# INSTALLATION ACTION PLAN for JOLIET ARMY AMUNITION PLANT



March 2001

# PURPOSE

The purpose of the Installation Action Plan (IAP) is to outline the total multiyear 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 Operable Unit (OU) 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 Joliet Army Ammunition Plant (JAAP). The IAP is used to track requirements, schedules and tenative 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 JAAP by the end of 2011.

# LIST OF CONTRIBUTORS

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# SUMMARY

Joliet AAP has been on the NPL since 22 July 1987 (2 Sites) HRS Value: Mfg Area - 32.08, LAP Area - 35.23						
53 DSERTS sites 22 Active 31 Response Complete (THREE WITH LTM)						
14 Spill Sites1 Unexploded Munitions6 Burn Areas4 Disposal Pits2 Contaminated Sediment1 Other2 Contaminated Buildings2 Waste Treatment Areas9 Storage Areas1 Surface Impoundments2 Maintenance Yards1 Firing Range1 Surface Disposal1 Industrial Discharge6 Landfills						
Explosives, Metals						
Groundwater and Soil						
IRA - Red Water Lagoon 1984IRA - Ash Pile Caps (2) 1985FRA - UST removals 1989-1994IRA - Ash Pile Cap Repairs 1993REM - PCB Electric Switch Boxes 1996REM - PCB Waste Oil Pits (L2) 1996IRA - Fence UXO Areas (L2, L3) 1996IRA - Install Geo-membrane (SA1) 1996FRA - Group 70 Motor Pool (L6) 1997IRA - Ash Pile Caps Repairs (M1&M9) 1999						
RI/FS at 14 sites RD at 0 sites RA(C) at 1 sites RA(O) at 3 sites LTM at 11 sites						
RD at 14 sites RA(C) at 22 sites RA(O) at 3 sites						
LTM at 11 sites Bioremediation Natural Attenuation Waste Removal Capping Source Removal						
PRIOR YEAR FUNDS \$ 40,434,700   FY01 FUNDS \$ 8,000,000   FUTURE REQUIREMENTS \$ 78,714,000   TOTAL \$ 127,148,700						
YEAR OF IRP INCEPTION: 1978 YEAR OF RA COMPLETION EXCLUDING LTM: 2011						
YEAR OF IRP COMPLETION INCLUDING LTM: 2028						

# **INSTALLATION INFORMATION**

## LOCALE

Joliet Army Ammunition Plant (JOAAP) is located in northeastern Illinois, approximately 60 miles southwest of Chicago and 10 miles south of Joliet in Will County. Nearby communities include Channahon to the northwest, Elwood to the north, Manhattan to the northeast, Symerton to the southeast, and Wilmington to the south. The installation, which is divided by IL Route 53, occupied a total of 23,544 acres, approx. 37 square miles. Current acreage under Department of Army control is approximately 7,482.

#### COMMAND ORGANIZATION

MAJOR COMMAND:	U.S. Army Materiel Command
SUBCOMMAND:	U.S. Army Operations Support Command
INSTALLATION:	Joliet Army Ammunition Plant

# **INSTALLATION RESTORATION PROGRAM (IRP) EXECUTING AGENCY**

INVESTIGATION PHASE: U.S. Army Environmental Center

REMEDIAL PHASE: U.S. Army Corps of Engineers, Louisville District

#### **REGULATOR PARTICIPATION**

FEDERAL: U.S. Environmental Protection Agency Region V

STATE: Illinois Environmental Protection Agency, Bureau of Land

#### **REGULATORY STATUS**

- NPL; Mfg Area JUL 1987, LAP MAR 1989
- Federal Facility Agreement; JUN 1989
- Technical Review Committee; JUL 1988
- Record of Decision signed; NOV 1998
- Projected date of removal from NPL; 2015
- Restoration Advisory Board; DEC 1995

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

- Groundwater monitoring completed at JAAP-010.
- Sites JAAP-008, 010, 013 (part), 016, 017,018, 0L6 were transfered to the State of Illinois.

# **INSTALLATION DESCRIPTION**

JOAAP is an U.S. Army-owned industrial facility that is currently excess. In 1999, Alliant Techsystems, Inc. completed producing ammunition on a limited basis, under a facility-use contract for part of the Load, Assemble and Pack (LAP) area. The Manufacturing (Mfg) area is completely inactive.

JOAAP was constructed in the early 1940s. It orginally consisted of the Kankakee Ordnance Works and the Elwood Ordnance Plant and is located in southwestern Will County, Illinois. The installation originally encompassed approximately 36,000 acres that are divided by IL Route 53. Approximately 13,000 acres were excessed and disposed in the early 1960s. In accordance with the Illinois Land Conservation Act of 1995, P.L. 104-106, Div. B, Title 2901-2932, Feb 10, 1996, the Army will transfer JOAAP land to various Federal, local and state jurisdictions. Approximately 19,100 acres will be transferred to the U.S. Department of Agriculture (USDA) for establishing the Midewin National Tallgrass Prairie; 982 acres have been transferred to the Department of Vererans Affairs (VA) to establish a Veterans Cemetery; and 455 acres will be transferred to the State of Illinois to establish two industrial parks. To date, 15,080 acres have been conveyed to USDA and the transfer to the VA has been completed.

The eastern side of the plant was used to load, assemble and pack bombs, shells, mines, and supplementary charges, and was known as the LAP Area. The western side of the plant, known as the Manufacturing Area (Mfg), was equipped to produce explosives such as trinitrotoluene (TNT), dinitrotoluene (DNT), trinitrophenylmethylnitramine (tetryl) and constituent chemicals. In the past, production output at JOAAP varied as the demand for munitions fluctuated. The plant was used extensively during World War II. Production was re-activated in support of the conflicts in Korea and Viet Nam. No production has occurred since 1977. During times of inactivity, many areas and facilities were leased out for commercial operations.

# **CONTAMINATION ASSESSMENT**

Past releases and disposal practices at JOAAP have resulted in soil and groundwater contamination with explosives compounds, metals, organics, PCBs, sulfur and inorganic hazardous and non-hazardous debris. The goal of the overall cleanup activities at JOAAP is to eliminate or reduce the levels of contaminants to concentrations that are protective to human health and the environment, such that no adverse health effects or adverse ecological impacts will result from future uses of the JOAAP property.

It is generally agreed that the JOAAP IRP began at the time of the Installation Assessment of Joliet Army Ammunition Plant (a records search conducted in 1978) to identify past contamination and to assess the potential for contaminant migration beyond the installation boundary, if any.

The Mfg Area was placed on the National Priorities List (NPL) in July 1987 with a Hazard Ranking Score (HRS) of 32.08. The LAP Area was placed on the NPL in March 1989 with a HRS of 35.23. The Army, USEPA Region V, and Illinois EPA signed a Federal Facility Agreement in June 1989.

Of the 53 sites originally identified for study in the early investigations, 27 were recommended for remedial action in the Feasibility Study completed in late 1997. The other 26 were found to meet the requirements that allowed them to be recommended for no further action. The Record of Decision was finalized in November 1998 except for certain soil issues on USDA land. A subsequent Final ROD is planned to address this interim USDA component. All other decisions within this document are considered final.

The main concerns of the IRP have been contamination of soils and groundwater by explosives and metals. There has been no migration of contamination off-post. The ROD specifies remedial activities such as bioremediation, waste removal, source removal, natural attenuation, and capping.

Contaminants at the installation include waste products from the production of sulfuric and nitric acids, sodium sulfite, TNT, DNT, tetryl, RDX, metals, volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), and polychlorinated biphenyls (PCBs).

The current focus of the IRP is completing remedial action at non-interim sites.

# **PREVIOUS STUDIES**

SEP78	Installation Assessment; USATHAMA
NOV 82	Installation Restoration Survey; Donahue and Assoc., Inc.
AUG 83	JAAP Phase II Technical Report: TNT Ditch Complex, Red Water Area, Explosive Burning Grounds, Group 61; Donahue and Assoc., Inc.
AUG 83	JAAP Phase II: Technical Report, Excessing Parcels; Donahue and Assoc., Inc.
OCT 85	JAAP Red Water Lagoon Sampling and Analysis, Remedial Action; Donahue and Assoc., Inc.
AUG 86	Midwest Site Confirmatory Survey, Sampling Report, Round 1; Dames and Moore
SEP 86	Midwest Site Confirmatory Survey, Sampling Report, Round 2; Dames and Moore
NOV 86	Midwest Site Confirmatory Survey Assessment Report; Dames and Moore
FEB 89	Assessment Report, PCB Spill Area, Group 70, LAP Area, JAAP; Dames and Moore
SEP 90	Phase I Results Report, Remedial Investigation, Manufacturing Area; Dames and Moore
MAY 93	Phase II Remedial Investigation Report, Manufacturing Area; Dames and Moore
JUL 93	Phase I Remedial Investigation Results Report, LAP Area; Dames and Moore
MAR 94	Baseline Risk Assesment (Final), RI/FS, Manufacturing Area; Dames and Moore
JUN 94	Health Risk Assessment for Consumption of Deer Muscle and Liver from JAAP, (Final); USAEHA
OCT 94	Feasibility Study, Groundwater Operable Unit, Manufacturing Area; Dames and Moore
NOV 94	Phase I Ecological Risk Assessment (Final); USAEHA
NOV 94	Phase II Aquatic Ecological Risk Assessment (Draft); USAEHA
NOV 94	Phase II Remedial Investigation (Final), LAP Area; Dames and Moore
JAN 95	Feasibility Study, Groundwater Operable Unit, LAP Area; Dames and Moore
FEB 95	Baseline Risk Assessment (Final), RI/FS, LAP Area; Dames and Moore
APR 95	Waste Classification and Volume Estimates, LAP Area (Revised Draft); Dames and Moore
APR 96	JAAP Preliminary Remediation Goals; OHM Corp.
FEB 99	Draft Final RD/RA Work Plan, Montgomery Watson

