

**INSTALLATION ACTION PLAN
for
KANSAS ARMY AMUNITION
PLANT**



Fiscal Year 2001

INSTALLATION ACTION PLAN

For

KANSAS ARMY AMMUNITION PLANT



March 2001

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 Solid Waste Management Unit (SWMU) at the installation and other areas of concern.

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 the Kansas Army Ammunition Plant (KSAAP). The IAP is used to track requirements, schedules and tentative 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 during the document's annual review. Under current project funding, all remedies will be in place at the KSAAP by the end of 2006.

CONTRIBUTORS TO THIS YEAR'S IAP

NAME

ORGANIZATION

Randall Carlson	Kansas Department of Health & Environment
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KANSAS ARMY AMMUNITION PLANT

PREPARED BY

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Remedial Project Manager
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APPROVAL

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JEWELL SIMMONS
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INFORMATION SHARING

AMC, as well as MSCs and installations believe that it should make its environmental restoration information available openly. This Installation Action Plan was forwarded to the following people:

RAB Co-chair (document provided to
all RAB members)

DAN GRAVATT, KDHE

KEN HERSTOWSKI, EPA Region VII

Installation RPM

ACRONYMS & ABBREVIATIONS

ALF	Abandoned Landfill
ADRA	Ammunition Demilitarization and Renovation Area
BRAC	Base Realignment and Closure Action
Cal-EPA	California Environmental Protection Agency
CERCLA	Comprehensive Environmental Response Compensation and Liability Act
CRWQCB	California Regional Water Quality Control Board
Cu	Copper
DERA	Defense Environmental Restoration Account
DRMO	Defense Reutilization and Marketing Office
DSERTS	Defense Site Environmental Restoration Tracking System
EE/CA	Engineering Evaluation Cost Analysis
ER,A	Environmental Restoration, Army (formally called DERA)
FFSRA	Federal Facility Site Remediation Agreement
FS	Feasibility Study
FY	Fiscal Year
IOC	Installation Operation Command (replaced by OSC)
IRA	Interim Remedial Action
IRP	Installation Restoration Program
KDHE	Kansas Department of Health & Environment
KSAAP	Kansas Army Ammunition Plant
LTM	Long Term Monitoring
MCL	Maximum Contaminant Level
NE	Not Evaluated
NFA	No Further Action
NPDES	National Pollution Discharge Elimination System
PAH	Polycyclic aromatic hydrocarbons
PEP	Propellents, Explosives, Pyrotecnics
PCE	polychlorinated biphenyl
POL	Petroleum, Oil & Lubricants
OSC	Operation Support Commant
RA	Remedial Action
RA(C)	Remedial Action - Construction
RA(O)	Remedial Action - Operation
RAB	Restoration Advisory Board
RC	Response Complete
RCRA	Resource Conservation and Recovery Act
RD	Remedial Design
REM	Removal
RFA	RCRA Facility Assessment
RFI	RCRA Facility Investigation
RI	Remedial Investigation
RIP	Remedy in Place
ROD	Record of Decision
RRSE	Relative Risk Site Evaluation
SI	Site Inspection
STP	Sewage Treatment Plant
SVOC	Semi-Volatile Organic Compounds
SWMU	Solid Waste Management Unit

ACRONYMS & ABBREVIATIONS

TCE	Trichloroethylene
TCLP	Toxicity Characterization Leaching Procedure
TPH	Total Petroleum Hydrocarbons
USACHPPM	United States Army Center for Health Promotion and Preventive Medicine
USAEC	United States Army Environmental Center
USAEHA	United States Army Environmental Hygiene Agency (replaced by CHPPM)
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	Non-NPL with RCRA Part B Permit Corrective Actions. Consent Order issued March 1989 for KAAP-18.			
NUMBER OF DSERTS SITES:	33 DSERTS sites 17 Active ER,A Eligible Sites 1 Response Complete with LTM 15 Response Complete ER,A Eligible			
DIFFERENT DSERTS SITE TYPES:	2	Burn Area	2	Contaminated Buildings
	7	Industrial Discharge	2	Incinerator
	6	Landfills	1	Oil Water Separator
	1	Pistol Range	3	Storage Areas
	2	Surface Impoundment/Lagoons	2	Spill Site Areas
	1	Sewage Treatment Plant	1	Above Ground Storage Tank
	1	UnderGround Storage Tank	1	Explosive Ordnance Disposal
	1	Other		
CONTAMINANTS OF CONCERN:	Explosives, Heavy Metals, VOCsm SVOCs, Dioxin/Furans, PAH, Arsenic			
MEDIA OF CONCERN:	Groundwater, Soil			
COMPLETED REM/IRA/RA:	<ul style="list-style-type: none"> • IRA, FY98 soil solidification(lead) soil removal (explosives) KAAP-18 \$ 1,707.706K • IRA, FY 98 pond sediments removal (lead) KAAP-18 \$ 774.611K 			
CURRENT IRP PHASES:	RI/FS 7 Sites	RD 5 Sites	RA 5 Sites	LTM 1 Site
PROJECTED IRP PHASES:	RI/FS 7 sites	RD 11 site	RA 14 sites	
	RA(O) 3 sites	LTM 14 sites		
IDENTIFIED POSSIBLE REM/IRA/RA:	<ul style="list-style-type: none"> • RA at KAAP-001, 003, 004, 005, 006, 010, 016, 017, 018, 019, 020, 021, 022, 041 			
FUNDING:	PRIOR YEAR:	\$ 21,934.9 K		
	FY2001:	\$ 2,190.0 K		
	FUTURE REQUIREMENTS:	\$ 25,179.0 K		
	TOTAL:	\$ 49,303.9 K		
DURATION:	YEAR OF IRP INCEPTION:		1989	
	YEAR OF IRP COMPLETION EXCLUDING LTM:		2006	
	YEAR OF IRP COMPLETION INCLUDING LTM:		2026	

INSTALLATION INFORMATION

LOCALE

Kansas Army Ammunition Plant (KSAAP) is located on 13,727 acres in rural Labette County, Kansas. The site is approximately 3 miles east of the City of Parsons (population 12,000) and 1 mile north of the town of Labette, Kansas (population 250). Kansas AAP is approximately 30 miles west of the Missouri border and 20 miles north of the Oklahoma border. The Installation is surrounded by farmland that is used for cattle grazing and crop production.

COMMAND ORGANIZATION

MAJOR COMMAND: U.S. Army Materiel Command; Engineering, Housing, Environmental and Installation Logistics, Environmental Quality Division

SUBCOMMAND: U.S. Army Operations Support Command

INSTALLATION: Kansas AAP, Environmental Office

INSTALLATION RESTORATION PROGRAM (IRP) EXECUTING AGENCY

- IRP Executor: U.S. Army Corps of Engineers, Kansas City District

REGULATOR PARTICIPATION

FEDERAL: U.S. Environmental Protection Agency, Region VII

STATE: Kansas Department of Health and Environment (KDHE)

REGULATORY STATUS

- Non-NPL Installation Site with RCRA Corrective Action
- 700 Area Consent Order, March 1989, KDHE

MAJOR CHANGES TO ACTION PLAN FROM PREVIOUS YEAR (FY 00)

- Reduce expected Cost to Complete (CTC) by \$26,166K
- Identified sites for No Further Action

INSTALLATION DESCRIPTION

CURRENT:

Kansas Army Ammunition Plant is a Government Owned, Contractor Operated (GOCO) Installation under the jurisdiction of the US Army Operations Support Command (OSC). The Installation is designated as inactive. The Operating Contractor has a Facility Use Contract for use in third party contracting of both DOD and Non-DOD munition items. The operating Contractor has a production contract with DOD for the Load/Assemble and Pack (LAP) of the Sensor Fuzed Weapon (SFW) on the 1100 line. Recently the OSC has identified Kansas AAP as partially excess to future production requirements and has initiated partial excessing actions.

HISTORIC:

The plant was established in 1941-42 as part of the pre-World War II build-up. The Secretary of War authorized the project on 31 May 1940. Construction was initiated in August 1941 and was completed in November 1942. Original construction consisted of three load lines, four component areas, an ammonium nitrate area, five explosive storage areas, an inert storage area and a maintenance and administration area, along with utilities, roads, and railroads required to support these facilities. The construction contractors were Peter Kiewit Sons Co., George W. Condon Co., both of Omaha, Nebraska; and Paschen Contractor Inc., Chicago, Illinois. Original construction cost, including land, but excluding machinery, was \$25,881,589.

Initial production began in July 1942 and was completed in August 1945. During this period artillery ammunition, bombs, and components for artillery shells, such as fuzes, boosters, detonators, relays, and primers were assembled. Ammonium nitrate was also produced. The operating contractor was J-M Service Corporation.

The plant was placed on standby in September 1945 through August 1950. During this period it was a Government Owned/Government operated (GOGO) plant. Plant operations consisted of receipt, storage, and issue of ammunition, ammunition components, and explosives, maintenance of facilities, preservation of industrial reserve equipment, ammunition renovation, and demilitarization of selected items. Following shutdown of World War II production activities, all available land was outleased for agricultural purposes.

During August 1950, there was a partial reactivation of the plant, and by September 1954 all production lines had been reactivated and the ammonium nitrate area converted to a cartridge case rework area. National Gypsum Company was selected as the operating contractor in April 1951. Items produced consisted of bombs, artillery ammunition, and component parts, and reworked 105mm cartridge cases. Subsequent to the signing of the Korean truce, production schedules diminished gradually. Upon completion of production orders, the areas were decontaminated and placed on standby.

During the standby period (1957-1967), the plant continued on a contractor-operator basis. Activities consisted of maintenance of facilities, and receipt, storage, and issue of ammunition items. Idle facilities, not required for storage of military materials, were made available for outleasing. Econo-Motels (manufacturers of prefabricated motel units), Grandview Products (manufacturer of cabinets), Stocker Wood Products (manufacturer of cabinets, desks, and shelving), and Ruskin (manufacturer of sheet metal products) leased 95,000 sq. ft. of floor area. The Bureau of Census and the Department of Commerce occupied the administrative area and a portion of the inert storage area on a permit basis during 1951-1961.

