

**FY2016**

**JOLIET AAP**

**Installation Action Plan**

Printed 19 September 2016

# Table of Contents

|   |    |
|---|----|
| Statement Of Purpose.....                               | 1  |
| Acronyms.....   | 2  |
| Installation Information.....                           | 4  |
| Cleanup Program Summary.....                            | 6  |
| 5-Year / Periodic Review Summary.....                   | 7  |
| Land Use Control (LUC) Summary.....                     | 9  |
| Parcel Summary.....                                     | 11 |
| Installation Restoration Program.....                   | 12 |
| IRP Summary.....  | 13 |
| IRP Contamination Assessment.....                       | 15 |
| IRP Previous Studies.....                               | 16 |
| Installation Restoration Program Site Descriptions..... | 19 |
| JAAP-001 SOUTHERN ASH PILE.....                         | 20 |
| JAAP-005 M5 - TETRYL PRODUCTION AREA.....               | 21 |
| JAAP-006 M6 TNT DITCH COMPLEX.....                      | 22 |
| JAAP-007 M7 - RED WATER AREA SOUTH OF TNT DITCH.....    | 23 |
| JAAP-008 ACID MANUFACTURING AREA.....                   | 24 |
| JAAP-009 NORTHERN ASH PILE.....                         | 25 |
| JAAP-011 M11 LANDFILL.....                              | 26 |
| JAAP-013 M13 GRAVEL/EXCAVATION PITS.....                | 27 |
| JAAP-0L1 GROUP 61 TNT - RIDGE & FURROW SYSTEM.....      | 28 |
| JAAP-0L2 EXPLOSIVE BURNING GROUND.....                  | 29 |
| JAAP-0L3 DEMO AREA.....                                 | 30 |
| JAAP-GWM INSTALLATION-WIDE GROUNDWATER.....             | 31 |
| JAAP-L14 GROUP 4 - FUSE PRODUCTION.....                 | 32 |
| IRP Site Closeout (No Further Action) Summary.....      | 33 |
| Installation Restoration Program Schedule.....          | 35 |
| Installation Restoration Program Milestones.....        | 35 |
| Installation Restoration Program Schedule Chart.....    | 38 |

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## Table of Contents

|   |           |
|---|-----------|
| <b>Military Munitions Response Program.....</b>                   | <b>39</b> |
| <b>MMRP Summary.....</b>  | <b>40</b> |
| <b>MMRP Contamination Assessment.....</b>                         | <b>41</b> |
| <b>MMRP Previous Studies.....</b>                                 | <b>42</b> |
| <b>Military Munitions Response Program Site Descriptions.....</b> | <b>43</b> |
| <b>JAAP-001-R-01 L3 Buffer Area.....</b>                          | <b>44</b> |
| <b>JAAP-001-R-02 L2-L3 Extended Buffer.....</b>                   | <b>45</b> |
| <b>JAAP-001-R-03 Capped L3 Area.....</b>                          | <b>46</b> |
| <b>JAAP-002-R-01 L2 Buffer Area.....</b>                          | <b>47</b> |
| <b>JAAP-004-R-01 FORMER BURNING AREA (L34).....</b>               | <b>48</b> |
| <b>MMRP Site Closeout (No Further Action) Summary.....</b>        | <b>49</b> |
| <b>Military Munitions Response Program Schedule.....</b>          | <b>50</b> |
| <b>Military Munitions Response Program Milestones.....</b>        | <b>50</b> |
| <b>Military Munitions Response Program Schedule Chart.....</b>    | <b>51</b> |
| <b>Community Involvement.....</b>                                 | <b>52</b> |

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## Statement of Purpose

The purpose of the Installation Action Plan (IAP) is to outline the total multiyear cleanup program for an installation. The plan identifies environmental cleanup requirements at each site or area of concern, and proposes a comprehensive, installation-wide approach, along with the costs and schedules associated with conducting investigations and taking the necessary remedial actions (RA).

In an effort to coordinate planning information between the US Army Environmental Command (USAEC), the Joliet Army Ammunition Plant (JOAAP), the Base Realignment and Closure (BRAC) Division, the executing agencies, regulatory agencies, and the public, an IAP was completed. The IAP is used to track requirements, schedules, and budgets for all major Army installation cleanup programs.

All site-specific funding and schedule information has been prepared according to projected overall Army funding levels and is, therefore, subject to change.

## Acronyms

|        |  |
|--------|--|
| AEDB-R | Army Environmental Database - Restoration                                    |
| BRAC   | Base Realignment and Closure   |
| CERCLA | Comprehensive Environmental Response, Compensation and Liability Act of 1980 |
| cy     | cubic yard   |
| DD     | Decision Document  |
| DERP   | Defense Environmental Restoration Program                                    |
| DNT    | 2,4-Dinitrotoluene   |
| EE/CA  | Engineering Evaluation/Cost Analysis   |
| FFA    | Federal Facility Agreement   |
| FRA    | Final Remedial Action  |
| FY     | Fiscal Year  |
| GMZ    | Groundwater Management Zone  |
| GW     | Groundwater  |
| HRS    | Hazard Ranking System  |
| IAP    | Installation Action Plan   |
| IC     | Institutional Control  |
| ID     | Identification   |
| IEPA   | Illinois Environmental Protection Agency                                     |
| IL     | Illinois   |
| IR     | Installation Restoration   |
| IRA    | Interim Remedial Action  |
| IRP    | Installation Restoration Program   |
| JAAP   | Joliet Army Ammunition Plant (AEDB-R designation)                            |
| JADA   | Joliet Arsenal Development Authority   |
| JOAAP  | Joliet Army Ammunition Plant   |
| K      | thousand   |
| LAP    | Load, Assemble, and Pack   |
| LTM    | Long-Term Management   |
| LUC    | Land Use Controls  |
| MEC    | Munitions and Explosives of Concern  |
| mg/kg  | milligrams per kilogram  |
| mm     | millimeter   |
| MMRP   | Military Munitions Response Program  |
| MNA    | Monitored Natural Attenuation  |
| MPPEH  | Material Presenting Potential Explosive Hazard                               |
| MR     | Munitions Response   |
| MRSP   | Military Response Site Prioritization Protocol                               |
| N/A    | Not Applicable   |
| NCP    | National Oil and Hazardous Substances Pollution Contingency Plan             |
| NPL    | National Priorities List   |
| OB     | Open Burning   |
| OD     | Open Detonation  |
| ORSC   | Ordnance Removal and Site Characterization                                   |
| OU     | Operable Unit  |
| PA     | Preliminary Assessment   |

## Acronyms

|        |   |
|--------|---|
| PBC    | Performance-Based Contract                        |
| PCB    | Polychlorinated Biphenyl                          |
| RA     | Remedial Action                                   |
| RA(C)  | Remedial Action (Construction)                    |
| RAB    | Restoration Advisory Board                        |
| RC     | Response Complete                                 |
| RCRA   | Resource Conservation and Recovery Act            |
| RD     | Remedial Design                                   |
| RDX    | Cyclotrimethylenetrinitramine                     |
| RIP    | Remedy-in-Place                                   |
| ROD    | Record of Decision                                |
| RRSE   | Relative Risk Site Evaluation                     |
| SI     | Site Inspection                                   |
| SRU    | Soil Remediation Unit                             |
| SVOC   | Semi-volatile Organic Compound                    |
| SWDRIP | Site-wide Deed Restriction Implementation Program |
| TAPP   | Technical Assistance for Public Participation     |
| TBD    | To Be Determined                                  |
| Tetryl | Trinitrophenylmethylnitramine                     |
| TNT    | Trinitrotoluene                                   |
| TRC    | Technical Review Committee                        |
| ug/dl  | micrograms per deciliter                          |
| USACE  | US Army Corps of Engineers                        |
| USAEC  | US Army Environmental Command                     |
| USDA   | US Department of Agriculture                      |
| USEPA  | US Environmental Protection Agency                |
| UXO    | Unexploded Ordnance                               |
| VA     | Veterans' Affairs                                 |
| VOC    | Volatile Organic Compound                         |
| WCLF   | Will County Landfill                              |

# Installation Information

## Installation Locale

**Installation Size (Acreage):** 23,544.00

**City:** Joliet

**County:** Will

**State:** Illinois

## Other Locale Information

The 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 Illinois Route 53, once occupied a total of 23,544 acres (about 37 square miles). Approximately 1,068 acres are currently under US Army control.

## Installation Mission

The JOAAP is a US Army-owned industrial facility that is currently excess property and is completely inactive. Following construction in the early-1940s, the eastern side of the plant was used to load, assemble, and pack (LAP) bombs, shells, mines, and supplementary charges, and the western side of the plant was equipped to produce explosives such as trinitrotoluene (TNT), dinitrotoluene (DNT), trinitrophenylmethyl nitramine (tetryl), and constituent chemicals. No production has occurred since 1977. During periods of inactivity, many areas and facilities were leased out for commercial operations.

## Lead Organization

Base Realignment and Closure Division

## Lead Executing Agencies for Installation

USAEC - Investigation Phase

US Army Corps of Engineers (USACE), Louisville District - RA Phase

## Regulator Participation

**Federal** US Environmental Protection Agency (USEPA), Region V

**State** Illinois Environmental Protection Agency (IEPA)

## National Priorities List (NPL) Status

A score of 35.2 was recorded on 01-MAR-89.

**Final RA(C) Completion Date:** 202003

**Date for NPL Deletion:** TBD

## Installation Restoration Advisory Board (RAB)/Technical Review Committee (TRC)/Technical Assistance for Public Participation (TAPP) Status

RAB established 1995

## Installation Program Summaries

### IRP

**Primary Contaminants of Concern:** Explosives, Metals, Munitions and explosives of concern (MEC), Semi-volatiles (SVOC), Volatiles (VOC)

**Affected Media of Concern:** Groundwater, Soil

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## Installation Information

### MMRP

**Primary Contaminants of Concern:** Munitions and explosives of concern (MEC)

**Affected Media of Concern:** Soil



# Cleanup Program Summary

## Installation Historic Activity

The JOAAP was constructed in the early-1940s. It originally consisted of the Kankakee ordnance works and the Elwood ordnance plant and was located in southwestern Will County, Illinois. The installation originally encompassed approximately 36,000 acres that were divided by Illinois Route 53. Approximately 13,000 acres were excessed and disposed of in the early-1960s. The eastern side of the plant was used to LAP bombs, shells, mines, and supplementary charges, and was known as the LAP area. The western side of the plant was equipped to produce explosives such as TNT, DNT, tetryl, and constituent chemicals and was known as the manufacturing area.

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 reactivated in support of the conflicts in Korea and Vietnam. No production has occurred since 1977. During times of inactivity, many areas and facilities were leased out for commercial operations. The JOAAP is now a US Army-owned industrial facility that is excess property and is completely inactive.

In accordance with the Illinois Land Conservation Act of 1995, P.L. 104-106, Div. B, Title 2901-2932, Feb. 10, 1996, the US Army will transfer the remaining 23,544 acres of land at JOAAP to various federal, local, and state jurisdictions. In 1997, approximately 982 acres were transferred to the Department of Veterans' Affairs (VA) to establish a veterans' cemetery; in 2002 455 acres were transferred to Will County, Illinois to establish the Will County Landfill (WCLF). Approximately 19,100 acres will be transferred to the US Department of Agriculture (USDA) to establish the Midewin National Tallgrass Prairie. To date, 17,620 acres of the total have been conveyed to the USDA. Approximately 3,000 acres will be transferred to the state of Illinois to establish two industrial parks. To date, transference of 2,935 acres to the state of Illinois has been completed. A total of 22,767 acres (approximately 94 percent) have been disposed.

The third five-year review under the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) was completed in 2015.

## Installation Program Cleanup Progress

### IRP

**Prior Year Progress:** Long-term management (LTM) and remedial action (operation) RA(O) continued in fiscal year (FY)16. Five-year review was completed in August 2015.

**Future Plan of Action:** RA(O) and LTM will continue.

### MMRP

**Prior Year Progress:** For sites JAAP-001-R-01, JAAP-002-R-01, and JAAP-004-R-01, the remedial investigation (RI) is underway. The time critical removal action (TCRA) for JAAP-001-R-03 is underway.

**Future Plan of Action:** LTM will continue for JAAP-001-R-01, JAAP-002-R-01, and JAAP-004-R-01. Removal of the L3 capped area (JAAP-001-R-03) is underway.