# **PREVIOUS STUDIES**

- OCT 96 Internal Draft Feasability Studies (4) Dames and Moore, OHM Corp.
- JAN 97 Phase 2, Aquatic Ecological Risk Assessment: USACHPPM (Final)
- AUG97 Project Management Plan for the Environmental Removal Action, L6/Group 70, IT Corp.
- SEP 97 Final Feasibility Study Report, LAP Area, Soil Operable Units and Groundwater Operable Units, Dames and Moore
- SEP 97 Final Feasibility Study Report, Mfg Area, Soil Operable Units and Groundwater Operable Units, OHM Corp.
- DEC97 Proposed Plans for the Groundwater Operable Unit and the Soil Operable Unit for JOAAP, U.S. Army
- NOV 98 Record of Decision, Soil and Groundwater Operable Units, Manufactuirng and Load-Assembly-Package Areas, ECG
- FEB 99 Draft Final RD/RA Work Plan, Montgomery Watson
- DEC 99 Final RD/RA Work Plan for Groundwater and Soil

# JOLIET AAP ER, A DSERTS SITES

Joliet Army Ammunition Plant - Installation Action Plan Site Descriptions - Page 1

# JAAP-001 (M1) SOUTHERN ASH PILE

# SITE DESCRIPTION

The Southern Ash Pile site is encompassed within a fenced area of approx. 50 acres, though the pile itself covers about 8 acres. This is in the southwestern corner of the Mfg. Area. The pile contains the solid residue from red water incineration comprised primarily of inorganic salts, mostly sodium sulfate. The pile was completed and initially capped in 1976. The cap has been repaired twice due to settling which caused breaching of the cap. A flexible membrane cap was installed in 1996, then replaced in 1999.

Both groundwater and surface water have been impacted by past discharges. A Groundwater Management Zone (GMZ) has been established.

This site is part of Soil Remediation Unit (SRU) 6 for landfills.

This site is intended to be transferred to USDA.

#### **PROPOSED PLAN**

The cap will be maintained until the landfill contents (approximately 200K cy) are excavated and disposed at the WCLF or other offsite disposal facility. Groundwater monitoring will continue in support of the selected remedy until remedial goals are met.

# **IRP STATUS**

RRSE RATING: High Risk (1A) CONTAMINANTS OF CONCERN: Sulfate MEDIA OF CONCERN: Groundwater, Surface Water, Soil COMPLETED IRP PHASE: PA/SI, RI/FS, RD, IRA CURRENT IRP PHASE: RAO, LTM FUTURE IRP PHASE: RA (source removal), RAO, LTM

PHASE	2001	2002	2003	2004	2005	2006	2007+			
RI/FS										
IRA										
RD										
RA(C)							5850			
RA(O)	10	10	10	10	10	10	30			
LTM	38	38	38	38	38	38	110			
LTO										
PRO	PROJECTED TOTAL: \$6,278,000									

# JAAP-002 (M2) EXPLOSIVE BURNING GROUND

### SITE DESCRIPTION

The Burning Ground is a 25 acre site in the southwestern portion of the Mfg. Area. Concentrations of TNT have been detected in soil, but not groundwater.

This is an interim ROD site and final remedial goals have not been established.

This site is intended to be transferred to USDA.

#### **PROPOSED PLAN**

The FS will be completed and final remedial goals will be developed.

Approximately 1.6K cy (based on interim PRGs) of explosives contaminated soil will be excavated and bioremediated. Funding for the treatment will be allocated to the Bioremediation Facility located at JAAP-004 (M4).

# **IRP STATUS**

RRSE RATING: High Risk (1A) CONTAMINANTS OF CONCERN: Explosives MEDIA OF CONCERN: Soil COMPLETED IRP PHASE: PA/SI, RI CURRENT IRP PHASE: FS FUTURE IRP PHASE: RD, RA

PHASE	2001	2002	2003	2004	2005	2006	2007+		
RI/FS	50								
IRA									
RD		40							
RA(C)							70		
RA(O)									
LTM									
LTO									
PRO	JECT	ED TC	)TAL:	\$160,	,000				

# JAAP-003 (M3) FLASHING GROUND

### SITE DESCRIPTION

The Flashing Ground is contained within a 60 acre parcel located in the west-central portion of the Mfg. Area. It was used primarily for the flash burning of equipment and demolition materials to remove explosive residues.

The site contains approximately 5600cy of metals contaminated soil and 400cy of explosives contaminated soil.

This is an interim ROD site and final remedial goals have not been established.

This site is intended to be transferred to USDA.

### **PROPOSED PLAN**

The FS will be completed and final remedial goals will be developed.

Approximately 6Kcy (based on interim PRGs) of explosives and metals contaminated soil will be excavated and either bioremediated or disposed in a hazardous waste landfill. Funding for the treatment of the explosives contaminated soil will be allocated to the Bioremediation Facility located at JAAP-004 (M4).

## **IRP STATUS**

RRSE RATING: High Risk (1A) CONTAMINANTS OF CONCERN: Explosives, VOCs, SVOCs, Metals MEDIA OF CONCERN: Soil COMPLETED IRP PHASE: PA/SI, RI CURRENT IRP PHASE: FS, LTM FUTURE IRP PHASE: RD, RA, LTM

PHASE	2001	2002	2003	2004	2005	2006	2007+
RI/FS	50						
IRA							
RD		40					
RA(C)							1100
RA(O)							
LTM	38	38	38	38	38	38	133
LTO							
PRO	JECT	ED TC	TAL:	\$1,55	51,000		

# JAAP-004 (M4) LEAD AZIDE AREA

#### SITE DESCRIPTION

JAAP-004 is approximately 100 acres in the west-central portion of the Mfg. Area. It was the site of lead azide explosives production. Most buildings have been removed from the site. The lead contamination exists in a former 2 acre pond.

The central bioremediation treatment facility is located on a 20 acre parcel of this site.

This is an interim ROD site and final remedial goals have not been established.

This site is intended to be transferred to USDA.

#### **PROPOSED PLAN**

The FS will be completed and final remedial goals will be developed.

Explosives-contaminated soil at the following DSERTS sites will be treated under this site: JAAP-002, 003, 005, 006, 007, 0L1, 0L2, 0L3, 0L7, 0L8, 0L9, L10, L14, L16. Treatment costs for all explosives-contaminated soils (installation-wide) are allocated to this DSERTS site.

Approximately 4200cy of lead-contaminated soil will be excavated, transported, and disposed in a hazardous waste landfill.

# **IRP STATUS**

RRSE RATING: High Risk (1A) CONTAMINANTS OF CONCERN: Lead MEDIA OF CONCERN: Soil COMPLETED IRP PHASE: PA/SI, RI CURRENT IRP PHASE: FS FUTURE IRP PHASE: RD, RA, RA(O)

PHASE	2001	2002	2003	2004	2005	2006	2007+		
RI/FS	50								
IRA									
RD		40							
RA(C)							1584		
RA(O)	5730	5730	5730	5730	5730	5730	11828		
LTM									
LTO									
PRO	JECT	ED TC	OTAL:	\$47,8	82,00	0			

# JAAP-005 (M5) TETRYL PRODUCTION AREA

### SITE DESCRIPTION

The tetryl area occupies 225 acres in the center of the Mfg. Area. Parts of it are in SRU 1 (explosives in soil) and other parts in SRU 3 (explosives and metals in soil).

This site is intended to be transferred to the State of Illinois.

A Groundwater Management Zone (GMZ) has been established.

# **IRP STATUS**

RRSE RATING: High Risk (1A) CONTAMINANTS OF CONCERN: Metals, Explosives MEDIA OF CONCERN: Groundwater, Soil COMPLETED IRP PHASE: PA/SI, RI/FS, RD CURRENT IRP PHASE: LTM (groundwater) FUTURE IRP PHASE: LTM (groundwater)

#### **CONSTRAINED COST TO COMPLETE**

PHASE	2001	2002	2003	2004	2005	2006	2007+
RI/FS							
IRA							
RD							
RA(C)							
RA(O)							
LTM	38	38	38	38	38	38	171
LTO							
PRO	JECT	ED TC	TAL:	\$399	,000		

### PROPOSED PLAN

Long Term Monitoring will continue.