Reactivation of the plant in support of the Southeast Asia Conflict commenced in early 1967. All production facilities were reactivated with the exception of the cartridge case rework area. The demolition bomb line (1100) was converted to a cluster bomb line and a 105mm shell line (900 area) was equipped for loading 81mm mortar rounds. Items produced consisted of cluster bombs, 105mm shells, 81mm mortars, detonators, fuzes, primers, and lead cup assemblies. Following the cessation of the Southeast Asia conflict five of the eight operating lines were laid away. Modernization, with limited production of the M374 Mortar on the 900 line, was completed in March 1976. Production of the 105mm, HE, M1 round on the 1000 line ceased in 1978.

INSTALLATION DESCRIPTION

Plans for termination of National Gypsum Company's contract were announced on November 26, 1968. Day and Zimmermann, Inc. was named the new contractor on December 31, 1969, and commenced operations on March 2, 1970.

A Lead Azide area, designed by E.I. duPont de Nemours and Company, Inc. and constructed by Martin K. Eby Construction Company under contracts with the Corp of Engineers, was completed in September 1968. The plant was tested and placed in layaway status during 1970.

The 300 line was modernized to load/assemble/pack (L/A/P) the 155mm/M483 ICM projectile. Production began in December 1976 and continued through April 1989. Production of the M864 began on this line in September 1992, and was completed in November 1993. A number of sites were identified as having possible soil, surface water, and groundwater contamination as a result of past activities in the Load/Assemble/Pack of munition components. The U.S. Army Hygiene Agency (USAEHA) also performed a study at KSAAP with similar results.

In December 1989 the Environmental Protection Agency (EPA) Region VII issued a RCRA Part B Permit identifying 25 SWMU sites requiring investigation of surface water, groundwater, surface and subsurface soils. Phase I investigations began in February 1992. The Final Phase I Investigation Report was completed in August 1994. A Background Metals Study was completed in June 1994 at the request of EPA to compare Phase I investigation data.

An Interim Measures Fish/Pond Study was completed in May 1996. EPA requested this study to assess potential risk to people catching and eating fish at KSAAP. As a result of this study, one pond was voluntarily closed to fishing until information could be gathered in the Phase II investigations.

Phase II field investigations were completed in September 1996. Final investigation reports were completed in May 1998. The Ecological Survey and the Human Health Risk Assessment reports were finalized in FY99.

REGULATORY STATUS:

700 AREA CONSENT ORDER - Sampling conducted by the EPA in August 1987 revealed high concentrations of lead being released in the 700 Area. In October 1987 the Kansas Department of Health and Environment (KDHE) requested KSAAP to perform a follow-up sampling of the 700 Area. These findings also revealed high concentrations of lead being released constituting an unlawful disposal of hazardous waste. In March 1989, a consent order was issued requiring KSAAP to perform soil and groundwater investigations and remediation of the 700 Area.






In April 1989 USAEHA began soil and groundwater investigations to determine the extent of contamination. Upon review of the USAEHA Report KDHE determined additional monitoring wells and investigation of ponds and ditches were needed. The Kansas City District Corps of Engineers (COE) was given the responsibility for completing the investigation. The Pre-Remedial Design Investigation Report for the 700 Area was completed in August 1994. The Human Health Risk Assessment for the 700 Area was completed in May 1996. The final Soil and Sediment Engineering Report for remedial alternatives was completed in May 1997. The Interim Removal project for removal and treatment of lead and explosive contaminated soils in the 700 Area was completed in July 1998. Also, the Interim Removal Project to remove lead contaminated sediments in Pond 15 was completed in August 1998.

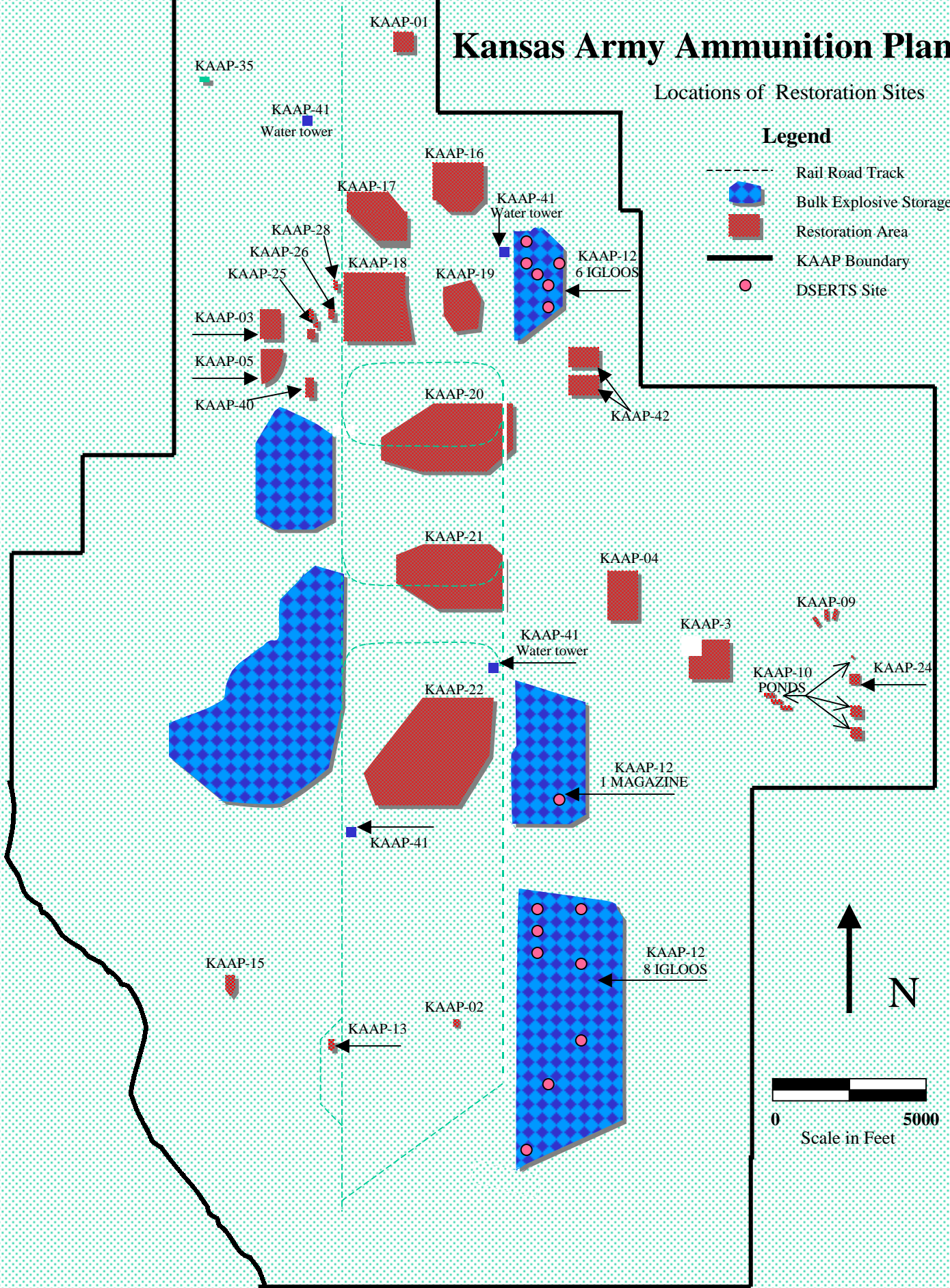
Groundwater monitoring for the 700 Area began in June 1992. Volatile organic compounds and explosives have been detected in the groundwater above MCLs. An Assessment of the groundwater was completed in FY 98; a final report has been submitted to the Kansas Department of Health and Environment that identifies the extent of PCE/TCE contamination in the groundwater. A draft GW Engineering report will be provided in FY00. Two additional wells have been placed down gradient of the plume in FY 99. Should the plume move past these additional wells, KDHE has indicated a requirement for new assessment or possibly an Interim Remediation project.

Kansas Army Ammunition Plant

Locations of Restoration Sites

Legend

-  Rail Road Track
-  Bulk Explosive Storage
-  Restoration Area
-  KAAP Boundary
-  DSERTS Site



CONTAMINATION ASSESSMENT

KSAAP's RCRA Part B permit issued in August 1989, identified twenty-five Solid Waste Management Units (SWMUs) requiring investigation for possible contamination. Areas of investigation include production areas, landfills, open burning cages, open burning pads, open detonation area, and miscellaneous maintenance and support areas. See map for locations (see Installation Description section).

Primary contamination of concern in the production areas and open burning areas are explosives and metals. Explosives in groundwater have been detected in some production areas. Contamination in the production areas was generally highest near the sumps and production facilities. Some dioxins/furans in soils were found at open burn pads. Some contamination was detected at all landfill areas. Two closed Landfill areas had VOC's, SVOC's and metals in surface soils and groundwater. Some dioxin/furans were found in surface soils and pond sediments at the 200 Area Closed landfill and Burn Pits (KAAP-03).

The Phase I RCRA Facility Investigation of contaminated sites began February 1992. Phase II field investigations were completed in 1996. Final Phase II reports were completed in May 1998. The Human Health Risk Assessment and Ecological Risk Assessment were approved in spring 1999. A Corrective Measures Study (CMS) was completed that identified some sites for no further action, and corrective actions for five sites. An interim removal design/specifications for the 900 Area, 1000 Area, 1100 Area, open burn areas for explosive contamination, and lead-contaminated soils around water towers will be completed. A groundwater monitoring program started for several sites in 1999.

The KDHE issued a Consent Order in March 1989, requiring investigation of the soils and groundwater in the 700 Area of KSAAP. A pre-remedial design investigation on the 700 Area was completed in August 1994. High concentrations of lead as well as other metals were found around the sumps. Lead has migrated from the sumps to the drainage ditches and to one oxidation pond. High concentrations of explosives were found at Building 701 in the 700 Area. Groundwater monitoring results from the 700 Area indicates the presence of TCE/PCE levels above the MCLs, triggering a requirement for an assessment of the groundwater.

Groundwater Assessment field investigations for TCE/PCE contamination were completed in July 1998, and the final report was approved in July 1999.

Two Interim Remedial Actions were completed in 1998. Removal of lead and explosive-contaminated soils in the 700 Area was completed in June 1998. Removal of lead in Pond 15 sediments was completed in August 1998.