## 5-Year / Periodic Review Summary

### 5-Year / Periodic Review Summary

| Status   | Begin Date | End Date | End FY |
|----------|------------|----------|--------|
| Complete | 201210     | 201509   | 2015   |
| Complete | 200310     | 200406   | 2004   |
| Complete | 200810     | 200910   | 2010   |
| Underway | 201509     | 201905   | 2019   |

### Last Completed 5-Year / Periodic Review Details

| Associated ROD/DD Name                   | Sites  |
|--|--|
| DECISION DOC. FOR L6/GRP. 70 REMOVAL ACN | JAAP-0L6   |
| DECISION DOC. FOR L6/GRP. 70 REMOVAL ACN | JAAP-0L6   |
| IRA for MR 001R01, 002R01, and 004R01    | JAAP-001-R-01, JAAP-002-R-01, JAAP-004-R-01  |
| IRA for MR 001R01, 002R01, and 004R01    | JAAP-001-R-01, JAAP-002-R-01, JAAP-004-R-01  |
| ROD (1998) for Joliet AAP                | JAAP-001, JAAP-002, JAAP-003, JAAP-004, JAAP-005, JAAP-006, JAAP-007, JAAP-008, JAAP-009, JAAP-010, JAAP-011, JAAP-012, JAAP-013, JAAP-014, JAAP-015, JAAP-016, JAAP-017, JAAP-018, JAAP-019, JAAP-020, JAAP-021, JAAP-022, JAAP-023, JAAP-024, JAAP-025, JAAP-026, JAAP-027, JAAP-028, JAAP-029, JAAP-030, JAAP-031, JAAP-032, JAAP-033, JAAP-034, JAAP-035 |
| ROD (1998) for Joliet AAP                | JAAP-001, JAAP-002, JAAP-003, JAAP-004, JAAP-005, JAAP-006, JAAP-007, JAAP-008, JAAP-009, JAAP-010, JAAP-011, JAAP-012, JAAP-013, JAAP-014, JAAP-015, JAAP-016, JAAP-017, JAAP-018, JAAP-019, JAAP-020, JAAP-021, JAAP-022, JAAP-023, JAAP-024, JAAP-025, JAAP-026, JAAP-027, JAAP-028, JAAP-029, JAAP-030, JAAP-031, JAAP-032, JAAP-033, JAAP-034, JAAP-035 |
| ROD (2004) for the Soil OU Interim Sites | JAAP-002, JAAP-003, JAAP-004, JAAP-012, JAAP-0L1, JAAP-0L2, JAAP-0L5, JAAP-0L7, JAAP-0L8, JAAP-0L9, JAAP-L10, JAAP-L14, JAAP-L23   |
| ROD (2004) for the Soil OU Interim Sites | JAAP-002, JAAP-003, JAAP-004, JAAP-012, JAAP-0L1, JAAP-0L2, JAAP-0L5, JAAP-0L7, JAAP-0L8, JAAP-0L9, JAAP-L10, JAAP-L14, JAAP-L23   |

**Results** The remedies for SOU Sites and GOU are protective of human health and the environment.

**Actions** Continue regular monitoring of conditions and ICs. Seek ways to optimize LTM.

**Plans** Address erosion at L3. Locate L5 closure documentation and determine if follow sampling is required. re-evaluate lead RG for M6 IF EPA adopts CDC recommendation re: blood level for lead.

### Recommendations and Implementation Plans:

## 5-Year / Periodic Review Summary

### **Recommendations and Implementation Plans:**

This information is from the August 2015 third five-year review.

#### Soils Operable Unit:

Site L3 - Repair eroded or displaced riprap on the west side of the landfill.

Site L5 - Obtain site closure documentation for metals in soil from the former Junk Pile area and confirm that lead concentrations are below the regulatory guidance (RG).

Site L6 - Perform additional sampling and analysis to evaluate lead in soil concentrations down to approximately 1 milligrams per kilogram (mg/kg) if the USEPA accepts the Center for Disease Control (CDC) recommended lead in blood level [5 microgram per deciliter (ug/dL)].

#### Groundwater Operable Unit:

A new remediation goal for 2-Nitrotoluene (2-NT) should be adopted based on new toxicological information that has come to light since the 1998 record of decision (ROD).

Groundwater monitoring data should be evaluated to determine whether 2-NT has exceeded the new RG at the groundwater management zone (GMZ) boundaries.

## Land Use Control (LUC) Summary

**LUC title:** EBA LUC

**Site(s):** JAAP-001-R-02

**ROD/DD title:** Expanded Buffer Area DD

**Location of LUC**

EBA around the L2-L3 OB/OD Area

**Land Use Restriction:** Media specific restriction - Prohibit, or otherwise manage excavation, Restrict land use - No daycare/hospital/school use, Restrict land use - No residential use

**Types of Engineering Controls:** Signs

**Types of Institutional Controls:** Deed Notices, Deed Restrictions

**Date in Place:** 201810

**Modification Date:** N/A

**Date Terminated:** N/A

**Inspecting Organization:** Other Federal Agency

**Record of LUC:** ECOP (Fed to Fed)

**Documentation Date:** 201810

**LUC Enforcement:** Annual Inspections, 5 Year Reviews, Transferee Reporting

**Contaminants:** Unexploded Ordnance(UXO)

**Additional Information**

N/A

**LUC title:** L2-L3 Buffer MR LUCs

**Site(s):** JAAP-001-R-01, JAAP-002-R-01

**ROD/DD title:** DD for 001R01, 002R01, and 004R01

**Location of LUC**

L2 and L3 original buffer area

**Land Use Restriction:** Media specific restriction - Prohibit, or otherwise manage excavation, Media specific restriction - Prohibit, or otherwise manage excavation below a specified depth, Restrict land use - No daycare/hospital/school use, Restrict land use - No residential use

**Types of Engineering Controls:** None

**Types of Institutional Controls:** Deed Restrictions, Restrictions on land use

**Date in Place:** 201610

**Modification Date:** N/A

**Date Terminated:** N/A

**Inspecting Organization:** Other Federal Agency

**Record of LUC:** ECOP (Fed to Fed)

**Documentation Date:** 201612

**LUC Enforcement:** Annual Inspections, 5 Year Reviews, Transferee Reporting

**Contaminants:** Unexploded Ordnance(UXO)

**Additional Information**

N/A

**LUC title:** Land and GW Restriction

## Land Use Control (LUC) Summary

**Site(s):** JAAP-001, JAAP-002, JAAP-003, JAAP-004, JAAP-005, JAAP-006, JAAP-007, JAAP-008, JAAP-009, JAAP-010, JAAP-011, JAAP-012, JAAP-013, JAAP-014, JAAP-015, JAAP-016, JAAP-017, JAAP-018, JAAP-0L1, JAAP-0L2, JAAP-0L3, JAAP-0L4, JAAP-0L5, JAAP-0L6, JAAP-0L7, JAAP-0L8, JAAP-0L9, JAAP-GWM, JAAP-L10, JAAP-L11, JAAP-L12, JAAP-L13, JAAP-L14, JAAP-L15, JAAP-L16, JAAP-L17, JAAP-L18, JAAP-L19, JAAP-L20, JAAP-L21, JAAP-L22, JAAP-L23, JAAP-L24, JAAP-L25, JAAP-L26, JAAP-L27, JAAP-L28, JAAP-L29, JAAP-L30, JAAP-L33, JAAP-L34, JAAP-L35

**ROD/DD title:** ROD (1998) for Joliet AAP

### Location of LUC

Entire former installation for land re-use. Within ROD-defined Groundwater Management Zones for GW.

**Land Use Restriction:** Media specific restriction - Prohibit groundwater extraction that interferes with Remedial Action system, Media specific restriction - prohibit use of groundwater for consumption or domestic purposes, Media specific restriction - restrict drinking water well installation, Media specific restriction - restrict withdrawal or use of groundwater w/out treatment, Restrict land use - No residential use

**Types of Engineering Controls:** None

**Types of Institutional Controls:** Affirmative covenants, Deed Notices, Deed Restrictions, Fed to Fed Transfer Agreement, Restrictions on land use

**Date in Place:** 199810

**Modification Date:** N/A

**Date Terminated:** N/A

**Inspecting Organization:** Installation

**Record of LUC:** ECOP (Fed to Fed)

**Documentation Date:** 199810

**LUC Enforcement:** Annual Inspections, 5 Year Reviews, Transferee Reporting

**Contaminants:** METALS, NITROAROMATICS, ORGANICS

### Additional Information

N/A

## Summary of Parcel Prioritization and Transfer Strategy

**Parcel Name: JADA 8**

**Parcel Size:** 19.00

**Associated Sites:** JAAP-013

**Transfer Date:** 201009

**Current Land Use:** N/A

**Future Land Use:** N/A

**Encumbrances:** N/A

**Leases/Permits/Licenses:** N/A

**Transfer Strategy:** Special Legislation

**Recipient Organization:** State of Illinois (JADA)

**Other Issues Affecting Transfer:**N/A

**Parcel Name: USDA 7**

**Parcel Size:** 442.00

**Associated Sites:** JAAP-GWM

**Transfer Date:** 200909

**Current Land Use:** N/A

**Future Land Use:** N/A

**Encumbrances:** N/A

**Leases/Permits/Licenses:** N/A

**Transfer Strategy:** Transfer to Other Federal Agencies

**Recipient Organization:** USDA Forest service

**Other Issues Affecting Transfer:**N/A

**Parcel Name: USDA 8**

**Parcel Size:** 423.00

**Associated Sites:** JAAP-011, JAAP-0L3, JAAP-GWM

**Transfer Date:** 201009

**Current Land Use:** N/A

**Future Land Use:** N/A

**Encumbrances:** N/A

**Leases/Permits/Licenses:** N/A

**Transfer Strategy:** Transfer to Other Federal Agencies

**Recipient Organization:** USDA Forest Service

**Other Issues Affecting Transfer:**N/A

**JOLIET AAP**  
**Non-BRAC Excess**  
**Installation Restoration Program**

# IRP Summary

**Installation Total Army Environmental Database-Restoration (AEDB-R) Sites/Closeout Sites Count:** 55/42

## Installation Site Types with Future and/or Underway Phases

- 1 Burn Area  
(JAAP-0L2)
- 1 Contaminated Buildings  
(JAAP-008)
- 1 Contaminated Ground Water  
(JAAP-GWM)
- 1 Contaminated Sediments  
(JAAP-006)
- 5 Landfill  
(JAAP-001, JAAP-009, JAAP-011, JAAP-013, JAAP-0L3)
- 2 Spill Site Area  
(JAAP-005, JAAP-L14)
- 1 Surface Disposal Area  
(JAAP-0L1)
- 1 Surface Impoundment/Lagoon  
(JAAP-007)

## Most Widespread Contaminants of Concern

Explosives, Metals, Munitions and explosives of concern (MEC), Semi-volatiles (SVOC), Volatiles (VOC)

## Media of Concern

Groundwater, Soil

## Completed Remedial Actions (Interim Remedial Actions / Final Remedial Actions (IRA/FRA))

| Site ID  | Site Name                                 | Action | Remedy   | FY   | Cost |
|----------|---|--------|--|------|------|
| JAAP-001 | SOUTHERN ASH PILE                         | IRA    | CAPPING  | 1994 | TBD  |
| JAAP-007 | M7 - RED WATER AREA<br>SOUTH OF TNT DITCH | IRA    | CAPPING  | 1994 | TBD  |
| JAAP-009 | NORTHERN ASH PILE                         | IRA    | CAPPING  | 1994 | TBD  |
| JAAP-011 | M11 LANDFILL                              | IRA    | CAPPING  | 1994 | TBD  |
| JAAP-L21 | SANITARY LANDFILL                         | IRA    | CAPPING  | 1994 | TBD  |
| JAAP-008 | ACID MANUFACTURING<br>AREA                | IRA    | WASTE REMOVAL - DRUMS, TANKS,<br>BULK CONTAINERS | 1996 | TBD  |
| JAAP-001 | SOUTHERN ASH PILE                         | IRA    | CAPPING  | 1997 | TBD  |
| JAAP-006 | M6 TNT DITCH COMPLEX                      | IRA    | WASTE REMOVAL - DRUMS, TANKS,<br>BULK CONTAINERS | 1997 | TBD  |
| JAAP-0L2 | EXPLOSIVE BURNING<br>GROUND               | IRA    | WASTE REMOVAL - SOILS                            | 1997 | TBD  |
| JAAP-0L3 | DEMO AREA                                 | IRA    | FENCE OR OTHER SITE ACCESS<br>CONTROL MEASURES   | 1997 | TBD  |
| JAAP-0L6 | GROUP 70 - MOTOR POOL                     | FRA    | WASTE REMOVAL - SOILS                            | 1998 | TBD  |
| JAAP-005 | M5 - TETRYL PRODUCTION<br>AREA            | FRA    | WASTE REMOVAL - SOILS                            | 1999 | TBD  |
| JAAP-005 | M5 - TETRYL PRODUCTION<br>AREA            | FRA    | INSTITUTIONAL CONTROLS                           | 1999 | TBD  |
| JAAP-008 | ACID MANUFACTURING<br>AREA                | FRA    | BIOREMEDIATION - IN SITU<br>GROUNDWATER          | 1999 | TBD  |
| JAAP-010 | TOLUENE TANK FARMS (3)                    | FRA    | NATURAL ATTENUATION                              | 1999 | TBD  |
| JAAP-0L1 | GROUP 61 TNT - RIDGE &<br>FURROW SYSTEM   | FRA    | WASTE REMOVAL - SOILS                            | 2000 | TBD  |
| JAAP-0L7 | GROUP 1                                   | FRA    | WASTE REMOVAL - SOILS                            | 2000 | TBD  |



