

INSTALLATION ACTION PLAN

For

LONE STAR ARMY AMMUNITION PLANT



March 2001

Lone Star Army Ammunition Plant Installation Action Plan



FY 2001

INSTALLATION ACTION PLAN MARCH 2001



**Lone Star Army
Ammunition Plant**

PURPOSE

The purpose of the Installation Action Plan (IAP) is to outline the total multi-year restoration program for an installation. The plan will define Installation Restoration Program (IRP) requirements and propose a comprehensive approach and associated costs to conduct future investigations and remedial actions at each IRP site on the installation.

In an effort to coordinate planning information between the IRP manager, major army commands (MACOMs), installations, executing agencies, regulatory agencies, and the public, an IAP has been completed for LSAAP. The IAP is used to track requirements, schedules and budgets for all major Army installation restoration programs.

All site specific funding and schedule information has been prepared according to projected overall Army funding levels and is therefore subject to change. Under current project funding, LSAAP will have all remedies in place by the end of 2002.

CONTRIBUTORS TO THIS YEAR'S IAP

NAME

ORGANIZATION

Todd House	U.S. Army Corps of Engineers
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LONE STAR ARMY AMMUNITION PLANT

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ACRONYMS & ABBREVIATIONS

AEC	Army Environmental Center
CA	Corrective Action
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act of 1980
CMS	Corrective Measure Study
COE	U.S. Army Corps of Engineers
CY	Cubic Yards
DA	Department of Army
DD	Decision Document
DERA	Defense Environmental Restoration Account
DERP	Defense Environmental Restoration Program
DOD	Department of Defense
DOL	Directorate of Logistics
DSERTS	Defense Site Environmental Restoration Tracking System
EPA	United States Environmental Protection Agency
ER,A	Environmental Restoration, Army (Formally DERA)
FS	Feasibility Study
FY	Fiscal Year
IAP	Installation Action Plan
IRA	Interim Remedial Action
IRP	Installation Restoration Program
LSAAP	Lone Star Army Ammunition Plant
LTM	Long Term Monitoring
MCL	Maximum Contaminant Level
NE	Not Evaluated
NFA	No Further Action
NFRAP	No Further Remedial Action Planned
NON	Notice of Noncompliance
NOV	Notice of Violation
NPL	National Priorities List
OB/OD	Open Burning / Open Detonation
ODA	Old Demolition Area
OMA	Operations and Maintenance - Army
OWS	Oil and Water Separator
POL	Petroleum, Oil and Lubricants
PA	Preliminary Assessment
PAH	Polycyclic Aromatic Hydrocarbons
PCB	Polychlorinated Biphenyls
PCE	Perchloroethylene
PPB	Parts Per Billion
PPM	Parts Per Million
PY	Prior Year
RA	Remedial Action
RA(C)	Remedial Action - Construction
RA(O)	Remedial Action - Operation
RAB	Restoration Advisory Board
RAP	Remedial Action Plan
RC	Response Complete

ACRONYMS & ABBREVIATIONS

LIST OF ACRONYMS AND ABBREVIATIONS CONTINUED...

RCRA	Resource Conservation and Recovery Act
RD	Remedial Design
RECAP	Risk Evaluation/ Corrective Action Program
REM	Removal
RI	Remedial Investigation
RIP	Remedy in Place
RFI	RCRA Facility Investigation
ROD	Record of Decision
RRAD	Red River Army Depot
RRSE	Relative Risk Site Evaluation
SI	Site Inspection
SVOC	Semi-Volatile Organic Compounds
SWMU	Solid Waste Management Unit
TCE	Trichloroethylene
TPH	Total Petroleum Hydrocarbons
TRC	Technical Review Committee
USACE	United States Army Corps of Engineers
USACHPPM	United States Army Center for Health Promotion and Preventive Medicine
USAEC	United States Army Environmental Center
USATHMA	United States Army Toxic and Hazardous Material Agency (replaced by AEC)
UST	Underground Storage Tank
UXO	Unexploded Ordnance
VOC	Volatile Organic Compounds

SUMMARY

STATUS:	Made NPL in July 1987 with HRS of 31.85. On-site soil and groundwater contamination.																																				
NUMBER OF DSERTS SITES:	52 DSERTS sites 15 Active ER,A Eligible Sites 37 Active Responce Complete ER,A Eligible Sites																																				
DIFFERENT SITE TYPES:	<table border="0"> <tr> <td>2</td> <td>Burn Areas</td> <td>1</td> <td>Contaminated Ground Water</td> </tr> <tr> <td>1</td> <td>Contaminated Sediment</td> <td>2</td> <td>Surface Disposal Areas</td> </tr> <tr> <td>1</td> <td>Drainage Ditch</td> <td>10</td> <td>Disposal Pits/ Dry Wells</td> </tr> <tr> <td>1</td> <td>Industrial Discharge</td> <td>14</td> <td>Landfills</td> </tr> <tr> <td>1</td> <td>Maintenance Yard</td> <td>5</td> <td>Storage Areas</td> </tr> <tr> <td>3</td> <td>Surface Impoundment Lagoons</td> <td>1</td> <td>Paint Shop</td> </tr> <tr> <td>1</td> <td>Underground Tank Farm</td> <td>4</td> <td>Water Lines</td> </tr> <tr> <td>1</td> <td>Mixed Waste Area</td> <td>1</td> <td>Waste Treatment Plant</td> </tr> <tr> <td>2</td> <td>Explosive Ordnance Disposal Area</td> <td>1</td> <td>Spill Site Area</td> </tr> </table>	2	Burn Areas	1	Contaminated Ground Water	1	Contaminated Sediment	2	Surface Disposal Areas	1	Drainage Ditch	10	Disposal Pits/ Dry Wells	1	Industrial Discharge	14	Landfills	1	Maintenance Yard	5	Storage Areas	3	Surface Impoundment Lagoons	1	Paint Shop	1	Underground Tank Farm	4	Water Lines	1	Mixed Waste Area	1	Waste Treatment Plant	2	Explosive Ordnance Disposal Area	1	Spill Site Area
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CONTAMINANTS OF CONCERN:	Explosives, Metals, VOCs																																				
MEDIA OF CONCERN:	Soil, Groundwater																																				
COMPLETED REM/IRA/RA:	<ul style="list-style-type: none"> • REM: FY98 Soil Removal at LSAAP-005 (\$500K) • REM: FY98 Cisterns & Soil Removal at LSAAP-045 (\$965K) • REM: FY98 Pit Removal at LSAAP-073 (\$52K) 																																				
CURRENT IRP PHASES:	RI/FS 11 sites RD 3 site RA 1 site LTM 0 sites																																				
PROJECTED IRP PHASES:	RD/RA 11 sites LTM 7 sites																																				
IDENTIFIED POSSIBLE REM/IRA/RA:	<ul style="list-style-type: none"> • RA at LSAAP-006, 009, 016, 017, 024, 033, 201 																																				
FUNDING:	<table border="0"> <tr> <td>PRIOR to FY00 Funds:</td> <td>\$ 19,135.01 K</td> </tr> <tr> <td>Current Year (FY01) Funds:</td> <td>\$ 1,287.0 K</td> </tr> <tr> <td>FUTURE REQUIREMENTS:</td> <td>\$ <u>3,426.0 K</u></td> </tr> <tr> <td>TOTAL:</td> <td>\$ 23,848.01 K</td> </tr> </table>	PRIOR to FY00 Funds:	\$ 19,135.01 K	Current Year (FY01) Funds:	\$ 1,287.0 K	FUTURE REQUIREMENTS:	\$ <u>3,426.0 K</u>	TOTAL:	\$ 23,848.01 K																												
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INSTALLATION INFORMATION

LOCALE

LSAAP is located in Northeastern Texas, about 12 miles West of Texarkana, Texas, in central Bowie County. The site lies in the heart of a four-state area: Arkansas, Oklahoma, Louisiana, and Texas. Communities in the vicinity of LSAAP include Hooks, Victory City, and Leary to the North, and Redwater and Maud to the South and Southwest. The installation covers approximately 15,546 acres.

COMMAND ORGANIZATION

MAJOR COMMAND: United States Army Material Command (AMC)

MAJOR SUBORDINATE COMMAND: U.S. Army Operations Support Command

INSTALLATION: Lone Star Army Ammunition Plant, Technical Division

INSTALLATION RESTORATION PROGRAM (IRP) EXECUTING AGENCY

- Lone Star Army Ammunition Plant
- Fort Worth District, Corps of Engineers

REGULATOR PARTICIPATION

FEDERAL: U.S. Environmental Protection Agency, Region VI, Federal Facilities Section

STATE: Texas Natural Resources Conservation Commission (TNRCC), Industrial and Hazardous Waste Division

REGULATORY STATUS

- NPL site with IAG, June 1990
- Agreed Order, March 1997
- RCRA Part B Permit, January 1992

INSTALLATION DESCRIPTION

LOCATION

LSAAP is a Government owned contractor-operated (GOCO) facility that has produced a variety of munitions. LSAAP occupies over 15,000 acres of land on which the various functions necessary to load, assemble, and pack (LAP) ammunition items for the Army are performed and maintained. The plant contains an administration area, 13 production load lines, seven storage areas, maintenance shops, a railroad classification yard, a sewage treatment plant, demolition areas, a high explosives burning ground, landfills (active and closed), and a fire-fighting pumping station.

LSAAP is a Government-owned shell loading plant constructed during World War II. Construction began in mid-1941 and was completed during the summer of 1942. Immediately following the completion of initial construction, the Lone Star Defense Corporation, a subsidiary of the B.F. Goodrich Company, Akron, Ohio, placed the plant into active production. Goodrich operated the plant during World War II and for several months thereafter in conjunction with close-out procedures. Effective November 4, 1945, Lone Star Ordnance Plant was incorporated with Red River Ordnance Depot, and a few months later the name of the installation was changed to Red River Arsenal. In the early part of 1950, Lone Star was selected for reactivation and Day & Zimmermann, Inc. was selected as the architect and operating engineer. Effective November 1, 1951, the plant was designated Lone Star Ordnance Plant, a Class II industrial activity under the jurisdiction of the Chief of Ordnance. On July 1, 1963, the plant was redesignated Lone Star Army Ammunition Plant. Early in 1969, ammunition production activities began a gradual decline, which has resulted in a decrease in personnel from a peak of 11,463 in December 1968 to the present strength of approximately 400.