PREVIOUS STUDIES

Title	Author	Date
Groundwater Contamination Survey # 38-26-0305-89, Evaluation of Solid Waste		
Pre-Remedial Design Investigation for the 700 Area	Radian	August-84
Preliminary Assessment RFA Report	A.T. Kearney	March-89
Groundwater Monitoring Plan 700 Area, Geohydrolic Investigation # 38-57-8857	USAEHA	April-89
Hazardous Waste Study # 37-26-7133-89, 700 Area Soil engineering Report	USAEHA	April-89
Background Metals Study, Kansas AAP	Radian	June-94
Phase I RCRA Facility Investigation, Kansas AAP	Radian	August-94
Final Interim Measures Assessment Study	Law	May-96
Human Risk Assessment for the 700 Area	Radian	May-96
Soil and Sediment Engineering Report for Remedial Action Alternatives for the 700 Area	Radian	May-97
Phase II RCRA Facility Investigation, Kansas AAP	Radian	May-98
Phase II Facility Investigation	Law	June-98
Human Risk Baseline Risk Assessment	Law	March-99
Installation Wide Ecological Assessment	Radian	April-99
700 Area Groundwater Assessment	Radian	July-99

ER, A DSERTS SITES

KAAP-001 SWMU NO. 12 CLASSIFICATION CONSTRUCTION WASTE

SITE DESCRIPTION

KAAP-01 is an approximately 4-acre uncapped, construction debris landfill site and is located 0.25 miles southeast of Gate 3 on the northern boundary of the plant. This site was used to dispose of construction waste generated during construction of KSAAP in 1942.

The PA/SI was completed in 1989. The Phase I RI was completed Aug 1994, the Phase II in June 1998. The Phase II RI report concluded that no additional action is needed for the landfill, but arsenic-contamination was detected in the sediment of the drainage ditch.

PROPOSED PLAN

Sediment removal and a soil cap is planned.

IRP STATUS

RRSE RATING: High Risk

CONTAMINANTS OF CONCERN:

Arsenic

MEDIA OF CONCERN:

Sediments, Surface Water

COMPLETED IRP PHASE:

PA/SI, RI/FS

CURRENT IRP PHASE:

RD

FUTURE IRP PHASE:

RA



CONSTRAINED COST TO COMPLETE

PHASE	2001	2002	2003	2004	2005	2006	2007+
RI/FS							
RD			10				
RA(C)			80				
RA(O)							
IRA							
LTM							

PROJECTED TOTAL: \$90,000

KAAP-002 SWMU NO. 13

CLOSED LANDFILL CONSTRUCTION WASTE

SITE DESCRIPTION

KAAP-02 is a closed landfill located in the south-central part of the Installation. This site was used between 1941 and 1945 and is located immediately north of Road 5.5 between Quarry Pond # 6 and #7. The site is circular in shape with a diameter of 150 feet and covers approximately 0.4 acres.

Various amounts of construction/demolition debris including scrap metal parts, rubble, trash, and inert material was placed on the ground to a six-foot height and covered with four feet of earth.

The PA/SI was completed in 1989. The Phase I RI was completed in August of 1994, the Phase II in June 1998. The RI detected levels of VOCs that exceed MCL in groundwater.

Groundwater monitoring began in March 1999.

IRP STATUS

RRSE RATING: Medium Risk

CONTAMINANTS OF CONCERN:

Metals, VOCs

MEDIA OF CONCERN:

Groundwater, Soil

COMPLETED IRP PHASE:

PA/SI

CURRENT IRP PHASE:

RI/FS

FUTURE IRP PHASE:

LTM



PROPOSED PLAN

The groundwater monitoring program will continue and be reevaluated every 3-5 years.

CONSTRAINED COST TO COMPLETE

PHASE	2001	2002	2003	2004	2005	2006	2007+
RI/FS	55						
RD							
RA(C)							
RA(O)							
IRA							
LTM		30	30	30	30	70	

PROJECTED TOTAL: \$245,000

KAAP-003 SWMU NO. 14

CLOSED LANDFILL W/ REFUSE BURN PITS

SITE DESCRIPTION

KAAP-03 is immediately north of Road 2 and west of the 200 Area. This site consists of two inactive landfill cells and a former refuse burning pit covering an area of approximately 12 acres. The landfill was used from 1950 to 1969. Materials disposed of consist of construction/demolition waste, maintenance/operations waste, and general office material. UXO may be present.

The PA/SI was completed in March 1989. The Phase I RI was completed in August 1994, the Phase II in June 1998. Trace amounts of dioxins and furans were detected in subsurface soils, Pond 36 sediment, surface water and fish tissue. VOCs and metals were detected above MCLs in groundwater.

Groundwater monitoring began in March 1999.

IRP STATUS

RRSE RATING: Medium Risk

CONTAMINANTS OF CONCERN:

Dioxins/Furans, Heavy Metals, VOC's

MEDIA OF CONCERN:

Groundwater, Soil, Sediment

COMPLETED IRP PHASE:

PA/SI

CURRENT IRP PHASE:

RI/FS

FUTURE IRP PHASE:

RD, RA, LTM



PROPOSED PLAN

A soil cover is planned.

Groundwater monitoring will continue.

CONSTRAINED COST TO COMPLETE

PHASE	2001	2002	2003	2004	2005	2006	2007+
RI/FS	69						
RD		35	120				
RA(C)			685	155	648		
RA(O)							
IRA							
LTM						45	296

PROJECTED TOTAL: \$2,053,000

KAAP-004 SWMU NO. 16 CLOSED LANDFILL

SITE DESCRIPTION

KAAP-04 is located in the east central portion of the Installation, immediately south of Road 3, near the open detonation area. The landfill is approximately 12 acres and was operated between 1969 and 1981. Waste disposed of includes ashes from burning operations and non-salable scrap metal.

The PA/SI was completed in March 1989. The Phase I RI was completed in August of 1994, the Phase II RI in June 1998. Low levels of nitrobenzene and other volatiles were found in the GW.

IRP STATUS

RRSE RATING: Medium Risk

CONTAMINANTS OF CONCERN:

Heavy Metals, VOC's, SVOC's

MEDIA OF CONCERN:

Groundwater, Soil

COMPLETED IRP PHASE:

PA/SI

CURRENT IRP PHASE:

RI/FS

FUTURE IRP PHASE:

RD/RA, LTM

PROPOSED PLAN

Continue to monitor GW. Additional soil cover may be needed.



CONSTRAINED COST TO COMPLETE

PHASE	2001	2002	2003	2004	2005	2006	2007+
RI/FS	50	35					
RD			135				
RA(C)				35	1225		
RA(O)							
IRA							
LTM					45	45	280

PROJECTED TOTAL: \$1,850,000

KAAP-005 SWMU NO. 15 INACTIVE LANDFILL

SITE DESCRIPTION

KAAP-05 is located in the northwest portion of the Installation, immediately south of Road 2 and west of the 200 Area. The site occupies approximately 11 acres. Waste disposed of includes inert grenade bodies, asbestos, fly ash from the contaminated waste processor, maintenance operation waste, sludge from the anaerobic digester, and trash.

This site is adjacent to the permitted current landfill. This site qualifies for IRP funds because the portion of the landfill that was investigated is a closed asbestos pit, grenade body burial pit and flyash pit.

The PA/SI was completed in March 1989. The RFI Phase I was completed in August of 1994, the Phase II RFI in June 1998, GW monitoring started in March 1999.

Dioxins/furans were detected in soil samples. Lead, volatiles and explosives below MCLs were detected in GW.

IRP STATUS

RRSE RATING: Medium Risk

CONTAMINANTS OF CONCERN:

Metals, VOC's, SVOC's

MEDIA OF CONCERN:

Groundwater, Soil

COMPLETED IRP PHASE:

PA/SI

CURRENT IRP PHASE:

RI/FS

FUTURE IRP PHASE:

RD, RA, LTM



PROPOSED PLAN

Soil cover and seed the landfill. Continue to monitor groundwater.

CONSTRAINED COST TO COMPLETE

PHASE	2001	2002	2003	2004	2005	2006	2007+
RI/FS	50						
RD		35	60				
RA(C)			150				
RA(O)							
IRA							
LTM				45	45	45	255

PROJECTED TOTAL: \$685,000

KAAP-009 SWMU NO. 23 BURNING CAGES

SITE DESCRIPTION

KAAP-09 is located in the east central portion of the installation. These cages (#14, 17, 22) were used to burn explosive contaminated trash from the production lines prior to construction of the contaminated waste processor. These burn cages were used from approximately 1952 to 1985. Each cage is surrounded on three sides by an 8 ft. berm.

The PA/SI was completed in 1989. The RFI Phase I was completed in Aug 1994, the RFI Phase II in June 1998. Explosives, PCBs, lead, dioxins and furans were detected in the soil. Lead and antimony at MCLs were detected in the groundwater.

IRP STATUS

RRSE RATING: High Risk

CONTAMINANTS OF CONCERN:

Metals, Explosives, Dioxins

MEDIA OF CONCERN:

Soil, Groundwater

COMPLETED IRP PHASE:

PA/SI, RI/FS

CURRENT IRP PHASE:

RD

FUTURE IRP PHASE:

RA, LTM



PROPOSED PLAN

Excavate, stabilize, and dispose of ~3,000 cy of contaminated soil in a RCRA permitted landfill. Monitor groundwater for ~3 years after removal.

CONSTRAINED COST TO COMPLETE

PHASE	2001	2002	2003	2004	2005	2006	2007+
RI/FS							
RD			100				
RA(C)				900			
RA(O)							
IRA							
LTM				15	15	20	

PROJECTED TOTAL: \$1,050,000

KAAP-010 SWMU NO.'S 24, 11 OPEN BURNING PADS

SITE DESCRIPTION

KAAP-10 is located in the east central portion of the installation. Pads 1-6 were in use from 1967 to 1984 to burn PEP waste on the ground. Use of pads 1-4 stopped in 1984. Pans were installed in 1984 at 5 to use for open burning of explosive hazardous waste, while #6 is infrequently used for burning/flashing explosive contaminated material too large for the contaminated waste processor.

RFA was completed in March 1989. The RFI Phase I was completed August 1994, the RFI Phase II in June 1998.

Soil sampling detected RDX, TNT, and lead above IRG. Dioxins/furans, PCBs, SVOCs, and explosives were detected below screening criteria.