# JAAP-006 (M6) TNT DITCH COMPLEX

# SITE DESCRIPTION

The TNT Ditch Complex is 275 acres in the north central part of the Mfg. Area. It consists of ten "batch" and six "continuous" production lines. It is part of SRU 1 (explosives in soil) and SRU 3 (explosives and metals in soil).

This land is intended to be transferred to the State of Illinois.

A Groundwater Management Zone (GMZ) has been established.

## **PROPOSED PLAN**

Approximately 175Kcy is currently being excavated and stockpiled for treatment at JAAP-004. To date, 50Kcy have been removed.

The RA report for soil excavation will be completed. Long term groundwater monitoring will continue.

# **IRP STATUS**

RRSE RATING: High Risk (1A) CONTAMINANTS OF CONCERN: Explosives, Metals MEDIA OF CONCERN: Groundwater, Soil COMPLETED IRP PHASE: PA/SI, RI/FS, RD CURRENT IRP PHASE: RAO, LTM FUTURE IRP PHASE: RAO, LTM

CONSTRAINED COST TO COMPLETE									
PHASE	2001	2002	2003	2004	2005	2006	2007+		
RI/FS									
IRA									
RD									
RA(C)									
RA(O)	1194	1134	1794	878	1306	1794	650		
LTM	38	38	38	38	38	38	171		
LTO									
PRO	JECT	ED TO	TAL:	\$9,14	9,000				

# JAAP-007 (M7) RED WATER AREA

# SITE DESCRIPTION

The Red Water Area is 50 acres on the south end of the TNT Ditch Complex. The area was used for treatment of red water from the TNT production. The redwater lagoon was remediated in 1985. It is part of SRU 1 (explosives in soil).

This site is intended to be transferred to the State of Illinois.

A Groundwater Management Zone (GMZ) has been established.

### **PROPOSED PLAN**

Approximately 16Kcy of explosives-contaminated soil will be excavated and stockpiled for treatment at JAAP-004.

The RA report for soil excavation will be completed. Long term groundwater monitoring will continue.

# **IRP STATUS**

RRSE RATING: High Risk (1A) CONTAMINANTS OF CONCERN: Explosives, metals MEDIA OF CONCERN: Groundwater, Soil COMPLETED IRP PHASE: PA/SI, RI/FS, RD CURRENT IRP PHASE: LTM FUTURE IRP PHASE: RA (soil), LTM

CONSTRAINED COST TO COMPLETE									
PHASE	2001	2002	2003	2004	2005	2006	2007+		
RI/FS									
IRA									
RD									
RA(C)				916	488				
RA(O)									
LTM	38	38	38	38	38	38	171		
LTO									
PRO	JECT	ED TC	TAL:	\$1,80	3,000				

# JAAP-008 (M8) ACID MANUFACTURING AREA

### SITE DESCRIPTION

The Acid Manufacturing Area is 200 acres in the north central part of the Mfg. Area. Its plants were used to produce the nitric and sulfuric acids for the TNT and Tetryl processes. Waste items were removed from this area in 1996. The Oleum Plant, associated with Acid Area 3, has received separate study for its sulfur issues.

A Groundwater Management Zone (GMZ) has been established.

This site iwas transferred to the state of Illinois on August 10, 2000.

## **PROPOSED PLAN**

Long term groundwater monitoring will continue.

# **IRP STATUS**

RRSE RATING: High Risk (1A) CONTAMINANTS OF CONCERN: VOC's, SVOC's, Explosives MEDIA OF CONCERN: Groundwater COMPLETED IRP PHASE: PA/SI, RI/FS, RD CURRENT IRP PHASE: LTM FUTURE IRP PHASE: LTM

PHASE	2001	2002	2003	2004	2005	2006	2007+
RI/FS							
IRA							
RD							
RA(C)							
RA(O)							
LTM	38	38	38	38	38	38	171
LTO							
PRO	JECT	ED TC	)TAL:	\$399	,000		

# JAAP-009 (M9) NORTHERN ASH PILE

# SITE DESCRIPTION

The Northern Ash Pile is approximately 6 acres in the north end of the Mfg. Area. It is very similar to the Southern Ash Pile (JAAP-001), but was first capped in 1968.

As a result of erosion, the site was recapped in 1985 with an additional 12 inches of clay and 6 inches of topsoil. The cap was repaired in 1993 and a leachate control system was installed in 1999.

This site is intended to be transferred to the State of Illinois.

It is part of SRU6 (landfills).

## **PROPOSED PLAN**

The cap will be maintained until the landfill contents (approximately 124K cy) are excavated and disposed at the WCLF or other off-site disposal facility.

# **IRP STATUS**

RRSE RATING: High Risk (1A) CONTAMINANTS OF CONCERN: Sulfate MEDIA OF CONCERN: Soil COMPLETED IRP PHASE: PA/SI, RI/FS, RD, IRA CURRENT IRP PHASE: LTM FUTURE IRP PHASE: LTO, RA

PHASE	2001	2002	2003	2004	2005	2006	2007+
RI/FS							
IRA							
RD							
RA(C)							
RA(O)							3670
LTM	10	10	10	10	10	10	30
LTO							
PRO	JECT	ED TC	)TAL:	\$3,76	0,000		

# JAAP-010 (M10) TOLUENE TANK FARMS

# SITE DESCRIPTION

These three tank farm areas lie in the north end of the Mfg. Area. Each farm is approximately 10 acres and had four tanks per site. All of the tanks have been removed. Toluene, a feedstock for TNT production, was stored in these tanks. No further action is necessary for the soil at any of the tank farms, but the central and west tank farms have groundwater contamination.

A Groundwater Management Zone (GMZ) has been established.

This site was transferred to the State of Illinois on August 10, 2000. Groundwater monitoring is complete due to four rounds of samples not exceeding remedial goals.

# **PROPOSED PLAN**

Reallocate funding.

# **IRP STATUS**

RRSE RATING: Medium Risk (2A) CONTAMINANTS OF CONCERN: VOC's MEDIA OF CONCERN: Groundwater COMPLETED IRP PHASE: PA/SI, RI/FS, RD, RA, LTM CURRENT IRP PHASE: RC FUTURE IRP PHASE: RC

					04 2005 2006 2007-			
PHASE	2001	2002	2003	2004	2005	2006	2007+	
RI/FS								
IRA								
RD								
RA(C)								
RA(O)								
LTM	40	40	40	40	40	40	140	
LTO								
PRO	JECT	ED TC	OTAL:	\$380	,000			

# JAAP-011 (M11) LANDFILL AREA

### SITE DESCRIPTION

The original study site covered 100 acres in the southwestern portion of the Mfg. Area.The area was originally mined for gravel then later received a variety of wastes. The Landfill Area is approximately 20 acres. The consolidation of site debris will result in capping 11 acres of the site. It is part of SRU6 (landfills).

This site is intended to be transferred to USDA.

### **PROPOSED PLAN**

Consolidation of the waste and construction of a RCRA Subtitle C cap will be performed. Long term post-closure cap maintenance and groundwater monitoring will be performed. Non-hazardous soils may be placed in JAAP-011 prior to construction of the RCRA Subtitle C cap.

# **IRP STATUS**

RRSE RATING: Medium Risk (2A) CONTAMINANTS OF CONCERN: Metals MEDIA OF CONCERN: Groundwater, Soil COMPLETED IRP PHASE: PA/SI, RI/FS, RD CURRENT IRP PHASE: RD FUTURE IRP PHASE: RA, LTM

PHASE	2001	2002	2003	2004	2005	2006	2007+
RI/FS							
IRA							
RD							
RA(C)							2600
RA(O)							
LTM							530
LTO							
PRO	JECT	ED TC	TAL:	\$3,13	0,000		

# JAAP-012 (M12) SELLITE MANUFACTURING AREA

### SITE DESCRIPTION

This area is 16 acres in the northwest corner of the Mfg. Area. Sellite was used to purify TNT.

This site is intended to be transferred to USDA.

This is an interim ROD site and final remedial goals have not been established.

## **PROPOSED PLAN**

Soil excavation and disposal off site.

Approximately 3700cy of lead-contaminated soil will be excavated and transported to an appropriate disposal site.

# **IRP STATUS**

RRSE RATING: High Risk (1A) CONTAMINANTS OF CONCERN: Metals MEDIA OF CONCERN: Soil COMPLETED IRP PHASE: PA/SI, RI CURRENT IRP PHASE: FS FUTURE IRP PHASE: RD/RA

				5110	CON		
PHASE	2001	2002	2003	2004	2005	2006	2007+
RI/FS	50						
IRA							
RD		50					
RA(C)							700
RA(O)							
LTM							
LTO							
PRO	JECT	ED TC	TAL:	\$800	,000		

# JAAP-013 (M13) GRAVEL / EXTRACTION PITS

### SITE DESCRIPTION

This area contains four pits that were originally mined for gravel. The unused pits received various disposals later. The area totals 130 acres in the central portion of the Mfg. Area. Thirteen acres will require a RCRA Subtitle D cap. It is part of SRU6 (landfills).

The acreage outside of the landfill area was transferred to the State of Illinois on August 10, 2000. The 13 acre landfill area will be transferred to the state after remediation is conpleted.

A Groundwater Management Zone (GMZ) has been established.

