate events based on the timing of other investigative activities and the proximity of Table 1 sites to sites on the other Tables of the HSWA permit. Table 1-2 lists the sites that were requested for further investigation by the regulatory agencies and the corresponding activities. Figure 1-1 shows the locations of the Table 1 SWMUs. Figure 1-2 presents the chronology of the Phase II activities beginning with an FS/CMS in 1992.

## 1.3.3 Investigations Regarding Lakes Holloman and Stinky

Because the lakes receive water from the sewage lagoons, site-specific investigations have been conducted in coordination with the sewage lagoons investigations and not with the other SWMUs listed on Table 1 of the HSWA permit. Information regarding these investigations have been presented in the following reports:

- Radian Corporation (1992)—Site Characterization Report, Sewage Lagoons and Lakes Investigation.
- Radian Corporation (1993)—Phase II RCRA Facility Investigation Report for Lakes Holloman and Stinky.
- Radian Corporation and EBASCO (1995)—Technical Memorandum, 1994 Site Investigation, Lake Holloman, Lake Stinky, and the Ditch.

A part of the sewage lagoons closure project, the *Draft Final Risk Assessment Addendum, Sewage Lagoons Closure Project* (Radian and Foster Wheeler, 1996), will be submitted. The RA determined that the lakes did not present an unacceptable risk to human health and the environment. Therefore, on the basis of this study, a recommendation of NFA will be made for Lakes Holloman and Stinky.

#### 1.4 Corrective Action Status

The overall objective of the Phase II activities was to resolve the agency concerns regarding the data collected during the Phase I activities. Additional data were gathered and were used to determine that the objective had been met and to suggest recommendations for further action at each site.

The Phase I RCRA Facility Investigation Report, Table 2 Solid Waste Management Units (Radian, 1994) presents the results, conclusions, and recommendations for SWMUs 118, 132, and AOC-A (IRP Site OT-16); SWMUs 129 and 178 (IRP Site OT-36); and SWMUs 165,177, 179, and 181 (IRP Site OT-39).

On the basis of the Table 1 Phase II investigations results, recommendations for further action were made and presented in the *Phase II RCRA Facility Investigation Report, Table 1 Solid Waste Management Units* (Radian and Foster Wheeler, 1995). Of the nine SWMUs and AOCs, four sites were recommended for NFA (SWMU 102, SWMU 104, SWMU 134, and SWMU 171).

Conditional no further action (CNFA) was recommended for the Fire Training Area (SWMU 170) and AOC-T where action was necessary to prevent further releases to the environment. Longterm monitoring (LTM) was also recommended for AOC-T.

Voluntary corrective action (VCA) was recommended for SWMU 82 and SWMU 197 to mitigate unacceptable occupational risk. LTM was also recommended for AOC-P to remediate TRPH concentrations exceeding the Base-specific standard of 1000 mg/kg. Table 1-3 summarizes the conclusions and recommendations for each Table 1 Phase II site.

### 1.4.1 Current Status of Table 1 Phase II Sites

The Table 1 Phase II report was submitted to NMED and EPA Region VI for review on 23 June 1995. EPA Region VI submitted a draft letter to Holloman AFB on 28 September 1995 approving the report and suggesting the preparation of a permit modifications for the sites. No further formal regulatory response has been received by Holloman AFB regarding the reports.

Decision documents were signed by NMED for the following Table 1 Phase II sites:

- IRP Site SS-02& SS-05 (AOC-T);
- IRP Site OT-04 (SWMU 102);
- IRP Site SD-08 (SWMU 82);
- IRP Site OT-14 (SWMU 197); and
- IRP Site OT-24 (SWMU 134).

To achieve CNFA at the Fire Training Area, a soil vapor extraction (SVE) system will be installed by March 1996. A SVE has been installed at AOC-T and LTM will also be conducted. The VCAs at SWMU 82 and SWMU 197 will be impermeable caps installed by March 1996. LTM will be conducted at SWMU 82. The VCA at AOC-P will be an SVE system installed by May 1996.