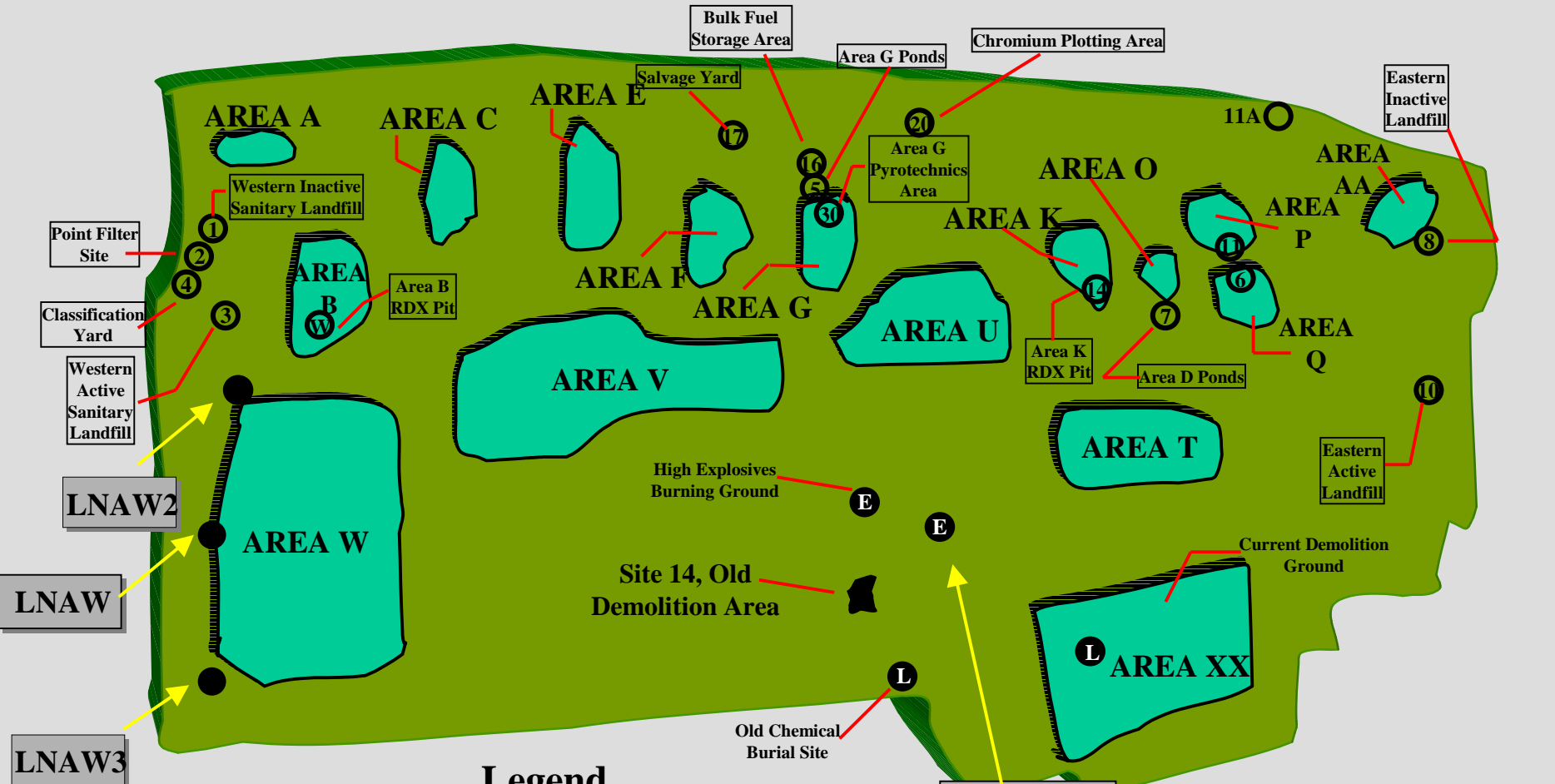
REGULATORY STATUS

The Army is investigating areas at LSAAP for any detrimental environmental impact, by implementing its environmental response authority under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA/Superfund Amendments and Reauthorization Act (SARA), and under the Resource Conservation and Recovery Act (RCRA).

The Environmental Protection Agency listed, in July 1987, the Old Demolition Area (ODA) on the National Priority List (NPL) based on a score of 31.85 under the Hazard Ranking System. The ODA covers approximately 17.4 acres in the south-central portion of LSAAP. It was used in 1943-1944 for the disposal of various munitions (grenades, fuzes, and bombs) by detonation.

Locations of SWMUs Lone Star Army Ammunition Plant

Texarkana, Texas



Legend

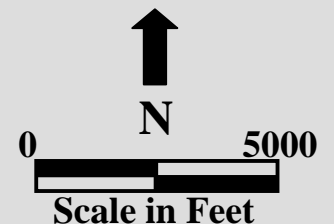
LSAAP Boundary Plant Operations Area

Old Demolition Area Potential Contaminant Source-

Numbers indicate potential contamination source, letters indicate plant operations areas.

LNAW Landfill Near Area 'W'

Road Oil Burial Site



CONTAMINATION ASSESSMENT

Past operations at LSAAP have resulted in the generation of explosive and metal contaminated wastes in landfills, and open burn/open detonation areas. Currently there are 52 sites in the Defense Site Environmental Restoration Tracking System (DSERTS) database. Restoration activities are still being performed at 18 of these sites.

Low levels of metals and explosives, have been found in the groundwater at several sites. Groundwater contamination is not likely to pose a significant risk off site, due to local geology.

The results from sediment sampling at boundary locations, except for LSAAP-033, indicate no significant contamination is exiting the installation.

One site, the Old Demolition Area (ODA LSAAP-017), was placed on the National Priorities List (NPL) in July 1987. This site was placed on the NPL because of metals and explosives contamination. A RI/FS was completed in 1997. The Record of Decision (ROD) was signed in August 1999, which specified a soil cover, erosion control measures and long term monitoring.

LSAAP received a Notice of Violation (NOV) on the Area G Ponds (LSAAP-033) in 1993. An Agreed Order with the State of Texas was signed in March 1999, which specified a surface water and sediment investigation, and long term monitoring.

PREVIOUS STUDIES

Title	Author	Date
PR/VSI REPORT Lone Star Army Ammunition Plant, Texarkana, Texas, EPA I.D. No. TX7213821381	A.T. Kearney	1988
Red River Army Depot Solid Waste Disposal Study, Texarkana, Texas.	CH2M Hill	1980
Ground-Water Quality Assessment - OTC Area, Red River Army Depot, Texarkana, Texas	Dames & Moore	1984a
Ground-Water Quality Assessment - WWT Area, Red River Army Depot, Texarkana, Texas	Dames & Moore	1984a
Remedial Investigation Report for Lone Star Army Ammunition Plant (DRAFT)	Dames & Moore	1991
Feasibility Study Reports for Lone Star Army Ammunition Plant (DRAFT)	Dames & Moore	1991
Remedial Investigation/Feasibility Study Report, Site 14, the Old Demolition Area for Lone Star Army Ammunition Plant (DRAFT)	Dames & Moore	1990
Environmental Assessment, Lone Star Army Ammunition Plant, Texarkana, Texas	Day & Zimmermann, Inc.	1980
Water Quality Surveillance Program, Lone Star Army Ammunition Plant, Texarkana, Texas	Day & Zimmermann, Inc.	1979
Land Management Plan, Lone Star Army Ammunition Plant, Texarkana, Texas	Day & Zimmermann, Inc.	1977
Salvage Yard Plot Plan, Lone Star Army Ammunition Plant, Texarkana, Texas	Day & Zimmermann, Inc.	1971
Contamination Survey, High Explosives Burning Ground, Lone Star Army Ammunition Plant, Texarkana, Texas	Environmental Protection Systems (EPS), Inc.	1985
Phase III Remedial Investigation Report, Site 14, Old Demolition Area for Lone Star Army Ammunition Plant (DRAFT-FINAL)	Fluor Daniel, Inc	1993
RCRA Facility Investigation Lone Star Army Ammunition Plant (DRAFT)	Fluor Daniel, Inc	Jun-94
RCRA Facility Investigation, Lone Star Army Ammunition Plant (DRAFT), Background Constituent Concentration, A Statistical Report	Fluor Daniel, Inc	Sep-94
Intensive Archeological Survey and Archival Investigations at the Red River Army Depot and Lone Star Army Ammunition Plant, Bowie County, Texas	Geo-Marine, Inc.	May-90
Industrial Solid Waste Landfill Siting, Lone Star Army Ammunition Plant, Texarkana, Texas	Harding Lawson Associates	1983
Report of Contamination Survey, Wells/Cisterns Lone Star Army Ammunition Plant (Preliminary), Texarkana, Texas.	Longview Inspection, Inc.	1986
Aerial Color Infrared Photography Interpretation, Lone Star Army Ammunition Plant, Texarkana, Texas	Rome Research Corporation (RRC)	
Subsurface Investigation of Areas G and O, Lone Star Army Ammunition Plant, Texarkana, Texas	SCS Engineers	1980
Environmental Impact Assessment, Plant-Wide Assessment Activities, Lone Star Army Ammunition Plant, Texarkana, Texas	U.S. Army	1975
Environmental Impact Assessment, Lone Star Army Ammunition Plant, Texarkana, Texas, RDS: DD-H&E AR 1068.	U.S. Army Armament Command	1975
Subsurface Conditions at Site 16 Lone Star Army Ammunition Plant, Texarkana, Texas	Waterways Experiment Station of USATHAMA	1988
Geohydrologic Study No. 38-26-0871-88, Lone Star Army Ammunition Plant, Texarkana, Texas, 14-25 Sept 1987	U.S. Army Environmental Hygiene Agency (USAEHA)	1987

PREVIOUS STUDIES

Title	Author	Date
Groundwater Contamination Migration Study No 38-26-0870-88, Lone Star Army Ammunition Plant, Texarkana, Texas, 17-31 Aug 1987	U.S. Army Environmental Hygiene Agency (USAEHA)	1987
Groundwater Contamination Migration Study No 38-26-0823-88, Lone Star Army Ammunition Plant, Texarkana, Texas, 11-23 May 1987	U.S. Army Environmental Hygiene Agency (USAEHA)	1987
Geohydrologic Study No. 38-26-0501-86, Lone Star Army Ammunition Plant, Texarkana, Texas	U.S. Army Environmental Hygiene Agency (USAEHA)	1985
Groundwater Monitoring Study No 38-26-0457-86, AMC Open Burning/Open Detonation Facilities, Lone Star Army Ammunition Plant, Texarkana, Texas	U.S. Army Environmental Hygiene Agency (USAEHA)	1985
Water Quality Biological Consultation No. 32-24-1307-85, Lone Star Army Ammunition Plant, Texarkana, Texas, 3 May - 26 Jun 1985	U.S. Army Environmental Hygiene Agency (USAEHA)	1985
Potable/Recreational Water Quality Survey No. 31-62-0148-80 and Wastewater Engineering Survey No. 32-666-0147-80, Lone Star Army Ammunition Plant, Texarkana, Texas, October 29 - November 9, 1979.	U.S. Army Environmental Hygiene Agency (USAEHA)	1980
Water Quality Engineering Special Study No. 24-026-75/76, Industrial Wastewater, Lone Star Army Ammunition Plant, Texarkana, Texas, June 3-21, 1974.	U.S. Army Environmental Hygiene Agency (USAEHA)	1976
Solid Waste Consultation List No. 26-004-75, Lone Star Army Ammunition Plant, Texarkana, Texas, July 25-26, 1974.	U.S. Army Environmental Hygiene Agency (USAEHA)	1974
Water Quality Monitoring Consultation No 24-015-74, Lone Star Army Ammunition Plant, Texarkana, Texas, September 24-28, 1973.	U.S. Army Environmental Hygiene Agency (USAEHA)	1974
WaterQuality Engineering Survey No. 24-029-72/73, Lone Star Army Ammunition Plant, Texarkana, Texas, May 22-26, 1972.	U.S. Army Environmental Hygiene Agency (USAEHA)	1973
Industrial Wastes Special Study No. 24-11-67/69, November 12-23, 1968.	U.S. Army Environmental Hygiene Agency (USAEHA)	1968
Water Quality Monitoring Data, project files of Day & Zimmermann.	U.S. Army Lone Star Army Ammunition Plant (LSAAP)	1987
Groundwater Monitoring Results for Sanitary Landfill (Present Landfill), Texarkana, Texas.	U.S. Army Red River Army Depot (RRAD)	1986
USGS Aerial Photography-1968, Lone Star Army Ammunition Plant, Texarkana, Texas	U.S. Army Environmental Hygiene Agency (USAEHA)	1987
Final Technical Report for Contamination Survey of Lone Star Army Ammunition Plant, Texarkana, Texas, Report DRZTH-AS-CR-83226	U.S. Army Environmental Hygiene Agency (USAEHA)	1983
Interim Technical Report #3, Contamination Analysis Report for Contamination Survey of Lone Star Army Ammunition Plant, Texarkana, Texas, Report DRXTH-AS-CR-82139	U.S. Army Toxic and Hazardous Materials Agency (USATHAMA)	1983
Interim Technical Report #2 Geotechnical Report for Contamination Survey of Lone Star Army Ammunition Plant, Texarkana, Texas, Report DRZTH-AS-CR-82139	U.S. Army Toxic and Hazardous Materials Agency (USATHAMA)	1982

PREVIOUS STUDIES

Title	Author	Date
Installation Assessment of Lone Star Army Ammunition Plant, Report No. 124.	U.S. Army Toxic and Hazardous Materials Agency (USATHAMA)	1978

**ER, A ELIGIBLE
ACTIVE DSERTS SITES**

LSAAP-002

WESTERN INACTIVE SANITARY LANDFILL

SITE DESCRIPTION

This 33-acre landfill, located on the western boundary of the installation, was used by Red River Army Depot (RRAD) for disposal of sanitary wastes from both RRAD and LSAAP from the mid-1940's until 1973. Groundwater sampling results indicate solvent contamination is present.