## IRP Summary

### Completed Remedial Actions (Interim Remedial Actions / Final Remedial Actions (IRA/FRA))

| Site ID       | Site Name                                 | Action | Remedy                                 | FY   | Cost |
|---------------|---|--------|--|------|------|
| JAAP-0L8      | GROUP 2                                   | FRA    | WASTE REMOVAL - SOILS                  | 2000 | TBD  |
| JAAP-0L9      | GROUP 3                                   | FRA    | WASTE REMOVAL - SOILS                  | 2000 | TBD  |
| JAAP-GWM      | INSTALLATION-WIDE<br>GROUNDWATER          | FRA    | NATURAL ATTENUATION                    | 2000 | TBD  |
| JAAP-L10      | GROUP 3A                                  | FRA    | WASTE REMOVAL - SOILS                  | 2000 | TBD  |
| JAAP-L11      | TEST SITE                                 | FRA    | WASTE REMOVAL - SOILS                  | 2000 | TBD  |
| JAAP-L17      | GROUP 7                                   | FRA    | WASTE REMOVAL - SOILS                  | 2000 | TBD  |
| JAAP-007      | M7 - RED WATER AREA<br>SOUTH OF TNT DITCH | FRA    | INSTITUTIONAL CONTROLS                 | 2002 | TBD  |
| JAAP-007      | M7 - RED WATER AREA<br>SOUTH OF TNT DITCH | FRA    | WASTE REMOVAL - SOILS                  | 2002 | TBD  |
| JAAP-L16      | GROUP 6                                   | FRA    | WASTE REMOVAL - SOILS                  | 2003 | TBD  |
| JAAP-006      | M6 TNT DITCH COMPLEX                      | FRA    | WASTE REMOVAL - SOILS                  | 2005 | TBD  |
| JAAP-006      | M6 TNT DITCH COMPLEX                      | FRA    | INSTITUTIONAL CONTROLS                 | 2005 | TBD  |
| JAAP-0L1      | GROUP 61 TNT - RIDGE &<br>FURROW SYSTEM   | FRA    | INSTITUTIONAL CONTROLS                 | 2006 | TBD  |
| JAAP-0L1      | GROUP 61 TNT - RIDGE &<br>FURROW SYSTEM   | FRA    | WASTE REMOVAL - SOILS                  | 2006 | TBD  |
| JAAP-0L7      | GROUP 1                                   | FRA    | WASTE REMOVAL - SOILS                  | 2006 | TBD  |
| JAAP-0L8      | GROUP 2                                   | FRA    | WASTE REMOVAL - SOILS                  | 2006 | TBD  |
| JAAP-0L9      | GROUP 3                                   | FRA    | WASTE REMOVAL - SOILS                  | 2006 | TBD  |
| JAAP-L10      | GROUP 3A                                  | FRA    | WASTE REMOVAL - SOILS                  | 2006 | TBD  |
| JAAP-L14      | GROUP 4 - FUSE<br>PRODUCTION              | FRA    | WASTE REMOVAL - SOILS                  | 2006 | TBD  |
| JAAP-001      | SOUTHERN ASH PILE                         | FRA    | WASTE REMOVAL - SOLIDS (NON-<br>SOILS) | 2007 | TBD  |
| JAAP-001      | SOUTHERN ASH PILE                         | FRA    | CAPPING                                | 2007 | TBD  |
| JAAP-003      | FLASHING GROUNDS                          | FRA    | WASTE REMOVAL - SOILS                  | 2007 | TBD  |
| JAAP-004      | LEAD AZIDE AREA                           | FRA    | BIOREMEDIATION                         | 2007 | TBD  |
| JAAP-004      | LEAD AZIDE AREA                           | FRA    | WASTE REMOVAL - SOILS                  | 2007 | TBD  |
| JAAP-009      | NORTHERN ASH PILE                         | FRA    | DRAINAGE CONTROLS                      | 2007 | TBD  |
| JAAP-009      | NORTHERN ASH PILE                         | FRA    | REMOVAL                                | 2007 | TBD  |
| JAAP-011      | M11 LANDFILL                              | FRA    | INSTITUTIONAL CONTROLS                 | 2007 | TBD  |
| JAAP-013      | M13 GRAVEL/EXCAVATION<br>PITS             | FRA    | INSTITUTIONAL CONTROLS                 | 2007 | TBD  |
| JAAP-0L3      | DEMO AREA                                 | FRA    | WASTE REMOVAL - SOILS                  | 2008 | TBD  |
| JAAP-0L3      | DEMO AREA                                 | FRA    | CAPPING                                | 2008 | TBD  |
| JAAP-0L3      | DEMO AREA                                 | FRA    | INSTITUTIONAL CONTROLS                 | 2008 | TBD  |
| PBC at Joliet | PBC                                       | FRA    | OTHER                                  | 2010 | TBD  |

#### Duration of IRP

Year of IRP Inception: 198711

Estimated Date for Remedy-In-Place (RIP)/Response Complete (RC): 201003/205909

Date of IRP completion including Long Term Management (LTM): 204612

# IRP Contamination Assessment

## Contamination Assessment Overview

The main concerns of the Installation Restoration Program (IRP) have been contamination of soils and groundwater by explosives and metals. There has been no migration of contamination off-post.

Contaminants at the installation include waste products from the production of sulfuric and nitric acids, sodium sulfite, TNT, DNT, tetryl, cyclotrimethylenetrinitramine (RDX), metals, VOCs, SVOCs, and polychlorinated biphenyls (PCB).

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 unacceptable health effects or ecological impacts will not result from future uses of the JOAAP property.

The JOAAP IRP began at the time of the installation assessment in 1978 when a records search was conducted to identify past contamination and to assess the potential for contaminant migration, if any, beyond the installation boundary.

In July 1987, the manufacturing area was placed on the NPL with a hazard ranking score (HRS) of 32.08. In March 1989, the LAP area was placed on the NPL with an HRS of 35.23. In June 1989 the US Army, the USEPA Region V, and the IEPA signed a federal facility agreement (FFA).

Of the 53 sites originally identified for study in the early investigations, 27 were recommended for remedial action (RA) in the feasibility study (FS) completed in late-1997. The other 26 were found to meet the requirements that allowed them to be recommended for no further action (NFA). Currently, three sites have RIP with LTM, and 24 sites are RC.

In November 1998, the ROD was finalized, with the exception of certain soil issues on USDA land. The ROD specifies RAs such as bioremediation, waste removal, source removal, and capping for contaminated soils. The ROD specified natural attenuation with institutional controls (IC) for groundwater because some contaminant concentrations exceed safe levels, specifically at sites JAAP-001, JAAP-003, JAAP-005, JAAP-006, JAAP-007, JAAP-008, JAAP-0L1, JAAP-0L2, JAAP-0L3, and JAAP-L14.

In 1998, based upon concerns raised by USDA and other stakeholders, the US Army, the USEPA, and the IEPA agreed to reevaluate the risk to human and ecological receptors. In 1999, multi-agency work groups were formed to evaluate these risks, and in 2000 they recommended preliminary remediation goals. These goals were evaluated by a multiagency management group.

Appropriate final remedial actions (FRA) for USDA soils were developed, evaluated, and selected in accordance with the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). A 2004 final ROD addresses the interim USDA soil component. All other decisions within this document are considered final.

Since finalizing the 2004 ROD, the following sites have reached RIP/RC for prairie use:

JAAP-0L1, JAAP-0L2, JAAP-0L5, JAAP-0L7, JAAP-0L8, JAAP-0L9, JAAP-L10, JAAP-L14, JAAP-L23A, JAAP-M02, JAAP-M03, JAAP-M04, JAAP-M12.

## Cleanup Exit Strategy

LTM and five-year reviews will continue at sites where required. LTM optimization and ramp-down will occur where practical.

## IRP Previous Studies

| Year | Title  | Author   | Date     |
|------|--|--|----------|
| 1978 | Installation Assessment  | Office of the Project Manager for Chemical Demilitarization and Installation Restoration | SEP-1978 |
| 1982 | Installation Restoration Survey  | Donohue and Associates   | NOV-1982 |
| 1983 | JAAP Phase II Technical Report: TNT Ditch Complex, Red Water Area, Explosive Burning Grounds, Group 61 | Donohue and Associates   | AUG-1983 |
|      | JAAP Phase II: Technical Report, Excessing Parcels   | Donohue and Associates   | AUG-1983 |
| 1985 | JAAP Red Water Lagoon Sampling and Analysis, Remedial Action   | Donohue and Associates   | OCT-1985 |
| 1986 | Midwest Site Confirmatory Survey, Sampling Report, Round 1   | Dames and Moore  | AUG-1986 |
|      | Midwest Site Confirmatory Survey, Sampling Report, Round 2   | Dames and Moore  | SEP-1986 |
|      | Midwest Site Confirmatory Survey Assessment Report   | Dames and Moore  | NOV-1986 |
| 1989 | Assessment Report, PCB Spill Area, Group 70, LAP Area  | Dames and Moore  | FEB-1989 |
| 1990 | Phase I Results Report, Remedial Investigation, Manufacturing Area                                     | Dames and Moore  | SEP-1990 |
| 1993 | Phase II Remedial Investigation Report, Manufacturing Area   | Dames and Moore  | MAY-1993 |
|      | Phase I Remedial Investigation Results Report, LAP Area  | Dames and Moore  | JUL-1993 |
| 1994 | Baseline Risk Assessment (Final), RI/FS, Manufacturing Area  | Dames and Moore  | MAR-1994 |
|      | Health Risk Assessment for Consumption of Deer Muscle and Liver from JAAP, (Final)                     | US Army Environmental Hygiene Agency   | JUN-1994 |
|      | Phase I Ecological Risk Assessment (Final)   | US Army Environmental Hygiene Agency   | NOV-1994 |
|      | Phase II Aquatic Ecological Risk Assessment  | US Army Environmental Hygiene Agency   | NOV-1994 |
|      | Phase II Remedial Investigation (Final), LAP Area  | Dames and Moore  | NOV-1994 |
| 1995 | Baseline Risk Assessment (Final), RI/FS, LAP Area  | Dames and Moore  | FEB-1995 |
|      | Baseline Risk Assessment (Final), RI/FS, LAP Area  | Dames and Moore  | APR-1995 |
| 1996 | JAAP Preliminary Remediation Goals   | OHM Remediation Services Corp.   | APR-1996 |
| 1997 |  |  |          |

## IRP Previous Studies

|             | Title  | Author  | Date     |
|-------------|--|---|----------|
| <b>1997</b> | Phase II, Aquatic Ecological Risk Assessment   | USACHPPM  | JAN-1997 |
|             | Project Management Plan for the Environmental Removal Action, L6/Group 70                              | IT Corporation                                  | AUG-1997 |
|             | Feasibility Study, Groundwater Operable Unit, LAP Area   | Dames and Moore                                 | AUG-1997 |
|             | Feasibility Study, Groundwater Operable Unit, Manufacturing Area                                       | OHM Corporation, Inc.                           | SEP-1997 |
|             | Final Feasibility Study Report, LAP Area, Soil Operable Units and Groundwater Operable Units           | Dames and Moore                                 | SEP-1997 |
|             | Final Feasibility Study Report, Mfg Area, Soil Operable Units and Groundwater Operable Units           | OHM Corporation, Inc.                           | SEP-1997 |
|             | Proposed Plans for the Groundwater Operable Unit and the Soil Operable Unit for JOAAP                  | US Army   | DEC-1997 |
| <b>1998</b> | Record of Decision, Soil and Groundwater Operable Units, Manufacturing and Load-Assembly-Package Areas | US Army   | NOV-1998 |
| <b>1999</b> | Final RD/RA Work Plan for Groundwater and Soil   | MWH   | DEC-1999 |
| <b>2000</b> | Final Closure Report - Site M5   | MWH   | SEP-2000 |
|             | Prairie Worker and Ecological PRG Reports  | Human Health Workgroup                          | SEP-2000 |
| <b>2001</b> | Final Ordnance Removal and Site Characterization   | US Army Engineering and Support Center          | SEP-2001 |
| <b>2004</b> | Final Feasibility Study  | US Army Corps of Engineers, Louisville District | FEB-2004 |
|             | Proposed Plan for the Soil Operable Unit, Interim Sites  | US Army   | MAR-2004 |
|             | 5-Year Review, Soil & GW   | MWH   | APR-2004 |
|             | Final Record of Decision for SOU, Interim Sites  | US Army   | JUN-2004 |
| <b>2005</b> | Final Project Management Plan, PBC   | MKM   | JUN-2005 |
|             | Final Quality Control Plan, PBC  | MKM   | AUG-2005 |
|             | Final Accident Prevention Plan, PBC  | MKM   | AUG-2005 |
|             | Final Site M9 Work Plan  | MKM   | SEP-2005 |
|             | Final LTM/LTO Plan, PBC  | MKM   | SEP-2005 |
|             | Final RD/RA Work Plan, Interim Sites   | MWH   | OCT-2005 |
|             | Final Site L4 Work Plan  | MKM   | NOV-2005 |
| <b>2006</b> | Final Closure Report - Site M6   | MWH   | JAN-2006 |
|             | Final Treatment Report - Tetryl Soils  | MWH   | MAY-2006 |
|             | Final M6 Closure Report  | MWH   | JUN-2006 |