## Table 1-1 Summary of Table 1 Investigations

				NOTE T	his Table	doesn'	t have
		Sum	Table 1-1 mary of Table 1 Ir	vestigations	sites	associat	en of
SWMU	SWMU Description	Nature of Suspected Release	COPCs in Soil	COPCs in Groundwater	Risk Assessment Results	Recommenda- tions	Current Status
4 82	Building 131 O/WS Building 131 Washrack	Overflow	Organochlorine pesticides and metals	Organochlorine pesticides	Unacceptable Occupational Risk	VCA/LTM <sup>e</sup>	VCA-4/96
21	Building 702 O/WS	Leak	Benzene, TRPH	BTEX, metals	Acceptable Risk	NFAd	Pending
42	Building I Waste Accumulation Area	Leaks & spills	TRPH, lead	None	Acceptable Risk	CNFA <sup>b</sup>	DD-3/93
102	Acid Trailer Disposal Site	Buried waste, leaks, leaching	None	Selenium	Acceptable Risk	NFA <sup>e</sup>	DD-Pending
104	Former Army Landfill	Buried waste, leaks, leaching	None	4,4'-DDD, chloroform	Acceptable Risk	NFA <sup>•</sup>	DD-Pending
105	Golf Course Landfill	Buried waste, leaks, leaching	None	lead, cadmium	Acceptable Risk	CNFA <sup>b</sup>	DD-3/93
106	Main Base Landfill	Buried waste, leaks, leaching	None	TRPH, pesticides	Acceptable Risk	CNFA*	DD-3/93
107	Main Base Substation PCB Disposal Area	Spills	PCBs, TRPH	None	Acceptable Risk	<b>CNFA<sup>b</sup></b>	DD-9/94
108	MOBSS Landfill Disposal Trench	Buried waste, leaks, leaching	None	delta-BHC	Acceptable Risk	CNFA*	DD-3/93
109	Old Main Base Landfill	Buried waste, leaks, leaching	None	TRPH, solvents	Acceptable Risk	CNFA*	DD-3/93
111	Radioactive Waste Disposal Area	Buried waste	Radioactive material	None	Acceptable Risk	NFA⁵	Pending
113A	Sludge Disposal Trenches at Lagoons	Buried waste, leaks, leaching	Metals, PCB-1254, organochlorine pesticides, dicamba	None	Acceptable Risk	CNFA <sup>c</sup>	DD-9/95
113B	Sludge Disposal Trenches near Fire Training Area	Buried waste, leaks, leaching	Organochlorine pesticides, chlorinated herbicides, PCBs, metals, VOCs	Nitrate/nitrite, sulfate, beryllium, lead, selenium, VOCs	Acceptable Risk	CNFA	DD-9/95
114	TEL Disposal Site	Buried waste, leaks, leaching	Lead, ethyl benzene, xylene, TRPH	lead, VOCs	Acceptable Risk	VCA/LTM <sup>c</sup>	DD-9/94
115	West Area Landfill #1 PCB Disposal Area	Buried waste, leaks, leaching	None	4,4'-DDE, alpha-BHC, cadmium, VOCs	Acceptable Risk	<b>CNFA<sup>b</sup></b>	DD-9/94
116	West Area Landfill #2	Buried waste, leaks, leaching	None	VOCs	Acceptable Risk	CNFA <sup>b</sup>	DD-9/94
122	Building 702 Waste Oil Tank	Leak	Benzene, TRPH	Benzene, TRPH	Acceptable Risk	NFA <sup>d</sup>	Pending
130	Taxiway 4 Tank 28		BTEX, TRPH	BTEX, TRPH	Acceptable Risk	CNFA*	DD-3/93