# **PROPOSED PLAN**

A RCRA Subtitle D cap will be constructed. Cap maintenance and long term monitoring will continue.

# **IRP STATUS**

RRSE RATING: Medium Risk (2A) CONTAMINANTS OF CONCERN: VOC's, Metals MEDIA OF CONCERN: Soil COMPLETED IRP PHASE: PA/SI, RI/FS, RD CURRENT IRP PHASE: LTM FUTURE IRP PHASE: RA, LTM

PHASE	2001	2002	2003	2004	2005	2006	2007+
RI/FS							
IRA							
RD							
RA(C)							2700
RA(O)							
LTM	38	38	38	38	38	38	507
LTO							
PRO	JECT	ED TC	TAL:	\$3,43	5,000		

# JAAP-014 (M14) FORMER POND AREA

# SITE DESCRIPTION

This site contains 14 acres in the western portion of the Mfg. Area. A small pond was observed in historic photographs and was later filled.

This site was transferred to USDA in 1997.

## **PROPOSED PLAN**

No further action is necessary.

# **IRP STATUS**

RRSE RATING: NE CONTAMINANTS OF CONCERN: SVOC's MEDIA OF CONCERN: Soil COMPLETED IRP PHASE: PA/SI, RI/FS CURRENT IRP PHASE: RC FUTURE IRP PHASE: RC

# JAAP-015 (M15) FORMER SEWAGE TREATMENT PLANT

### SITE DESCRIPTION

The plant is in the northwest portion of the Mfg. Area and occupies 2 acres. It was taken out of service in 1982 when a new facility was constructed nearby.

This site was transferred to USDA in 1997.

### **PROPOSED PLAN**

No further action is necessary.

# **IRP STATUS**

RRSE RATING: NE CONTAMINANTS OF CONCERN: Metals, Svoc's, Explosives MEDIA OF CONCERN: Groundwater, Soil COMPLETED IRP PHASE: PA/SI, RI/FS CURRENT IRP PHASE: RC FUTURE IRP PHASE: RC

# JAAP-016 (M16) MOTOR POOL AREA

### SITE DESCRIPTION

The Motor Pool Area is about 8 acres in the north portion of the Mfg. Area. It was used to service the mobile equipment of the plant.

This site was transferred to the State of Illinois on August 10, 2000.

## **PROPOSED PLAN**

No further action is necessary.

# **IRP STATUS**

RRSE RATING: NE CONTAMINANTS OF CONCERN: Metals, SVOC's MEDIA OF CONCERN: Sediment COMPLETED IRP PHASE: PA/SI, RI/FS CURRENT IRP PHASE: RC FUTURE IRP PHASE: RC

# JAAP-017 (M17) LAUNDRY FACILITY

### SITE DESCRIPTION

The laundry was contained in one building in the northern portion of the Mfg. Area. It was used to launder work clothes that may have been contaminated.

This site was transferred to the State of Illinois on August 10, 2000.

### **PROPOSED PLAN**

No further action is necessary.

# **IRP STATUS**

RRSE RATING: NE CONTAMINANTS OF CONCERN: Explosives, Metals MEDIA OF CONCERN: Sediment COMPLETED IRP PHASE: PA/SI, RI/FS CURRENT IRP PHASE: RC FUTURE IRP PHASE: RC

# JAAP-018 (M18) HERBICIDE STORAGE AREA

# SITE DESCRIPTION

The area was one building in the northeastern portion of the Mfg. Area that was used for the storage of pesticides.

This site was transferred to the State of Illinois on August 10, 2000.

# **PROPOSED PLAN**

No further action is necessary.

# **IRP STATUS**

RRSE RATING: NE CONTAMINANTS OF CONCERN: Pesticides MEDIA OF CONCERN: Soil COMPLETED IRP PHASE: PA/SI, RI/FS CURRENT IRP PHASE: RC FUTURE IRP PHASE: RC



# JAAP-0L1 (L1) GROUP 61

# SITE DESCRIPTION

Group 61 is a demilitarization process area that covers 80 acres in the north central portion of the LAP Area and is part of SRU1 for explosives-contaminated soil. The site is also known as the ridge-and-furrow system.

This site is intended to be transferred to USDA.

This is an interim ROD site for explosivescontaminated soil and final remedial goals have not been established.

PCB-contaminated soil has been remediated.

A Groundwater Management Zone has been established.

## **PROPOSED PLAN**

Approximately 6065cy of explosives-contaminated soils will be excavated and transported to JAAP-004 for treatment. Groundwater LTM will continue.

# **IRP STATUS**

RRSE RATING: High Risk (1A) CONTAMINANTS OF CONCERN: Explosives, PCB MEDIA OF CONCERN: Groundwater, Soil COMPLETED IRP PHASE: PA/SI, RI/FS, RD/RA (groundwater and PCBs) CURRENT IRP PHASE: FS (soil), LTM FUTURE IRP PHASE: RD/RA (soil), LTM

							-
PHASE	2001	2002	2003	2004	2005	2006	2007+
RI/FS	50						
IRA							
RD		50					
RA(C)							262
RA(O)							
LTM	38	38	38	38	38	38	133
LTO							
PRO	JECT	ED TC	TAL:	<b>\$723</b> ,	,000		

# JAAP-0L2 (L2) EXPLOSIVE BURNING GROUND

# SITE DESCRIPTION

This site is 45 acres in the west central portion of the LAP Area. It was used for the open combustion of munitions and explosive wastes. It also contained popping furnaces and oil disposal pits. Soils containing metals near popping furnaces are part of SRU2. Soils around burning pads with explosives and metals are part of SRU3.

A GMZ has been established.

This is an interim ROD site and final remedial goals have not been established for soils.

This site is intended to be transferred to USDA.

#### **PROPOSED PLAN**

Approximately 4440 cy of metals-contaminated soils will be excavated and disposed in hazardous waste disposal facility. An additional 16,350cy of soils contaminated with both explosives and metals will be excavated and transported to JAAP-004 for treatment. UXO is present.

Long term groundwater monitoring will be continued.

# **IRP STATUS**

RRSE RATING: High Risk (1A) CONTAMINANTS OF CONCERN: Explosives, Metals MEDIA OF CONCERN: Groundwater, Soil COMPLETED IRP PHASE: PA/SI, RI/FS, RD (groundwater) CURRENT IRP PHASE: FS, LTM FUTURE IRP PHASE: RA, LTM

PHASE	2001	2002	2003	2004	2005	2006	2007+
RI/FS	50						
IRA							
RD		50					
RA(C)							1545
RA(O)							
LTM	38	38	38	38	38	38	133
LTO							
PRO	JECT	ED TC	TAL:	\$2,00	6,000		

# JAAP-0L3 (L3) DEMOLITION AREA

### SITE DESCRIPTION

This site is 50 acres in the west central portion of the LAP Area. Approximately 7.5 acres will be capped. It was used for open combustion of refuse and contained a fire training site. Fire training area and soils east of demolition pits have metals (SRU2). Areas within the berms have metals and explosives (SRU3). Berm soil will be landfilled as part of SRU6.

A GMZ has been established.

This is an interim ROD site and final remedial goals have not been established for soils.

This site is intended to be transferred to USDA.

## PROPOSED PLAN

Approximately 185cy of metals-contaminated soils will be excavated and disposed in hazardous waste disposal facility. An additional 1070cy of soils contaminated with both explosives and metals will be excavated and transported to JAAP-004 for treatment. UXO is present.

Long term groundwater monitoring will be continued.

# **IRP STATUS**

RRSE RATING: High Risk (1A) CONTAMINANTS OF CONCERN: Explosives, Metals MEDIA OF CONCERN: Soil COMPLETED IRP PHASE: PA/SI, RI/FS CURRENT IRP PHASE: FS, LTM FUTURE IRP PHASE: RD/RA, LTM

#### 2003 PHASE 2001 2002 2004 2005 2006 2007+ RI/FS 50 IRA RD 50 1377 RA(C) RA(O) 38 38 38 133 LTM 38 38 38 LTO **PROJECTED TOTAL: \$1,838,000**

# JAAP-0L4 (L4) LANDFILL AREA

### SITE DESCRIPTION

The landfill is two acres in the west central portion of the LAP Area. It was reportedly filled with early construction wastes. It is part of SRU6 (landfills).

This site is intended to be transferred to USDA.

#### **PROPOSED PLAN**

Approximately 37Kcy will be excavated and transported to WCLF or other appropriate offsite disposal facility.

# **IRP STATUS**

RRSE RATING: Low Risk (3A) CONTAMINANTS OF CONCERN: Metals MEDIA OF CONCERN: Soil COMPLETED IRP PHASE: PA/SI, RI/FS, RD CURRENT IRP PHASE: RA FUTURE IRP PHASE: RC

PHASE	2001	2002	2003	2004	2005	2006	2007+
RI/FS							
IRA							
RD							
RA(C)							1330
RA(O)							
LTM							
LTO							
PRO	JECT	ED TC	OTAL:	\$1,33	0,000		

# JAAP-0L5 (L5) SALVAGE YARD

## SITE DESCRIPTION

This site is approximately 16 acres in the northwestern portion of the LAP Area. It was used for open storage and salvage of miscellaneous installation materials.