TNRCC directed LSAAP to submit a Compliance Plan application. This application was submitted in June 1997. LSAAP is awaiting final issuance of the plan from TNRCC.

The RFI was completed in 1998.

IRP STATUS

RRSE RATING: High Risk

CONTAMINANTS OF CONCERN:

1,2 DCE, TCE, vinyl chloride

MEDIA OF CONCERN:

Groundwater

COMPLETED IRP PHASE:

PA/SI, RI (RFI)

CURRENT IRP PHASE:

FS (CMS), RD

FUTURE IRP PHASE:

RA, LTM

PROPOSED PLAN

A CMS to address groundwater contamination will be completed. The expected remedy is a RCRA Cap and LTM.

CONSTRAINED COST TO COMPLETE

PHASE	2001	2002	2003	2004	2005	2006	2007+
RI/FS	17						
IRA							
RD	134						
RA(C)		1339					
RA(O)							
LTM		13.6	13.6	13.6			
PROJECTED TOTAL:							\$1,530,800

LSAAP-004 EASTERN INACTIVE LANDFILL

SITE DESCRIPTION

This landfill, located near the Eastern boundary of LSAAP, was used from 1951 to 1985 for the disposal of construction debris. Sampling results obtained from the RFI indicated the possibility of off site contaminated groundwater migration. No contaminants have been detected above risk reduction standards or background since 1992.

The PA/SI was completed in July 1978. The RFI was started in 1991 and is expected to be completed in FY00.

IRP STATUS

RRSE RATING: High Risk with regulatory agreement (1A)

CONTAMINANTS OF CONCERN:

Antimony, Lead, Barium, Manganese

MEDIA OF CONCERN:

Groundwater, Sediment, Surface Water

COMPLETED IRP PHASE:

PA/SI

CURRENT IRP PHASE:

RI (RFI)

FUTURE IRP PHASE:

RC

PROPOSED PLAN

After completion of the RFI, no further action is expected.

CONSTRAINED COST TO COMPLETE

PHASE	2001	2002	2003	2004	2005	2006	2007+
RI/FS	17						
RD							
RA(C)							
RA(O)							
IRA							
LTM							
PROJECTED TOTAL:					\$17,000		

LSAAP-006 BB-15 AREA

SITE DESCRIPTION

Buildings 1545 and 1548 were built in the 1940s and housed a road wheel denuding process (removing rubber from wheels). Wheel and track from tanks were stripped of rubber and shot blasted at this site. All denuding operations at this site ceased in 1988.

This site was transferred from RRAD to LSAAP in March 1999.

Phase I RFI was submitted to TNRCC in 1995. LSAAP is awaiting comments. The RFI indicated low levels of solvents in groundwater, and metals and PAHs in surface soil. An IRA removed soil from a ditch in 1995.

IRP STATUS

RRSE RATING MEDIUM Risk with regulatory agreement (1A)

CONTAMINANTS OF CONCERN:

Cadmium, Chromium, Lead

MEDIA OF CONCERN:

Soil, Groundwater

COMPLETED IRP PHASE:

PA/SI, IRA

CURRENT IRP PHASE:

R/FS

FUTURE IRP PHASE:

RC

PROPOSED PLAN

Phase II RFI is being conducted to further delineate the extent of contamination. No further action is expected.

CONSTRAINED COST TO COMPLETE

PHASE	2001	2002	2003	2004	2005	2006	2007+	
R/FS	16							
IRA								
RD								
RA(C)								
RA(O)								
LTM								
PROJECTED TOTAL:	\$16,000							

LSAAP-009

ABANDONED CONSTRUCTION LANDFILL

SITE DESCRIPTION

This landfill, located south of the Western Active Landfill has evidence of building demolition debris and buried drums containing construction materials. No documentation of use or contents of this landfill exists.

The Phase I RFI was completed in June 1999. Sampling results indicate detection of TPH and PCBs.

IRP STATUS

RRSE RATING: Low Risk with regulatory agreement (3A)

CONTAMINANTS OF CONCERN:

TPH, PCBs

MEDIA OF CONCERN:

Soil

COMPLETED IRP PHASE:

PA/SI

CURRENT IRP PHASE:

RI/FS

FUTURE IRP PHASE:

RD, RA

PROPOSED PLAN

Phase II RFI is being conducted to further delineate the extent of contamination. Soil removal may be needed.

CONSTRAINED COST TO COMPLETE

PHASE	2001	2002	2003	2004	2005	2006	2007+
RI/FS	9						
IRA							
RD		7					
RA(C)		11					
RA(O)							
LTM							
PROJECTED TOTAL:							\$27,000

LSAAP-015 ROAD OIL BURIAL SITE

SITE DESCRIPTION

This wooded site was used for the disposal of approximately 7,500 gallons of excess RC-3 road oil in 1973-1974.

TNRCC has allowed the results of the RI to be substituted for the RFI. TNRCC also allowed the Army to go directly to corrective action on this site. The LSAAP RCRA Permit was modified to allow the Army to excavate this material and spread it on the roads of LSAAP (beneficial reuse). This site was remediated (IRA) in the Summer of 1994. The Road Oil Burial Site has been placed back into the RFI to address barium levels.

IRP STATUS

RRSE RATING: Low Risk with regulatory agreement (3A)

CONTAMINANTS OF CONCERN:

Arsenic, Barium

MEDIA OF CONCERN:

Soil

COMPLETED IRP PHASE:

PA/SI, RI/FS (RFI), IRA

CURRENT IRP PHASE:

RI/FS (RFI)

FUTURE IRP PHASE:

RC

PROPOSED PLAN

Complete the RFI for no further action.

CONSTRAINED COST TO COMPLETE

PHASE	2001	2002	2003	2004	2005	2006	2007+
RI/FS	9						
RD							
RA(C)							
RA(O)							
IRA							
LTM							

PROJECTED TOTAL: \$9,000

LSAAP-016 HIGH EXPLOSIVES BURING GRND (RI-SITE 12)

SITE DESCRIPTION

This site is located in the center of LSAAP. It has been used since the late 1940s to destroy, by open burning, articles contaminated with high explosives. In the mid-1970s metal pans replaced four earthen pits previously used as burning areas. Although this site is active, the IRP will address the contamination left from activities before the metal pans were installed. The unit currently operates under the interim requirements in Title 40 CFR Part 265, Sub-part P.

Phase I RFI results indicate that metal-contaminated sediments may be migrating along surface water drainage pathways.

PROPOSED PLAN

Phase II RFI is being conducted to further delineate the extent of contamination. Sediment remediation may be required.

IRP STATUS

RRSE RATING: High Risk with regulatory agreement (1A)

CONTAMINANTS OF CONCERN:

Lead, Mercury, Chromium, Selenium, Nickel, Zinc

MEDIA OF CONCERN:

Sediment

COMPLETED IRP PHASE:

PA/SI

CURRENT IRP PHASE:

RI/FS

FUTURE IRP PHASE:

RD, RA

CONSTRAINED COST TO COMPLETE

PHASE	2001	2002	2003	2004	2005	2006	2007+
RI/FS	12						
IRA							
RD		27					
RA(C)			234				
RA(O)							
LTM			7.66	7.66	7.66		
PROJECTED TOTAL:				\$295,980			

LSAAP-017 OLD DEMOLITION AREA

SITE DESCRIPTION

This site is on the National Priorities List (NPL). All corrective actions are covered under an Inter-agency Agreement (IAG). The Old Demolition Area (ODA) covers approximately 17.4 acres in the South-central portion of LSAAP. The ODA was used from 1943-1944 for the disposal of various munitions (grenades, fuzes, and bombs) by detonation.

This site was placed on the NPL because of metals and explosives contamination. A RI/FS was completed in May 1998. The Record of Decision (ROD) was signed in August 1999, which specified a soil cover, erosion control measures and long term monitoring, to address nitroglycerin contamination in the soil and groundwater.

IRP STATUS

RRSE RATING: Medium Risk with regulatory agreement (2A)

CONTAMINANTS OF CONCERN:

Nitroglycerin, PETN, Metals

MEDIA OF CONCERN:

Groundwater, Soil

COMPLETED IRP PHASE:

PA/SI, RI/FS, ROD

CURRENT IRP PHASE:

RD

FUTURE IRP PHASE:

PROPOSED PLAN

Implement ROD actions.

CONSTRAINED COST TO COMPLETE

PHASE	2001	2002	2003	2004	2005	2006	2007+
RI/FS							
IRA							
RD							
RA(C)	964						
RA(O)							
LTM		55.9	56	56	56	56	
PROJECTED TOTAL:				\$1,243,910			

LSAAP-018

HIGH EXPLOSIVES DEMOLITION GROUND (RI-15)

SITE DESCRIPTION

This active, 100-acre site is located in the Southeast portion of LSAAP. It has been used since the mid-1940s for the disposal of ammunition that does not meet specifications and for the disposal of flares, smoke grenades, photoflash powder and other materials. The site operates in interim status under the Part B Permit.

A RFI was conducted to insure that no contamination has migrated past site boundaries. The Phase I RFI was completed in 1999.

PROPOSED PLAN

Phase II RFI is being conducted to further delineate the extent of contamination.

Because this Burning Ground is still being used, any future actions will not be eligible for ER,A funds.

IRP STATUS

RRSE RATING: High Risk with regulatory agreement (1A)

CONTAMINANTS OF CONCERN:

Explosives, Metals

MEDIA OF CONCERN:

Sediment

COMPLETED IRP PHASE:

PA/SI

CURRENT IRP PHASE:

RI/FS (RFI)

FUTURE IRP PHASE:

RC - under the IRP

CONSTRAINED COST TO COMPLETE

PHASE	2001	2002	2003	2004	2005	2006	2007+
RI/FS							
RD							
RA(C)							
RA(O)							
IRA							
LTM							

PROJECTED TOTAL: \$0

LSAAP-020

RDX AND TNT SUMPS AND TANKS

SITE DESCRIPTION

Several RDX and TNT concrete sumps and tanks exist at LSAAP. Most were constructed during the 1940's. The units were used for the collection, treatment and/or transfer of pinkwater. There are also several steel units. These units provide preliminary removal of pinkwater from the wastewater. The wastewater is then transported to the pinkwater treatment plants via the industrial sewer.

PROPOSED PLAN

An RFI is being conducted in accordance with the Part B Permit requirements. No further action is expected.

IRP STATUS

RRSE RATING: Low Risk with regulatory agreement (3A)

CONTAMINANTS OF CONCERN:

Metals, Explosives

MEDIA OF CONCERN:

Soil

COMPLETED IRP PHASE:

PA/SI

CURRENT IRP PHASE:

RI/FS (RFI)

FUTURE IRP PHASE:

RC

CONSTRAINED COST TO COMPLETE

PHASE	2001	2002	2003	2004	2005	2006	2007+
RI/FS							
IRA							
RD							
RA(C)							
RA(O)							
LTM							
PROJECTED TOTAL:	\$0						

LSAAP-024

ABANDONED LANDFILL (NEAR AREA W)

SITE DESCRIPTION

This landfill covers approximately five acres near Area W. It is located on both sides of a nearby road. The site is filled with construction debris, soil, and steel drainage piping from the demolition of a Plumbing Shop and a Chemistry Laboratory at RRAD.