## Table 1-1 (Continued)

SWMU	SWMU Description	Nature of Suspected Release	COPCs in Soil	COPCs in Groundwater	Risk Assessment Results	Recommenda- tions	Current Status
132	Building 21 Entomology Leachfield	Discharges, leaching	Organochlorine & organophosphorus pesticides, VOCs	organochlorine & organophosphorus pesticides	Acceptable Risk	VCA <sup>d</sup>	VCA-4/96
133	Building 703 Washrack Discharge Area	Overflows	TRPH	None	Acceptable Risk	NFAd	Pending
134	Building 920-924 Drainage Ditch	Discharges	None	None	Acceptable Risk	NFA®	DD-Pending
137	Building 1166 Test Track Drainfield	Discharges	TRPH	trichloroethene, chloroform, nitrate/nitrite	Acceptable Risk	CNFA⁴	DD-Pending
139	Lake Holloman, including ditch from Lagoon G	Discharges	Solvents, PCBs	Solvents, PCBs	Acceptable Risk	NFA <sup>f</sup>	Pending
140	Lake Stinky	Discharges	Solvents, PCBs	Solvents, PCBs	Acceptable Risk	NFA	Pending
165 179	Building 1176 Pond Discharge Box	Discharges, leaks	Metals, chlorinated VOCs	chlorinated VOCs	Acceptable Risk	NFA⁴	DD-Pending
166	MOBSS Drainage Lagoon	Discharges, leaks	Pesticides, solvents	Pesticides, solvents	Acceptable Risk	NFA*	DD-3/93
170	Fire Department Training Area 1	Discharges, spills	TRPH	BTEX, VOCs	Acceptable Risk	VCA <sup>e</sup>	VCA-4/96
171	Fire Department Training Area 2	Discharges, spills	TRPH	BTEX, VOCs	Acceptable Risk	NFA°	Pending
178	Building 1191 Fuel Runoff Pits	Spills	None	Trichloroethene, selenium, lead, VOCs	Acceptable Risk	NFA⁴	VCA-10/95
192	CoCo Blockhouse Disposal Well	Buried waste	Propellants, oxidizers	None	Acceptable Risk	NFA⁵	DD-3/93
197	Former Entomology Shop	Discharges	4,4'-DDD, 4,4'-DDE, 4,4'-DDT, aldrin, chlordane	2,4-DB	Unacceptable Occupational Risk	VCA <sup>e</sup>	VCA-4/96 DD-9/95
212	Building 824 Waste Accumulation Area	Overflows	VOCs	VOCs	Acceptable Risk	NFA <sup>b</sup>	Pending
AOC-A	Building 21 Pesticide Rinsewater Spill Area	Discharges	Organochlorine and organophosphorus pesticides, VOCs	Organochlorine and organophosphorus pesticides	Acceptable Risk	CNFA⁴	VCA-4/96 DD-9/95
AOC-D	Building 882 Spills	Spills	None	None	Acceptable Risk	NFA⁵	DD-9/94
AOC-G	Atlas Substation PCB Spill	Spill	TRPH, PCBs	None	Acceptable Risk	<b>CNFA<sup>b</sup></b>	DD-9/94
AOC-L	Early Missile Test Site	Discharges, overflows	TRPH, PCBs, lead, cadmium	Chloroform, copper, antimony	Unacceptable Ecological Risk	CNFA <sup>b</sup>	VCA-6/93 DD-9/94
AOC-P	Building 301 Fuel Tank	Leaks	TRPH	None	Acceptable Risk	CNFA <sup>e</sup>	VCA-5/96
AOC-T	POL Storage Tank Leaks	Spills	BTEX, TRPH	BTEX	Acceptable Risk	VCA/LTM <sup>e</sup>	LTM-SVE DD-9/95

## Table 1-1

#### (Continued)

Report containing most current recommendation for further action:

- The 1987 Confirmation/Quantification Report determined the presence or absence of contamination, and the 1989 RI delineated the extent at seven sites. A risk assessment was also conducted as part
  of the RI.
- <sup>b</sup> The 1992 29 Sites Remedial Investigation and Risk Assessment was the Phase I investigation for 28 of the 40 SWMUs listed on Table 1 of the HSWA permit.
- <sup>c</sup> The 1993 Table 1 Phase II RFI Work Plan (Holloman AFB, 1993) proposed further actions for some sites and no further action at others.
- <sup>d</sup> The 1994 *Table 2 RCRA Facility Investigation (RFI)* (Radian, 1994a) consisted of a field investigation of SWMUs listed on Table 2 of the HSWA permit. Due to its proximity to several Table 2 SWMUs, SWMU 132, 165, 178, 179, and AOC-A were included in this investigation.
- The 1995 Table I Phase II RCRA Facility Investigation (RFI) (Radian, 1995) was conducted to address the remaining EPA Region VI comments not addressed during the previous studies of SWMUs listed on Table 1 of the HSWA permit.
- <sup>t</sup> The 1996 Draft Risk Assessment Addendum, Sewage Lagoons Closure Project (Radian and Foster Wheeler, 1996) addressed both Lakes Holloman and Stinky as well as the sewage lagoons and will be submitted in March 1996.
- BTEX = Benzene, toluene, ethyl benzene, xylene.
- CNFA = Conditional no further action. Condition is the remediation of soil contamination.
- COPCs = Chemicals of potential concern detected during the investigation.
- DD = Decision Document
- NA = Not applicable.