## IRP Previous Studies

|             | Title  | Author               | Date     |
|-------------|--|----------------------|----------|
| <b>2006</b> | Final Closure Report - Sites L1, L7, L8, L9, L10, L14, and M2                                | MWH                  | AUG-2006 |
| <b>2007</b> | Final Remedial Action Completion Report - L4 Landfill  | MKM                  | APR-2007 |
|             | Final M9 RIP Report  | MKM                  | SEP-2007 |
|             | Final Remedial Action Completion Report - M9 North Ashpile                                   | MKM                  | SEP-2007 |
| <b>2008</b> |  |                      |          |
|             | Final Historical Records Review Addendum, Joliet Army Ammunition Plant, Wilmington, Illinois | Malcolm Pirnie, Inc. | NOV-2008 |
| <b>2009</b> |  |                      |          |
|             | Final M11 RIP Report   | MKM                  | MAR-2009 |
|             | Final M13 RIP Report   | MKM                  | MAY-2009 |
|             | Final 5YR Review Groundwater OU  | Aerostar             | AUG-2009 |
|             | Final 5YR Review Soil OU   | Aerostar             | AUG-2009 |
|             | M13 RIP Report   | MKM                  | SEP-2009 |
|             | L2/L3/L23A/M3/M4/M12 Closure Report  | MWH                  | OCT-2009 |
| <b>2010</b> |  |                      |          |
|             | Final L3 Closure Rpt   | MWH                  | JUN-2010 |
|             | Final Bioremediation Report  | MWH                  | JUL-2010 |
| <b>2011</b> |  |                      |          |
|             | Final 2009 Semi-annual GW Monitoring Report  | Toltest              | SEP-2011 |
|             | 2009 Final Annual GW Monitoring Report   | Toltest              | SEP-2011 |
|             | Final 2010 Semi-annual GW Monitoring Report  | Toltest              | DEC-2011 |
| <b>2012</b> |  |                      |          |
|             | Final 2010 Annual GW Monitoring Report   | Toltest              | MAY-2012 |
|             | Final 2011 Semi-Annual GW Monitoring Report  | Toltest              | JUN-2012 |
| <b>2013</b> |  |                      |          |
|             | 2011 Annual GW Monitoring Report   | Toltest              | MAR-2013 |
|             | 2012 Annual GW Monitoring Report   | Toltest              | OCT-2013 |
|             | Site-wide Deed Restriction report  | Toltest              | NOV-2013 |
| <b>2014</b> |  |                      |          |
|             | 2013 Semi Annual GW Monitoring Report  | Toltest              | APR-2014 |

**JOLIET AAP**  
**Non-BRAC Excess**  
**Installation Restoration Program**  
**Site Descriptions**

**Site ID: JAAP-001**

**Site Name: SOUTHERN ASH PILE**

## STATUS

**Parcel:** NONE

**Regulatory Driver:** CERCLA

**RRSE:** LOW

**Contaminants of Concern:** Explosives, Metals, Other (Sulfates)

**Media of Concern:** Groundwater, Soil

| <b>Phases</b> | <b>Start</b> | <b>End</b> |
|---------------|--------------|------------|
| PA.....       | 198711.....  | 198803     |
| SI.....       | 198712.....  | 198803     |
| RI/FS.....    | 199001.....  | 199710     |
| RD.....       | 199806.....  | 199906     |
| IRA.....      | 198711.....  | 199704     |
| RA(C).....    | 199904.....  | 200709     |
| RA(O).....    | 200709.....  | 204609     |

**RIP Date:** 200709

**RC Date:** 204609

## SITE DESCRIPTION

The Southern Ash Pile site covers an area of approximately 50 acres, though the pile itself covers about eight acres. This is in the southwestern corner of the manufacturing area. The pile contains the solid residue from the incineration of red water and is 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, and then replaced in 1999.

Both groundwater and surface water have been impacted by past discharges. A GMZ and remedial goals were established in the 1998 ROD and the GMZ was revised in FY03.

This site is part of Soil Remediation Unit (SRU) 6 for landfills. The landfill cap was removed and contents (approximately 326,000 cubic yards (cy) were excavated in 2007 and disposed at the WCLF.

The cost of groundwater RA(O) monitoring is tracked under site JAAP-GWM. This site is intended to be transferred to the USDA.

## CLEANUP/EXIT STRATEGY

Groundwater monitoring, funded under the JAAP-GWM site, will continue.

**Site ID: JAAP-005**

**Site Name: M5 - TETRYL PRODUCTION AREA**

## STATUS

**Parcel:** NONE

**Regulatory Driver:** CERCLA

**RRSE:** HIGH

**Contaminants of Concern:** Explosives

**Media of Concern:** Groundwater, Soil

| <b>Phases</b> | <b>Start</b> | <b>End</b> |
|---------------|--------------|------------|
| PA.....       | 198711.....  | 198803     |
| SI.....       | 198711.....  | 198803     |
| RI/FS.....    | 198712.....  | 199710     |
| RD.....       | 199806.....  | 199906     |
| RA(C).....    | 199907.....  | 199909     |
| LTM.....      | 199909.....  | 204609     |

**RIP Date:** N/A

**RC Date:** 199909

## SITE DESCRIPTION

The final 1998 ROD established GMZ and remedial goals. The property was transferred to the state of Illinois for use as an industrial park in 2001.

Soils contaminated with explosives (5,900 cy) were removed in September 1999 and taken to JAAP-004 for remediation. No further remedial action is required.

The remedial goals for the site have been met and a closure document was submitted in FY00.

## CLEANUP/EXIT STRATEGY

LTM, including LUC monitoring and five-year reviews, is funded under the JAAP-GWM site and will continue.



**Site ID: JAAP-006**  
**Site Name: M6 TNT DITCH COMPLEX**

**STATUS**

**Parcel:** NONE

**Regulatory Driver:** CERCLA

**RRSE:** HIGH

**Contaminants of Concern:** Explosives, Metals

**Media of Concern:** Groundwater, Soil

| <b>Phases</b> | <b>Start</b> | <b>End</b> |
|---------------|--------------|------------|
| PA.....       | 198711.....  | 198803     |
| SI.....       | 198711.....  | 198803     |
| RI/FS.....    | 198712.....  | 199710     |
| RD.....       | 199806.....  | 199906     |
| IRA.....      | 199606.....  | 199708     |
| RA(C).....    | 199606.....  | 200509     |
| RA(O).....    | 200509.....  | 204609     |

**RIP Date:** 200509

**RC Date:** 205909

**SITE DESCRIPTION**

The final 1998 ROD established GMZ and remedial goals.

The property has been transferred to the state of Illinois for use as an industrial park.

Soils with explosives (estimated 175,000 cy) were removed and taken to site JAAP-004 for remediation.

**CLEANUP/EXIT STRATEGY**

Groundwater monitoring, funded under the JAAP-GWM site, will continue.

**Site ID: JAAP-007**

**Site Name: M7 - RED WATER AREA SOUTH OF TNT DITCH**

## STATUS

**Parcel:** NONE

**Regulatory Driver:** CERCLA

**RRSE:** HIGH

**Contaminants of Concern:** Explosives

**Media of Concern:** Groundwater, Soil

| <b>Phases</b> | <b>Start</b> | <b>End</b> |
|---------------|--------------|------------|
| PA.....       | 198711.....  | 198803     |
| SI.....       | 198711.....  | 198803     |
| RI/FS.....    | 198912.....  | 199710     |
| RD.....       | 199806.....  | 199906     |
| IRA.....      | 198711.....  | 199311     |
| RA(C).....    | 200104.....  | 200112     |
| RA(O).....    | 200201.....  | 204609     |

**RIP Date:** 200201

**RC Date:** 204609

## SITE DESCRIPTION

The final 1998 ROD established GMZ and remedial goals.

The property was transferred to the state of Illinois for use as an industrial park.

The redwater lagoon was remediated in 1985. Explosive soils in the TNT ditch and redwater treatment area (16,000 cy) were removed and taken to site JAAP-004 for bioremediation in 2001.

## CLEANUP/EXIT STRATEGY

Groundwater monitoring and five-year reviews will continue.

**Site ID: JAAP-008**

**Site Name: ACID MANUFACTURING AREA**

## STATUS

**Parcel:** NONE

**Regulatory Driver:** CERCLA

**RRSE:** LOW

**Contaminants of Concern:** Explosives, Semi-volatiles (SVOC)

**Media of Concern:** Groundwater, Soil

| <b>Phases</b> | <b>Start</b> | <b>End</b> |
|---------------|--------------|------------|
| PA.....       | 198711.....  | 198803     |
| SI.....       | 198711.....  | 198803     |
| RI/FS.....    | 198803.....  | 199710     |
| RD.....       | 199806.....  | 199906     |
| IRA.....      | 199606.....  | 199608     |
| RA(C).....    | 199606.....  | 199907     |
| LTM.....      | 200001.....  | 204609     |

**RIP Date:** N/A

**RC Date:** 199912

## SITE DESCRIPTION

The 1998 final ROD established a GMZ and remedial goals. Sulfur was removed in 1999. The property was transferred to the state of Illinois for use as an industrial park on Aug. 10, 2000. Four wells are monitored semiannually.

## CLEANUP/EXIT STRATEGY

Groundwater monitoring and five-year reviews will continue.

**Site ID: JAAP-009**

**Site Name: NORTHERN ASH PILE**

## STATUS

**Parcel:** NONE

**Regulatory Driver:** CERCLA

**RRSE:** LOW

**Contaminants of Concern:** Other (Sulfate)

**Media of Concern:** Soil

| <b>Phases</b> | <b>Start</b> | <b>End</b> |
|---------------|--------------|------------|
| PA.....       | 198711.....  | 198803     |
| SI.....       | 198711.....  | 198803     |
| RI/FS.....    | 198803.....  | 199710     |
| RD.....       | 199806.....  | 199907     |
| IRA.....      | 198711.....  | 199311     |
| RA(C).....    | 199904.....  | 200709     |
| LTM.....      | 200709.....  | 204609     |

**RIP Date:** N/A

**RC Date:** 200709

## SITE DESCRIPTION

Northern Ash Pile is approximately 6 acres in the north end of the manufacturing area. The contents are very similar to the Southern Ash Pile (JAAP-001), but this area 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. In 2001, as part of a maintenance action, the cap drainage was improved by increasing the grade (mixture of clay and treated soil from the biotreatment facility).

This property will be transferred to the state of Illinois. It is part of SRU6 (landfills).

In early 2006, the site was excavated (50,535 cy), disposed at WCLF (Prairie View) and re-graded using biotreated soils.

## CLEANUP/EXIT STRATEGY

Groundwater monitoring and five-year reviews will continue.

**Site ID: JAAP-011**  
**Site Name: M11 LANDFILL**

**STATUS**

**Parcel:** USDA 8 (423 acres)

**Regulatory Driver:** CERCLA

**RRSE:** LOW

**Contaminants of Concern:** Metals

**Media of Concern:** Groundwater, Soil

| <b>Phases</b> | <b>Start</b> | <b>End</b> |
|---------------|--------------|------------|
| PA.....       | 198711.....  | 198803     |
| SI.....       | 198711.....  | 198803     |
| RI/FS.....    | 198803.....  | 199710     |
| RD.....       | 199806.....  | 199906     |
| IRA.....      | 198711.....  | 199311     |
| RA(C).....    | 200409.....  | 200709     |
| LTM.....      | 200709.....  | 203709     |

**RIP Date:** N/A

**RC Date:** 200709

**SITE DESCRIPTION**

The original study site covered 100 acres in the southwestern portion of the manufacturing area. The area was mined for gravel and it later received a variety of wastes. The landfill area of approximately 20 acres was used from 1952 to 1978 and contains mostly construction debris. Manganese and sulfate waste pose a risk to the groundwater.

The consolidation of site debris resulted in capping about 11 acres of the site. It is part of SRU 6 (landfills). In 2007 construction of a Resource Conservation and Recovery Act (RCRA) Subtitle D cap was begun and was completed in 2008.

Per Illinois (IL) Administrative Code, 30 years of monitoring is required for the landfill.

The remaining 89 acres are managed as tall grass prairie and LUCs are reported annual by the USDA.

89 acres have been transferred to the USDA; the 11-acre landfill area is intended to be transferred to the USDA.

Costs associated with LTM are tracked under site JAAP-GWM.

**CLEANUP/EXIT STRATEGY**

LTM (including groundwater monitoring, cap maintenance, and LUCs) is funded under site JAAP-GWM.

LTM will continue for a fixed 30 years after the 2008 cap installation based on the 1998 ROD.

**Site ID: JAAP-013**  
**Site Name: M13 GRAVEL/EXCAVATION PITS**

**STATUS**

**Parcel:** JADA 8 (19 acres)

**Regulatory Driver:** CERCLA

**RRSE:** LOW

Contaminants of Concern: Metals, Semi-volatiles (SVOC)

Media of Concern: Soil

| <b>Phases</b>   | <b>Start</b>       | <b>End</b>    |
|-----------------|--------------------|---------------|
| PA.....         | 198711.....        | 198803        |
| SI.....         | 198711.....        | 198803        |
| RI/FS.....      | 198803.....        | 199710        |
| RD.....         | 199806.....        | 199906        |
| RA(C).....      | 200409.....        | 200709        |
| <b>LTM.....</b> | <b>200709.....</b> | <b>202209</b> |

**RIP Date:** N/A

**RC Date:** 200709

**SITE DESCRIPTION**

This area totals 130 acres in the central portion of the manufacturing area and contains four pits that were originally mined for gravel. Later, the unused pits received various disposals. Thirteen acres required a RCRA Subtitle D cap. The soil is contaminated with metals and SVOCs.