No significant contamination was found in groundwater.

IRP STATUS

RRSE RATING: High Risk

CONTAMINANTS OF CONCERN:

Explosives, Lead

MEDIA OF CONCERN:

Soil, Groundwater

COMPLETED IRP PHASE:

RFA, RFI

CURRENT IRP PHASE:

RD

FUTURE IRP PHASE:

RA, LTM



PROPOSED PLAN

Remove, treat, and dispose of ~1,600 cy of metals-contaminated soil and ~2,400 cy of explosives-contaminated soil.

Groundwater monitoring will follow.

CONSTRAINED COST TO COMPLETE

PHASE	2001	2002	2003	2004	2005	2006	2007+
RI/FS							
RD	30						
RA(C)	409	604	38				
RA(O)							
IRA							
LTM			45	45	45	45	145

PROJECTED TOTAL: \$1,406,000

KAAP-016 SWMU NO. 5

300 AREA WASHWATER SUMPS AND DISCHARGE POINTS

SITE DESCRIPTION

KAAP-16 consists of wastewater sumps, ditches and oxidation ponds. The site is located in the north central portion of the installation, north of Road 1.5. This site has been in use from 1941 to present.

Prior to construction of a wastewater treatment system, wastewater was discharged into unlined ditches and ponds. The trough and sump systems are constructed of concrete and have no secondary containment. Spillage/overflows have occurred around the sumps. Currently, the sumps are pumped regularly to prevent overflow.

The RFA was completed in March 1989. The RFI Phase I was completed in August of 1994, the Phase II RFI in June 1998.

Explosives were detected in the soil and groundwater at low levels.

IRP STATUS

RRSE RATING: Medium Risk

CONTAMINANTS OF CONCERN:

Explosives, Metals

MEDIA OF CONCERN:

Groundwater, Soil, Surface Water

COMPLETED IRP PHASE:

RFA

CURRENT IRP PHASE:

RI/FS

FUTURE IRP PHASE:

RD, RA, LTM



PROPOSED PLAN

Groundwater monitoring and hot spot removal.

CONSTRAINED COST TO COMPLETE

PHASE	2001	2002	2003	2004	2005	2006	2007+
RI/FS			40	38			
RD				46			
RA(C)					70		
RA(O)							
IRA							
LTM					40	40	97

PROJECTED TOTAL: \$371,000

KAAP-017 SWMU NO. 6

500 AREA WASHWATER SUMPS AND DISCHARGE POINTS

SITE DESCRIPTION

KAAP-17 is located in the north central portion of the installation, north of Road 1.5 and west of the 300 Area. It was in use from 1942 to 1974.

The sumps were opened-topped, constructed of concrete, and designed to overflow to unlined ditches. Solids that collected into the sumps were removed and burned at the open burning grounds.

RFI Phase I was completed in August 1994, the Phase II RFI in June 1998.

Explosives, metals, and PAH's were found in the soil at high levels. Metals and explosives were found in groundwater.

IRP STATUS

RRSE RATING: Medium Risk

CONTAMINANTS OF CONCERN:

Explosives, Metals, PAHs

MEDIA OF CONCERN:

Groundwater, Surface Water, Soil

COMPLETED IRP PHASE:

PA/SI

CURRENT IRP PHASE:

RI/FS

FUTURE IRP PHASE:

RD, RA, LTM



CONSTRAINED COST TO COMPLETE

PHASE	2001	2002	2003	2004	2005	2006	2007+
RI/FS				35	36		
RD					12		
RA(C)					61	8	
RA(O)							
IRA							
LTM						35	183

PROJECTED TOTAL: \$370,000

PROPOSED PLAN

Groundwater monitoring and hot spot removal.

KAAP-018 SWMU NO. 25

700 AREA WASHWATER SUMPS AND DISCHARGE POINTS

SITE DESCRIPTION

KAAP-18 has been in use from the 1940's to present and is located in the north central portion of the installation, south of the 500 Area. Prior to construction of the industrial wastewater treatment system in the 700 Area wastewater was discharged into in-ground sumps. Past processes resulted in lead being discharged to surrounding soils. Wastewaters were then treated with acetic acid, sodium nitrate and sodium hydroxide and allowed to overflow into unlined ditches and ponds. A Consent Agreement was issued in March 1989 to cleanup lead-contaminated soils and VOC/SVOC-contaminated groundwater.

A soil IRA was completed in July 1998. It included the removal and disposal of explosive contaminated soils to an off-site hazardous waste facility. The lead-contaminated soil and sediments were treated to non-hazardous levels and disposed of in a permitted (RCRA Subtitle D) landfill.

Soil cleanup was approved by regulators in March 1999 and no further action is needed.

A Groundwater Assessment Report was completed in July 1999. The report identified several contaminants above MCLs. A GW Engineering report (EE/CA) was completed to evaluate clean-up options.

PROPOSED PLAN

A RD/RA of enhanced natural attenuation is planned. This will include the installation of additional wells. If enhanced natural attenuation does not prove successful, additional RA may be required.

LTM will continue with reevaluation every 3-5 years.

IRP STATUS

RRSE RATING: High Risk

CONTAMINANTS OF CONCERN:

Explosives, Metals, VOCs

MEDIA OF CONCERN:

Groundwater, Soil, Surface Water

COMPLETED IRP PHASE:

PA/SI, RI (soils), IRA (soils & pond sediments), RI (GW)

CURRENT IRP PHASE:

RI/FS

FUTURE IRP PHASE:

RD, RA (GW), RA(O), LTM



CONSTRAINED COST TO COMPLETE

PHASE	2001	2002	2003	2004	2005	2006	2007+
RI/FS	310	300					
RD		299					
RA(C)			374				
RA(O)			250	250	149		
IRA							
LTM					101	300	1992

PROJECTED TOTAL: \$4,325,000

KAAP-019 SWMU NO. 7

800 AREA WASHWATER SUMPS AND DISCHARGE POINTS

SITE DESCRIPTION

KAAP-19 was in use from 1942 to 1974 and is located in the north central portion of the installation, west of Road 1.5 and the 1700 Area. Opened in-ground sumps and troughs covered with metal gratings were used to convey explosive wastewater. Solids were allowed to settle out in the bottom of sumps and wastewater containing explosives discharged into the ditches around the sumps.

The PA/SI was completed in 1989. The RFI Phase I was completed in August 1994, the RFI Phase II in June 1998.

There are low levels of explosives in the surface soil. Lead was detected in the sump sediment.

IRP STATUS

RRSE RATING: Medium Risk

CONTAMINANTS OF CONCERN:

Explosives, Metals, VOCs

MEDIA OF CONCERN:

Soil, Groundwater

COMPLETED IRP PHASE:

PA/SI

CURRENT IRP PHASE:

RI/FS

FUTURE IRP PHASE:

RD, RA, LTM



CONSTRAINED COST TO COMPLETE

PHASE	2001	2002	2003	2004	2005	2006	2007+
RI/FS			20	20			
RD				26			
RA(C)				34			
RA(O)							
IRA							
LTM					20	30	19

PROJECTED TOTAL: \$169,000

PROPOSED PLAN

Sump sediment will be cleaned out. The expected RA for this site is "hot spot" source removal for explosives and metals with LTM.

KAAP-020 SWMU NO. 8

900 AREA WASHWATER SUMPS AND DISCHARGE POINTS

SITE DESCRIPTION

KAAP-20 is located in the central portion of the installation, north of Road 2.5. Prior to construction of the 900 Area industrial wastewater treatment system, wastewater was discharged directly to the 900 Area unlined ditches and oxidation ponds. The site was in use from 1942 to 1975.

RFA was completed in 1989. The RFI Phase I was completed in August 1994, the RFI Phase II in June 1998. Explosives and lead were found in soil, sediments, and groundwater.

The RD for soils was started in March 1999.

IRP STATUS

RRSE RATING: High Risk

CONTAMINANTS OF CONCERN:

Explosives, Metals

MEDIA OF CONCERN:

Soil, Groundwater, Surface Water

COMPLETED IRP PHASE:

RFA, RFI, RI/FS

CURRENT IRP PHASE:

RD

FUTURE IRP PHASE:

RA, LTM



PROPOSED PLAN

Removal of approximately 3,000 cy of explosives and metals-contaminated soil. LTM will follow for 10 years.

CONSTRAINED COST TO COMPLETE

PHASE	2001	2002	2003	2004	2005	2006	2007+
RI/FS							
RD	10						
RA(C)	388	27	708				
RA(O)							
IRA							
LTM			55	35	35	35	243

PROJECTED TOTAL: \$1,536,000

KAAP-021 SWMU NO. 9

1000 AREA WASHWATER SUMPS AND DISCHARGE POINTS

SITE DESCRIPTION

KAAP-21 is located in the central portion of the installation, south of the 900 Area. Prior to construction of the industrial wastewater treatment system in the 1000 Area, wastewater was discharged into the unlined ditches and oxidation ponds. In-ground sumps and troughs were constructed of concrete and are open-topped. This site was in use from 1942 to 1974.

The RFA was completed in 1989. The RFI Phase I was completed in August 1994, the RFI Phase II in June 1998. Metals and explosives were detected in the soil. Metals and explosives in excess of action levels were detected in groundwater near the sumps.

An RD for the RA was started in March 1999.

IRP STATUS

RRSE RATING: High Risk

CONTAMINANTS OF CONCERN:

Explosives, Metals

MEDIA OF CONCERN:

Groundwater, Soil

COMPLETED IRP PHASE:

RFA, RFI (soil)

CURRENT IRP PHASE:

RI/FS (GW), RD (soil)

FUTURE IRP PHASE:

RD (GW), RA(both), RA(O), LTM



PROPOSED PLAN

Removal of approximately 2,700 cy of explosives and metals-contaminated soil.

Groundwater remediation is expected. LTM will continue.

CONSTRAINED COST TO COMPLETE

PHASE	2001	2002	2003	2004	2005	2006	2007+
RI/FS		122					
RD	10		100				
RA(C)	76	98	35	436			
RA(O)				260	224	229	216
IRA							
LTM							4211

PROJECTED TOTAL: \$6,017,000

KAAP-022 SWMU NO. 10

1100 AREA WASHWATER SUMPS AND DISCHARGE POINTS

SITE DESCRIPTION

KAAP-22 is located in the south central portion of the installation, north of Road 4. It has been used from 1942 to present. Prior to construction of a wastewater treatment system, wastewater was discharged to unlined ditches and oxidation ponds. Spills and overflows have occurred around the in-ground sumps. Currently, the sumps are pumped regularly to prevent overflow.