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- NFA = No further action.
- LTM = Long-term monitoring.
- O/WS = Oil/water separator.
- PCBs = Polychlorinated biphenyls.
- RFI = RCRA facility investigation.
- TRPH = Total residual petroleum hydrocarbons.
- VCA = Voluntary corrective action.
- VOCs = Volatile organic compounds.



Figure 1-1. Solid Waste Management Units (SWMUs) Addressed by the Table 1 Phase II Report

		Phase II Activities									
SWMU	IRP Site	1993 Table 1 Phase II RFI Work Plan *	1993 Predesign Investigation <sup>6</sup>	1994 Table 2 RFI <sup>d</sup>	1995 Table 1 Phase II RFI*						
82	SD-08	x	X		x						
102	OT-04	x			x						
104	LF-29	x			x						
113A	OT-20	x									
113B	DP-30 & SD-133	х									
114	OT-03	x									
132, AOC-A	OT-16 <sup>1</sup>	x		x	x						
134	OT-24	х			x						
FTA <sup>2</sup>	FT-31	х		x	x						
165, 179	OT- 39 <sup>3</sup>	x		x							
178	OT- 36 <sup>4</sup>	x		x							
197	OT-14	x			x						
AOC-P	OT-44	x			x						
AOC-T	SS-02 & SS-05	x	х		x						

 Table 1-2

 Phase II Investigation Activities at Table 1 SWMUs

<sup>1</sup> IRP Site OT-16 also contains one Table 2 SWMU (118).

<sup>2</sup> The FTA (Fire Training Area) consists of two Table 1 SWMUs (170 and 171) and three Table 2 SWMUs (39, 127, and 135).

<sup>3</sup> IRP Site OT-39 also contains two Table 2 SWMUs (177 and 181).

<sup>4</sup> IRP Site OT-36 also contains one Table 2 SWMU (129).

<sup>b</sup> The predesign investigation was conducted as part of the 1993 Feasibility Study—Investigation Study, and Recommendations for 29 Waste Sites (Radian, 1993b) of the sites recommended for remedial action in the 1992 29 Sites RI. The 1993 predesign investigation determined the source and lateral extent of soil contamination exceeding the remedial action objectives (RAOs) established during the 1992 CMS (Radian, 1992a).

<sup>c</sup> The 1994 *Table 2 RCRA Facility Investigation (RFI)* (Radian, 1994a) consisted of a field investigation of SWMUs listed on Table 2 of the HSWA permit. Due to its proximity to several Table 2 SWMUs, SWMU 132, 165, 178, 179, and AOC-A were included in this investigation.

<sup>d</sup> The 1995 *Table 1 Phase II RCRA Facility Investigation (RFI)* (Radian, 1995) was conducted to address the remaining EPA Region VI comments not addressed during the previous studies of SWMUs listed on Table 1 of the HSWA permit.

<sup>&</sup>lt;sup>a</sup> The approved 1993 Table 1 Phase II RFI Work Plan (Holloman AFB, 1993) proposed further actions for some sites and no further action at others.

ALL IRP	Site	3																
						1	993			1994			1995					
·	Duration	Start	Finish	Qtr 4	Qtr	1 Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2
CORRECTIVE ACTION TIME TABLE	787d	4/27/93	6/23/95															
Required Work Plan Submittal Date	b0	4/27/93	4/27/93			• 4/2         • 4/	27											
Required RFI Report Submittal Date	Od	4/25/95	4/25/95											4/25				
Approved Extension of Submittal Date	b0	6/23/95	6/23/95											۲	6/23			
PROJECT HISTORY	1292d	11/15/92	5/30/96															
WORK PLAN	273d	4/27/93	1/25/94															
Work Plan Submitted to EPA (Draft Final)	Od	4/27/93	4/27/93			● 4/2	27											
EPA Comments on RFI Work Plan	b0	7/22/93	7/22/93				T/2	22										
Work Plan (Final)	b0	8/17/93	8/17/93				۲	8/17										
Work Plan Approval	0d	1/25/94	1/25/94						1/2	5								
PHASE II ACTIVITIES	819d	7/1/93	9/28/95															
Other Table 1 Investigations	167d	7/1/93	12/15/93															
Table 1 Phase II RFI	67d	10/15/94	12/20/94															;
RFI Report (Draft Final)	DO	6/23/95	8/23/95											۲	6/23			
Draft Regulatory Comments Received on RFI Report	DO	9/28/95	9/28/95												۲	9/28		
CORRECTIVE MEASURES	1292d	11/15/92	5/30/96															
Corrective Measures Study/Feasibility Study	b0	11/15/92	11/15/92	11	/15								44-A					
Voluntary Corrective Action	484d	2/1/95	5/30/96															<u> </u>