This is an interim ROD site and final remedial goals have not been established for soils.

This site is intended to be transferred to USDA.

# **PROPOSED PLAN**

Approximately 1070cy of metals-contaminated soil will be excavated and transported to WCLF or other off-site disposal facility.

Approximately 1405cy of organics-contaminated soil will be excavated and transported to WCLF or other off-site disposal facility.

Approximately 1965cy of PCB-contaminated soil will be excavated and disposed.

# **IRP STATUS**

RRSE RATING: High Risk (1A) CONTAMINANTS OF CONCERN: Metals, PCB's, organics MEDIA OF CONCERN: Soil COMPLETED IRP PHASE: PA/SI, RI CURRENT IRP PHASE: FS FUTURE IRP PHASE: RD, RA

							-
PHASE	2001	2002	2003	2004	2005	2006	2007+
RI/FS	50						
IRA							
RD		50					
RA(C)							454
RA(O)							
LTM							
LTO							
PRO	JECT	ED TC	)TAL:	\$554	,000		

# JAAP-0L6 GROUP 70

# SITE DESCRIPTION

Located in the southwestern portion of the LAP area, Group 70 covered approximately 120 acres. Facilities included an electrical shop, a locomotive service building, a carpenter's shop, an above-ground gas storage tank, two fuel oil tanks, a motor pool, a laundry, and equipment storage sheds. All remediation (excavation and disposal of soils) was completed in November 1997.

This site is intended to be transferred to Will County, IL, and the State of Illinois. The state of Illnois received their portion of the land on August 10, 2000.

# **PROPOSED PLAN**

No further action necessary.

# **IRP STATUS**

RRSE RATING: High Risk (1A) CONTAMINANTS OF CONCERN: Metals, PCB's, organics MEDIA OF CONCERN: Groundwater, Soil COMPLETED IRP PHASE: PA/SI, RI/FS, RD, RA CURRENT IRP PHASE: RC FUTURE IRP PHASE: RC

# JAAP-0L7 (L7), 0L8 (L8), 0L9 (L9), L10 GROUPS 1,2,3,3A

#### SITE DESCRIPTION

These Groups are located in the eastern portion of the LAP Area and cover about 100 acres each. They were used to load, assemble and pack munitions such as bombs, shells, and mines.

PCB-contaminated soil was remediated in 1999.

These sites are intended to be transferred to USDA. They are interim ROD sites and final remedial goals have not been established for explosives.

#### This CTC box reflects the sum of funding for JAAP-0L7, 0L8, 0L9, and 0L10

Each Site has 50 K for an RI/FS in FY 2001, 50K for RD in 2002, and a slightly different amounts funded in FY07+ for the RA.

# **IRP STATUS**

RRSE RATING: High Risk (1A) CONTAMINANTS OF CONCERN: Explosives, PCB's MEDIA OF CONCERN: Soil COMPLETED IRP PHASE: PA/SI, RI CURRENT IRP PHASE: FS FUTURE IRP PHASE: RD, RA

# **PROPOSED PLAN**

JAAP-0L7: Approximately 1850cy of explosives-contaminated soil will be excavated and transported to JAAP-004 for treatment.

JAAP-0L8: Approximately 400cy of explosives-contaminated soil will be excavated and transported to JAAP-004 for treatment.

JAAP-0L9: Approximately 1500cy of explosives-contaminated soil will be excavated and transported to JAAP-004 for treatment.

JAAP-L10: Approximately 1660cy of explosives-contaminated soil will be excavated and transported to JAAP-004 for treatment.

CONSTRAINED COST TO COMPLETE									
PHASE	2001	2002	2003	2004	2005	2006	2007+		
RI/FS	200								
IRA									
RD		200							
RA(C)							235		
RA(O)									
LTM									
LTO									
PRO	JECT	ED TO	TAL:	\$635,	000				

### JAAP-L11 TEST SITE

### SITE DESCRIPTION

This area is 33 acres in the south portion of the LAP Area. It was used to verify firing velocities and impact effectiveness of various munitions.

This site is intended to be transferred to State of Illinois.

Approximately 445cy of metals-contaminated soil will be excavated and disposed at an off-site disposal facility.

### **IRP STATUS**

RRSE RATING: High Risk (1A) CONTAMINANTS OF CONCERN: Metals MEDIA OF CONCERN: Soil COMPLETED IRP PHASE: PA/SI, RI/FS, RD, RA CURRENT IRP PHASE: RC FUTURE IRP PHASE: RC

## JAAP-L12 DOYLE LAKE

### SITE DESCRIPTION

Doyle Lake is a 12 acre site in the southeast portion of the LAP Area. It received run-off from the load lines.

This site was transferred to USDA in 1997.

### **PROPOSED PLAN**

No further action is necessary.

### **IRP STATUS**

RRSE RATING: NE CONTAMINANTS OF CONCERN: Explosives, Metals MEDIA OF CONCERN: Sediment, Groundwater COMPLETED IRP PHASE: PA/SI, RI/FS CURRENT IRP PHASE: RC FUTURE IRP PHASE: RC

### JAAP-L13 GROUP 68

### SITE DESCRIPTION

This group is 125 acres in the southwestern portion of the LAP Area. It consists of 23 Earth-covered Storage Magazines (ECM) that were originally used to store fuzes.

This site is intended to be transferred to USDA.

### **PROPOSED PLAN**

No further action is necessary.

### **IRP STATUS**

## JAAP-L14 GROUP 4

#### SITE DESCRIPTION

This site is in the southwestern portion of the LAP Area and covers approximately 60 acres. This was known as the Fuze and Booster Area.

A GMZ has been established.

This site is intended to be transferred to USDA and the State of Illinois.

This site is an interim ROD site and final remedial goals have not been established for soil.

### **PROPOSED PLAN**

Approximately 420cy of explosives-contaminated soil will be excavated and transported to JAAP-004 for treatment. Long term groundwater monitoring will continue.

### **IRP STATUS**

RRSE RATING: High Risk (1A) CONTAMINANTS OF CONCERN: Explosives MEDIA OF CONCERN: Groundwater, Soil COMPLETED IRP PHASE: PA/SI, RI, RD (groundwater) CURRENT IRP PHASE: FS, LTM FUTURE IRP PHASE: RD, RA, LTM

#### **CONSTRAINED COST TO COMPLETE**

PHASE	2001	2002	2003	2004	2005	2006	2007+					
RI/FS	25											
IRA												
RD		40										
RA(C)							18					
RA(O)												
LTM	36	36	36	36	36	36	133					
LTO												
PROJECTED TOTAL: \$432,000												

## JAAP-L15 GROUP 5

#### SITE DESCRIPTION

This site is in the southwestern portion of the LAP Area and covers a approximately 60 acres. This was known as the Fuze and Booster Area.

This site is intended to be transferred to USDA.

### **PROPOSED PLAN**

No further action is necessary.

### **IRP STATUS**

RRSE RATING: Medium (2A) CONTAMINANTS OF CONCERN: Metals, Explosives MEDIA OF CONCERN: Groundwater, Soil COMPLETED IRP PHASE: PA/SI, RI/FS CURRENT IRP PHASE: RC FUTURE IRP PHASE: RC

## JAAP-L16 GROUP 6

#### SITE DESCRIPTION

This site is in the southwestern portion of the LAP Area and covers approximately 60 acres. This was known as the Fuze and Booster Area. L16 is part of SRU 1 (explosives in soil).

This site is intended to be transferred to the State of Illinois.

#### **PROPOSED PLAN**

Approximately 85cy of explosives-contaminated soil will be excavated and transported to JAAP-004 for treatment.

### **IRP STATUS**

RRSE RATING: High Risk (1A) CONTAMINANTS OF CONCERN: Metals, Explosives MEDIA OF CONCERN: Groundwater, Soil 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												
IRA												
RD												
RA(C)							4					
RA(O)												
LTM												
LTO												
PROJECTED TOTAL: \$4,000												

## JAAP-L17 GROUP 7

### SITE DESCRIPTION

This site is in the southwestern portion of the LAP Area and covers approximately 60 acres. This was known as the Fuze and Booster Area. L17 is part of SRU 4.

PCB-contaminated soil was excavated and disposed off-site in 1999.

This site is intended to be transferred to the State of Illinois.

### **IRP STATUS**

RRSE RATING: High Risk (1A) CONTAMINANTS OF CONCERN: PCBs MEDIA OF CONCERN: Soil COMPLETED IRP PHASE: PA/SI, RI/FS, RD, RA CURRENT IRP PHASE: RC FUTURE IRP PHASE: RC

## JAAP-L18, L19 GROUPS 8 AND 9

#### SITE DESCRIPTION

These groups are in the western portion of the LAP area and cover a combined 30 acres. These groups originally produced primers.

This site is intended to be transferred to the USDA.

### **PROPOSED PLAN**

No further action is necessary.