The PA/SI was completed in 1989. The RFI Phase I was completed in August 1994, the RFI Phase II in June 1998. Metals and explosives were detected in the soil. Explosives in excess of action levels were detected in groundwater near the sumps.

An RD for remediation of contaminated soils was started in March 1999.

IRP STATUS

RRSE RATING: High Risk

CONTAMINANTS OF CONCERN:

Explosives, Metals

MEDIA OF CONCERN:

Soil, Groundwater

COMPLETED IRP PHASE:

RFA, RFI (soil)

CURRENT IRP PHASE:

RI/FS (GW), RD (soil)

FUTURE IRP PHASE:

RD (GW), RA(both), RA(O), LTM



PROPOSED PLAN

Removal of approximately 2,200 cy of explosives and metals-contaminated soil.

Groundwater remediation is expected. LTM will continue.

CONSTRAINED COST TO COMPLETE

PHASE	2001	2002	2003	2004	2005	2006	2007+
RI/FS		123					
RD	10		100				
RA(C)	490	439	35	480			
RA(O)				305	189	235	255
IRA							
LTM							4160

PROJECTED TOTAL: \$6,821,000

KAAP-028 SWMU NO. 19

COAL PILE RUNOFF

SITE DESCRIPTION

KAAP-28 is located in the northwestern portion of the installation, in the 200 Area. The coal pile storage area was built in the 1940's. Precipitation runoff from the coal pile went directly to the ditches.

RFA was completed in 1989. The RFI Phase I was completed in August 1994, the RFI Phase II in June 1998.

IRP STATUS

RRSE RATING: Medium Risk

CONTAMINANTS OF CONCERN:

Metals, PAHs

MEDIA OF CONCERN:

Groundwater, surface Water, Soil

COMPLETED IRP PHASE:

RFA

CURRENT IRP PHASE:

RI/FS

FUTURE IRP PHASE:

RC



PROPOSED PLAN

No further action is expected after the RFI.

CONSTRAINED COST TO COMPLETE

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

PROJECTED TOTAL: \$15,000

KAAP-035 SWMU NO. 1

100 AREA LAUNDRY SUMP AND POND

SITE DESCRIPTION

KAAP-35 is located in the northwestern portion of the installation, in the Administrative area. This site was used from the 1940's to approximately 1990. The laundry was used for washing uniforms and rags used on production lines which were contaminated with explosives. Wastewater was conveyed to a settling sump. Wastewater from the sump was discharged through an under ground pipe to the oxidation pond.

RFA was completed in 1989. The RFI Phase I was completed in August 1994, the RFI Phase II in June 1998.

IRP STATUS

RRSE RATING: Low Risk

CONTAMINANTS OF CONCERN:

Explosives, Metals, Organics

MEDIA OF CONCERN:

Groundwater, Surface Water, Soil

COMPLETED IRP PHASE:

RFA

CURRENT IRP PHASE:

RFI

FUTURE IRP PHASE:

RC



PROPOSED PLAN

No further action is expected after the RFI.

CONSTRAINED COST TO COMPLETE

PHASE	2001	2002	2003	2004	2005	2006	2007+
RI/FS	20						
RD							
RA(C)							
RA(O)							
IRA							
LTM							

PROJECTED TOTAL: \$20,000

KAAP-037 SWMU NO. 17 DEMOLITION GROUNDS

SITE DESCRIPTION

KAAP-37 is located in the east central portion of the installation, south of Road 3, in the 2700 Area . The Demolition Grounds have been used since 1942 through the present for detonation of rejected and loaded explosive items. The demolition area is approximately 20 acres in size.

RFA was completed in 1989. The RFI Phase I was completed in August 1994, the RFI Phase II in June 1998. Lead was detected in groundwater.

Groundwater monitoring began in March 1999.

IRP STATUS

RRSE RATING: Medium Risk

CONTAMINANTS OF CONCERN:

Explosives, Metals, VOC's, SVOC's

MEDIA OF CONCERN:

Groundwater, Soil, Surface Water

COMPLETED IRP PHASE:

RFA, RFI (soils)

CURRENT IRP PHASE:

RFI (GW)

FUTURE IRP PHASE:

RC (under IRP)



CONSTRAINED COST TO COMPLETE

PHASE	2001	2002	2003	2004	2005	2006	2007+
RI/FS							
RD							
RA(C)							
RA(O)							
IRA							
LTM	40	40	50				

PROJECTED TOTAL: \$130,000

PROPOSED PLAN

Groundwater monitoring will continue. When the area is closed, soil cleanup may be needed (non-IRP funds).

KAAP-041 WATER TOWERS

SITE DESCRIPTION

KAAP-41 consists of four water towers located in the northeast, southeast, southwest, and northwest areas of the installation. The water towers provide a working reservoir of potable water that serves all areas of the plant. The towers were constructed in 1941 and are of bolted steel construction. Past sand blasting operations contaminated this site with lead.

RFA was completed in 1996. The RFI Phase II was completed in June 1998. High levels of lead were detected in soils. No significant contamination was detected in groundwater. RD started in March 1999.

IRP STATUS

RRSE RATING: Medium Risk

CONTAMINANTS OF CONCERN:

Metals

MEDIA OF CONCERN:

Soil

COMPLETED IRP PHASE:

RFA, RFI

CURRENT IRP PHASE:

RD

FUTURE IRP PHASE:

RA

PROPOSED PLAN

Remove ~700cy of soil.



CONSTRAINED COST TO COMPLETE

PHASE	2001	2002	2003	2004	2005	2006	2007+
RI/FS							
RD	2						
RA(C)	156		60				
RA(O)							
IRA							
LTM							

PROJECTED TOTAL: \$218,000

**RESPONSE COMPLETE
ER, A DSERTS SITES**

KAAP-011

OLD PESTICIDE STORAGE BUILDING

SITE DESCRIPTION

KAAP-11 is located in the southwest portion of the installation near the sewage treatment plant. The building was used for storage of pesticides. The area outside of the building may have been used for mixing of materials. The building is no longer at the site.

A visual inspection and records search showed no indication of release.

IRP STATUS

RRSE RATING: Not Evaluated

CONTAMINANTS OF CONCERN:

Pesticides

MEDIA OF CONCERN:

Soil, Groundwater

COMPLETED IRP PHASE:

RFA

CURRENT IRP PHASE:

RC

FUTURE IRP PHASE:

RC

PROPOSED PLAN

No further action is required at this site.

KAAP-012 SWMU NO. 21

HAZARDOUS WASTE STORAGE IGLOOS

SITE DESCRIPTION

KAAP-12 consists of container storage units located in the 1700, 1800, 1900 and the 2700 Areas of the installation. Hazardous waste generated at various locations of the installation is stored at these RCRA-permitted storage areas. The permitted storage facilities consist of 18 igloo structures and 1 storage magazine. No contamination was observed during Phase I investigations.

These storage units are still being used. These units began as RCRA units in 1980. The RFI Phase I was completed August 1994.

IRP STATUS

RRSE RATING: Not Evaluated

CONTAMINANTS OF CONCERN:

PCB's

MEDIA OF CONCERN:

Soil, Groundwater, Surface Water

COMPLETED IRP PHASE:

RFA, RFI

CURRENT IRP PHASE:

RC

FUTURE IRP PHASE:

RC

PROPOSED PLAN

This site is not ER,A eligible. These units will be closed when hazardous waste activities end.



KAAP-013

PCB STORAGE AREA BLD 1400

SITE DESCRIPTION

KAAP-13 is located in the south central portion of the installation, immediately west of Road D, in Building 1406. Use of this site began in approximately 1980 and it is still in use. Used transformers are placed in storage pending outshipment for treatment and/or disposal. Transformers are placed in a drip pan to avoid release of PCB's into the environment. This site was not made part of the RCRA Part B permit Corrective Actions.

RFA was completed in 1989.

IRP STATUS

RRSE RATING: Not Evaluated

CONTAMINANTS OF CONCERN:

PCB's

MEDIA OF CONCERN:

Soil, Groundwater, Surface Water

COMPLETED IRP PHASE:

RFA

CURRENT IRP PHASE:

RC

FUTURE IRP PHASE:

RC

PROPOSED PLAN

This site is not ER,A eligible. Closure when activities end.



KAAP-015 SWMU NO. 18

STP SLUDGE DRYING BEDS AREA 2200

SITE DESCRIPTION

The sewage treatment plant began operation in the 1940's and is located in the southwest portion of the installation and has a capacity of one million gallons per day. Sludge drying beds were the focus of the original investigation. They are no longer being used although the STP is still in use.

After treatment and NPDES limits are met the liquid effluent is discharged into a ditch that leads to Labette Creek. Sludge and solids from the primary settling tanks are transferred to the anaerobic sludge digester and four sludge drying beds.

PA/SI was completed in March 1989. The RFI Phase I was completed in August 1994, the RFI Phase II in June 1998.

No significant contamination was found.

PROPOSED PLAN

No further action is required.

IRP STATUS

RRSE RATING: Medium Risk

CONTAMINANTS OF CONCERN:

Metals, Explosives, VOCs, SVOCs

MEDIA OF CONCERN:

Soil, Groundwater, Surface Water

COMPLETED IRP PHASE:

PA/SI, RI

CURRENT IRP PHASE:

RC

FUTURE IRP PHASE:

RC



KAAP-023

WASTE ANALYSIS CHEMISTRY LAB

SITE DESCRIPTION

KAAP-23 is located in the north central portion of the installation, south of Road 1.5 and the 300 Area. The site began in the 1940's and it is still being used. The laboratory performs chemical analyses on explosives, water, wastewater, and other waste generated at KSAAP. Quantities handled are small and strict procedures are followed.

This site was not selected for further investigation in the RCRA Part B permit Corrective Action.

RFA was completed in 1989.