The sampling results indicated that the surface water was contaminated with VOCs and arsenic.

IRP STATUS

RRSE RATING: Medium Risk with regulatory agreement (2A)

CONTAMINANTS OF CONCERN:

VOCs, Arsenic

MEDIA OF CONCERN:

Surface Water

COMPLETED IRP PHASE:

PA/SI

CURRENT IRP PHASE:

RI/FS

FUTURE IRP PHASE:

RD, RA, LTM

PROPOSED PLAN

Phase II RFI is being conducted to further delineate the extent of contamination. A soil cover remediation with LTM is expected.

CONSTRAINED COST TO COMPLETE

PHASE	2001	2002	2003	2004	2005	2006	2007+
RI/FS							
IRA							
RD		8.00					
RA(C)		64.00					
RA(O)							
LTM			30.68	30.66	30.66		
PROJECTED TOTAL:				\$164,000			

LSAAP-033 AREA G PONDS (RI SITE 6)

SITE DESCRIPTION

Between 1942 and 1972, the site was used to hold spent sulfuric, chromic, and nitric acids; sodium hydroxide; and rinse water. The underground piping transported acidic wastewaters from the Area G production lines to the Area G Ponds. The pond's wastewater was treated with sodium hydrogen sulfite and sodium hydroxide to precipitate metals. The liquid above the precipitated metals was discharged into a drainage channel.

Area "G" Ponds were capped and closed in accordance with a TNRCC approved closure plan in October 1983. The TNRCC requested that these units be reinvestigated because the unit was closed with sludge in place.

Currently, the site is undergoing a RFI to investigate soil, surface water and sediment contamination.

IRP STATUS

RRSE RATING: Medium Risk with regulatory agreement (2A)

CONTAMINANTS OF CONCERN:

Chromium

MEDIA OF CONCERN:

Surface Water, Soil, Sediments

COMPLETED IRP PHASE:

PA/SI, RD, RA

CURRENT IRP PHASE:

RI/FS (RFI)

FUTURE IRP PHASE:

RD, RA, LTM

PROPOSED PLAN

Following the RFI, hot spot removal and LTM is expected.

CONSTRAINED COST TO COMPLETE

PHASE	2001	2002	2003	2004	2005	2006	2007+
RI/FS	20						
IRA							
RD	23						
RA(C)		196					
RA(O)							
LTM			10	10	10	10	285
PROJECTED TOTAL:				\$564,000			

LSAAP-034

AREA O PONDS (SWMUS 034, 035, RI-SITE 7)

SITE DESCRIPTION

The seven Area "O" Ponds (6.1 acres total surface area) were closed under a TNRCC and EPA approved closure plan in December 1982. The unit was closed (capped) as a landfill, with sludge in place. From 1942 to 1978, these ponds were used to treat pink water discharges consisting of explosive residues and wash down water.

The Agreed Order signed March 1997 called for groundwater monitoring.

IRP STATUS

RRSE RATING: Low Risk with regulatory agreement (3A)

CONTAMINANTS OF CONCERN:

HMX, RDX, 2,6-TNT

MEDIA OF CONCERN:

Groundwater

COMPLETED IRP PHASE:

PA/SI, RI/FS, RD, RA

CURRENT IRP PHASE:

LTM

FUTURE IRP PHASE:

LTM

PROPOSED PLAN

LTM will continue.

CONSTRAINED COST TO COMPLETE

PHASE	2001	2002	2003	2004	2005	2006	2007+
RI/FS							
IRA							
RD							
RA(C)							
RA(O)							
LTM	17	25	25	15	15		
PROJECTED TOTAL:							\$97,000

LSAAP-055 XX TEST AREA

SITE DESCRIPTION

This test area is used for performance testing/firing of small munitions. It has been used as a detonator destruction grounds, high explosive burning ground and high explosive demolition ground. In the early 1960's, a series of holes (2 feet in diameter) were drilled and used to dispose (by detonation) of defective classified material.

The SI was completed in Jul 78 and the Phase I RFI was completed in 1999. Explosives and metals were found in the groundwater.

IRP STATUS

RRSE RATING: High Risk with regulatory agreement (1A)

CONTAMINANTS OF CONCERN:

Explosives, Metals

MEDIA OF CONCERN:

Soil, Groundwater

COMPLETED IRP PHASE:

PA/SI

CURRENT IRP PHASE:

RI/FS (RFI)

FUTURE IRP PHASE:

RC

PROPOSED PLAN

Phase II RFI is being conducted to further delineate the extent of contamination.

Because this Test Area is still being used, any future actions will not be eligible for ER,A funds.

CONSTRAINED COST TO COMPLETE

PHASE	2001	2002	2003	2004	2005	2006	2007+
RI/FS	17						
RD							
RA(C)							
RA(O)							
IRA							
LTM							

PROJECTED TOTAL: \$17,000

LSAAP-075 K-15 SOUTH AND K-15 NORTH

SITE DESCRIPTION

This active SWMU consists of a hand grenade primer testing facility. Primers are tested in a special firing mechanism. A vacuum system is used to draw primer fumes and residue out of the testing stand and away from the operator. The vacuums discharge to the outside of the building. K-15 South: Five vacuums discharge at this site. K-15 North: Two vacuums discharge at this site.

The SI was completed in December 1993, the Phase I RFI was completed in 1999.

IRP STATUS

RRSE RATING: High Risk with regulatory agreement (1A)

CONTAMINANTS OF CONCERN:

Metals

MEDIA OF CONCERN:

Soil, Surface Water

COMPLETED IRP PHASE:

PA/SI

CURRENT IRP PHASE:

RI/FS (RFI)

FUTURE IRP PHASE:

RC

PROPOSED PLAN

Phase II RFI is being conducted to further delineate the extent of contamination.

Because this Test Facility is still being used, any future actions will not be eligible for ER,A funds.

CONSTRAINED COST TO COMPLETE

PHASE	2001	2002	2003	2004	2005	2006	2007+
RI/FS							
RD							
RA(C)							
RA(O)							
IRA							
LTM							

PROJECTED TOTAL: \$0

LSAAP-076 LANDFILL NEAR AREA W TWO

SITE DESCRIPTION

This landfill is located near Area W. This site was used to dispose of waste and trash generated by LSAAP. The exact size and years of use of this landfill are unknown.

Trenching in the Summer of 1994 confirmed the presence of waste at this site. The SI was completed in March 1996. The RFI was completed in 1999 and found no contamination above action levels.

PROPOSED PLAN

Currently addressing comments from TNRCC. Hot spot removal is expected.

IRP STATUS

RRSE RATING: Low Risk with regulatory agreement (3A)

CONTAMINANTS OF CONCERN:
Pesticides, VOCs, Metals

MEDIA OF CONCERN:
Soil, Groundwater

COMPLETED IRP PHASE:
PA/SI, RI/FS (RFI)

CURRENT IRP PHASE:
RD

FUTURE IRP PHASE:
RA

CONSTRAINED COST TO COMPLETE

PHASE	2001	2002	2003	2004	2005	2006	2007+
RI/FS							
RD	1						
RA(C)	15						
RA(O)							
IRA							
LTM							

PROJECTED TOTAL: \$16,000

LSAAP-201

RDX PITS, SETTLING PITS AND WW SUMPS

SITE DESCRIPTION

These 25 units are in-ground stainless steel wastewater sumps with mixing and heating systems to desensitize explosives (initiators). The units manage lead-contaminated wastewater generated from primer and detonator production activities from 1951 to 1979.

These units are located near units LSAAP 68-72, therefore contaminants are assumed to be the same.

The SI was completed in July 1978. The Phase I RFI was completed in 1999. Explosives and metals were found on the soil. Antimony was found in one groundwater well.

IRP STATUS

RRSE RATING: High Risk with regulatory agreement (1A)

CONTAMINANTS OF CONCERN:

RDX, HMX, Tetryl, Lead, Antimony

MEDIA OF CONCERN:

Soil, Groundwater

COMPLETED IRP PHASE:

PA/SI

CURRENT IRP PHASE:

RI/FS (RFI)

FUTURE IRP PHASE:

RD, RA, LTM

PROPOSED PLAN

Currently addressing comments from TNRCC. Hot spot removal is expected.

CONSTRAINED COST TO COMPLETE

PHASE	2001	2002	2003	2004	2005	2006	2007+
RI/FS	9						
IRA							
RD		17					
RA(C)		164					
RA(O)							
LTM							
PROJECTED TOTAL:							\$190,000

LSAAP-499E

INDUSTRIAL SEWER LIFT STATION P-78 + PIPES

SITE DESCRIPTION

The existing lead azide wastewater collection and treatment facilities were placed into service in the late 1970's. It served the P and Q lines individually but combines the lines at the treatment plant influent pump. Six man-holes and approximately 2,575 feet of plastic pipe comprise the gravity system serving the P lines. Ten manholes, two lift stations, and approximately 2,750 feet of plastic pipe comprise the gravity system serving the Q-line. The system was leaking in 1989. Corrective steps were taken in 1990, however in 1992, leaks were again detected. This area is still active although the sewer lines are not active. Possible contamination from previous leaks in the sewer lines is eligible for ER.A funds.

The PA/SI was completed in December 1990.

IRP STATUS

RRSE RATING: Low Risk with regulatory agreement (3A)

CONTAMINANTS OF CONCERN:

Explosives, Lead

MEDIA OF CONCERN:

Soil

COMPLETED IRP PHASE:

PA/SI

CURRENT IRP PHASE:

RI/FS (RFI)

FUTURE IRP PHASE:

RD, RA

PROPOSED PLAN

A RFI is underway testing for contamination along the sewer lines. Hot spot removal is expected.

CONSTRAINED COST TO COMPLETE

PHASE	2001	2002	2003	2004	2005	2006	2007+
RI/FS							
IRA							
RD		2					
RA(C)		7					
RA(O)							
LTM							
PROJECTED TOTAL:					\$9,000		

**RESPONSE COMPLETE
DSERTS SITES**

LSAAP-003

EASTERN ACTIVE LANDFILL (RI-SITE 10)

SITE DESCRIPTION

This landfill is registered as a Class II landfill and is permitted for the disposal of miscellaneous inert refuse (construction/demolition debris). It is nearing the end of its useful life. It has been in operation since August 1985.

PROPOSED PLAN

Since this is an active site, it is not eligible for IRP funds. No further action is required under the IRP.

IRP STATUS

CONTAMINANTS:

None

MEDIA OF CONCERN:

None

RRSE RATING:

Not Evaluated

COMPLETED IRP PHASE:

PA/SI, RI/FS

CURRENT IRP PHASE:

RC

FUTURE IRP PHASE:

RC

LSAAP-005

PAINT FILTER SITE

SITE DESCRIPTION

This site was used by RRAD in 1980 for the disposal of used paint filters from spray painting operations. The unit is a shallow earthen pit, approximately 20 feet by 20 feet. To avoid the requirement to obtain a post closure care permit for this site; corrective action, specifically closure by removal was proposed by the Army to deal with this SWMU. The TNRCC granted this request. The remedial design is complete, and contaminated soil was removed.

PROPOSED PLAN

Closure certification report has been submitted to the state for review and approval. If approved, this site will be response complete.

IRP STATUS

CONTAMINANTS:

Cadmium, Copper, Lead, Selenium

MEDIA OF CONCERN:

Soil

RRSE RATING:

Medium Risk (2A)

COMPLETED IRP PHASE:

PA/SI, RI/FS, RD, RA

CURRENT IRP PHASE:

RIP

FUTURE IRP PHASE:

RC

LSAAP-008 ABANDONED LANDFILL 2

SITE DESCRIPTION

This area, located South of Area BB may have been used for dumping incinerator ash. The surface of this site is covered with burned electrical connectors and wires. A field investigation was conducted on this site in the summer of 1993. No gross evidence of contaminants was noted.

The Phase II RFI submitted to TNRCC in 1998 showed no contamination above action levels.

