# FINDING OF SUITABILITY TO TRANSFER (FOST)

Joliet Army Ammunition Plant, IL (JOAAP)

"T-6" to State of Illinois

June 2020

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#### 1. PURPOSE

The purpose of this Finding of Suitability to Transfer (FOST) is to document the environmental suitability of certain Tracts (the Property) at Joliet Army Ammunition Plant (JOAAP), Illinois for transfer to the State of Illinois consistent with Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Section 120(h) and Department of Defense (DOD). In addition, the FOST includes the CERLCA Notice, Covenant and Access Provisions and other Deed Provisions, and the Environmental Protection Provisions (EPPs) necessary to protect human health or the environment after transfer.

SPECIAL NOTE – In August 2000 the Army and the Joliet Arsenal Development Authority (JADA) entered a Memorandum of Agreement (MOA) regarding the transfers and development of the properties conveying to the State of Illinois. Within the MOA is Section 3.02 which, paraphrased, states that after the initial transfer of August 2000, subsequent transfers and Deeds would be, to the extent practical, substantially similar. This FOST is written in the style, format and character of the original to assist in the preparation of the Deed to follow.

#### 2. PROPERTY DESCRIPTION

The property consists of approximately 31.386 acres contained in two Tracts. Neither Tracts contained any buildings nor other improvements:

- A. Site M9 (Northern Ashpile). This Tract consists of approximately 10.136 acres and 0 buildings and structures. The Army used this area during 1966 and 1967 to landfill the ash residues from the incineration of Trinitrotoluene (TNT) manufacturing waste.
- B. Site M13 (Gravel Pit). This Tract consists of approximately 21.25 total acres of which 10.8 acres are capped, and 0 buildings and structures. The difference includes access area, driveway, anchor and drainage trench and buffer. The site was originally delineated as 106 acres, but during the Remedial Investigation/Feasibility Study Phase (RI/FS), the size of the impacted area was determined to be contained within 10.8 acres. The balance was removed from further environmental consideration. Installation records and aerial photography indicate that landfilling activities at the Gravel Pit began in 1966 and ceased in 1984.

The Property is intended to be transferred for industrial use. This use is consistent with the intended reuse of the property, as set forth in Public Law 104-106, and the Joliet Arsenal Development Authority (JADA) Reuse Plan. A site map of the Property, with plat of survey and description is attached (Enclosures 1A, 1B, and 1C).

#### 3. ENVIRONMENTAL DOCUMENTATION

A determination of the environmental condition of the Property has been made based on the starting site conditions as presented in the National Environmental Policy Act (NEPA) analysis, Enhanced Preliminary Assessment Screening/ Environmental Baseline Survey, Land Transfer to the State of Illinois for Industrial Parks (PAS) dated September 1997, the Remedial Investigation/Feasibility Reports, 1998 Record of Decision (ROD), as well as the Enhanced Preliminary Assessment Screening (Environmental Baseline Survey) -, Remedial Action closure reports, and various site survey reports. The information provided is a result of a complete search of agency files during the development of these environmental surveys.

A complete list of documents that provide information on environmental conditions of the Property is attached (Enclosure 2).

#### 4. ENVIRONMENTAL CONDITION OF PROPERTY

The DOD ECP Categories for the Property is: **ECP Category 4.** 

A summary of the ECP Categories for specific parcels is provided in Table 1 – Description of Property (Enclosure 3).

#### 4.1. Environmental Remediation Sites

There were two (2) soil remediation sites located on the Property. A summary of the environmental remediation sites is found below. The Army has conducted the following groundwater and soil remediation activities on the Property:

#### Groundwater -

• Explosive contaminants have been detected in portions of the glacial drift (shallow) groundwater beneath the Property. The 1998 JOAAP installation-wide ROD selected a Limited Action Remedy. The Limited Action Remedy includes: establishing Groundwater Management Zones (GMZs), deed and zoning restrictions, periodic inspections, groundwater and surface-water monitoring and natural attenuation. These actions became part of the Groundwater Operable Unit remedy. At these Tracts, if future excavations or development should encounter groundwater, the soils at this depth must be assumed to be contaminated at a level above the industrial RG. Proper sampling, analysis, handling and disposal methods must be implemented. The map depicting the locations of the Groundwater Monitoring wells is provided at Enclosure 7. See Site M9 and M13 Closure Reports for additional information.