### **IRP STATUS**

RRSE RATING: Low Risk (3A) CONTAMINANTS OF CONCERN: Metals, Explosives MEDIA OF CONCERN: Soil, Groundwater COMPLETED IRP PHASE: PA/SI, RI/FS CURRENT IRP PHASE: RC FUTURE IRP PHASE: RC

### JAAP-L20 GROUP 20

### SITE DESCRIPTION

This is the sewage treatment plant in the southwestern portion of the LAP Area that covers 3 acres.

This site is intended to be transferred to USDA.

### **PROPOSED PLAN**

No further action is necessary.

### IRP STATUS

### JAAP-L21 GROUP 23

### SITE DESCRIPTION

L21 is a site totalling 450 acres with miscellaneous structures, shops, and storage sheds. It also encompasses a small, closed sanitary landfill that was capped in 1993 under an approved closure plan. Landfill groundwater monitoring continues.

### **PROPOSED PLAN**

This site is not eligible for ER,A funding. Long term monitoring is being conducted under the another program.

### **IRP STATUS**

### JAAP-L22 GROUP 25

#### SITE DESCRIPTION

The site is in the northwest portion of the Mfg. Area and occupies approximately 36 acres. This site is a former railroad classification yard.

This site was transferred to USDA in 1997.

#### **PROPOSED PLAN**

No further action is necessary.

### **IRP STATUS**

## JAAP-L23 GROUP 27

#### SITE DESCRIPTION

The site is in the northern portion of the LAP Area and occupies approximately 2 acres. A small disposal pit in the southwest corner of the investigated area requires metals-contaminated soils remediation.

This site is intended to be transferred to USDA.

This is an interim ROD site and final remedial goals have not been established.

### **PROPOSED PLAN**

Only a small area on the southwest corner of L23 (aka L23A) requires excavation and disposal (at WCLF) of 3300cy of metals-contaminated soils.

### **IRP STATUS**

RRSE RATING: High Risk 1A CONTAMINANTS OF CONCERN: Metals MEDIA OF CONCERN: Soil COMPLETED IRP PHASE: PA/SI, RI CURRENT IRP PHASE: FS FUTURE IRP PHASE: RD, RA

#### **CONSTRAINED COST TO COMPLETE**

PHASE	2001	2002	2003	2004	2005	2006	2007+				
RI/FS	25										
IRA											
RD		50									
RA(C)							143				
RA(O)											
LTM											
LTO											
PROJECTED TOTAL: \$218,000											

### JAAP-L24 GROUP 29

#### SITE DESCRIPTION

Group 29 is a Railroad Classification Yard in the north central portion of the LAP Area. It occupies 36 acres.

This site was transferred to USDA in 1997.

### **PROPOSED PLAN**

No further action is necessary.

### **IRP STATUS**

### JAAP-L25 GROUP 62

### SITE DESCRIPTION

L25 includes two sets of inert warehouses and occupies 280 acres in the central portion of the LAP Area.

This site was transferred to USDA in 1997.

### **PROPOSED PLAN**

No further action is necessary.

### **IRP STATUS**

### JAAP-L26 GROUP 63

#### SITE DESCRIPTION

Group 63 is a 400 acre site containing 78 earthcovered storage magazines in the northwestern portion of the LAP Area.

This site was transferred to USDA in 1997.

### **PROPOSED PLAN**

No further action is necessary.

### **IRP STATUS**

## JAAP-L27 GROUP 64

### SITE DESCRIPTION

Group 64 is a 240 acre site that contains 34 above ground magazines in the eastern portion of the LAP Area.

This site is intended to be transferred to USDA.

### **PROPOSED PLAN**

No further action is necessary.

### IRP STATUS

## JAAP-L28 GROUP 65

### SITE DESCRIPTION

Group 65 is a 200 acre site that contains 22 earth-covered storage magazines in the south-eastern portion of the LAP Area.

This site is intended to be transferred to USDA.

### **PROPOSED PLAN**

No further action is necessary.

### **IRP STATUS**

## JAAP-L29, L30 GROUP 66 AND 66A

### SITE DESCRIPTION

These groups, in the northeastern portion of the LAP Area, contain a combined 129 earthcovered storage magazines on 710 acres.

Both of these sites were transferred to USDA in 1997.

### PROPOSED PLAN

No further action is necessary.

### **IRP STATUS**

## JAAP-L31 EXTRACTION PITS

### SITE DESCRIPTION

This site contains three small pits, totaling about 5 acres, in the southwestern portion of the LAP Area. They were originally borrow pits.

This site is intended to be transferred to USDA.

### **PROPOSED PLAN**

No further action is necessary.

### **IRP STATUS**

## JAAP-L32 GROUP 60

### SITE DESCRIPTION

This group contains the former administration and housing area in the southern portion of the LAP Area. Numerous buildings are contained within the 140 acres.

This site was transferred to the State of Illinois on August 10, 2000.

### **PROPOSED PLAN**

No further action is necessary.

### **IRP STATUS**

### JAAP-L33 PVC AREA

### SITE DESCRIPTION

It involves 130 acres in the central portion of the LAP Area and was used as an outdoor test range.

This site is intended to be transferred to USDA.

### **PROPOSED PLAN**

No further action is necessary.

### **IRP STATUS**

## JAAP-L34 FORMER BURNING AREA

### SITE DESCRIPTION

This area covers 7 acres in the central portion of the LAP Area. It was used to burn and backfill materials.

This site is intended to be transferred to USDA.

### **PROPOSED PLAN**

No further action is necessary.

### **IRP STATUS**

## JAAP-L35 FILL AREA

### SITE DESCRIPTION

This is a 3 acre site in the west central portion of the LAP Area.

This site is intended to be transferred to USDA.

### **PROPOSED PLAN**

No further action is necessary.

### **IRP STATUS**

# **SCHEDULE**

	PA	ST MILESTONES
1978	SEP	IRP Installation Assessment
1982	NOV	Installation Restoration Survey
1983	AUG	JAAP Phase II Technical Report
1985	OCT	JAAP Red Water Lagoon Remedial Action
1986	AUG SEP NOV	Midwest Site Confirmatory Survey, Round 1 Midwest Site Confirmatory Survey, Round 2 Midwest Site Confirmatory Survey Assessment
1987	JUL	Manufacturing Area NPL Listing
1989	APR JUN	LAP Area NPL Listing Interagency Agreement (IAG) Signed (FFA)
1990	SEP	Manufacturing Area Phase 1 RI
1993	MAY JUL	Manufacturing Area Phase 2 RI LAP Area Phase 1 RI
1994	DEC	LAP Area Phase 2 RI
1996	APR	Preliminary Remediation Goals
1997	SEP DEC	Feasibility Study Proposed Plan
1998	NOV DEC	Record of Decision Deadlines for Completion of Draft Primary Documents and Project Schedule
1999	APR DEC	Remedial Action (Start) RD/RA Final Workplan

# **SCHEDULE**

	PROJECTED MILESTONES										
2009	SEP DEC	Remedial Action (Complete) Delist from NPL									
2028	DEC	Long Term Monitoring									
2000	JUN	Complete Remedial Action									
2000	JUN	Start-up Bioremediation Facility									

## SCHEDULE

### NO FURTHER ACTION SITES

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

SITE	<b>RC DATE</b>
JAAP-005	199909 **LTM on going
JAAP-008	199912 **LTM on going
JAAP-010	199909 **LTM on going
JAAP-014	199305
JAAP-015	199305
JAAP-016	199305
JAAP-017	199305
JAAP-018	199305
JAAP-0L6	199711
JAAP-L11	199912
JAAP-L12	199412
JAAP-L13	199412
JAAP-L15	199604
JAAP-L17	199912
JAAP-L18	199412
JAAP-L19	199604
JAAP-L20	199412
JAAP-L21	199412
JAAP-L22	199412
JAAP-L24	199412
JAAP-L25	199412
JAAP-L26	199412
JAAP-L27	199412
JAAP-L28	199412
JAAP-L29	199412
JAAP-L30	199412
JAAP-L31	199412
JAAP-L32	199510
JAAP-L33	199412
JAAP-L34	199412
JAAP-L35	199412

Schedule

### **Joliet Army Ammunition Plant**

(Based on current funding constraints)

		Com	pleted Pl	hase				Underwa	y Phase				Future Phase			I	
		FY00	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15+
JAAP-01	RD																
	RAC																
	RAO																
	LTM																
JAAP-02	RI/FS																
	RD																
	RAC																
JAAP-03	RI/FS																<u> </u>
UTIN OU	RD																
	RA																
	LTM																
JAAP-04	RI/FS																
JAAI -04	RD RD																
	RAC																
	RAO																<u> </u>
TA A D 07																	<b> </b>
JAAP-05	RD RAC																
	L;TM																
JAAP-06	RD																<b> </b>
	RAC																
	LTM																
JAAP-07	RD																Ļ
	RAC																
	LTM																

		FY00	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15+
JAAP-08	RI																
	RAC																
	LTM																
JAAP-09	RAC																
	RAO																
JAAP-10	LTM																
JAAP-11	RD																
01111 11	RAC																
	LTM																
JAAP-12	RI/FS																
011111 12	RD																
	RAC																
JAAP-13	RI/FS																
<b>97111 - 13</b>	RD																
	RAC																
	LTM																
JAAP-0L1	RI/FS																
	RD																
	RAC																
	LTM																
JAAP-0L2	RI/FS																
	RD																
	RA																
	LTM																
JAAP-0L3	RI/FS																
	RD																
	RA																
	LTM																
JAAP-0L4	RD																
	RAC																