The site is part of SRU6 (landfills). In 2007, construction of a RCRA Subtitle D cap was begun and was completed in 2008. In August 2000 the acreage outside of the landfill area was transferred to the state of Illinois. The 13-acre landfill area will be transferred to the state.

Soils- 117 acres were part of the 1998 ROD for soils. All remedial goals have been met. Industrial use continues at the site. LUCs will be covered under the site-wide deed restriction verification program (SWDRIP), which is covered under JAAP-GWM.

Groundwater- The groundwater at this site is being monitored for two purposes. Fifteen years of groundwater monitoring is required to show the cap is protective. In addition, groundwater monitoring at this site is ongoing as part of the neighboring JAAP-006 site remediation. Groundwater for this site was covered in the 1998 ROD.

Groundwater costs are covered under JAAP-GWM.

**CLEANUP/EXIT STRATEGY**

LTM costs (including groundwater monitoring, LUCs and cap maintenance) will be captured under site JAAP-GWM.

Landfill post-closure monitoring is necessary for 15 years. However, groundwater monitoring at M13 may be required beyond that date until RGs have been met as part site JAAP-006.

Site ID: JAAP-0L1

Site Name: GROUP 61 TNT - RIDGE & FURROW SYSTEM

**STATUS**

Parcel: NONE

Regulatory Driver: CERCLA

RRSE: HIGH

Contaminants of Concern: Explosives, Polychlorinated Biphenyls (PCB), Semi-volatiles (SVOC)

Media of Concern: Groundwater, Soil

| Phases     | Start       | End    |
|------------|-------------|--------|
| PA.....    | 198711..... | 198803 |
| SI.....    | 198711..... | 198803 |
| RI/FS..... | 199001..... | 200312 |
| RD.....    | 199806..... | 200506 |
| RA(C)..... | 199908..... | 200606 |
| RA(O)..... | 200606..... | 204609 |

RIP Date: 200606

RC Date: 204609

**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 contains the Ridge-and-Furrow System, where ammunition washout effluent was allowed to evaporate.

This site is intended to be transferred to the USDA.

PCB contaminated soil (155 cy) was removed in August 1999.

This is a 2004 ROD site for contaminated soil and final remedial goals have been established. A GMZ and remedial goals were established in the 1998 ROD.

In FY06, approximately 12,000 cy of explosives contaminated soils was excavated and transported to site JAAP-004 for treatment. Approximately 1,900 cy of TPH contaminated soils was excavated and transported to site JAAP-004 for treatment.

**CLEANUP/EXIT STRATEGY**

Groundwater monitoring, funded under the JAAP-GWM site, will continue.

**Site ID: JAAP-0L2**  
**Site Name: EXPLOSIVE BURNING GROUND**

**STATUS**

**Parcel:** NONE

**Regulatory Driver:** CERCLA

**RRSE:** HIGH

Contaminants of Concern: Explosives, Metals

Media of Concern: Groundwater, Soil

| <b>Phases</b> | <b>Start</b> | <b>End</b> |
|---------------|--------------|------------|
| PA.....       | 198711.....  | 198803     |
| SI.....       | 198711.....  | 198803     |
| RI/FS.....    | 199001.....  | 200312     |
| RD.....       | 199806.....  | 200506     |
| IRA.....      | 199606.....  | 199702     |
| RA(C).....    | 200504.....  | 200709     |
| RA(O).....    | 200709.....  | 204609     |

**RIP Date:** 200709

**RC Date:** 204609

**SITE DESCRIPTION**

This site consists of 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. MEC were found at the site.

A GMZ and remedial goals have been established. This is a 2004 ROD site and final remedial goals have been established for soils. This site is intended to be transferred to the USDA.

Cleanup began in FY06 and was completed in FY07. Approximately 2,400 cy of metals contaminated soils were excavated and disposed at WCLF. A total of 946 cy of explosives contaminated soils were excavated and treated at the bioremediation treatment facility (BTF).

The MEC removal was completed in 2007.

**CLEANUP/EXIT STRATEGY**

Groundwater monitoring, funded under the JAAP-GWM site, will continue.



## STATUS

**Parcel:** USDA 8 (423 acres)

**Regulatory Driver:** CERCLA

**RRSE:** HIGH

Contaminants of Concern: Explosives, Metals, Munitions and explosives of concern (MEC)

Media of Concern: Soil

| Phases     | Start       | End    |
|------------|-------------|--------|
| PA.....    | 198711..... | 198803 |
| SI.....    | 198711..... | 198803 |
| RI/FS..... | 199001..... | 200312 |
| RD.....    | 199806..... | 200506 |
| IRA.....   | 199610..... | 199702 |
| RA(C)..... | 200410..... | 200809 |
| RA(O)..... | 200809..... | 204612 |

**RIP Date:** 200809

**RC Date:** 204612

## SITE DESCRIPTION

This site comprises 50 acres in the west central portion of the LAP area. It was used for open combustion of refuse and contained a fire training site. The fire training area and soils east of demolition pits have metals (SRU2). Areas within the berms have metals and explosives (SRU3). Berm soil was capped as part of SRU 6. MEC are present.

In 1997, the site was fenced as part of an interim remedial action (IRA). A GMZ has been established. This is a 1998 and 2004 ROD site and final remedial goals have been established for soils. About 3,330 cy of explosives and metals contaminated soil was excavated and disposed of at the WCLF. Construction of a seven acre landfill was completed in 2008. Approximately 28,800 cy of soil and debris were consolidated under the cap.

Soil on the site was addressed under the 2004 ROD. All RGs have been met for soil on this site.

A landfill was driven by a decision in the 1998 ROD. The solid waste comingled with munitions provided an unacceptable risk. The comingled waste was consolidated and capped in 2007. The ROD dictates 30 years of groundwater monitoring. The landfill is bound by Prairie Creek on the west. The original bank was designed for a 100-year storm. In 2010 and 2011 large storms compromised the stability of the bank armoring. Approximately 50 percent of the riprap was sent down stream.

Groundwater standards were set by the 1998 ROD. Groundwater RGs for this site have not been met.

This site is intended to be transferred to the USDA. The landfill portion of the site was renamed JAAP-001-R-03 due to the munitions present. In FY14, a contract was awarded to deconstruct the landfill. This action is captured under JAAP-001-R-03.

## CLEANUP/EXIT STRATEGY

Groundwater monitoring, funded under the JAAP-GWM site, will continue.

Site ID: JAAP-GWM

Site Name: INSTALLATION-WIDE GROUNDWATER

**STATUS**

Parcel: USDA 7 (442 acres),USDA 8 (423 acres)  
Regulatory Driver: CERCLA  
RRSE: HIGH  
Contaminants of Concern: Explosives, Metals, Volatiles (VOC)  
Media of Concern: Groundwater

| Phases     | Start       | End    |
|------------|-------------|--------|
| PA.....    | 198711..... | 198803 |
| SI.....    | 198711..... | 198803 |
| RI/FS..... | 199806..... | 199906 |
| RD.....    | 199906..... | 199912 |
| RA(C)..... | 199906..... | 199912 |
| RA(O)..... | 200001..... | 204609 |

RIP Date: 200001

RC Date: 204609

**SITE DESCRIPTION**

This site was created to address RA(O) and LTM at all JOAAP sites. Installation-wide, five-year reviews for soil and groundwater will be captured under this site. Groundwater monitoring will be conducted at six GMZs (including sites JAAP-0L1, 0L2, 0L3, L14, 001, 005, 006, 007, 008, 009, 011, and 013) and three landfills (JAAP-011, JAAP-013, and JAAP-0L3) as well as the SWDRIP (deed restriction compliance monitoring) and future five-year reviews.

The groundwater activities are being evaluated to optimize the program.

**CLEANUP/EXIT STRATEGY**

Groundwater monitoring will continue at all sites identified above. Wells not required for monitoring will be properly closed and abandoned. This site will cover all out-year RA(O), LTM, and deed restriction verification activities.

**Site ID: JAAP-L14**  
**Site Name: GROUP 4 - FUSE PRODUCTION**

**STATUS**

**Parcel:** NONE

**Regulatory Driver:** CERCLA

**RRSE:** HIGH

**Contaminants of Concern:** Explosives

**Media of Concern:** Groundwater, Soil

| <b>Phases</b> | <b>Start</b> | <b>End</b> |
|---------------|--------------|------------|
| PA.....       | 198711.....  | 198803     |
| SI.....       | 198711.....  | 198803     |
| RI/FS.....    | 199001.....  | 200312     |
| RD.....       | 199806.....  | 200509     |
| RA(C).....    | 200410.....  | 200606     |
| RA(O).....    | 200606.....  | 204612     |

**RIP Date:** 200606

**RC Date:** 204612

**SITE DESCRIPTION**

This site is in the southwestern portion of the LAP area and covers approximately 60 acres. This site was part of the fuze and booster area.

A GMZ and remedial goals were established in the 1998 ROD.

This site is intended to be transferred to the USDA.

This site is in the 2004 ROD which established final soil remedial goals.

In FY05, approximately 780 cy of explosives contaminated soil was excavated and transported to site JAAP-004 for treatment.

**CLEANUP/EXIT STRATEGY**

Groundwater monitoring, funded under the JAAP-GWM site, will continue.

## IRP Site Closeout (No Further Action) Summary

| Site ID  | Site Name                     | NFA Date | Documentation  |
|----------|-------------------------------|----------|--|
| JAAP-002 | EXPLOSIVE BURNING GROUNDS     | 200610   | Final Closure Report - Sites L1, L7, L8, L9, L10, L14, and M2, October 2006  |
| JAAP-003 | FLASHING GROUNDS              | 200706   | Final Closure Report - Sites L2, L5, L23A, M3, M4 and M12. Phase 2 Remedial Action - Soils OU, MWH, October 2009.  |
| JAAP-004 | LEAD AZIDE AREA               | 200712   | Final Closure Report - Sites L2, L5, L23A, M3, M4 and M12. Phase 2 Remedial Action - Soils OU, MWH, October 2009.  |
| JAAP-010 | TOLUENE TANK FARMS (3)        | 200004   | Final Closure Report - Site M10, JOAAP, March 2003   |
| JAAP-012 | SELLITE MANUFACTURING AREA    | 200706   | Final Closure Report - Sites L2, L5, L23A, M3, M4 and M12. Phase 2 Remedial Action - Soils OU, MWH, October 2009.  |
| JAAP-014 | FORMER POND AREA              | 199305   | 1998 ROD   |
| JAAP-015 | FORMER SEWAGE TREATMENT PLANT | 199305   | 1998 ROD   |
| JAAP-016 | MOTOR POOL AREA               | 199305   | 1998 ROD   |
| JAAP-017 | LAUNDRY FACILITY              | 199305   | 1998 ROD   |
| JAAP-018 | HERBICIDE STORAGE AREA        | 199305   | 1998 ROD   |
| JAAP-0L4 | L4 LANDFILL AREA              | 200708   | Final Remediation Report for Soil Operable Unit Number 6 - L4 Landfill, MKM Engineers, August 2007.  |
| JAAP-0L5 | SALVAGE YARD                  | 200709   | Final Closure Report - Sites L2, L5, L23A, M3, M4 and M12. Phase 2 Remedial Action - Soils OU, MWH, October 2009.  |
| JAAP-0L6 | GROUP 70 - MOTOR POOL         | 199711   | 1998 ROD   |
| JAAP-0L7 | GROUP 1                       | 200606   | Joliet Army Ammunition Plant; Wilmington, Illinois; Final Closure Report - Sites L1, L7, L8, L10, L14, M2; Phase II Remedial Action; Soils Operable Unit; Revision 1, Montgomery, Watson, Harza, October 2006. |
| JAAP-0L8 | GROUP 2                       | 200606   | Joliet Army Ammunition Plant; Wilmington, Illinois; Final Closure Report - Sites L1, L7, L8, L10, L14, M2; Phase II Remedial Action; Soils Operable Unit; Revision 1, Montgomery, Watson, Harza, October 2006. |
| JAAP-0L9 | GROUP 3                       | 200608   | Joliet Army Ammunition Plant; Wilmington, Illinois; Final Closure Report - Sites L1, L7, L8, L10, L14, M2; Phase II Remedial Action; Soils   |