IRP STATUS

RRSE RATING: Not Evaluated

CONTAMINANTS OF CONCERN:

Explosives, Laboratory Chemicals

MEDIA OF CONCERN:

Soil, Groundwater, Surface Water

COMPLETED IRP PHASE:

RFA

CURRENT IRP PHASE:

RC

FUTURE IRP PHASE:

RC

PROPOSED PLAN

This site is response complete.

KAAP-024 SWMU NO. 20 INCINERATOR EXPLOSIVE WASTE

SITE DESCRIPTION

KAAP-24 is located in the east central portion of the installation, 0.5 miles south of Road 3, south of the contaminated waste processor. It has been in use from 1981 to the present. The explosive waste incinerator is a RCRA permitted unit and is used for incinerating residual raw explosives and explosive loaded components. Emissions from the unit are treated in the EWI gas cooler, cyclone separator and baghouse before discharge.

The RFA was completed in 1989. The Phase I RFI was completed in Aug 1996.

IRP STATUS

RRSE RATING: Not Evaluated

CONTAMINANTS OF CONCERN:

Emissions from No. 2 Fuel Oil

MEDIA OF CONCERN:

Air

COMPLETED IRP PHASE:

RFA, RFI

CURRENT IRP PHASE:

RC (under IRP)

FUTURE IRP PHASE:

RC (under IRP)

PROPOSED PLAN

Further action will be pursuant to the RCRA Part B permit.



KAAP-025 SWMU NO. 3 OIL SPILL RESIDUE LAND FARM

SITE DESCRIPTION

KAAP-25 is located within the 200 Area, approximately 700 feet west of Road D and immediately north of Road 2. The Landfarm was initially put into operation in 1984. The Landfarm consists of three cells, the largest is 150 feet by 150 feet. The other two cells are approximately 60 feet by 30 feet each. The cells had 12 inch berms and were lined with compacted clay. The Landfarm was used for treatment of oil contaminated soil from spill cleanup activities. Two of the cells have not been operated since 1985, use of the remaining cell ceased in 1994

RFA was completed in 1989. The RFI Phase I was completed in August 1994, the RFI Phase II in June 1998.

IRP STATUS

RRSE RATING: Medium Risk

CONTAMINANTS OF CONCERN:

Metals, Organics, SVOC's, VOC's

MEDIA OF CONCERN:

Groundwater, Soil

COMPLETED IRP PHASE:

RFA, RFI

CURRENT IRP PHASE:

RC

FUTURE IRP PHASE:

RC

PROPOSED PLAN

No further action for soil or groundwater is required.



KAAP-026 SWMU NO. 2 WASHRACK DISCHARGE POINT - 200 AREA

SITE DESCRIPTION

KAAP-26 is located in the northwestern portion of the installation, in the 200 Area. It has been in use since the 1940's to the present. The oil/water separator is used to collect oil that may be discharged from building 202 wash rack activities. In principle the oil collects on the surface of the water behind the dike while clean water discharges to the ditch through four underdrains.

The PA/SI was completed 1989. The RFI Phase I was completed in August 1994, the RFI Phase II in June 1998. No significant contamination was found.

IRP STATUS

RRSE RATING: Low Risk

CONTAMINANTS OF CONCERN:

Metals, VOC's, SVOC's

MEDIA OF CONCERN:

Groundwater, Surface Water, Soil

COMPLETED IRP PHASE:

RFA, RFI

CURRENT IRP PHASE:

RC

FUTURE IRP PHASE:

RC

PROPOSED PLAN

No further action is required.



KAAP-027

MERCURY FULMINATE BURIAL SITE

SITE DESCRIPTION

KAAP-27 is located southwest of closed landfill KAAP-04, approximately 0.5 miles east of Road E and immediately south of Road 3. Less than one quart of mercury fulminate from percussion primers was reportedly buried at this location. The U.S. Army arranged the removal of mercury and placed it in the KAAP-04 landfill in the late 1940's.

This site was not made part of the RCRA Part B permit Corrective Actions.

RFA was completed in 1989.

IRP STATUS

RRSE RATING: Not Evaluated

CONTAMINANTS OF CONCERN:

Mercury Fulminate

MEDIA OF CONCERN:

Groundwater, Soil, Surface Water

COMPLETED IRP PHASE:

RFA

CURRENT IRP PHASE:

RC

FUTURE IRP PHASE:

RC

PROPOSED PLAN

No further action is required.

KAAP-029

PARTICULATE EMISSION CONTROL FOR COAL FIRED BOILER

SITE DESCRIPTION

KAAP-29 is located in the northwestern portion of the installation, in the 200 Area. This process began in the 1940's. KAAP-29 consists of two gravity type flyash control systems (hoppers). The hoppers collect particulate emissions from the coal fired boilers. The flyash is non-hazardous and is disposed of in trenches in the current landfill.

This site was not selected for further investigation in the RCRA Part B permit Corrective Actions.

IRP STATUS

RRSE RATING: Not Evaluated

CONTAMINANTS OF CONCERN:

Flyash, Sulfur by-products

MEDIA OF CONCERN:

Air

COMPLETED IRP PHASE:

RFA

CURRENT IRP PHASE:

RC(under IRP)

FUTURE IRP PHASE:

RC(under IRP)

PROPOSED PLAN

No further action required under the ER,A program.

KAAP-036

200 AREA PAINT BOOTH WATERFALL SYSTEM

SITE DESCRIPTION

KAAP-36 is located Building 247, in the 200 Area. It began use in the 1940's. The waterfall system controls the paint overspray associated with spray painting operations. The waste sludge generated from this operation contains lead and chromium and handled as hazardous waste. The system is intact and operational.

This site was not made part of the RCRA Part B permit Corrective Actions.

RFA completed in 1989.

IRP STATUS

RRSE RATING: Not Evaluated

CONTAMINANTS OF CONCERN:

Paint Waste, Solvents

MEDIA OF CONCERN:

Soil, Air, Water

COMPLETED IRP PHASE:

RFA

CURRENT IRP PHASE:

RC (under IRP)

FUTURE IRP PHASE:

RC (under IRP)

PROPOSED PLAN

No further action is required under the IRP.

KAAP-038 SWMU NO. 22 CONTAMINATED WASTE PROCESSOR

SITE DESCRIPTION

KAAP-38 is located in the east central portion of the installation, in the 2700 Area. This site has been in use from 1981 to present. The CWP is used to burn trash, which may have been contaminated with explosives. Ash generated from this unit is drummed and stored in a hazardous waste unit until tested. Emissions are controlled by a gas cooler, cyclone separator and baghouse prior to discharge. Non-hazardous waste would be placed in the current landfill, hazardous waste would be taken off post.

RFA was completed in 1989. The RFI was completed in August 1994. No significant contamination was found.

IRP STATUS

RRSE RATING: Low Risk

CONTAMINANTS OF CONCERN:

Explosives, VOC's, SVOC's, Air emissions protocol

MEDIA OF CONCERN:

Soil, Groundwater, Surface Water

COMPLETED IRP PHASE:

RFA, RFI

CURRENT IRP PHASE:

RC

FUTURE IRP PHASE:

RC

PROPOSED PLAN

No further action is required.



KAAP-039 SWMU NO. 4 HAZARDOUS WASTE UST

SITE DESCRIPTION

KAAP-39 is located in the north central portion of the installation, in the 300 Area. The tank contained a mixture of No. 5 fuel oil, waste oil and toluene. This tank was tightness tested in 1992 and showed no indication of leakage. This tank was removed after closure plan approval in March 1994. Upon removal, only a small amount of oil was found. Soil was removed and tested as non-hazardous.

RFA completed in 1989. The RFI was completed in August 1994.

IRP STATUS

RRSE RATING: Low Risk

CONTAMINANTS OF CONCERN:

Metals, VOC's, SVOC's

MEDIA OF CONCERN:

Groundwater, Soil, Surface Water

COMPLETED IRP PHASE:

RFA, RFI, RA

CURRENT IRP PHASE:

RC

FUTURE IRP PHASE:

RC

PROPOSED PLAN

No further action is required.

KAAP-040

PISTOL RANGE

SITE DESCRIPTION

KAAP-40 is located in the northwestern portion of the installation, approximately 0.25 mile south of the 200 Area. The area is used for training and certification of KSAAP security personnel in the handling of firearms as required by regulation. The area was constructed in 1968, and consists of a covered shooting area, seven wooden target posts, and an earthen barricade.

RFA was completed in 1996. This site was picked up at the beginning of the RFI Phase II investigation, that was completed in June 1998. Low levels of lead were detected in soils.

RCRA Corrective action requirement (presence or absence of past lead contamination) makes this site eligible for IRP funds.

IRP STATUS

RRSE RATING: Low Risk

CONTAMINANTS OF CONCERN:

Lead

MEDIA OF CONCERN:

Soil

COMPLETED IRP PHASE:

RFA, RFI

CURRENT IRP PHASE:

RC (under IRP)

FUTURE IRP PHASE:

RC (under IRP)



PROPOSED PLAN

This site requires no further action under the IRP.

KAAP-042

WATER DETENTION BASIN

SITE DESCRIPTION

KAAP-42 is located in the northeast portion of the installation (Area 2100), south of Road 2 approximately 0.5 mile east of Road E. The basin was constructed in 1978 to store lime sludge from the settling basins at the water treatment plant.

The RFA was completed in June 1996 and the RFI is complete. No significant contamination was found.

IRP STATUS

RRSE RATING: Medium Risk

CONTAMINANTS OF CONCERN:

Metals

MEDIA OF CONCERN:

Sludge

COMPLETED IRP PHASE:

RFA, RFI

CURRENT IRP PHASE:

RC

FUTURE IRP PHASE:

RC



PROPOSED PLAN

No further action is required.

SCHEDULE

PAST MILESTONES

1988	PA/SI (USAEHA)	AUGUST
1989	PA/SI (EPA)	MARCH
1991	RI WORK PLANS APPROVED	OCTOBER
	RI AWARD	DECEMBER
1992	LTM 700 AREA INITIATED KAAP-18	JUNE
1994	BACKGROUND METALS STUDY	JUNE
	RFI PHASE I REPORT	DECEMBER
1995	RI 700 AREA HUMAN HEALTH RISK STUDY (KAAP-18)	MAY
1996	INTERIM MEASURES FISH/POND STUDY	MAY
	700 AREA HUMAN HEALTH RISK STUDY (KAAP-18)	MAY
1997	CMS/FS 700 AREA SOILS & SEDIMENTS (KAAP-18)	MAY
1998	RI PHASE II RFI INVESTIGATION	MAY
	IRA 700 AREA SOILS (KAAP-18)	AUGUST
	RI, BEGAIN GROUNDWATER ASSESSMENT (KAAP-18)	FEBRUARY

SCHEDULE

PAST MILESTONES, CONTD.