PROPOSED PLAN

Awaiting no further action approval from TNRCC.

IRP STATUS

CONTAMINANTS:

Maganese

MEDIA OF CONCERN:

Soil

RRSE RATING:

Medium Risk (2A)

COMPLETED IRP PHASE:

PA/SI, RI/FS

CURRENT IRP PHASE:

RC

FUTURE IRP PHASE:

RC

LSAAP-010 ABANDONED LANDFILL (SWMU 010)

SITE DESCRIPTION

The site located East of Area V contains building demolition debris. No evidence of contamination exists around the site.

PROPOSED PLAN

TNRCC approved no further action for this site in August 1992.

IRP STATUS

CONTAMINANTS:

None

MEDIA OF CONCERN:

None

RRSE RATING:

Not Evaluated

COMPLETED IRP PHASE:

PA/SI, RI/FS

CURRENT IRP PHASE:

RC

FUTURE IRP PHASE:

RC

LSAAP-011 ABANDONED LANDFILL (SWMU 11)

SITE DESCRIPTION

There is no evidence or records of disposal operations in this area, near the railroad tracks West of Area U. An affidavit was approved by the TNRCC.

PROPOSED PLAN

TNRCC has approved no further action for this site in August 1992.

IRP STATUS

CONTAMINANTS:

None

MEDIA OF CONCERN:

None

RRSE RATING:

Not Evaluated

COMPLETED IRP PHASE:

PA/SI, RI/FS

CURRENT IRP PHASE:

RC

FUTURE IRP PHASE:

RC

LSAAP-012 ABANDONED LANDFILL (SWMU 012)

SITE DESCRIPTION

LSAAP-012 and 013 are known as the Wood Disposal Fills 1 & 2. These units have been removed as part of gravel pit operations. Sampling occurred as part of the RI and no contamination was found.

PROPOSED PLAN

TNRCC approved no further action for this site in August 1992.

IRP STATUS

CONTAMINANTS:

None

MEDIA OF CONCERN:

None

RRSE RATING:

Not Evaluated

COMPLETED IRP PHASE:

PA/SI, RI/FS

CURRENT IRP PHASE:

RC

FUTURE IRP PHASE:

RC

LSAAP-013 ABANDONED LANDFILL (SWMU 13)

SITE DESCRIPTION

LSAAP-012 and 013 are known as the Wood Disposal Fills 1 & 2. These units have been removed as part of gravel pit operations. Sampling occurred as part of the RI and no contamination was found.

PROPOSED PLAN

TNRCC has approved no further action for this site in August 1992.

IRP STATUS

CONTAMINANTS:

None

MEDIA OF CONCERN:

None

RRSE RATING:

Not Evaluated

COMPLETED IRP PHASE:

PA/SI, RI/FS

CURRENT IRP PHASE:

RC

FUTURE IRP PHASE:

RC

LSAAP-014 ABANDONED LANDFILL (SWMU 014)

SITE DESCRIPTION

This site, located South of Area V, contains two large chunks of concrete with steel reinforcing bars, no other evidence of burial or other sources of contamination were present. An affidavit has been submitted to TNRCC.

PROPOSED PLAN

TNRCC approved no further action for this site in August 1992.

IRP STATUS

CONTAMINANTS:

None

MEDIA OF CONCERN:

None

RRSE RATING:

Not Evaluated

COMPLETED IRP PHASE:

PA/SI, RI/FS

CURRENT IRP PHASE:

RC

FUTURE IRP PHASE:

RC

LSAAP-019 CREEKS, STREAMS, DRAINAGE (AOC #1, RI SITE 18)

SITE DESCRIPTION

The RCRA permit lists all creeks, streams and drainage ditches on LSAAP as an area of possible concern. Drainage ditches, creeks, and streams exit the facility in numerous directions feeding into six different hydrologic units. The SI was completed in July 1978. Monitoring to date has not detected a problem in any of these six hydrologic units.

The high risk is due to one high hit of lead in surface water in 1990. Concentrations have reduced significantly since then.

PROPOSED PLAN

TNRCC has approved no further action for this site.

IRP STATUS

CONTAMINANTS:

Metals, 1,3,5-TNB

MEDIA OF CONCERN:

Surface Water, Sediment

RRSE RATING:

High Risk (1A)

COMPLETED IRP PHASE:

PA/SI, RI/FS

CURRENT IRP PHASE:

RC

FUTURE IRP PHASE:

RC

LSAAP-022 CONTAINER STORAGE AREA T-4-2

SITE DESCRIPTION

The container storage area T-4-2 is an igloo type structure constructed in the 1940's. The unit originally was used to store ammunition. It was converted in 1986 to a permitted, hazardous waste storage area. Currently several drums of non-hazardous waste, burning ground ash and residue from pads are stored in the igloo.

PROPOSED PLAN

This is an active, permitted storage, site and is not eligible for IRP funds.

IRP STATUS

CONTAMINANTS:

None

MEDIA OF CONCERN:

None

RRSE RATING:

Not Evaluated

COMPLETED IRP PHASE:

None

CURRENT IRP PHASE:

RC

FUTURE IRP PHASE:

RC

LSAAP-023 CHEMICAL BURIAL SITE (SWMUS 19-24, RI-16)

SITE DESCRIPTION

These inactive units consist of earthen pits, which were reportedly used for the disposal of acids and possibly other wastes. The exact location and period of operation of these units is unknown. Unit 23 was thought to be in use between 1950 and 1970. Unit 23 was investigated in the RI.

PROPOSED PLAN

TNRCC has approved no further action for this site in August 1992.

IRP STATUS

CONTAMINANTS:

None

MEDIA OF CONCERN:

None

RRSE RATING:

Low Risk (3A)

COMPLETED IRP PHASE:

PA/SI, RI/FS

CURRENT IRP PHASE:

RC

FUTURE IRP PHASE:

RC

LSAAP-027 CONTAINER STORAGE AREA T-3-2

SITE DESCRIPTION

This site contains several drums of explosive-contaminated spent carbon and non-hazardous spent carbon. This is a permitted storage site.

PROPOSED PLAN

This is an active, permitted storage, site and is not eligible for IRP funds.

IRP STATUS

CONTAMINANTS:

Ash

MEDIA OF CONCERN:

None

RRSE RATING:

Not Evaluated

COMPLETED IRP PHASE:

PA/SI

CURRENT IRP PHASE:

RC

FUTURE IRP PHASE:

RC

LSAAP-028 CONTAINER STORAGE AREA T-2-1

SITE DESCRIPTION

This storage area contains several drums of ash residue from the burning ground pad 2. This is a permitted storage site.

PROPOSED PLAN

This is an active, permitted storage, site and is not eligible for IRP funds.

IRP STATUS

CONTAMINANTS:

Ash

MEDIA OF CONCERN:

None

RRSE RATING:

Not Evaluated

COMPLETED IRP PHASE:

PA/SI

CURRENT IRP PHASE:

RC

FUTURE IRP PHASE:

RC

LSAAP-029 CONTAINER STORAGE AREA P-78 (SWMU)

SITE DESCRIPTION

This unit was an open gravel storage area for drums, located next to building P-78, the lead-contaminated wastewater treatment facility.

PROPOSED PLAN

The area was closed following a TNRCC approved closure plan in August 1992.

IRP STATUS

CONTAMINANTS:

None

MEDIA OF CONCERN:

None

RRSE RATING:

Not Evaluated

COMPLETED IRP PHASE:

PA/SI

CURRENT IRP PHASE:

RC

FUTURE IRP PHASE:

RC

LSAAP-031 SALVAGE YARD (RI-SITE 17)

SITE DESCRIPTION

This site is active and is not eligible for IRP funds.

This site is located near the North-central boundary of LSAAP and has been used since the 1940s for the temporary storage of salvageable materials and for drum storage of spent solvents and waste oils. It was also formerly used as a storage area for transformers containing PCBs.

The RI recommended that sediment off-site surface migration be controlled by construction of on-site siltation basins on drainage ways leaving the site. A retention basin was constructed in 1994.

PROPOSED PLAN

TNRCC approved no further action in August 1992.

IRP STATUS

CONTAMINANTS:

Cadmium, Copper, Lead, Nickel,
Thallium, Zinc

MEDIA OF CONCERN:

Soil

RRSE RATING:

Medium Risk (2A)

COMPLETED IRP PHASE:

PA/SI, RI/FS

CURRENT IRP PHASE:

RC

FUTURE IRP PHASE:

RC

LSAAP-035 RR CLASSIFICATION YARD (RFI-AOC #4, RI-4)

SITE DESCRIPTION

This site has been used since 1941 for segregating and inspection of railroad-cars. No chemicals or other supplies were off-loaded at this location. This well maintained, limited access site consists of track and a rail-yard, including a mounded gravel bed with swales leading to drainage ditches which parallel the track.

PROPOSED PLAN

The TNRCC approved no further action in August 1992.

IRP STATUS

CONTAMINANTS:

None

MEDIA OF CONCERN:

None

RRSE RATING:

Medium Risk (2A)

COMPLETED IRP PHASE:

PA/SI, RFI

CURRENT IRP PHASE:

RC

FUTURE IRP PHASE:

RC

LSAAP-037 CHROME PLATING AREA (SITE 20)

SITE DESCRIPTION

This unit is an unlined, vegetated shallow drainage ditch West of Building I-30. A chromium plating operation in the Building I-30 machine shop resulted in the generation of chromium oxide contaminated waste. This operation took place prior to 1968. In 1979, an 8,000-gallon underground storage tank was installed onsite to store wastewater.

PROPOSED PLAN

TNRCC approved no further action in August 1992.

IRP STATUS

CONTAMINANTS:

Chromium

MEDIA OF CONCERN:

Sediment

RRSE RATING:

Low Risk (3A)

COMPLETED IRP PHASE:

PA/SI, RI/FS

CURRENT IRP PHASE:

RC

FUTURE IRP PHASE:

RC

LSAAP-038 AREA W WELLS (SWMUS 038-044)

SITE DESCRIPTION

These units are shallow excavations in which classified munitions were disposed.

Sampling during the July 78 PA/SI did not locate any of the wells. The RFI was completed in 1998 and found no contamination levels above background.

PROPOSED PLAN

No further action.

IRP STATUS

RRSE RATING: Low Risk with regulatory agreement (3A)

CONTAMINANTS OF CONCERN:

Metals, Explosives

MEDIA OF CONCERN:

Soil

COMPLETED IRP PHASE:

PA/SI, RI/FS

CURRENT IRP PHASE:

RC

FUTURE IRP PHASE:

RC

LSAAP-039 BULK FUEL STORAGE AREA (RI-SITE 19)

SITE DESCRIPTION

Four 10,000-gallon underground storage tanks were used to store gasoline and diesel until January 1989. These tanks were connected to the Service Station tanks where the fuel was dispensed. This site consists of both the Gasoline Station and the Bulk Fuel Storage Area. These tanks were removed in third quarter FY92. A closure plan was prepared. Post closure monitoring has determined that the groundwater underneath contains free product. The groundwater has been pumped and treated. Groundwater samples are not showing contaminants.

PROPOSED PLAN

No further action is planned under the IRP.

IRP STATUS

CONTAMINANTS:

Benzene, Ethyl Benzene, Toluene, Xylene, Lead

MEDIA OF CONCERN:

Soil, Groundwater

RRSE RATING:

Medium (2A)

COMPLETED IRP PHASE:

PA/SI, RI/FS, RD, RA

CURRENT IRP PHASE:

RC

FUTURE IRP PHASE:

RC

LSAAP-040 CONTAINER STORAGE AREA A-8

SITE DESCRIPTION

This area is used to store transformers taken out of service.

PROPOSED PLAN

This is an active, permitted storage, site and is not eligible for IRP funds.