Schedule

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		FY00	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15+
JAAP-0L5	RI/FS																
	RD																
	RAC																
JAAP-0L7	RI/FS																
01111 011	RD																
	RAC																
JAAP-0L8	RI/FS																
JAAI -0L0	RD																
	RAC																
JAAP-0L9	RI/FS																
JAAI -0L)	RD																
	RAC																
	RI/FS																
JAAP-L10	RD RD																
	RAC																
JAAP-L11	RAC																
JAAP-L14	RI/FS																
	RD																
	RAC																
	LTM																
JAAP-L16	RAC																
JAAP-L17	RAC																
JAAP-L23	RI/FS																<b> </b>
	RD																
	RAC																

#### DEFENSE SITE ENVIRONMENTAL RESTORATION TRACKING SYSTEM

Site, 4. Installation Phase Summary Report

Installation: JO Programs:	OLIET AAP - K	ANKAKEE	, .	BRAC I. BRAC	II, BRAC III, BRA	AC IV. IRP	1	/25/01					
Subprograms:				Compliance, Re									
	int for Programs	:		1	storation, erro								
NPL Options:				Delisted, No, Pr	oposed, Yes								
	unt for Program Programs and NF			1 53									
				Phase / Status / Sites									
		РА						SI					
	С	U	F	RC		С	U	F	RC				
	53	0 <b>RI / FS</b>	0	0		53	0	0 <b>RD</b>	0				
	С	U	F	RC		С	U	F					
	39	14 <b>RA(C)</b>	0	25		14	13	1 <b>RA(O)</b>					
	С	U	F	RC		С	U	F	RC				
	6	9	13	6	LTM	0	1	0	0				
				С	U	F	Ν						
				1 Remedy	2 y / Status / Sites (A	10 Actions)	40						
				Kemeu	IRA	(cuons)							
		С			U			F					
	9	(10)		2	(2)				0(0)				
					FRA								
	С				U			F					
	11	(11)		2	(2)				21 (21)				
<b>RIP</b> Total:		0											
RC Total:		31											
					Reporting Pe	eriod End Date:	03/31/2001						

#### DEFENSE SITE ENVIRONMENTAL RESTORATION TRACKING SYSTEM

#### Site, 9. RISK INSTALLATION ACTION PLAN REPORT

Installation:	JOLIET AAP - KANKAKEE
Major Command:	AMC

SubCommand:OSCProgram Options:IRP, BRAC I, BRAC II, BRAC III, BRAC IV

Subprogram Options:	Compliance, Re	estoration, 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
JAAP-001	1A	GW SL	PA RD RI SI		RAC	2	1		F		201008
JAAP-002	1A	GW SL	PA SI	RD RI	RAC				Ν		200809
JAAP-003	1A	GW SL	PA SI	RD RI	RAC				F		200909
JAAP-004	1A	GW SL	PA SI	RAC RAO RD RI					N	201109	201112
JAAP-005	1A	GW SL	PA RAC RD RI SI	iu -					U		199909
JAAP-006	1A	GW SL	PA RD RI SI	RAC		1			F		200709
JAAP-007	1A	GW SL	PA RD RI SI	RAC		1			F		200112
JAAP-008	3A	GW SL	PA RAC RD RI SI			1			U		199912

01/25/2001

Site JAAP-009	RRSE 1A	<b>Media</b> Evaluated GW SL	Phase (s) Completed PA RD	Phase (s) Underway	Phase (s) Future RAC	<b>#IRA</b> Completed 1	#IRA Underway 1	#IRA Future	LTM Status N	RIP Date	<b>RC</b> <b>Date</b> 200909
JAAP-010	2A	GW	RI SI PA RAC RD						С		199909
JAAP-011	3A	GW	RI SI PA RD RI		RAC	1			F		201112
JAAP-012	1A	GW SL	SI PA SI	RD RI	RAC				Ν		200909
JAAP-013	3A	GW	PA RD	RAC					F		201112
JAAP-014	NE		RI SI PA RI						Ν		199305
JAAP-015	NE		SI PA RI						Ν		199305
JAAP-016	NE		SI PA RI						Ν		199305
JAAP-017	NE		SI PA RI						Ν		199305
JAAP-018	NE		SI PA RI						Ν		199305
JAAP-0L1	1A	GW SL	SI PA SI	RAC RD RI					F		200809
JAAP-0L2	1A	GW SL	PA SI	RD RI	RAC	1			F		200809
JAAP-0L3	1A	GW SL	PA SI	RD RI	RAC	1			F		200909

Site JAAP-0L4	RRSE 3A	Media Evaluated GW	Phase (s) Completed PA RD	Phase (s) Underway	Phase (s) Future RAC	#IRA Completed	#IRA Underway	#IRA Future	LTM Status N	RIP Date	<b>RC</b> <b>Date</b> 201012
			RI SI								
JAAP-0L5	1A	GW SL	PA SI	RI	RAC RD				Ν		200909
JAAP-0L6	1A	SL	PA RAC RD RI SI						Ν		199711
JAAP-0L7	1A	SL	PA SI	RAC RD RI					Ν		200809
JAAP-0L8	1A	GW SL	PA SI	RAC RD RI					Ν		200812
JAAP-0L9	1A	SL	PA SI	RAC RD RI					Ν		200812
JAAP-L10	1A	GW SL	PA SI	RAC RD RI					Ν		200812
JAAP-L11	1A	GW SL	PA RAC RD RI SI						Ν		199912
JAAP-L12	NE		PA RI SI						Ν		199412
JAAP-L13	NE		PA RI SI						Ν		199412
JAAP-L14	1A	GW SL	PA SI	RD RI	RAC				F		200812
JAAP-L15	2A	GW SL	PA RI SI						Ν		199604
JAAP-L16	1A	SL	PA RD RI SI		RAC				Ν		200812

<b>Site</b> JAAP-L17	RRSE 1A	Media Evaluated SH	Phase (s) Completed PA	Phase (s) Underway	Phase (s) Future	#IRA Completed	#IRA Underway	#IRA Future	LTM Status N	RIP Date	<b>RC</b> <b>Date</b> 199912
			RAC RD RI SI								
JAAP-L18	3A	GW	PA RI SI						Ν		199412
JAAP-L19	3A	GW	PA RI SI						Ν		199604
JAAP-L20	NE		PA RI SI						Ν		199412
JAAP-L21	NE		PA RI SI			1			Ν		199412
JAAP-L22	NE		PA RI SI		D. C				N		199412
JAAP-L23 JAAP-L24	1A NE	SL	PA SI PA RI	RD RI	RAC				N N		200909 199412
JAAP-L25	NE		SI PA RI						Ν		199412
JAAP-L26	NE		SI PA RI						Ν		199412
JAAP-L27	3A	SL	SI PA RI						Ν		199412
JAAP-L28	NE		SI PA RI						Ν		199412
JAAP-L29	NE		SI PA RI SI						Ν		199412
JAAP-L30	NE		PA RI SI						Ν		199412
			51								

		Media	Phase (s)	Phase (s)	Phase (s)	#IRA	#IRA	#IRA	LTM	RIP	RC
Site	RRSE	Evaluated	Completed	Underway	Future	Completed	Underway	Future	Status	Date	Date
JAAP-L31	NE		PA						Ν		199412
			RI								
			SI								
JAAP-L32	1A	SL	PA						Ν		199510
			RI								
			SI								
JAAP-L33	3A	SL	PA						Ν		199412
			RI								
			SI								
JAAP-L34	NE		PA						Ν		199412
			RI								
			SI								
JAAP-L35	NE		PA						Ν		199412
			RI								
			SI								

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: 03/31/2001

# **REM/IRA/RA ASSESSMENT**

#### PAST REM/IRA/RA

IRA - Red Water Lagoon 1984 FRA - UST removals 1989-1994 REM - PCB Electric Switch Boxes 1996 IRA - Fence IRP UXO Areas (L2, L3) 1996 FRA - Group 70 Motor Pool (L6) 1997 IRA - Ash Pile Caps (2) 1985 IRA - Ash Pile Cap Repairs 1993 REM - PCB Waste Oil Pits and associated UXO removal (L2) 1996 IRA - Install Geo-membrane (SA1) 1996 IRA - Ash Pile Cap Replacement (M1) 1999 IRA - Ash Pile Leachate Control System (M9) 1999 FRA - GW monitoring well closure ( update sites) 1999 Bioremediation facility construction completed 1999

#### CURRENT REM/IRA/RA

M5 Soil Excavation completed M6 Soil Excavation initiated 0L1, 0L7, 0L8, 0L9, L10, L17 PCB contaminated soil excavation and off-site disposal completed 001, 005, 006, 007, 008, 013, 010, 0L1, 0L2, 0L3, L14 Groundwater remedy (monitored natural attenuation) initiated and underway