#### **Soil Remediation -**

• **Site M9.** Northern Ashpile Background: The Northern Ashpile was constructed in 1966 and 1967 as a landfill for ash residues from the incineration of TNT manufacturing wastes. The area of the Ashpile is approximately 6 acres. The Ashpile was approximately 10 to 15 feet tall with a domed top and steep sides. It was originally estimated to contain approximately 124,000 cubic yards (cy), however, it was not as deep as originally thought. During excavation, the actual volume of redwater ash was 50,535 cy.

The removal action began December 7, 2005 and was concluded on February 26, 2006. During this time, 50,535 cy of redwater ash was excavated, loaded into fully permitted, licensed and registered vehicles for transport to the Prairie View RFD (aka Will County Landfill (WCLF)). 3,369 loads were shipped.

Per the approved RD/RA Workplan, field observations were used to verify that remedial objectives were being met and that the redwater ash had been completely removed from the site. During the Removal Action several site visits and inspections were performed incrementally by members of the regulatory agencies and the US Army Corps of Engineers (USACE). The USACE also supplied daily on-site overview and quality inspections during remediation.

Backfilling and site restoration activities were conducted from February 27, 2006 through April 18, 2006. The site was hydroseeded on April 26, 2006.

The completed work was inspected by members of the USACE, USEPA, IL EPA, and contractor on March 24, 2006.

The Final M9 Remedial Action Completion Report was submitted for approval to the USEPA and IL EPA on September 6, 2007 and was subsequently accepted.

For further information about the Remedial Action, see Final M9 Remedial Action Completion Report, Soils Operable Unit, M9 Northern Ashpile, Joliet Army Ammunition Plant, IL, dated September 6, 2007.

• **Site M13.** Gravel Pit Background: Installation records and aerial photographs indicate that landfill activities took place between 1966 and 1984. Per the 1998 ROD, the northern gravel pit contains scrap metal, creosote-treated railroad ties and telephone poles, and a variety of construction and office debris. None of the other pits were identified as containing wastes that pose potential threats to human health or the environment. Site related soil contaminants include beryllium, lead, and benzo(a)pyrene. The remedy selected in the 1998 ROD was a RCRA Subtitle D landfill cap to be constructed over M13.

Cap construction activities began in November 2006, and after weather related suspensions, were completed August 27, 2008. Simply stated, the cap consists of a gas venting system, grading layer with a minimum 12 inches to establish the general topography of the cap, 40-mil geomembrane of low linear density polyethylene, a Geonet to provide drainage above the membrane, a minimum 30 inch rooting zone, and six (6) inches of topsoil and seeding. The cap system also has 12 inches of riprap gravel at the toe of the cap and within the drainage swale surrounding the cap as well as fencing. All remedial work was overseen, daily, by representatives of the USACE.

The remedy in the 1998 ROD also requires that the Army perform 15 years of Post-closure care and monitoring, and that the maintenance and monitoring of the landfill remains a responsibility of the US Army.

The Final M13 Remedy in Place report was submitted for approval in September 2009 and was subsequently accepted by the USEPA and the IL EPA.

The Post-closure care activities began in April 2009 and continue on an annual basis.

For further information about the Remedial Action, see Final M13 Remedy in Place Report, Joliet Army Ammunition Plant, IL, dated September 2009.

All soil remediation and groundwater remediation activities on the Property have been completed or are in place and operating properly and successfully. A summary of the investigation/remediation sites is provided in Table 2 – Notification of Hazardous Substance Storage, Release, or Disposal (Enclosure 4).

The deed will include the requisite landfill cap protective restriction, no residential use restriction and groundwater restrictions which are included in the Environmental Protection Provisions (Enclosure 6).