## IRP Site Closeout (No Further Action) Summary

| Site ID       | Site Name                             | NFA Date | Documentation  |
|---------------|---------------------------------------|----------|--|
|               |                                       |          | Operable Unit; Revision 1, Montgomery, Watson, Harza, October 2006.      |
| JAAP-L10      | GROUP 3A                              | 200606   | Final Closure Report - Sites L1, L7, L8, L9, L10, L14, M2, October 2006. |
| JAAP-L11      | TEST SITE                             | 199912   | Final Closure Report - Sites L11 and L16, December 2003                  |
| JAAP-L12      | DOYLE LAKE AREA                       | 199412   | Final Record of Decision, October 1998                                   |
| JAAP-L13      | GROUP 68                              | 199412   | 1998 ROD   |
| JAAP-L15      | GROUP 5                               | 199604   | 1998 ROD   |
| JAAP-L16      | GROUP 6                               | 200212   | Final Closure Report - Site L11, L16, December 2003                      |
| JAAP-L17      | GROUP 7                               | 199912   | Final PCB Sites RA Report, December 2001                                 |
| JAAP-L18      | GROUP 8                               | 199412   | 1998 ROD   |
| JAAP-L19      | GROUP 9                               | 199604   | 1998 ROD   |
| JAAP-L20      | GROUP 20                              | 199412   | 1998 ROD   |
| JAAP-L21      | SANITARY LANDFILL                     | 199412   | 1998 ROD   |
| JAAP-L22      | GROUP 25 RAILROAD CLASSIFICATION YARD | 199412   | 1998 ROD   |
| JAAP-L23      | DISPOSAL PIT AT GROUP 27              | 200706   | 1998 ROD   |
| JAAP-L24      | GROUP 29                              | 199412   | 1998 ROD   |
| JAAP-L25      | GROUP 62                              | 199412   | 1998 ROD   |
| JAAP-L26      | GROUP 63                              | 199412   | 1998 ROD   |
| JAAP-L27      | GROUP 64                              | 199412   | 1998 ROD   |
| JAAP-L28      | GROUP 65                              | 199412   | 1998 ROD   |
| JAAP-L29      | RCRA HAZARDOUS STORAGE (GROUP 66)     | 199412   | 1998 ROD   |
| JAAP-L30      | GROUP 66A                             | 199412   | 1998 ROD   |
| JAAP-L31      | EXTRACTION PITS                       | 199412   | 1998 ROD   |
| JAAP-L32      | GROUP 60                              | 199510   | 1998 ROD   |
| JAAP-L33      | PVC AREA                              | 199412   | 1998 ROD   |
| JAAP-L34      | FORMER BURNING AREA                   | 199412   | 1998 ROD   |
| JAAP-L35      | FILL AREA                             | 199412   | 1998 ROD   |
| PBC at Joliet | PBC                                   | 201403   | All CLINs awarded  |

# IRP Schedule

Date of IRP Inception: 198711

## Past Phase Completion Milestones

1988

PA (JAAP-L14 - GROUP 4 - FUSE PRODUCTION, JAAP-L15 - GROUP 5, JAAP-L16 - GROUP 6, JAAP-L17 - GROUP 7, JAAP-L18 - GROUP 8, JAAP-L19 - GROUP 9, JAAP-L20 - GROUP 20, JAAP-L21 - SANITARY LANDFILL, JAAP-L22 - GROUP 25 RAILROAD CLASSIFICATION YARD, JAAP-L23 - DISPOSAL PIT AT GROUP 27, JAAP-L24 - GROUP 29, JAAP-L25 - GROUP 62, JAAP-L26 - GROUP 63, JAAP-L27 - GROUP 64, JAAP-L28 - GROUP 65, JAAP-L29 - RCRA HAZARDOUS STORAGE (GROUP 66), JAAP-L30 - GROUP 66A, JAAP-L31 - EXTRACTION PITS, JAAP-L32 - GROUP 60, JAAP-L33 - PVC AREA, JAAP-L34 - FORMER BURNING AREA, JAAP-L35 - FILL AREA, JAAP-001 - SOUTHERN ASH PILE, JAAP-002 - EXPLOSIVE BURNING GROUNDS, JAAP-003 - FLASHING GROUNDS, JAAP-004 - LEAD AZIDE AREA, JAAP-005 - M5 - TETRYL PRODUCTION AREA, JAAP-006 - M6 TNT DITCH COMPLEX, JAAP-007 - M7 - RED WATER AREA SOUTH OF TNT DITCH, JAAP-008 - ACID MANUFACTURING AREA, JAAP-009 - NORTHERN ASH PILE, JAAP-010 - TOLUENE TANK FARMS (3), JAAP-011 - M11 LANDFILL, JAAP-012 - SELLITE MANUFACTURING AREA, JAAP-0L2 - EXPLOSIVE BURNING GROUND, JAAP-0L3 - DEMO AREA, JAAP-0L4 - L4 LANDFILL AREA, JAAP-0L5 - SALVAGE YARD, JAAP-0L6 - GROUP 70 - MOTOR POOL, JAAP-0L7 - GROUP 1, JAAP-0L8 - GROUP 2, JAAP-0L9 - GROUP 3, JAAP-GWM - INSTALLATION-WIDE GROUNDWATER, JAAP-L10 - GROUP 3A, JAAP-013 - M13 GRAVEL/EXCAVATION PITS, JAAP-014 - FORMER POND AREA, JAAP-015 - FORMER SEWAGE TREATMENT PLANT, JAAP-016 - MOTOR POOL AREA, JAAP-017 - LAUNDRY FACILITY, JAAP-018 - HERBICIDE STORAGE AREA, JAAP-0L1 - GROUP 61 TNT - RIDGE & FURROW SYSTEM, JAAP-L11 - TEST SITE, JAAP-L12 - DOYLE LAKE AREA, JAAP-L13 - GROUP 68)

SI (JAAP-L14 - GROUP 4 - FUSE PRODUCTION, JAAP-L15 - GROUP 5, JAAP-L16 - GROUP 6, JAAP-L17 - GROUP 7, JAAP-L18 - GROUP 8, JAAP-L19 - GROUP 9, JAAP-L20 - GROUP 20, JAAP-L21 - SANITARY LANDFILL, JAAP-L22 - GROUP 25 RAILROAD CLASSIFICATION YARD, JAAP-L23 - DISPOSAL PIT AT GROUP 27, JAAP-L24 - GROUP 29, JAAP-L25 - GROUP 62, JAAP-L26 - GROUP 63, JAAP-L27 - GROUP 64, JAAP-L28 - GROUP 65, JAAP-L29 - RCRA HAZARDOUS STORAGE (GROUP 66), JAAP-L30 - GROUP 66A, JAAP-L31 - EXTRACTION PITS, JAAP-L32 - GROUP 60, JAAP-L33 - PVC AREA, JAAP-L34 - FORMER BURNING AREA, JAAP-L35 - FILL AREA, JAAP-001 - SOUTHERN ASH PILE, JAAP-002 - EXPLOSIVE BURNING GROUNDS, JAAP-003 - FLASHING GROUNDS, JAAP-004 - LEAD AZIDE AREA, JAAP-005 - M5 - TETRYL PRODUCTION AREA, JAAP-006 - M6 TNT DITCH COMPLEX, JAAP-007 - M7 - RED WATER AREA SOUTH OF TNT DITCH, JAAP-008 - ACID MANUFACTURING AREA, JAAP-009 - NORTHERN ASH PILE, JAAP-010 - TOLUENE TANK FARMS (3), JAAP-011 - M11 LANDFILL, JAAP-0L1 - GROUP 61 TNT - RIDGE & FURROW SYSTEM, JAAP-0L2 - EXPLOSIVE BURNING GROUND, JAAP-0L3 - DEMO AREA, JAAP-0L4 - L4 LANDFILL AREA, JAAP-0L5 - SALVAGE YARD, JAAP-0L6 - GROUP 70 - MOTOR POOL, JAAP-0L7 - GROUP 1, JAAP-0L8 - GROUP 2, JAAP-0L9 - GROUP 3, JAAP-GWM - INSTALLATION-WIDE GROUNDWATER, JAAP-012 - SELLITE MANUFACTURING AREA, JAAP-013 - M13 GRAVEL/EXCAVATION PITS, JAAP-014 - FORMER POND AREA, JAAP-015 - FORMER SEWAGE TREATMENT PLANT, JAAP-016 - MOTOR POOL AREA, JAAP-017 - LAUNDRY FACILITY, JAAP-018 - HERBICIDE STORAGE AREA, JAAP-L10 - GROUP 3A, JAAP-L11 - TEST SITE, JAAP-L12 - DOYLE LAKE AREA, JAAP-L13 - GROUP 68)

1993

RI/FS (JAAP-014 - FORMER POND AREA, JAAP-015 - FORMER SEWAGE TREATMENT PLANT, JAAP-016 - MOTOR POOL AREA, JAAP-017 - LAUNDRY FACILITY, JAAP-018 - HERBICIDE STORAGE AREA)

1994

IRA (JAAP-L21 - SANITARY LANDFILL, JAAP-007 - M7 - RED WATER AREA SOUTH OF TNT DITCH, JAAP-009 - NORTHERN ASH PILE, JAAP-011 - M11 LANDFILL)

1995

## 1995

RI/FS (JAAP-L18 - GROUP 8, JAAP-L20 - GROUP 20, JAAP-L21 - SANITARY LANDFILL, JAAP-L22 - GROUP 25 RAILROAD CLASSIFICATION YARD, JAAP-L24 - GROUP 29, JAAP-L25 - GROUP 62, JAAP-L26 - GROUP 63, JAAP-L27 - GROUP 64, JAAP-L28 - GROUP 65, JAAP-L29 - RCRA HAZARDOUS STORAGE (GROUP 66), JAAP-L30 - GROUP 66A, JAAP-L31 - EXTRACTION PITS, JAAP-L33 - PVC AREA, JAAP-L34 - FORMER BURNING AREA, JAAP-L35 - FILL AREA, JAAP-L12 - DOYLE LAKE AREA, JAAP-L13 - GROUP 68)

## 1996

IRA (JAAP-008 - ACID MANUFACTURING AREA)

RI/FS (JAAP-L15 - GROUP 5, JAAP-L17 - GROUP 7, JAAP-L19 - GROUP 9, JAAP-L32 - GROUP 60)

## 1997

RI/FS (JAAP-0L6 - GROUP 70 - MOTOR POOL)

RD (JAAP-0L6 - GROUP 70 - MOTOR POOL)

IRA (JAAP-001 - SOUTHERN ASH PILE, JAAP-006 - M6 TNT DITCH COMPLEX, JAAP-0L2 - EXPLOSIVE BURNING GROUND, JAAP-0L3 - DEMO AREA)

## 1998

RI/FS (JAAP-L16 - GROUP 6, JAAP-001 - SOUTHERN ASH PILE, JAAP-005 - M5 - TETRYL PRODUCTION AREA, JAAP-006 - M6 TNT DITCH COMPLEX, JAAP-007 - M7 - RED WATER AREA SOUTH OF TNT DITCH, JAAP-008 - ACID MANUFACTURING AREA, JAAP-009 - NORTHERN ASH PILE, JAAP-010 - TOLUENE TANK FARMS (3), JAAP-011 - M11 LANDFILL, JAAP-0L4 - L4 LANDFILL AREA, JAAP-013 - M13 GRAVEL/EXCAVATION PITS, JAAP-L11 - TEST SITE)

RA(C) (JAAP-0L6 - GROUP 70 - MOTOR POOL)

## 1999

RA(C) (JAAP-005 - M5 - TETRYL PRODUCTION AREA, JAAP-008 - ACID MANUFACTURING AREA, JAAP-010 - TOLUENE TANK FARMS (3))

RI/FS (JAAP-GWM - INSTALLATION-WIDE GROUNDWATER)

RD (JAAP-L16 - GROUP 6, JAAP-L17 - GROUP 7, JAAP-001 - SOUTHERN ASH PILE, JAAP-005 - M5 - TETRYL PRODUCTION AREA, JAAP-006 - M6 TNT DITCH COMPLEX, JAAP-007 - M7 - RED WATER AREA SOUTH OF TNT DITCH, JAAP-008 - ACID MANUFACTURING AREA, JAAP-009 - NORTHERN ASH PILE, JAAP-010 - TOLUENE TANK FARMS (3), JAAP-011 - M11 LANDFILL, JAAP-0L4 - L4 LANDFILL AREA, JAAP-013 - M13 GRAVEL/EXCAVATION PITS, JAAP-L11 - TEST SITE)

## 2000

LTM (JAAP-010 - TOLUENE TANK FARMS (3))

RA(C) (JAAP-L17 - GROUP 7, JAAP-GWM - INSTALLATION-WIDE GROUNDWATER, JAAP-L11 - TEST SITE)

RD (JAAP-GWM - INSTALLATION-WIDE GROUNDWATER)

## 2001

PA (PBC at Joliet - PBC)

## 2002

RA(C) (JAAP-007 - M7 - RED WATER AREA SOUTH OF TNT DITCH)

## 2003

RI/FS (JAAP-0L5 - SALVAGE YARD)

RA(C) (JAAP-L16 - GROUP 6)

## 2004

**2004**

RI/FS (JAAP-L14 - GROUP 4 - FUSE PRODUCTION, JAAP-L23 - DISPOSAL PIT AT GROUP 27, JAAP-002 - EXPLOSIVE BURNING GROUNDS, JAAP-003 - FLASHING GROUNDS, JAAP-004 - LEAD AZIDE AREA, JAAP-012 - SELLITE MANUFACTURING AREA, JAAP-0L1 - GROUP 61 TNT - RIDGE & FURROW SYSTEM, JAAP-0L2 - EXPLOSIVE BURNING GROUND, JAAP-0L3 - DEMO AREA, JAAP-0L7 - GROUP 1, JAAP-0L8 - GROUP 2, JAAP-0L9 - GROUP 3, JAAP-L10 - GROUP 3A)

**2005**

RA(C) (JAAP-006 - M6 TNT DITCH COMPLEX)