1999

FINAL HUMAN HEALTH RISK ASSESSMEN	MARCH
CMS, BEGIN CMS, KAAP-10,20, 21,22,41	MARCH
LTM, BEGIN LTM, KAAP-02,03,04,05,37	MARCH
CMS , BEGIN KAAP-02,05,12,15,24,25,26,35,37,38,39,40,42	MARCH
FINAL ECOLOGICAL RISK ASSESSMENT	MAY
RD, BEGIN RD, KAAP-10,20,21,22,41 *65%	JUNE
RI, COMPLETE GROUNDWATER ASSESSMENT REPORT	AUGUST

2000

BEGAN CMS 700 AREA GROUNDWATER ENG. REPORT KAAP-18	FEBRUARY
BEGAN DATA GAP STUDY KAAP-01,03,04,05,09,10,17,19,20,21,22	JUNE
CMS COMPLETE KAAP-10,20,21,22,41	DECEMBER

PROJECTED MILESTONES

2001

COMPLETE CMS 700 GROUNDWATER ENG REPORT KAAP-18	FEBRURAY
COMPLETE RD KAAP-10,20,21,22,41	MAY
BEGIN RA METALS CONTAMINATED SOILS	AUGUST
COMPLETE DATA GAP STUDY	SEPTEMBER

2002

BEGIN RD 700 AREA GROUNDWATER KAAP-18	JANUARY
BEGIN RA EXPLOSIVE CONTAMINATED SOILS KAAP-10,20,21	AUGUST

2007

ALL RA COMPLETED

2026

ALL IRP ACTIONS COMPLETED

SCHEDULE

NO FURTHER ACTION SITES

The following sites currently require no further action under the ER,A program:

KAAP-11*	OLD PESTICIDE STORAGE BUILDING
KAAP-12	HAZARDOUS WASTE STORAGE IGLOOS
KAAP-13	PCB STG AREA BLD 1400
KAAP-15	SEWAGE TREATMENT PLANT - AREA 200
KAAP-23	WASTE ANALYSIS CHEMISTRY LAB
KAAP-24	INCINERATOR EXPLOSIVE WASTE
KAAP-25	OIL SPILL RESIDUE LAND FARM
KAAP-26	WASH RACK DISCHARGE POINT - 200 AREA
KAAP-27	MERCURY FULMINATE BURIAL SITE
KAAP-29	PARTICULATE EMISSION CONTROL FOR COAL FIRED BOILER
KAAP-36	200 AREA PAINT BOOTH WATERFALL SYSTEM
KAAP-38	CONTAMINATED WASTE PROCESSOR
KAAP-39	HAZARDOUS WASTE UST
KAAP-40	PISTOL RANGE
KAAP-42	WATER DETENTION BASIN

*EPA may require an SI to be performed as a result of review on EBS for plant excessing.

Kansas Army Annunition Plant IRP Schedule

(Based on current funding constraints)

		Current Phase				Future Phase		
		FY01	FY02	FY03	FY04	FY05	FY06	FY07+
KAAP-001	RD			■				
	RA			■				
KAAP-002	RI/FS	■						
	LTM		■	■	■	■	■	
KAAP-003	RI/FS	■						
	RD		■	■				
	RA			■	■	■		
	LTM						■	■
KAAP-004	RI/FS	■	■					
	RD			■				
	RA				■	■		
	LTM					■	■	■
KAAP-005	RI/FS	■						
	RD		■	■				
	RA				■			
	LTM					■	■	■
KAAP-009	RD			■				
	RA				■			
	LTM				■	■	■	
KAAP-010	RD	■						
	RA	■	■	■				
	LTM			■	■	■	■	■
KAAP-016	RI/FS			■	■			
	RD				■			
	RA					■		
	LTM					■	■	■
KAAP-017	RI/FS				■	■		
	RD					■		
	RA					■	■	
	LTM						■	■
KAAP-018	RI/FS	■	■					
	RD		■					
	RA			■				
	RA(O)			■	■	■		
	LTM					■	■	■

		FY01	FY02	FY03	FY04	FY05	FY06	FY07+
KAAP-019	RI/FS							
	RD							
	RA							
	LTM							
KAAP-020	RD							
	RA							
	LTM							
KAAP-021	RI/FS							
	RD							
	RA							
	RA(O)							
	LTM							
KAAP-022	RI/FS							
	RD							
	RA							
	RA(O)							
	LTM							
KAAP-028	RI/FS							
KAAP-035	RI/FS							
KAAP-037	LTM							
KAAP-041	RD							
	RA							

DEFENSE SITE ENVIRONMENTAL RESTORATION TRACKING SYSTEM

Site, 4. Installation Phase Summary Report

10/30/00

Installation: KANSAS 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: 33

Phase / Status / Sites

PA				SI			
C	U	F	RC	C	U	F	RC
33	0	0	0	27	0	0	6
RI / FS				RD			
C	U	F	RC	C	U	F	
5	22	0	4	0	2	12	
RA(C)				RA(O)			
C	U	F	RC	C	U	F	RC
0	0	14	0	0	0	3	0
				LTM			
				C	U	F	N
				0	0	14	19

Remedy / Status / Sites (Actions)

IRA			
C	U	F	
2 (3)			0 (0)
FRA			
C	U	F	
0 (0)			14 (21)

RIP Total: 0

RC Total: 10

Reporting Period End Date: 09/30/2000

DEFENSE SITE ENVIRONMENTAL RESTORATION TRACKING SYSTEM

03/13/2001

Site, 9. RISK INSTALLATION ACTION PLAN REPORT

Installation: KANSAS 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
KAAP-01	1A	SH SL WH	PA SI	RI	RAC RD				N		200408
KAAP-02	2A	GW SEM SH SL WEF	PA SI	RI					F		200110
KAAP-03	2A	GW SH SL	PA SI	RI	RAC RD				F		200509
KAAP-04	2A	GW SH SL WH	PA SI	RI	RAC RD				F		200506
KAAP-05	2A	GW SH SL WH	PA SI	RI	RAC RD				F		200405
KAAP-09	1A	GW SL	PA SI	RI	RAC RD				F		200407
KAAP-10	1A	GW SH SL	PA SI	RI	RAC RD				F		200305
KAAP-11	NE		PA SI						N		198912
KAAP-12	NE		PA RI SI						N		199709
KAAP-13	NE		PA SI						N		198912
KAAP-15	2A	SL	PA SI	RI					N		200112
KAAP-16	2A	GW SH SL WH	PA SI	RI	RAC RD				F		200507
KAAP-17	2A	GW SH	PA SI	RI	RAC RD				F		200603

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
KAAP-18	1A	SL GW SL	PA SI	RD RI	RAC RAO	2			F	200307	200508
KAAP-19	2A	WH SEM	PA SI	RI	RAC RD				F		200502
KAAP-20	1A	GW SH SL	PA SI	RI	RAC RD				F		200308
KAAP-21	1A	WH GW SH	PA SI	RI	RAC RAO RD				F	200412	200706
KAAP-22	1A	SL GW SH SL	PA SI	RI	RAC RAO RD				F	200412	200708
KAAP-23	NE		PA SI						N		198912
KAAP-24	NE		PA RI SI						N		199709
KAAP-25	2A	SH SL	PA SI	RI					N		200112
KAAP-26	3A	SH SL WH	PA SI	RI					N		200112
KAAP-27	NE		PA SI						N		198912
KAAP-28	2A	SH	PA SI	RI					N		200112
KAAP-29	NE		PA SI						N		198912
KAAP-35	3A	GW WH	PA SI	RI					N		200112
KAAP-36	NE		PA SI						N		198912
KAAP-37	2A	GW SL	PA	RI					F		200112
KAAP-38	3A	SH	PA RI						N		199709
KAAP-39	3A	SL	PA RI			1			N		199709
KAAP-40	3A	SH	PA	RI					N		200112
KAAP-41	2A	SL	PA RI	RD	RAC				N		200312
KAAP-42	2A	SH	PA	RI					N		200112

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 03/31/2001

REM/IRA/RA ASSESSMENT

PAST REM/IRA/RA

- KAAP-18, Removal of Explosive and Lead contaminated soils around sumps and ditches in the 700 Area Apr-Jul 98, (FY98), \$1,707,706.
- KAAP-18, Removal of Lead contaminated sediments in Pond 15 (old Oxidation pond) July-August 1998 (FY98) \$774,611.

CURRENT REM/IRA/RA

- Soil removal at KAAP-10, 20, 21, 22, 41

FUTURE REM/IRA/RA

- RA at KAAP-001, 003, 004, 005, 006, 010, 016, 017, 018, 019, 020, 021, 022, 041

PRIOR YEAR FUNDING

FY91	700 AREA CONSENT ORDER PREDESIGN INVESTIGATION	\$913.0K
FY92	REMEDIAL INVESTIGATION - SWMU's GROUNDWATER MONITORING (700A)	\$2,400.0K <u>\$50.0K</u> \$2,450.0K
FY93	REMEDIAL INVEST.- PHASE II(SWMU'S) GROUNDWATER MONITORING (700 A.)	\$1,607.0K <u>\$300.0K</u> \$1,907.0K
FY94	G.W. MONITORING (700 A. CONSENT) REMEDIAL INVEST. (SWMU'S) RI/FS PROJECT SUPPORT (700 A./SWMU'S) REMEDIAL DESIGN (700 A. CON.)	\$86.0K \$2,519.0K \$179.0K <u>\$556.0K</u> \$3,340.0K
FY95	G.W. MONITORING (700 A. CONSENT) REMEDIAL. INVESTI. (SWMU's-Phase II) REMEDIAL INVEST.(700 A. CONSENT)	\$348.0K \$884.0K <u>\$ 43.0K</u> \$1,275.0K
FY96	G.W. MONITORING (700 A. CONSENT) REMEDIAL INVEST.(SWMU'S-PHASE II) REMEDIAL DESIGN (700 A. CONSENT)	\$385.2K \$2,580.6K <u>\$414.1K</u> 3,379.9K
FY97	G.W. MONITORING (700 A. CONSENT) REMEDIAL INVEST.(SWMU'S-Phase II) REMEDIAL DESIGN (700 A. CONSENT) Groundwater Assessment Installation Support	\$569.8K \$136.0K \$85.0K \$144.1K <u>\$105.7K</u> \$1,040.6K
FY98	LTM, KAAP-18 RI.(All site except KAAP-18) RI KAAP-19, GW IRA, KAAP-18 CMS, KAAP-18	\$435.0K \$150.0K \$322.0K \$2,482.0K <u>\$519.0K</u> \$3,908.0K