IRP STATUS

CONTAMINANTS:

PCBs

MEDIA OF CONCERN:

Soil

RRSE RATING:

Not Evaluated

COMPLETED IRP PHASE:

PA/SI

CURRENT IRP PHASE:

RC

FUTURE IRP PHASE:

RC

LSAAP-044 WELLS AND CISTERNS

SITE DESCRIPTION

This site consists of miscellaneous wells and cisterns formerly used as residential water supplies. The cisterns associated with this site were never used to dispose of hazardous waste.

No contamination was found during the December 1991 RI.

PROPOSED PLAN

There is no further action planned under the IRP.

IRP STATUS

CONTAMINANTS:

None

MEDIA OF CONCERN:

None

RRSE RATING:

Low Risk (3A)

COMPLETED IRP PHASE:

PA/SI, RI/FS

CURRENT IRP PHASE:

RC

FUTURE IRP PHASE:

RC

LSAAP-045 CISTERN VII (SWMU 045, RI-SITE 11)

Unit No. 45 is located in a densely wooded area approximately 400 feet East of an unnamed dirt road, about 1,500 feet South of Area A, and 600 feet North of the Western elevated water tower. Cistern VII appears to be an open dug well; the dates and use of this cistern are unknown. It is approximately six to ten feet in diameter.

The cistern was decontaminated and removed during the RA phase.

PROPOSED PLAN

The RIP meets regulatory requirements and no further action will be needed.

IRP STATUS

CONTAMINANTS:

None

MEDIA OF CONCERN:

Groundwater

RRSE RATING:

Low Risk (3A)

COMPLETED IRP PHASE:

PA/SI, RI/FS, RD, RA

CURRENT IRP PHASE:

RC

FUTURE IRP PHASE:

RC

LSAAP-046 CISTERN II (SWMU 046, RI-SITE 11)

SITE DESCRIPTION

Unit No. 46 is located in a cleared area approximately 200 feet south of Old Boston Road and 2,500 feet West of Red Springs Road immediately adjacent to Unit No. 48. The cistern and its riser are constructed of concrete. Dismantled metal hand grenade parts were reportedly placed in this unit and the unit was then filled with concrete.

TNRCC approved the work plan in September 1996. The cistern was decontaminated and removed in 1998 as the RA.

PROPOSED PLAN

RIP meets regulatory statues and no further action will be required.

IRP STATUS

CONTAMINANTS:

Cadmium, Zinc, Antimony, Chromium, Copper, Nickel

MEDIA OF CONCERN:

Groundwater, Soil

RRSE RATING:

Low Risk (3A)

COMPLETED IRP PHASE:

PA/SI, RI/FS, RD, RA

CURRENT IRP PHASE:

RC

FUTURE IRP PHASE:

RC

LSAAP-047 CISTERN III (SWMU 047, RI-SITE 11)

SITE DESCRIPTION

LSAAP Unit No. 47 is located in a sparsely wooded area approximately 85 feet north of Old Boston Road and 800 feet west of Red Springs Road. The cistern is bell-shaped below the ground surface, and its total measured depth is 12.1 feet. Nothing is known to have been disposed of at this site. Unit No. 46 is located on homesite 41BW367, as determined during the LSAAP historic sites survey.

The RI/FS was completed in September 1993. The cistern was decontaminated and removed in September 1998.

PROPOSED PLAN

RIP meets regulatory requirements and no further action will be required.

IRP STATUS

CONTAMINANTS:

None

MEDIA OF CONCERN:

Groundwater, Soil

RRSE RATING:

Medium Risk (2A)

COMPLETED IRP PHASE:

PA/SI, RI/FS, RD, RA

CURRENT IRP PHASE:

RC

FUTURE IRP PHASE:

RC

LSAAP-048 CISTERN IV (SWMU-048, RI-SITE 11)

SITE DESCRIPTION

Unit No. 48 was also located in a cleared area approximately 100 feet north of Old Boston Road and 2,500 feet east of Red Springs Road. Dismantled metal hand grenade parts were reportedly placed in this cistern and the cistern was then filled with concrete. TNRCC approved the work plan.

The RI was completed in September 1993. The cistern was decontaminated and removed in September 1998.

PROPOSED PLAN

RIP meets regulatory requirements and no further action will be required.

IRP STATUS

CONTAMINANTS:

Cadmium, Zinc, Antimony, Chromium, Copper, Zinc

MEDIA OF CONCERN:

Soil

RRSE RATING:

Low Risk (3A)

COMPLETED IRP PHASE:

PA/SI, RI/FS, RD, RA

CURRENT IRP PHASE:

RC

FUTURE IRP PHASE:

RC

LSAAP-053 CISTERN VI SWMU 053 RI SITE 11

SITE DESCRIPTION

Unit No. 53 is located approximately 1,500 feet north of the east water tower along the northern boundary of the installation. This unit consists of one large circular and one large rectangular concrete cistern with underground piping and covered port opening at the surface. The structures were installed prior to 1941 as water holding sumps for the town of Leary's railroad station. These structures became part of a temporary water treatment plant that supplied water for LSAAP.

RI sampling (September 1993) results indicated that disposal of wastes occurred at this site. The cistern was decontaminated and removed in September 98.

PROPOSED PLAN

RIP meets regulatory requirements and no further action will be required.

IRP STATUS

CONTAMINANTS:

Arsenic, Chromium, Copper, Lead, Zinc, Lindane, p-chlorophenol, 1,1-DCA, Chloromethane, 1,2,4-trichlorobenzene, Thallium

MEDIA OF CONCERN:

Soil

RRSE RATING:

Low (3A)

COMPLETED IRP PHASE:

PA/SI, RI/FS, RD, RA

CURRENT IRP PHASE: RC

FUTURE IRP PHASE: RC

LSAAP-054 CISTERN VIII (SWMU 054, RI-SITE 11)

SITE DESCRIPTION

Unit No. 54 is located in a densely wooded area about 1,500 feet south of the northern installation boundary and 2.7 miles east of the western boundary. This cistern is located approximately 230 feet north of a fire lane paralleling Fourth Street. It is constructed of concrete, with a rectangular brick riser approximately 2.5 feet above ground surface.

The RI was completed in September 1998. The cistern was decontaminated and removed in September 1998.

PROPOSED PLAN

RIP meets regulatory requirements and no further action will be required.

IRP STATUS

CONTAMINANTS:

None

MEDIA OF CONCERN:

Groundwater

RRSE RATING:

Low Risk (3A)

COMPLETED IRP PHASE:

PA/SI, RI/FS, RD, RA

CURRENT IRP PHASE:

RC

FUTURE IRP PHASE:

RC

LSAAP-067 RDX PIT B-46 (RI-SITE 5C)

SITE DESCRIPTION

Pit B-46 is located in Area B. This pit was used for the disposal of production wastewater from approximately 1961 to 1980. Historical results show lead in nearby surface water and sulfates and cadmium in nearby wells, however there appears to be no migration from this site. The lead in the surface water/sediment was indicative of poor housekeeping that has been corrected.

PROPOSED PLAN

TNRCC has approved no further action in August 1992.

IRP STATUS

CONTAMINANTS:

None

MEDIA OF CONCERN:

None

RRSE RATING:

Not Evaluated

COMPLETED IRP PHASE:

PA/SI

CURRENT IRP PHASE:

RC

FUTURE IRP PHASE:

RC

LSAAP-073 RDX PIT K-2 (SWMU-073)

SITE DESCRIPTION

Area K has been used for LAP operations. The earthen pit K-2 was reportedly used from about 1961 to 1980. The pit is inactive, uncapped and contained six to nine inches of muddy sediment. Area K is relatively flat. The ground elevation of Pit K-2 is 382 feet mean sea level (MSL).

The RI was completed in March 1993. The excavation and removal was completed in April 1998.

PROPOSED PLAN

RIP meets regulatory requirements and no further action will be required.

IRP STATUS

CONTAMINANTS:

Barium, RDX

MEDIA OF CONCERN:

Soil

RRSE RATING:

Low Risk (3A)

COMPLETED IRP PHASE:

PA/SI, RI/FS, RD, RA

CURRENT IRP PHASE:

RC

FUTURE IRP PHASE:

RC

LSAAP-076 LANDFILL NEAR AREA W TWO

SITE DESCRIPTION

This landfill is located near Area W. This site was used to dispose of waste and trash generated by LSAAP. The exact size and years of use of this landfill are unknown.

Trenching in the Summer of 1994 confirmed the presence of waste at this site. The SI was completed in March 1996. The RFI was completed in 1999 and found no contamination above action levels.

PROPOSED PLAN

Awaiting comments from TNRCC, and no further action is expected.

IRP STATUS

RRSE RATING: Low Risk with regulatory agreement (3A)

CONTAMINANTS OF CONCERN:
Pesticides, VOCs, Metals

MEDIA OF CONCERN:
Soil, Groundwater

COMPLETED IRP PHASE:
PA/SI, RI/FS

CURRENT IRP PHASE:
RC

FUTURE IRP PHASE:
RC

LSAAP-077 LANDFILL NEAR AREA W THREE

SITE DESCRIPTION

This landfill is located near Area W. This site was used to dispose of waste and trash generated by RRAD.

Waste in the form of building debris, drums, and five-gallon buckets were evident on the surface. The exact size of this site is unknown.

Trenching in the Summer of 1994 confirmed the presence of waste at this site. The SI was completed in March 1996. The RFI was completed in 1999 and found no contamination above action levels.

PROPOSED PLAN

Awaiting comments from TNRCC, and no further action is expected.

IRP STATUS

RRSE RATING: Low Risk with regulatory agreement (3A)

CONTAMINANTS OF CONCERN:
Pesticides, VOCs, Metals

MEDIA OF CONCERN:
Soil, Groundwater

COMPLETED IRP PHASE:
PA/SI, RI/FS

CURRENT IRP PHASE:
RC

FUTURE IRP PHASE:
RC

LSAAP-422 B-8 BATTERY WASHDOWN SUMP

SITE DESCRIPTION

The Battery Washdown Sump is located outside the building where forklift batteries were serviced. The building is now used to support a dry packing operation. The unit was used in the early 1970s and is now inactive.

The SI was completed in July 1978, the RFI was completed in August 1999.

PROPOSED PLAN

Awaiting comments from TNRCC, and no further action is expected.

IRP STATUS

RRSE RATING: Low Risk with regulatory agreement (3A)

CONTAMINANTS OF CONCERN:
Explosives, Metals

MEDIA OF CONCERN:
Soil

COMPLETED IRP PHASE:
PA/SI, RI/FS

CURRENT IRP PHASE:
RC

FUTURE IRP PHASE:
RC

LSAAP-498 SANITARY SEWER SYSTEM

SITE DESCRIPTION

The sanitary sewer system carries treated wastewater effluent from the pink water treatment plants and treated effluent from the chromium treatment plant, as well as sanitary wastewater throughout the facility, to the wastewater treatment plant operated by RRAD. The system does not handle hazardous waste.

This site is active and is not eligible for ER,A funds.

PROPOSED PLAN

TNRCC approved no further action in August 1992.

IRP STATUS

CONTAMINANTS:
None

MEDIA OF CONCERN:
None

RRSE RATING:
Not Evaluated

COMPLETED IRP PHASE:
RFI

CURRENT IRP PHASE:
RC

FUTURE IRP PHASE:
RC

LSAAP-499A PINKWATER TREATMENT FACILITIES AND AUXILIARY EQUIPMENT

SITE DESCRIPTION

This site is active and is not eligible for ER,A funding.

Industrial sewers carry wastewater from the production areas to industrial wastewater pre-treatment plants. The Area C, E, and F lines are open trough or closed pipe above ground lines.

The PA was completed in July 1978.

PROPOSED PLAN

This site is RC under the IRP.