RD (JAAP-L14 - GROUP 4 - FUSE PRODUCTION, JAAP-L23 - DISPOSAL PIT AT GROUP 27, JAAP-002 - EXPLOSIVE BURNING GROUNDS, JAAP-003 - FLASHING GROUNDS, JAAP-004 - LEAD AZIDE AREA, JAAP-012 - SELLITE MANUFACTURING AREA, JAAP-0L1 - GROUP 61 TNT - RIDGE & FURROW SYSTEM, JAAP-0L2 - EXPLOSIVE BURNING GROUND, JAAP-0L3 - DEMO AREA, JAAP-0L5 - SALVAGE YARD, JAAP-0L7 - GROUP 1, JAAP-0L8 - GROUP 2, JAAP-0L9 - GROUP 3, JAAP-L10 - GROUP 3A)

**2006**

RA(C) (JAAP-L14 - GROUP 4 - FUSE PRODUCTION, JAAP-0L7 - GROUP 1, JAAP-0L8 - GROUP 2, JAAP-0L9 - GROUP 3, JAAP-0L1 - GROUP 61 TNT - RIDGE & FURROW SYSTEM, JAAP-L10 - GROUP 3A)

**2007**

RA(C) (JAAP-L23 - DISPOSAL PIT AT GROUP 27, JAAP-001 - SOUTHERN ASH PILE, JAAP-002 - EXPLOSIVE BURNING GROUNDS, JAAP-003 - FLASHING GROUNDS, JAAP-004 - LEAD AZIDE AREA, JAAP-009 - NORTHERN ASH PILE, JAAP-011 - M11 LANDFILL, JAAP-012 - SELLITE MANUFACTURING AREA, JAAP-0L2 - EXPLOSIVE BURNING GROUND, JAAP-0L4 - L4 LANDFILL AREA, JAAP-0L5 - SALVAGE YARD, JAAP-013 - M13 GRAVEL/EXCAVATION PITS)

**2008**

RA(O) (JAAP-004 - LEAD AZIDE AREA)

RA(C) (JAAP-0L3 - DEMO AREA)

**2010**

RA(O) (PBC at Joliet - PBC)

RA(C) (PBC at Joliet - PBC)

**2014**

LTM (PBC at Joliet - PBC)

**Projected Phase Completion Milestones**

See attached schedule

**Projected Record of Decision (ROD)/Decision Document (DD) Approval Dates**

| Site ID | Site Name | ROD/DD Title | ROD/DD Date |
|---------|-----------|--------------|-------------|
|---------|-----------|--------------|-------------|

**Final RA(C) Completion Date:** 201003

**Schedule for Next Five-Year Review:** 2019

**Estimated Completion Date of IRP at Installation (including LTM phase):** 204612



## JOLIET AAP IRP Schedule

  = phase underway

| SITE ID  | SITE NAME                              | PHASE | FY17 | FY18 | FY19 | FY20 | FY21 | FY22+ |
|----------|--|-------|------|------|------|------|------|-------|
| JAAP-001 | SOUTHERN ASH PILE                      | RA(O) |      |      |      |      |      |       |
| SITE ID  | SITE NAME                              | PHASE | FY17 | FY18 | FY19 | FY20 | FY21 | FY22+ |
| JAAP-005 | M5 - TETRYL PRODUCTION AREA            | LTM   |      |      |      |      |      |       |
| SITE ID  | SITE NAME                              | PHASE | FY17 | FY18 | FY19 | FY20 | FY21 | FY22+ |
| JAAP-006 | M6 TNT DITCH COMPLEX                   | RA(O) |      |      |      |      |      |       |
| SITE ID  | SITE NAME                              | PHASE | FY17 | FY18 | FY19 | FY20 | FY21 | FY22+ |
| JAAP-007 | M7 - RED WATER AREA SOUTH OF TNT DITCH | RA(O) |      |      |      |      |      |       |
| SITE ID  | SITE NAME                              | PHASE | FY17 | FY18 | FY19 | FY20 | FY21 | FY22+ |
| JAAP-008 | ACID MANUFACTURING AREA                | LTM   |      |      |      |      |      |       |
| SITE ID  | SITE NAME                              | PHASE | FY17 | FY18 | FY19 | FY20 | FY21 | FY22+ |
| JAAP-009 | NORTHERN ASH PILE                      | LTM   |      |      |      |      |      |       |
| SITE ID  | SITE NAME                              | PHASE | FY17 | FY18 | FY19 | FY20 | FY21 | FY22+ |
| JAAP-011 | M11 LANDFILL                           | LTM   |      |      |      |      |      |       |
| SITE ID  | SITE NAME                              | PHASE | FY17 | FY18 | FY19 | FY20 | FY21 | FY22+ |
| JAAP-013 | M13 GRAVEL/EXCAVATION PITS             | LTM   |      |      |      |      |      |       |
| SITE ID  | SITE NAME                              | PHASE | FY17 | FY18 | FY19 | FY20 | FY21 | FY22+ |
| JAAP-0L1 | GROUP 61 TNT - RIDGE & FURROW SYSTEM   | RA(O) |      |      |      |      |      |       |
| SITE ID  | SITE NAME                              | PHASE | FY17 | FY18 | FY19 | FY20 | FY21 | FY22+ |
| JAAP-0L2 | EXPLOSIVE BURNING GROUND               | RA(O) |      |      |      |      |      |       |
| SITE ID  | SITE NAME                              | PHASE | FY17 | FY18 | FY19 | FY20 | FY21 | FY22+ |
| JAAP-0L3 | DEMO AREA                              | RA(O) |      |      |      |      |      |       |
| SITE ID  | SITE NAME                              | PHASE | FY17 | FY18 | FY19 | FY20 | FY21 | FY22+ |
| JAAP-GWM | INSTALLATION-WIDE GROUNDWATER          | RA(O) |      |      |      |      |      |       |
| SITE ID  | SITE NAME                              | PHASE | FY17 | FY18 | FY19 | FY20 | FY21 | FY22+ |
| JAAP-L14 | GROUP 4 - FUSE PRODUCTION              | RA(O) |      |      |      |      |      |       |

**JOLIET AAP**  
**Non-BRAC Excess**  
**Military Munitions Response Program**

# MMRP Summary

**Installation Total Army Environmental Database-Restoration (AEDB-R) Sites/Closeout Sites Count:** 6/1

**Installation Site Types with Future and/or Underway Phases**

- 3 Burn Area  
(JAAP-001-R-01, JAAP-002-R-01, JAAP-004-R-01)
- 1 Open Burning/Open Detonation (OB/OD)  
(JAAP-001-R-03)
- 1 Unexploded Munitions/Ordnance  
(JAAP-001-R-02)

**Most Widespread Contaminants of Concern**

Munitions and explosives of concern (MEC)

**Media of Concern**

Soil

**Completed Remedial Actions (Interim Remedial Actions / Final Remedial Actions (IRA/FRA))**

| Site ID       | Site Name                 | Action | Remedy                 | FY   | Cost |
|---------------|---------------------------|--------|------------------------|------|------|
| JAAP-001-R-01 | L3 Buffer Area            | IRA    | UXO CLEARANCE          | 2008 | TBD  |
| JAAP-001-R-01 | L3 Buffer Area            | IRA    | INSTITUTIONAL CONTROLS | 2008 | TBD  |
| JAAP-002-R-01 | L2 Buffer Area            | IRA    | INSTITUTIONAL CONTROLS | 2008 | TBD  |
| JAAP-002-R-01 | L2 Buffer Area            | IRA    | UXO CLEARANCE          | 2008 | TBD  |
| JAAP-004-R-01 | FORMER BURNING AREA (L34) | IRA    | UXO CLEARANCE          | 2008 | TBD  |

**Duration of MMRP**

**Year of MMRP Inception:** 200304

**Estimated Date for Remedy-In-Place (RIP)/Response Complete (RC):** 202003/202003

**Date of MMRP completion including Long Term Management (LTM):** 205103

# MMRP Contamination Assessment

## Contamination Assessment Overview

The main concern of the Military Munitions Response Program (MMRP) is to ensure that the lands are safe for their intended public re-use. The five sites in the program have been transferred or will transfer to the USDA (US Forest Service) and are to be included in the Midewin National Tallgrass Prairie. As such, MEC clearance is required.

All five sites were associated with various open burn (OB)/open detonation (OD) operations. Sites JAAP-001-R-01, JAAP-001-R-02, and JAAP-002-R-01 are buffer areas around what were active OB/OD grounds. Site JAAP-004-R-01 was a series of burning pads. Site JAAP-001-R-03 is the capped area within L3 and will provide a site for removing the capped area.

The concern at sites JAAP-001-R-01, JAAP-001-R-02, and JAAP-002-R-01 is that burning operations within the active areas may have caused items to be scattered outwardly. This can occur if any munitions pop during the burn causing an adjacent item to become airborne. There is known ordnance scrap in boundary areas.

The concern at JAAP-004-R-01 stems from intact cases of non-metallic ordnance items being located there. Conventional ordnance detection practices may have failed to locate nonmetallic items.

Three of the five sites have undergone and passed investigations that addressed the potential for soil or groundwater contamination.

In September 2002, the closed, transferring, or transferred range inventory was completed.

In May 2005, the site inspection (SI) was completed for JAAP-001-R-01, JAAP-002-R-01, and JAAP-004-R-01. These three sites were recommended for further RA. A contract was awarded and the necessary responses were completed.

JAAP-001-R-02, established in January 2008, is the result of physical observation of MEC beyond the boundaries set for JAAP-001-R-01 and JAAP-002-R-01 during the IRA of those two sites. The SI for JAAP-001-R-02 was completed in fall of 2009. The RI is currently underway for this site.

JAAP-001-R-03 was established in 2011. This site is the capped area within IRP site L3. This site was created to spend MMRP money on just the MEC capped area of L3, therefore, differentiating the fact that the rest of L3 is not in need of attention.

## Cleanup Exit Strategy

JAAP-001-R-02 is expected to require site clearance. LTM and five-year reviews will be performed as required for all MMRP sites.

## MMRP Previous Studies

|             | <b>Title</b>   | <b>Author</b>                          | <b>Date</b> |
|-------------|--|--|-------------|
| <b>2001</b> | Ordnance Removal and Site Characterization (ORSC) Report   | US Army Engineering and Support Center | SEP-2001    |
| <b>2002</b> | Final Closed, Transferring and Transferred Range Inventory | e2M                                    | SEP-2002    |
| <b>2005</b> | Final SI, MMRP   | e2M                                    | MAY-2005    |
| <b>2008</b> | Final, Historical Records Review Addendum                  | Malcom Pirnie                          | NOV-2008    |
| <b>2009</b> | Final Site Inspection Addendum Work Plan                   | Malcom Pirnie                          | FEB-2009    |
|             | Final Site Inspection Addendum Report                      | Malcolm Pirnie                         | SEP-2009    |
| <b>2010</b> | L3 Site Specific Final Report                              | MKM                                    | MAY-2010    |
|             | L2 Site Specific Final Report                              | MKM                                    | MAY-2010    |
|             | L34 Site Specific Final Report                             | MKM                                    | MAY-2010    |
| <b>2011</b> | MMRP RI Work Plan JOAAP-001-R-02                           | Advent                                 | NOV-2011    |

**JOLIET AAP**  
**Non-BRAC Excess**  
**Military Munitions Response Program**  
**Site Descriptions**

**Site ID: JAAP-001-R-01**  
**Site Name: L3 Buffer Area**

**STATUS**

**Parcel:** NONE

**Regulatory Driver:** CERCLA

**MRSP Score:** No longer required

**Contaminants of Concern:** Munitions and explosives of concern (MEC)

**Media of Concern:** Soil

| <b>Phases</b> | <b>Start</b> | <b>End</b> |
|---------------|--------------|------------|
| PA.....       | 200304.....  | 200305     |
| SI.....       | 200309.....  | 200505     |
| RI/FS.....    | 200709.....  | 200809     |
| IRA.....      | 200510.....  | 200809     |
| LTM.....      | 200810.....  | 204609     |

**RIP Date:** N/A

**RC Date:** 200809

**SITE DESCRIPTION**

This 25-acre site consists of a buffer of about 200 feet surrounding the demolition area site in the west central portion of the LAP area that was used from 1940 to 1975. The area is of concern because of the possibility of kick-out from demolition operations.

The demolition area was used for OB of combustible refuse and munitions crates and was also the location of a fire training area consisting of less than one acre.

During the Ordnance Removal and Site Characterization (ORSC) study, one-half of a BLU-26/B munition was discovered as well as 30 other UXO items including 40 millimeter (mm) rifle grenades, M-T83 PD fuses, 57 mm projectiles, 155 mm projectiles, and 105 mm projectiles. The site characterization was not completed, so there is a possibility that more UXO are present at this site. This MMRP site surrounds the site identified under the AEDB-R program as JAAP-L3 and is currently undeveloped. It is scheduled to transfer to the USDA.

In 2007, an IRA of a one-foot deep clearance across the site was completed.

To complete proper closure under CERCLA, an RI/FS will be completed to summarize the work completed on the site and document LUCs as the selected remedy. The contract for RI/FS through DD was awarded in 2014. It was recommended to keep the LTM phase open, even though an RI/FS is underway.

The five-year review is going to be included in the installation-wide five-year review.

**CLEANUP/EXIT STRATEGY**

LTM will include the completion of the RI through DD documentation, five-year reviews, and LUCs. The cost of the five-year reviews and LUCs will be captured under site JAAP-GWM.