PRIOR YEAR FUNDING

FY99

LTM, KAAP-18	\$455.0K
LTO, KAAP-18	\$190.0K
RI/FS, KAAP-18	\$100.0K
RI/FS ,KAAP,01,02,03,04,05,09,10,15,16,17,19,20,21,22,26,28,37,42	\$288.4K
RD, KAAP-10,20,21,21,41	\$262.0K
LTM, KAAP-01,02,03,04,05,37	<u>\$300.0K</u>
	<i>\$1595.4K</i>

FY00

RI/FS, (Data Gap Study) KAAP-01, 02, 03, 04, 05 09, 10, 16, 17, 18,19, 20, 21, 22, 28, 37	\$1,346K
LTM, KAAP-18,	\$440K
LTM, KAAP 02, 03, 04, 05, 37	<u>\$340K</u>
	<i>\$2,126.0K</i>

Total Prior Year ER,A Funds	\$21,934.9K
Total Future Requirements	\$27,369.0K
Total Funding from Inception to Completion	\$49,303.9K

Kansas AAP FY01 Required CTC

DSERTS #	SITE TITLE	PHASE	FY01	FY02	FY03	FY04	FY05	FY06	FY07	SITE TOTAL	DESCRIPTION OF WORK	
KAAP-018	Area 700 Wastewater Sumps and Discharge Pits	RI/FS	610								design of the enhanced natural attenuation, treatability studies (300K), GWM (200K)	
		RD		299								
		RA		374								enhanced natural attenuation, ~7 wells (375K), GWM (200K)
		RA(O)			50	50	50	100	399			sampling ~7 well, semi-annually, review in 06
		LTM			200	200	200	200	1593	4325		reduction in current program of 22 wells, quarterly
KAAP-001	Classification Construction Waste	RD	10								removal of ~50cy of sediment, 12 inch soil cover	
		RA	80							90	removal of ~50cy of sediment, 12 inch soil cover (7000cy @\$10 cy, on-site soil)	
KAAP-002	Closed Landfill Construction Waste	RI/FS	55								PY S&R (25K), GWM (30K)	
		LTM		30	30	30	30	68	243		6 wells, semi-annually (30K), 5 yr review (40K)	
KAAP-003	Closed Landfill w/ Refuse Burial Pits	RI/FS	69								PY S&R (25K), GWM (35K)	
		RD		155							engineered soil cover, GWM (35K)	
		RA			1488						engineered soil cover 12 acres, GWM (35K)	
		LTM				45	45	85	166	2053	8 wells, semi-annual (35K), 5 yr reviews (40K), cover maintenance (10K)	
KAAP-004	Closed Landfill	RI/FS	50	35							PY S&R (15K) GWM (35K)	
		RD			135						engineered soil cover, GWM (35K)	
		RA				1260					engineered soil cover 12 acres, GWM (35K)	
		LTM					45	45	280	1850	10 wells, semi-annual (35K), 5 yr reviews (10K), cover maintenance (10K)	
KAAP-005	Inactive Landfill	RI/FS	50								PY S&R (15K) GWM (35K)	
		RD		60							soil cover 11 acres, GWM (35K)	
		RA		150							soil cover 11 acres	
		LTM			45	45	45	45	245	685	9 wells semi-annual (35K), 5 yr review (10K), cover maint (10K)	
KAAP-006	Burning Cages	RD	100								3,000 cy excavate, stabilize, remove	
		RA		900							3,000 cy excavate, stabilize, remove	
		LTM			15	15	20			1050	3 wells, semi-annual (15K), review (5K)	
KAAP-010	Open Burning Pads	RD	30								Designs for metal / explosives contaminated soil	
		RA	470	280				301			4,000 cy @ 200/cy removed, treated in two phases (2,700cy /1,300cy), S&R	
		LTM			45	45	45	45	145	1406	14 wells semi annual, three year review (10K)	

Kansas AAP FY01 Required CTC

DSERTS #	SITE TITLE	PHASE	FY01	FY02	FY03	FY04	FY05	FY06	FY07	SITE TOTAL	DESCRIPTION OF WORK
KAAP-016	Area 300 Wastewater Sumps and Discharge Points	RI/FS	40	38							GWM
		RD			46						design
		RA			70						Hot spot removal 150 cy @ \$200/cy
		LTM				40	40	40	57	371	10 wells semi-annual, GWM, 5 yr review
KAAP-017	Area 500 Wastewater Sumps and Discharge Points	RI/FS	35	35							GWM
		RD			10						design
		RA			70						Hot spot removal 300 cy @ \$200/cy
		LTM			35	35	35	35	80	370	7 wells semi-annual, GWM, 5 yr review
KAAP-019	Area 800 Wastewater Sumps and Discharge Pits	RI/FS	20	20							GWM
		RD			26						design
		RA			34						Hot spot removal 150 cy @ \$200/cy
		LTM			20	20	20	9		169	4 wells semi-annual, GWM, 3 yr review
KAAP-020	Area 900 Wastewater Sumps and Discharge Points	RD	10								finish design
		RA	710	413							remove, treat (low thermal and stabilization), dispose 3000 cy soil
		LTM		35	35	35	35	35	228	1536	9 wells semi-annual (35K), 5 yr review (10K)
KAAP-021	Area 1000 Wastewater Sumps and Discharge Points	RI/FS	122								FS for GW
		RD	10	100							finish design for soil, design for GW
		RA	230	250	165						remove treat, (low thermal & stabilization), dispose 2,700 cy soil (1,000cy explosives, 1,700cy metals). GAC(for GW)\$500K
		RA(O)			260	224	229	216			Operation of GAC, 10 yr reviews @50K
		LTM							4211	6017	10 wells semi-annual (35K) 5 yr review(10K)
KAAP-022	Area 1100 Wastewater Sumps and Discharge Points	RI/FS	123								FS for GW
		RD	10	100							finish design for soil, design for GW
		RA	550	250	644						remove treat, (low thermal & stabilization), dispose 2,200 cy soil (900cy explosives, 1,300cy metals). GAC(for GW)\$550K
		RA(O)				250	250	250	234		Operation of GAC, 10 yr reviews @50K
		LTM								6821	4160
KAAP-028	Coal Pile Runoff	RI/FS	15							15	PY S&R
KAAP-035	Area 100 Laundry Sump and Pond	RI	20							20	PY S&R
KAAP-037	Open Demolition Grounds	LTM	40	40	50					130	10 wells, semi-annual (40), 5 yr reviews (10K)
KAAP-041	Water Towers	RD	2								finish design
		RA		216							218
FISCAL YEAR TOTALS IN THOUSANDS OF DOLLARS			\$ 3,461	\$ 3,780	\$ 3,473	\$ 2,294	\$ 1,089	\$ 1,474	\$ 11,798	\$ 27,369	

COMMUNITY INVOLVEMENT

In October 1994 KSAAP conducted a community billboard information session at the city of Parsons library to inform the community of the Installation Restoration Program. A fact sheet was distributed to persons on KSAAP's mailing list, local leaders, radio station and newspaper announcing the informational session. Representatives from EPA Region VII, KDHE, Corps and their Contractors were on hand to provide information to the public. Only representatives from the radio station, newspaper and two local contractors seeking an opportunity for business attended the session.

An interest survey was taken in June 1997. Two responses were received, both were interested in clean-up efforts taking place at KSAAP, but they were not interested in being part of a RAB.

KSAAP is surrounded by farmland. The city of Parsons, Kansas (population 12,000) is 3 miles to the west, and the township of Labette is immediately south of the installation. Other townships in Labette County, Kansas that may hold an interest in the installation's activities are Oswego, Altamont and Chetopa, Kansas.

Efforts Taken to Determine Interest

- Discussed the need for a RAB with current TRC members made of Installation, State and Federal Regulators and COE.
- Placed a public notice in the local newspaper identifying what a RAB was and our interest in getting community involvement.
- Placed Fact Sheets and community interest forms at the public library.
- Mailed Fact sheets and community interest forms to those on KSAAP's mailing list.
- RI contractor provided slides and spoke at local Rotary luncheon on the ongoing remedial investigations at KSAAP.
- The local community was surveyed in 1997 to determine if there was interest in establishing a Restoration Advisory Board.
- Held a public meeting in April 1998 for 700 IRA soil cleanup.
- Conducted another RAB community interest survey in June 1999.
- Presentation to Kiwanis Club in August 1999.

Results

- The current committee supported efforts to form a RAB.
- Received seven community interest and survey forms in response to June 1999 survey.
- Interest in the investigation was shown. Local newspaper did a story on KSAAP's IRP program. No response received from the article.
- Neither public attendance nor response from media announcements.

Conclusion:

Based on the results of KSAAP's efforts to determine interest in forming a RAB, The Commanders Representative determined that there was not enough interest to establish and sustain a RAB at this time.

Follow-up Procedures:

KSAAP is committed to getting the community involved in the ongoing Restoration program. The installation will have one public information session left on contract with the COE, which we plan to hold during a strategic point in the program to let the community know what cleanup efforts are planned for the future at Kansas AAP.

KSAAP will again try to establish community interest in 2001. KSAAP will work with headquarters OSC, and the regulators to determine what efforts need to take place to develop community interest.

DEFENSE SITE ENVIRONMENTAL RESTORATION TRACKING SYSTEM

Installation, 7. RAB REPORT

10/30/2000

Command: AMC

SubComma: OSC

Installation: KANSAS AAP

RAB Established Date:

Reason RAB Not Establish:

The community has expressed no sufficient, sustained interest in a RAB.

RAB Adjourned Date:

Reason RAB Adjourned:

TRC Date:

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