IRP STATUS

CONTAMINANTS:

Explosives

MEDIA OF CONCERN:

Soil

RRSE RATING:

Low Risk (3A)

COMPLETED IRP PHASE:

PA/SI

CURRENT IRP PHASE:

RC

FUTURE IRP PHASE:

RC

LSAAP-499C LEAD WASTEWATER TREATMENT FACILITY P-78 & AUXILIARY EQUIPMENT

SITE DESCRIPTION

The lead removal IWTP (P-78) receives lead contaminated wastewater from the P line sumps and from tank trucks for the Q and K Lines. Prior to being transported, chemical addition and agitation occurs to de-sensitize the lead azide and lead styphnate. The system consists of an electrochemical precipitator followed by a degassing tank, clarifier/reactor, storage tank, an in-line filter and a carbon column.

PROPOSED PLAN

This is an active treatment facility; and is not eligible for IRP funds.

IRP STATUS

CONTAMINANTS:

Metals

MEDIA OF CONCERN:

Soils

RRSE RATING:

Medium Risk (2A)

COMPLETED IRP PHASE:

PA/SI

CURRENT IRP PHASE:

RC

FUTURE IRP PHASE:

RC

LSAAP-499D CHROME WASTEWATER TREATMENT FACILITY G130 AND AUXILIARY EQUIPMENT

SITE DESCRIPTION

The chrome removal IWTP receives pyrotechnic wastewater from sumps in the process area. It batch processes the wastewater through an electrochemical precipitator followed by ultrafiltration and then carbon adsorption.

PROPOSED PLAN

This is an active treatment facility; and is not eligible for IRP funds.

IRP STATUS

CONTAMINANTS:

Metals

MEDIA OF CONCERN:

Soil

RRSE RATING:

Low Risk (3A)

COMPLETED IRP PHASE:

PA/SI

CURRENT IRP PHASE:

RC

FUTURE IRP PHASE:

RC

SCHEDULE

PAST MILESTONES

Installation Assessment	Jul 78
PA/SI	Sep 81
IRA - Area O Ponds closed	Dec 82
IRA - Area G Ponds closed	Oct 83
IRA - USTs removed at LSAAP-039	May 92
RI/FS Phase I	Dec 91
RI/RA - Draft, Phase II	Jun 92
RI/RA - Draft-Final, Phase III	Feb 93
RA - Retention basin constructed	Jul 93
RI/Risk Assessment Completion	Mar 97
Feasibility Study Completion	Dec 97
Proposed Plan	Apr 98
RA - Complete for removal at LSAAP-046, 047, 048, 053, 054	Sep 98
ROD signed	Aug 99

NO FURTHER ACTION SITES

The following sites currently require no further action by the Installation Restoration Program:

- LSAAP-003 Eastern Active Landfill (RI-Site 10)
- LSAAP-005 Paint Filter Site
- LSAAP-008 Abandoned Landfill 2
- LSAAP-010 Abandoned Landfill (SWMU 010)
- LSAAP-011 Abandoned Landfill (SWMU 11)
- LSAAP-012 Abandoned Landfill (SWMU 012)
- LSAAP-013 Abandoned Landfill (SWMU 13)
- LSAAP-014 Abandoned Landfill (SWMU 14)
- LSAAP-015 Road Oil Burial Site
- LSAAP-018 High Explosives Demolition Ground (RI-15)
- LSAAP-019 Creeks, Streams, Drainage (AOC #1, RI Site 18)
- LSAAP-022 Container Storage Area T-4-2
- LSAAP-023 Chemical Burial Site (SWMU 19-24, RI Site-16)
- LSAAP-027 Container Storage Area T-3-2
- LSAAP-028 Container Storage Area T-2-1
- LSAAP-029 Container Storage Area P-78 (SWMU)
- LSAAP-031 Salvage Yard (RI Site 17)
- LSAAP-035 RR Classification Yard (RFI-AOC #4, RI)
- LSAAP-037 Chrome Plating Area (Site 20)
- LSAAP-038 Area W Wells (SWMUs039-044)
- LSAAP-039 Bulk Fuel Storage Area (RI-Site 19)
- LSAAP-040 Container Storage Area A-8
- LSAAP-044 Wells and Cisterns
- LSAAP-045 Cistern VII (SWMUs 045, RI-Site 11)
- LSAAP-046 Cistern II (SWMU 046, RI-Site 11)
- LSAAP-047 Cistern III (SWMU 047, RI-Site 11)
- LSAAP-048 Cistern IV (SWMU-048, RI-Site 11)
- LSAAP-053 Cistern VI (SWMU 053 RI Site 11)
- LSAAP-054 Cistern VIII (SWMU 054, RI-Site 11)
- LSAAP-067 RDX Pit B-46 (RI-Site 5C)
- LSAAP-073 RDX Pit K-2 (SWMU-073)
- LSAAP-076 Landfill Near Area W Two
- LSAAP-077 Landfill Near Area W Three
- LSAAP-422 B-8 Battery Washdown Sump
- LSAAP-498 Sanitary Sewer System
- LSAAP-499A Pinkwater Treatment Facilities and Auxiliary Equipment
- LSAAP-499C Lead Wastewater Treatment Facility P-78 & Auxiliary Equipment
- LSAAP-499D Chrome Wastewater Treatment Facility G130 and Auxiliary Equipment

Lone Star AAP IRP Schedule

(Based on current funding constraints)

Current Phase

Future Phase

DSERTS #	PHASE	FY01	FY02	FY03	FY04	FY05	FY06+	FY07+
LSAAP-002	RI/FS	Current						
	RD	Current						
	RA		Future					
	LTM		Future	Future	Future			
LSAAP-004	RI/FS	Current						
	RD	Current						
	RA		Future					
	LTM			Future	Future	Future		
LSAAP-006	RI/FS	Current						
	RD		Future					
	RA		Future					
LSAAP-009	RI/FS	Current						
	RD		Future					
	RA		Future					
LSAAP-016	RI/FS	Current						
	RD		Future					
	RA			Future				
	LTM			Future	Future	Future		
LSAAP-017	RD							
	RA	Current						
	LTM		Future	Future	Future	Future	Future	
LSAAP-018	RI/FS							
LSAAP-020	RI/FS							
LSAAP-024	RI/FS							
	RD		Future					
	RA		Future					
	LTM			Future	Future	Future		
LSAAP-033	RI/FS	Current						
	RD	Current						
	RA		Future					
	LTM			Future	Future	Future	Future	Future
LSAAP-034	LTM	Current	Current	Current	Current	Current		
LSAAP-055	RI/FS	Current						
	RD		Future					
	RA		Future					
	LTM			Future	Future	Future		
LSAAP-075	RD		Future					
	RA		Future					

LSAAP-076	RD						
	RA						
LSAAP-201	RI/FS						
	RD						
	RA						
	LTM						
LSAAP-499E	RD						
	RA						

DEFENSE SITE ENVIRONMENTAL RESTORATION TRACKING SYSTEM

Site, 4. Installation Phase Summary Report

1/4/01

Installation: LONE STAR AAP
Programs: BRAC I, BRAC II, BRAC III, BRAC IV, IRP
Subprograms: Compliance, Restoration, UXO
Installation count for Programs: 1
NPL Options: Delisted, No, Proposed, Yes
Installations count for Programs and NPL: 1
Site count for Programs and NPL: 52

Phase / Status / Sites

PA				SI			
C	U	F	RC	C	U	F	RC
52	0	0	8	20	0	0	8

RI / FS				RD			
C	U	F	RC	C	U	F	RC
17	15	2	7	3	1	12	

RA(C)				RA(O)			
C	U	F	RC	C	U	F	RC
11	0	13	11	0	0	0	0

LTM			
C	U	F	N
1	1	7	37

Remedy / Status / Sites (Actions)

IRA			
C	U	F	F
3 (3)		0 (0)	0 (0)

FRA			
C	U	F	F
11 (11)		0 (0)	13 (13)

RIP Total: 0

RC Total: 34

Reporting Period End Date: 09/30/2000

DEFENSE SITE ENVIRONMENTAL RESTORATION TRACKING SYSTEM

Site, 9. RISK INSTALLATION ACTION PLAN REPORT

01/04/2001

Installation: LONE STAR AAP
Major Command: AMC
SubCommand: OSC
Program Options: IRP, BRAC I, BRAC II, BRAC III, BRAC IV

Subprogram Options: Compliance, Restoration, UXO

Site	RRSE	Media Evaluated	Phase (s) Completed	Phase (s) Underway	Phase (s) Future	#IRA Completed	#IRA Underway	#IRA Future	LTM Status	RIP Date	RC Date
LSAAP-002	1A	GW	PA	RI	RAC				F		200203
		SL	SI		RD						
LSAAP-003	1B	GW	PA						N		199702
		SH									
		SL									
LSAAP-004	1A	GW	PA	RI	RAC				F		200209
		SH			RD						
		WH									
LSAAP-005	2A	GW	PA						N		199903
		SH	RAC								
		WH	RI								
			SI								
LSAAP-006	2A	GW	PA	RI							200109
		SL	SI								
LSAAP-008	3A	SL	PA		RI				N		200203
LSAAP-009	3A	GW	PA	RI	RAC						200304
		SH			RD						
		SL									
		WH									
LSAAP-010	NE		PA						N		197807
			SI								
LSAAP-011	NE		PA						N		199208
			SI								
LSAAP-012	NE		PA						N		199208
			SI								
LSAAP-013	NE		PA						N		199208
			SI								

schedule

Site	RRSE	Media Evaluated	Phase (s) Completed	Phase (s) Underway	Phase (s) Future	#IRA Completed	#IRA Underway	#IRA Future	LTM Status	RIP Date	RC Date
LSAAP-014	NE		PA SI						N		199208
LSAAP-015	3A	SL	PA	RI		1			N		200109
LSAAP-016	1A	GW	PA	RI	RAC RD				F		200303
LSAAP-017	2A	SL GW	PA RI	RD	RAC				F		200112
LSAAP-018	1A	WH SH	PA	RI							200109
LSAAP-019	1A	SL WH	PA								197807
LSAAP-020	3B	SL	PA	RI	RAC RD						200303
LSAAP-022	NE		PA						N		199208
LSAAP-023	3A	GW	PA						N		199209
LSAAP-024	2A	GW SH	PA	RI	RAC RD				F		200303
LSAAP-027	NE		PA						N		199208
LSAAP-028	NE		PA						N		199208
LSAAP-029	NE		PA RAC						N		198812
LSAAP-031	2A	SL	PA RAC						N		199208
LSAAP-033	2A	GW	PA	RI	RAC RD	1			F		200209
LSAAP-034	3A	GW	PA RI			1			U		199909
LSAAP-035	2A	SL WH	PA RI						N		199204
LSAAP-037	3A	SH	PA						N		199208
LSAAP-038	3A	SL	PA						N		199909
LSAAP-039	2B	GW SL	PA RAC						C		199603

Site	RRSE	Media Evaluated	Phase (s) Completed	Phase (s) Underway	Phase (s) Future	#IRA Completed	#IRA Underway	#IRA Future	LTM Status	RIP Date	RC Date
LSAAP-040	NE		SI PA						N		199208
LSAAP-044	3A	SL WH	PA RI						N		199208
LSAAP-045	3A	WH	PA RAC						N		199903
LSAAP-046	3A	WH	SI PA RAC						N		199903
LSAAP-047	2A	WH	RD RI SI PA						N		199903
LSAAP-048	3A	WH	RAC RD RI SI PA						N		199903
LSAAP-053	3A	WH	RAC RD RI SI PA						N		199903
LSAAP-054	3A	WH	SI PA RAC						N		199903
LSAAP-055	1A	GW SH SL	RI PA		RAC RD				F		200212
LSAAP-067	NE		SI PA						N		199208
LSAAP-073	3A	SL	PA RAC RI SI						N		200008

Site	RRSE	Media Evaluated	Phase (s) Completed	Phase (s) Underway	Phase (s) Future	#IRA Completed	#IRA Underway	#IRA Future	LTM Status	RIP Date	RC Date
LSAAP-075	1A	SL	PA	RI	RAC				N		200303
		WH			RD						
LSAAP-076	3A	GW	PA	RI	RAC				N		200212
		SL			RD						
LSAAP-077	3A	GW	PA						N		199909
		SL	RI								
LSAAP-201	1A	GW	PA	RI	RAC						200303
		SH			RD						
		SL									
		WH									
LSAAP-422	3A	SL	PA		RI				N		200209
LSAAP-498	NE		PA						N		199209
			RI								
LSAAP-499A	3A	GW	PA						N		199707
		SL	SI								
LSAAP-499C	2A	SH	PA						N		199702
		SL									
LSAAP-499D	3A	GW	PA						N		199702
LSAAP-499E	3A	GW	PA	RI	RAC				N		200303
					RD						

RRSE - Relative Risk Site Evaluation; Risk Category - 1=High, 2=Medium, 3=Low;

Legal Agreement - A = with agreement, B = without agreement; C = Complete, U = Underway, F = Future, N = Not Applicable

Reporting Period End Date: 09/30/2000

REM/IRA/RA ASSESSMENT

PAST REM/IRA/RA

In 1993, a RFI began on 11 sites. The report is being revised and is currently under government review. In 1996, RFI efforts began on 3 additional sites. The work plans are currently being reviewed by the State regulatory agency.