**Site ID: JAAP-001-R-02**  
**Site Name: L2-L3 Extended Buffer**

**STATUS**

**Parcel:** NONE

**Regulatory Driver:** CERCLA

**MRSP Score:** 03

**Contaminants of Concern:** Munitions and explosives of concern (MEC)

**Media of Concern:** Soil

| <b>Phases</b> | <b>Start</b> | <b>End</b> |
|---------------|--------------|------------|
| PA.....       | 200710.....  | 200711     |
| SI.....       | 200803.....  | 200909     |
| RI/FS.....    | 200910.....  | 201706     |
| RD.....       | 201501.....  | 201712     |
| RA(C).....    | 201709.....  | 202003     |
| LTM.....      | 202103.....  | 205103     |

**RIP Date:** N/A

**RC Date:** 202003

**SITE DESCRIPTION**

In 1999, an engineering evaluation/cost analysis (EE/CA) was prepared which recommended clearing a 200-foot buffer around IRP sites JAAP-0L2 and JAAP-0L3. The EE/CA was implemented; the findings and recommendations of the EE/CA were carried through the initial MMRP process.

The L2-L3 extended buffer is the result of physical observation of MEC beyond the boundaries set for JAAP-001-R-01 and JAAP-002-R-01 during the IRA of those two sites. Based on the types of munitions found at the Installation Restoration (IR) and Munitions Response (MR) sites, and the perimeters of the IR sites, a blast distance diagram was constructed. This resulted in an area of approximately 396 acres which does not include either the IR or MR sites inside this newly established site.

Both contractor and USACE personnel walked the property and found MEC similar to that found at both the IR and MR sites. The SI was completed in September 2009 and recommended approximately 200 acres for further study.

An RI was completed in FY15. After completion of the investigation of the 200 acres proposed in the SI, it was determined the investigation need to be expanded to include the original proposed 396 acres.

A follow-on contract was awarded in FY15 that requires the completion of an FS, proposed plan (PP), and ROD for the site.

Based on the RI findings, it is expected that surface clearance of the whole 396 acres will be needed and periodic MEC monitoring, along with LUCs will be required.

**CLEANUP/EXIT STRATEGY**

Pending the results of the RI, the following actions may be required:

- an FS,
- a remedial design (RD)
- a MEC RA,
- ICs, and
- five-year reviews.

One-foot UXO clearance, based on future land use, is anticipated.



**Site ID: JAAP-001-R-03**  
**Site Name: Capped L3 Area**

**STATUS**

**Parcel:** NONE

**Regulatory Driver:** CERCLA

**MRSP Score:** 04

Contaminants of Concern: Munitions and explosives of concern (MEC), Munitions constituents (MC)

Media of Concern: Soil

| <b>Phases</b> | <b>Start</b> | <b>End</b> |
|---------------|--------------|------------|
| PA.....       | 200606.....  | 200607     |
| SI.....       | 200606.....  | 200712     |
| RI/FS.....    | 201201.....  | 201712     |
| IRA.....      | 201303.....  | 201612     |

**RIP Date:** N/A

**RC Date:** 201712

**SITE DESCRIPTION**

This MMRP site addresses the munitions aspect of the Joliet L3 capped area. In 2007, it was determined that seven acres of IRP site L3 contained MEC and material presenting potential explosive hazard (MPPEH) at a higher density than the rest of the site. The remainder of the site was undergoing a one-foot removal action to address MEC that was deposited during OB/OD operations. When approaching these seven acres, the amount of metallic debris had increased such that a one-foot clearance would no longer be sufficient to address MEC concerns. Due to the limited technology at the time, the decision was made to cap this area of higher density material. The RA (cap) was captured under site JAAP-0L3.

Fill material from the popping furnace was placed over the seven acres as a soil cover and then the area was capped. The soil cover was certified as munitions debris and scrap prior to placement.

In 2011, heavy rains compromised the edge of the cap that runs along Prairie Creek. An action memorandum signed Aug. 26, 2014 calls for excavation and removal of the site.

The removal began in 2015 and will be complete in 2016.

**CLEANUP/EXIT STRATEGY**

The landfill will be removed, and a RI through DD will be completed.

**Site ID: JAAP-002-R-01**  
**Site Name: L2 Buffer Area**

**STATUS**

**Parcel:** NONE

**Regulatory Driver:** CERCLA

**MRSP Score:** No longer required

**Contaminants of Concern:** Munitions and explosives of concern (MEC)

**Media of Concern:** Soil

| <b>Phases</b> | <b>Start</b> | <b>End</b> |
|---------------|--------------|------------|
| PA.....       | 200304.....  | 200305     |
| SI.....       | 200309.....  | 200505     |
| RI/FS.....    | 200709.....  | 200809     |
| IRA.....      | 200510.....  | 200809     |
| LTM.....      | 200810.....  | 204509     |

**RIP Date:** N/A

**RC Date:** 200809

**SITE DESCRIPTION**

This site of approximately 22 acres consists of a band of about 200 feet surrounding the explosive burning ground in the west central portion of the LAP area. The area was used between 1940 and 1975 and is of concern because of the possibility of kick-out from the burning grounds.

The explosive burning ground was used for the open combustion of munitions and explosive wastes and also contained popping furnaces and oil disposal pits.

The burning grounds were suspected of containing BLU-26/B sub-munitions; however, only miscellaneous parts were located during the ORSC study. During the site characterization, 92 additional UXO items were discovered including M48 nose fuses, M66 base fuses, miscellaneous fuse boosters, and 75mm projectiles. The site characterization was not completed, so there is a possibility that more UXO is present. This site is intended to transfer to the USDA.

In 2007, an IRA of a one-foot deep clearance across the site was completed.

The decision was made to keep the LTM phase open even though an RI is currently underway.

To complete proper closure under CERCLA, a contract for RI through DD was awarded in FY14 and will likely document LUCs as the selected remedy.

**CLEANUP/EXIT STRATEGY**

LTM will include the completion of the RI through DD documentation, five-year reviews, and LUCs. The cost of the five-year reviews and LUCs will be captured under site JAAP-GWM.

**Site ID: JAAP-004-R-01**  
**Site Name: FORMER BURNING AREA (L34)**

**STATUS**

**Parcel:** NONE

**Regulatory Driver:** CERCLA

**MRSP Score:** No longer required

**Contaminants of Concern:** Munitions and explosives of concern (MEC)

**Media of Concern:** Soil

| <b>Phases</b> | <b>Start</b> | <b>End</b> |
|---------------|--------------|------------|
| PA.....       | 200304.....  | 200305     |
| SI.....       | 200309.....  | 200505     |
| RI/FS.....    | 200709.....  | 200809     |
| IRA.....      | 200510.....  | 200809     |
| LTM.....      | 200810.....  | 201610     |

**RIP Date:** N/A

**RC Date:** 200809

**SITE DESCRIPTION**

This site covers approximately 4.5 acres in the central portion of the LAP area. It was used to burn raw explosives and backfill materials. In 2007, an IRA was completed. During the ORSC study, ceramic items believed to be the bodies of nonmetallic mines containing explosive residues were located. Although UXO was not located during the study, 15 related scrap items were located consisting of ceramic and glass M5 mines and nose and base fuses. Less than 10 percent of this site was cleared, so there is a possibility that UXO may still be present. The site is identified under the AEDB-R program as JAAP- L34. The site is scheduled to transfer to the USDA.

To complete proper closure under CERCLA, an RI/FS is underway. The work was awarded in FY14.

**CLEANUP/EXIT STRATEGY**

LTM will include the completion of the RI through DD documentation.

## MMRP Site Closeout (No Further Action) Summary

| Site ID       | Site Name       | NFA Date | Documentation                      |
|---------------|-----------------|----------|------------------------------------|
| JAAP-003-R-01 | TRAINING AREA 7 | 200505   | MMRP Final Site Inspection by e2M. |

# MMRP Schedule

**Date of MMRP Inception** 200304

## Past Phase Completion Milestones

### 2003

PA (JAAP-002-R-01 - L2 Buffer Area, JAAP-003-R-01 - TRAINING AREA 7, JAAP-004-R-01 - FORMER BURNING AREA (L34), JAAP-001-R-01 - L3 Buffer Area)

### 2005

SI (JAAP-002-R-01 - L2 Buffer Area, JAAP-003-R-01 - TRAINING AREA 7, JAAP-004-R-01 - FORMER BURNING AREA (L34), JAAP-001-R-01 - L3 Buffer Area)

### 2006

PA (JAAP-001-R-03 - Capped L3 Area)

### 2008

SI (JAAP-001-R-03 - Capped L3 Area)

PA (JAAP-001-R-02 - L2-L3 Extended Buffer)

RI/FS (JAAP-002-R-01 - L2 Buffer Area, JAAP-004-R-01 - FORMER BURNING AREA (L34), JAAP-001-R-01 - L3 Buffer Area)

IRA (JAAP-002-R-01 - L2 Buffer Area, JAAP-004-R-01 - FORMER BURNING AREA (L34), JAAP-001-R-01 - L3 Buffer Area)

### 2009

SI (JAAP-001-R-02 - L2-L3 Extended Buffer)

## Projected Phase Completion Milestones

See attached schedule

## Projected Record of Decision (ROD)/Decision Document (DD) Approval Dates

| Site ID       | Site Name                 | ROD/DD Title                      | ROD/DD Date |
|---------------|---------------------------|-----------------------------------|-------------|
| JAAP-001-R-02 | L2-L3 Extended Buffer     | Expanded Buffer Area DD           | 20160915    |
| JAAP-004-R-01 | FORMER BURNING AREA (L34) | DD for 001R01, 002R01, and 004R01 | 20171225    |
| JAAP-001-R-01 | L3 Buffer Area            | DD for 001R01, 002R01, and 004R01 | 20171225    |
| JAAP-002-R-01 | L2 Buffer Area            | DD for 001R01, 002R01, and 004R01 | 20171225    |

**Final RA(C) Completion Date:** 202003

**Schedule for Next Five-Year Review:** 2019

**Estimated Completion Date of MMRP at Installation (including LTM phase):** 205103

## JOLIET AAP MMRP Schedule

= phase underway

| SITE ID       | SITE NAME                 | PHASE | FY17 | FY18 | FY19 | FY20 | FY21 | FY22+ |
|---------------|---------------------------|-------|------|------|------|------|------|-------|
| JAAP-001-R-01 | L3 Buffer Area            | LTM   |      |      |      |      |      |       |
| SITE ID       | SITE NAME                 | PHASE | FY17 | FY18 | FY19 | FY20 | FY21 | FY22+ |
| JAAP-001-R-02 | L2-L3 Extended Buffer     | RI/FS |      |      |      |      |      |       |
|               |                           | RD    |      |      |      |      |      |       |
|               |                           | RA(C) |      |      |      |      |      |       |
|               |                           | LTM   |      |      |      |      |      |       |
| SITE ID       | SITE NAME                 | PHASE | FY17 | FY18 | FY19 | FY20 | FY21 | FY22+ |
| JAAP-001-R-03 | Capped L3 Area            | RI/FS |      |      |      |      |      |       |
|               |                           | IRA   |      |      |      |      |      |       |
| SITE ID       | SITE NAME                 | PHASE | FY17 | FY18 | FY19 | FY20 | FY21 | FY22+ |
| JAAP-002-R-01 | L2 Buffer Area            | LTM   |      |      |      |      |      |       |
| SITE ID       | SITE NAME                 | PHASE | FY17 | FY18 | FY19 | FY20 | FY21 | FY22+ |
| JAAP-004-R-01 | FORMER BURNING AREA (L34) | LTM   |      |      |      |      |      |       |

## Community Involvement

**Technical Review Committee (TRC):** None

**Community Involvement Plan (Date Published):** 201102

**Restoration Advisory Board (RAB):** RAB established 1995

**RAB Adjournment Date:**

**RAB Adjournment Reason:**

### Additional Community Involvement Information

Community involvement was initiated with the 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 RAB then met bi-monthly through September 2007.

The mission of the RAB is to:

- represent the community by facilitating communications and coordination between the community and the appropriate government agencies in the environmental cleanup of the JOAAP;
- critically review and comment on pertinent environmental cleanup documents;
- make recommendations to the US Army and other appropriate governmental agencies regarding cleanup methods and priorities; and
- encourage public participation in accomplishing these goals.

Past meeting activities have included several installation tours, media coverage (radio, television, newspaper), an open house, special training events, and guest speakers. Individual RAB members participated in the first IAP workshop, Region V RAB forum, Defense Environmental Restoration Program (DERP) workshops, public speaking engagements, and radio and newspaper interviews.

Several RAB members participated in ecological and human health workgroups formed to finalize interim ROD issues.

A RAB meeting is called annually. An adjournment meeting will be held after the final land transfer. The last RAB meeting was September 2009. In the interim, an annual summary of events within the IRP and MMRP is distributed to the RAB annually in October. Feedback from these, if any, will be used to gauge the value of resuming regular meetings.

### Administrative Record is located at

Joliet Army Ammunition Plant  
Administrative Building  
29401 South Route 53  
Wilmington, IL 60481  
(815)423-2870

### Information Repository is located at

Joliet Army Ammunition Plant  
Administrative Building  
29401 South Route 53  
Wilmington, IL 60481  
(815)423-2870

**Current Technical Assistance for Public Participation (TAPP):** N/A

**TAPP Title:** N/A

**Potential TAPP:** N/A