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Figure 1-2. Schedule of Events for the Table 1 Phase II Solid Waste Management Units

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SWMU	IRP Site	Objective	Conclusion	Recommendations	Current Status
82	SD-08	Define extent of organochlorine pesticides in soil above health-based cleanup criteria.	Extent of organochlorine pesticide concentrations above the health-based cleanup criteria is limited primarily to the shallow soils in southern half of the refuse yard.	VCA and LTM; an impermeable cap over the affected soils will mitigate risk by	VCA and LTM be completed in 4/96. DD was signed in 9/95.
		Define extent of organochlorine pesticides in the groundwater.	Extent of elevated organochlorine pesticide concentrations is limited to an area immediately downgradient of the site but does not extend further downgradient.	eliminating the exposure pathway.	
102	OT-04	Determine whether selenium concentrations are above the background concentrations in the groundwater.	All selenium concentrations were detected below the Basewide background UTL.	NFA	DD was signed in 9/95 and permit modification will be submitted.
104	LF-29	Determine whether a release to groundwater has occurred at the site.	There is no evidence that a release from the site has occurred. VOCs in an upgradient monitor well were detected at much higher concentrations than in downgradient wells. The upgradient contaminant source is unknown at this time.	NFA: Separate investigation to determine the upgradient source.	DD document was signed in 9/95 and permit modification will be submitted.
134	OT-24	Confirm the presence of BTEX in two monitor wells, and define the source (if present).	The presence of BTEX was not confirmed in the two monitor wells during the Phase II RFI. BTEX was detected in two isolated groundwater samples collected during field screening.	NFA	LTM will be conducted, DD was signed in 9/95 and permit modification will be submitted.
FTA <sup>1</sup>	FT-31	Define the extent of soil contamination.	Extent of TRPH contamination above the Base-specific cleanup level is limited to three distinct areas: SWMU 170, the oil/water separator area (SWMUs 39, 127, and 135), and near the JP-4 tank.	CNFA; the condition of NFA is the remediation of TRPH soil contamination	An SVE system will be installed by 4/96.
		Define extent of groundwater contamination.	Extent of BTEX contamination was primarily limited to the immediate oil/water separator area but not further downgradient. Low levels of BTEX were detected in wells downgradient of SWMU 170 and SWMU 171. Low levels of chlorinated VOCs were limited to a small area near the JP-4 tank.		

## Table 1-3 Summary of Phase II RFI Conclusions

will be Romitted.

### Table 1-3 (Continued)

SWMU	IRP Site	Objective	Conclusion	Recommendations	Current Status
197	OT-14	Define extent of organochlorine pesticides in soil above health-based cleanup criteria.	Extent of organochlorine pesticide concentrations above the health-based cleanup criteria is limited to a band that runs east to west in the central portion of the site and extends to a depth of approximately 2 ft below ground level.	VCA: An impermeable cap over the affected soils will mitigate risk by eliminating the exposure pathway.	VCA will be completed by 4/96.
AOC-P	OT-44	Confirm TRPH concentrations are below 1000 mg/kg.	TRPH concentrations above 1000 mg/kg are limited to a localized area in the northern portion of the site.	VCA: TRPH soil contamination will be remediated.	An SVE system will be installed by 5/96.
AOC-T	SS-02 & SS-05	Identify source and extent of TRPH-contaminated soil Define extent of BTEX contamination in the groundwater	TRPH contamination is limited to the mounded area and extends to groundwater. BTEX contamination extends downgradient of the mounded area both to the northeast and southeast and terminates near the eastern edge of Dillard Draw. Groundwater does not discharge to the Draw.	CNFA and LTM; the condition of NFA is the remediation of TRPH soil contamination.	An SVE system is operating, and LTM will be conducted.

- BTEX = Benzene, toluene, ethylbenzene, and xylenes.
- CNFA = Conditional No Further Action.
- DD = Decision Document
- LTM = Long-term monitoring.
- NFA = No Further Action.
- UTL = Upper tolerance limit.
- VCA = Voluntary Corrective Action.
- VOCs = Volatile organic compounds.

<sup>1</sup> The FTA consists of two Table 1 SWMUs (170 and 171) and three Table 2 SWMUs (39, 127, and 135).