# **PRIOR YEAR FUNDING**

	FUNDING REPORTED IN THOUSANDS (K)										
FY88	RI	Excess Area Assessment	30								
	RI	Technical Support from ANL	45.5								
FY89	RI	Develop Land Resources Plan	35.2								
	RI	Environmental Parameters Monitoring	65.3								
FY90	RI/FS	JAAP Phase II Technical Report	2035.4								
	PA/SI	Manufacturing Area	1990.5								
	RI	Installation Support (ANL)	115.7								
	RI	Manufacturing Area Support	75								
	RI	Work Plan Manufacturing (D&M)	148.5								
	REM	UST Removal/Clean Up (AMCCOM)	130.7								
	RI	Oversight	9.6								
FY91	RI/FS	LAP Area	1419.4								
	PA/SI	Manufacturing Area	112								
	RI	Tech Support	395.4								
FY92	RI/FS	LAP and Manufacturing Area	1449								
FY93	RI/FS	LAP and Manufacturing Area	269.8								
	REM	Remove 16 DERA Eligible USTs	543.4								
	IRA	Ash Pile Caps	32.7								
FY94	REM	Remove 16 DERA Eligible USTs	27.5								
	RI/FS	LAP and Manufacturing Area	867.5								
	REM	Ash Pile Caps	14.2								
FY95	PA/SI	Enhanced PAS	170.3								
	RI/FS	Proposed Plan/Record of Decision	382								
	RI/FS	LAP and Manufacturing Area	459.5								

# **PRIOR YEAR FUNDING**

FY 96	RI/FS	LAP and Manufacturing Area	700
	RAB	Support	2
	REM	Removal Oil Pits	4900
	REM	Removal PCB Items	562
FY 97	REM	Removal Actions	163
	RAB	RAB Support	24
FY 98	RD	Remedial Design (Groundwater)	1200
	RD	Remedial Design (Soil)	1765
	LTM	Groundwater Monitoring	2
	RI/FS	COE Prior Year Contract S&A	27.7
	IRA	Oil Pits Removal	3
	RA	Test Site L11	195.6
	RAB	RAB Support	20.3
FY 99	RAB	RAB Support	10
	RD	RD (Soil)	682
	RAB	Remedial Action (Soil)	12105
	LTM	Groundwater Monitoring	627
	LTO	Cap Maintainance	622
FY 00	RA	Lead Axide Area &TNT Ditch	1783
	RAO	Lead Axide Area	3761
	LTM	Groundwater Monitoring	456
		TOTAL PRIOR YEAR FUNDS	40434.7

### FUNDING REPORTED IN THOUSANDS

#### JOLIET CONSTRAINED COST TO COMPLETE

DSERTS #	SITE NAME	RRSE	PHASE	2001	2002	2003	2004	2005	2006	2007+	TOTAL
JAAP-001	SOUTHERN ASH PILE	HIGH	RA(C)							5850	
	(M1)		RA(O)	10	10	10	10	10	10	30	
			LTM	38	38	38	38	38	38	110	6278
JAAP-002	EXPLOSIVE BURNING	HIGH	RI/FS	50							
	GROUND		RD		40						
	interim		RA(C)							70	160
JAAP-003		HIGH	RI/FS	50							
	interim		RD		40						
			RA(C)							1100	
			LTM	38	38	38	38	38	38	133	1551
JAAP-004	LEAD AZIDE AREA	HIGH	RI/FS	50							
	interim		RD		40						
			RA(C)							1584	
			RA(O)	5730	5730	5730	5730	5730	5730	11828	47882
	TETRYL PRODUCTION AREA		LTM	38	38	38	38	38	38	171	399
JAAP-006	TNT DITCH COMPLEX	HIGH	RA(C)	1194	1,134	1794	878	1306	1794	650	
			LTM	38	38	38	38	38	38	171	9149
JAAP-007	RED WATER AREA	HIGH	RA(C)				916	488			
			LTM	38	38	38	38	38	38	171	1803
JAAP-008	ACID	LOW	LTM	38	38	38	38	38	38	171	399
	MANUFACTURING										
JAAP-009	NORTHERN ASH PILE	HIGH	RA(C)							3670	
			RA(O)	10	10	10	10	10	10	30	3760
JAAP-010	TOLUENE TANK FARMS	MEDIUM	LTM	40	40	40	40	40	40		
JAAP-011		LOW	RA(C)							2600	
			LTM							530	3130
JAAP-012	SELLITE MANUFAC-	HIGH	RI/FS	50							
	TURING AREA		RD		50						
			RA(C)							700	800
JAAP-013	GRAVEL/EXTRACTION PITS	LOW	RA(C)							2700	
			LTM	38	38	38	38	38	38	507	3435
JAAP-0L1	GROUP 61	HIGH	RI/FS	50							
			RD		50						
			RA(C)							262	
			LTM	38	38	38	38	38	38	133	723
JAAP-0L2	EXPLOSIVE BURNING	HIGH	RI/FS	50							
	GROUND		RD		50						
			RA(C)							1545	
			LTM	38	38	38	38	38	38	133	2006
JAAP-0L3	DEMOLITION AREA	HIGH	RI/FS	50							
			RD		50						
			RA(C)							1377	
			LTM	38	38	38	38	38	38	133	1838
JAAP-0L4	LANDFILL AREA	LOW	RA(C)							1230	1230
		HIGH	RI/FS	50							

#### JOLIET CONSTRAINED COST TO COMPLETE

			RD		50						
			RA(C)		• •					454	554
JAAP-0L7	GROUP 1	HIGH	RI/FS	50							
			RD		50						
			RA(C)							80	180
JAAP-0L8	GROUP 2	HIGH	RI/FS	50							
			RD		50						
			RA(C)							18	118
JAAP-0L9	GROUP 3	HIGH	RI/FS	25							
			RD		50						
			RA(C)							65	140
JAAP-L10	GROUP 3A	HIGH	RI/FS	25							
			RD		50						
			RA(C)							72	147
	TEST SITE	HIGH	RA(C)								0
JAAP-L14	GROUP 4	HIGH	RI/FS	25	10						
	-		RD		40					10	
			RA(C)	2.5	2.5	2.5	2.5	2.5	2.5	18	(00
IAAD IIC	CDOUD (	INCH	LTM	36	36	36	36	36	36		432
JAAP-L16		HIGH	RA(C)							4	4
	GROUP 7 GROUP 27	HIGH HIGH	RA(C) RI/FS	25							0
JAAP-L25	GROUP 27	HIGH	RD RD	25	50						
			RA(C)							143	218
FISCAL			KA(C)	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000		
YEAR				\$0,000	\$0,000	<i>\$0,000</i>	\$0,000	<i>ф</i> 0,000	\$0,000	\$30,710	\$00,710
TOTALS IN											
THOUSANDS											
			POM:	8,000	8,000	8,000	8,000	8,000	8,000	38,714	86,714
			DIFF:	\$0	\$0	\$0	\$0	\$0	\$0	\$2	\$2
			FY	2001	2002	2003	2004	2005	2006		

# **COMMUNITY INVOLVEMENT**

Community involvement was initiated with the Technical Review Committee (TRC) that began in July 1988, after the Manufacturing Area was placed on the NPL. The TRC was replaced with a RAB that began in December 1995 and met monthly until June 1999. The group now meets every other month.

The Mission of the board is to represent the community by facilitating communications and coordination between the community and the appropriate government agencies in the environmental cleanup of the Joliet Army Ammunition Plant; to critically review and comment on pertinent environmental cleanup documents; to make recommendations to the United States Army and other apporpriate governmental agencies regarding cleanup methods and priorities; and to encourage public participation in accomplishing these goals.

Past meeting activities have included several installation tours, media (radio, television, newspaper) open house, special training events, and guest speakers. Individual RAB members have participated in the first IAP workshop, Region 5 RAB forum, DERP workshops, public speaking engagements, and radio and newpaper interviews. In addition, local and regional newspapers cover the RAB meetings.

The RAB Community Co-Chair generates annual reports which are distributed up to the chain of command to the Office of the Secretary of Defense.

Currently, several RAB members are participating in ecological and human health workgroups formed to finalize interim ROD issues.

### DEFENSE SITE ENVIRONMENTAL RESTORATION TRACKING SYSTEM

Installation, 7. RAB REPORT

01/25/2001

Command:	AMC	SubCommand:	OSC			
Installation:	JOLIET AAP - KANKAKEE					
RAB Establishe	d Date:	199512	Reason RAB Not Establis	h:		
RAB Adjourned	RAB Adjourned Date:		Reason RAB Adjourned:			
TRC Date:						
RAB Communit	ty Members:			Total RAB Co	mmunity Members:	20
Business Comm	unity					
<b>RAB</b> Governme	nt Members:			Total RAB Go	vernment Members:	3
Environmental P	rotection Agency					
<b>RAB</b> Activities:						
Advice On Scope	e/Sch Studies/Cleanup					
<b>RAB</b> Advice						
Remedy Selectio	n					
<b>TAPP</b> Applicati	on Approval Date:				03/31/2001	
<b>TAPP Project T</b>	ïtle:					
<b>TAPP Project D</b>	Description:					
			Purchase Order			
Award Number			Awar	d Date	Completion Date	