Past REM/IRA/RA/LTM:

- LSAAP-039, Bulk Fuel Storage Area, Interim remedial action to remove four 10,000 gallon underground storage tanks, May 92, (FY92), 336.1K.
- LSAAP-046, 047, 048, 053, & 054, Cisterns, Corrective action, excavate, decontaminate, and dispose of cisterns and soil, (FY98), \$965.0K.
- LSAAP-005, Paint Filter Site, Removal action, excavation and disposal of soil, (FY98), \$500.0K.
- LSAAP-073, RDX Pit K-2, Removal action, excavate and dispose of soil, (FY98), \$52.0K.

CURRENT REM/IRA/RA

- LSAAP-017, Old Demolition Area, Soil cover and erosion control.

FUTURE REM/IRA/RA

- LSAAP-006, Building BB-15, Soil removal.
- LSAAP-009, Abandoned Construction Landfill, Soil removal.
- LSAAP-016, High Explosives Burning Ground, Sediment removal.
- LSAAP-024, Abandoned Landfill (Near Area W), Soil cover.
- LSAAP-033, Area G Ponds, Hot spot removal.
- LSAAP-201, RDX Pits, Settling Ponds and WW Sumps, Soil and sump removal

PRIOR YEAR FUNDING

FY78

Preliminary Assessment	<u>50.0K</u>
TOTAL:	50.0K

FY80

Contamination Survey	<u>355.0K</u>
TOTAL:	355.0K

FY86

Contamination Survey of Wells/Cisterns	<u>43.1K</u>
TOTAL:	43.1K

FY87

RI/FS Technical Plan Development	40.2K
RI/FS Task Award (Dames & Moore)	972.5K
Closure Plan Developed for Chemical Burial Sites	<u>0.3K</u>
TOTAL:	1013.0K

FY88

Increased RI Field Work	174.3K
Increase to GOCO Spt. Fund	25.5K
Chemical Burial Site Investigation (CE)	204.1K
CLASS	<u>17.5K</u>
TOTAL:	421.4K

FY89

Completion RI/FS (Dames & Moore)	1,251.5K
RADE, CEHND	232.0K
CLASS	<u>44.8K</u>
TOTAL:	1505.8K

FY90

Monitoring Old Demo Area	60.5K
RD/RA Service Station	20.0K
RA/SA Service Station	<u>29.0K</u>
TOTAL:	109.5K

FY91

Installation RFI	691.6K
Water & Soil Sampling at the ODA	28.1K
TEU/EOD Support	10.1K
Fort Worth Well Installation	61.1K
Demo Grounds (CEHND)	11.1K
Old Service Station	<u>147.5K</u>
TOTAL:	949.5K

PRIOR YEAR FUNDING

FY92

WILF CA, [CESWT]) (LSAAP-01)	965.0K
Road Oil Burial Site CA (LSAAP-15)	69.0K
Re-Survey Monitoring Wells (LSAAP-16)	250.0K
Paint Filter Site CA (LSAAP-05)	500.0K
Area K CA (LSAAP-073)	52.0K
ODA RI (LSAAP-17)	444.0K
RFI (LSAAP-18)	1386.0K
LUST - Old Service Station (SWF)	140.0K
Installation Support RFI	<u>100.0K</u>
TOTAL:	3,906.0K

FY93

WILF CA, [CESWT]) (LSAAP-01)	93.0K
WILF CA, Scoping [CESWT] (LSAAP-01)	12.0K
ODA RI [cost growth] (LSAAP-17)	36.0K
RFI (LSAAP-18)	807.0K
Monitor Well Removal (LSAAP-18)	100.0K
Maintenance of Environmental sites (LSAAP-18)	50.0K
Installation Support CA (LSAAP-05)	<u>50.0K</u>
TOTAL:	1148.6K

FY94

Installation Support ODA RI/FS (LSAAP-017)	33.7K
RFI (LSAAP-018)	795.6K
Maintain Monitoring Wells (LSAAP-018)	99.9K
Bulk Fuel Storage (LSAAP-039)	200.0K
Old Service Station (LSAAP-039)	200.0K
Installation Support CA (LSAAP-002)	50.0K
Installation Support RFI (LSAAP-018)	74.9K
WILF CA, [CESWT]) (LSAAP-002)	<u>155.0K</u>
TOTAL:	1609.1K

FY95

Fiscal Year 1995 funds were subject to availability (SAF) and were carried over to FY96.

FY96

Old Demolition Area RI/FS	1,858.0K
RCRA Facility Investigation	1,283.0K
Area G Ponds	<u>307.0K</u>
TOTAL:	\$3,448.0K

PRIOR YEAR FUNDING

FY97

Projects programmed for FY97 were not funded.

FY98

Western Inactive Sanitary Landfill	\$243.0K
TOTAL:	\$243.0K

FY99

LTM at LSAAP-017	\$88K
RI/FS at LSAAP-017	68K
RI/FS at LSAAP-033	418K
RI/FS at LSAAP-034	120K
TOTAL:	\$694K

FY00

TOTAL: \$3640 K

TOTAL PRIOR YEAR FUNDS: **\$19,135.01K**

CURRENT YEAR FUNDS (FY01): \$1,287K

FUNDS REQUIRED TO COMPLETION (FY01+): \$4,713K

TOTAL IRP REQUIREMENTS **\$23,848.01K**

LONE STAR AAP - COST TO COMPLETE RESTORATION WORK

DSERTS #	SITE TITLE	PHASE	FY01	FY02	FY03	FY04	FY05	FY06	FY07+	SITE TOTAL	DESCRIPTION OF WORK	
LSAAP-002	Western Inactive Sanitary Landfill	RI/FS	17								CMS for natural attenuation (300K)	
		RD	134									
		RA		1339								RCRA cap
		LTM		13.6	13.6	13.6					1530.8	~10 wells, semi-annual, well closure (40K)
LSAAP-004	Eastern Inactive Landfill	RI	17							17	RFI for NFA (411K), well closure (20K)	
LSAAP-006	Building BB-15	RI/FS	16							16	Phase II RFI	
LSAAP-009	Abandoned Construction Landfill	RI/FS	9									Phase II RFI
		RD		7								Soil Removal
		RA		11							27	Soil Removal
LSAAP-015	Road Oil Burial Site	RI/FS	9							9	Closure of 2 wells	
LSAAP-016	High Explosives Burning Ground (RI-Site 12)	RI/FS	12									Phase II RFI
		RD		27								Sediment removal
		RA			234							Sediment removal
		LTM			7.66	7.66	7.66				295.98	
		RA	964									Soil Cover, erosion control
		LTM		55.91	56	56	56	56			1243.91	install wells (65K), ~10 wells & surface water, start with quarterly go to annual, 5 year review (15K), IDW for LSAAP
LSAAP-018	High explosives Demolition Ground (RI-15)	RI/FS									0	Phase II RFI currently underway
LSAAP-020	RDX and TNT Sumps and Tanks	RI/FS									0	Phase I RFI currently underway
LSAAP-024	Abandoned Landfill (Near Area W0)	RD		8								Soil Cover
		RA		64								Soil Cover
		LTM			30.68	30.66	30.66				164	
LSAAP-033	Area G Ponds (RI Site 6)	RI/FS	20									PY S&R
		RD	23									Hot Spot removal
		RA		196								Hot Spot removal assuming 1000cy disposed as Haz
		LTM			10	10	10	10	10	285	564	LTM, 5 year review (10K), well closure (20K)
LSAAP-034	Area O Ponds (SWMUs 34, 35, RI-Site 7)	LTM	17	25	25	15	15				97	LTM, 5 year review (10K), well closure (20K)
LSAAP-055	XX Test Area	RI/FS	17								17	Phase II RFI
LSAAP-075	K-15 South and K-15 North	RI/FS										Phase II RFI currently underway
LSAAP-076	Landfill Near Area W2	RD	1									Hot spot removal
		RA		15								16
LSAAP-201	RDX Pits, Settling Pits and WW Sumps	RI/FS	9									Phase II RFI
		RD		17								Soil & Sump removal
		RA		164								190
LSAAP-499E	Industrial Sewer Lift Station P-78 & Pipes	RD		2								Hot spot removal
		RA		7								9
FISCAL YEAR TOTALS IN THOUSANDS OF DOLLARS			\$ 1,265	\$ 1,952	\$ 377	\$ 133	\$ 119	\$ 66	\$ 285	\$ 4,197		
POM			\$1,296	\$2,410	\$518	\$200	\$200	\$100	\$240	\$4,964		
Difference			\$31	\$458	\$141	\$67	\$81	\$34	-\$45	\$767		

COMMUNITY INVOLVEMENT

Status of Community Involvement

Four residential clusters are located within 2 miles of the LSAAP boundary:

- 1) A small mobile home park near Hooks consisting of about 16 mobile homes;
- 2) A small development of about 55 single-family homes;
- 3) A small mobile home park near Redwater consisting of about 15 mobile homes.
- 4) A small housing development to the east is being constructed.

In November 1997 (FY98), Lone Star Army Ammunition Plant (LSAAP) canvassed its surrounding communities for potential interest in establishing a RAB. After all efforts were completed, it was determined there was not enough interest to establish a RAB.

Determining Interest for Establishing RAB

Efforts Taken to Determine Interest

In an effort to determine public interest in establishing a RAB, LSAAP placed advertisements, over a 30-day period, each Friday in the daily Texarkana Gazette and each Sunday in the weekly Citizens Tribune.

Results of Efforts to Determine Interest in a RAB

Three responses to the paid advertisements in the community newspapers were received. They were from: 1) an environmental consultant, 2) an employee on LSAAP's operating contractor's environmental staff, and 3) a private citizen.

Conclusions Concerning Establishing a RAB

Based on the results of LSAAP's efforts to determine interest in forming a RAB, it was determined that there was not enough interest to establish a RAB at this time.

Follow-up Procedures

LSAAP is committed to involving the public in its restoration program and recognizes that interest in restoration activities can change. LSAAP will monitor community interest bi-annually. In FY00, LSAAP again canvassed the community for interest in a RAB. There was none.

DEFENSE SITE ENVIRONMENTAL RESTORATION TRACKING SYSTEM

Installation, 7. RAB REPORT

01/04/2001

Command: AMC

SubCommand: OSC

Installation: LONE STAR AAP

RAB Established Date:

Reason RAB Not Establish:

The community has expressed no sufficient,

RAB Adjourned Date:

Reason RAB Adjourned:

sustained interest in a RAB.

TRC Date:

198801

RAB Community Members:

Total RAB Community Members:

RAB Government Members:

Total RAB Government Members:

RAB Activities:

RAB Advice

TAPP Application Approval Date:

TAPP Project Title:

09/30/2000

TAPP Project Description:

Purchase Order

Award Number

Award Date

Completion Date