#### 4.2. Storage, Release, or Disposal of Hazardous Substances

Hazardous substances were stored for one year or more and released or disposed of on the Property, in excess of reportable quantities specified in 40 CFR Part 373. All hazardous substance storage operations have been terminated on the Property. Hazardous substances were released in excess of the 40 CFR 373 reportable quantities at the following sites: Site M9 and Site M13. The hazardous substance releases were remediated at the time of the release or, where required, were subsequently remediated as part of the installation restoration program. A summary of the buildings or areas in which hazardous substance storage occurred is provided in Table 2 – Notification of Hazardous Substance Storage, Release, or Disposal (Enclosure 4). The CERCLA 120(h)(3) Notice, Description, and Covenant at Enclosure \_ will be included in the Deed.

#### 4.3. Petroleum and Petroleum Products

#### **4.3.1.** Underground and Above-Ground Storage Tanks (UST/AST)

There is no evidence that petroleum products were stored in underground or above-ground storage tanks on the Property.

#### 4.3.2. Non-UST/AST Storage, Release, or Disposal of Petroleum Products

There is no evidence that non-UST/AST petroleum products in excess of 55 gallons were stored for one year or more on the Property.

#### 4.4. Polychlorinated Biphenyl (PCB) Equipment

There is no evidence that PCB-containing equipment is located or was previously located on the Property.

#### 4.5. Asbestos

There is no asbestos-containing material (ACM) located on the Property because there were no buildings or other structures on either Tract.

#### 4.6. Lead-Based Paint (LBP)

There is no lead-based paint on the Property because there were no buildings or other structures on either Tract.

#### 4.7. Indoor Firing Ranges

There were no indoor firing ranges because there were no buildings or other structures on either Tract.

#### 4.8. Radiological Materials

There is no evidence that the radioactive material or sources were used or stored on the Property.

#### 4.9. Radon

Radon surveys were not conducted on the Property because there were no building basements to test, and the Property shall not be used for residential purposes.

#### **4.10.** Munitions and Explosives of Concern<sup>1</sup> (MEC)

Based on a review of existing records and available information, there is no evidence that Munitions and Explosives of Concern (MEC) are present on the Property. The Property was never used for production, testing, nor disposal of explosives or munitions, and there is no evidence of explosives contamination.

#### 4.11. Other Property Conditions

There are no other hazardous conditions on the property that present an unacceptable risk to human health and the environment.

#### 5. ADJACENT HAZARDOUS CONDITIONS

There are no conditions adjacent to the property that present an unacceptable risk to human health and the environment.

#### 6. ENVIRONMENTAL REMEDIATION AGREEMENTS

The following environmental remediation orders/agreements are applicable to the Property: The 1989 Federal Facility Agreement (FFA), and the 1998 ROD. All remediation activities on the property, required by such agreement or order, are completed or in place and operating properly and successfully. The deed will include a provision reserving the Army's right to conduct remediation activities (see Enclosure 5). The Army's remedial action includes institutional controls (see Section 4.3.2 above). The Army has previously agreed to take the following measures to ensure institutional controls are not violated in the future:

- During monitoring events, the Army will be diligent in observing any land uses prohibited by either the deed or law, any new wells, or other groundwater impacts within the GMZ and will investigate the cause of any unexpected groundwater analysis trends. A report on the above findings will be included in the Annual Report, submitted as part of the long-term monitoring program. In addition, regular 5-year reviews will evaluate the effectiveness of the remedial action remedies for soil and groundwater.
- The Army will query the landowner of record on an annual basis to determine that the integrity of the deed restrictions has not been compromised. In addition, a random number of sites will

<sup>1</sup> <u>Munitions and Explosives of Concern (MEC)</u>. This term, which distinguishes specific categories of military munitions that may pose unique explosives safety risks means: (A) Unexploded ordnance (UXO), as defined in 10 U.S.C. §101(e)(5)(A) through (C); (B) Discarded military munitions (DMM), as defined in 10 U.S.C. §2710(e)(2); or (C) Munitions constituents (e.g., TNT, RDX), as defined in 10 U.S.C. §2710(e)(3), present in high enough concentrations to pose an explosive hazard.

be inspected by army personnel. A summary of findings from these actions will be sent to each of the FFA parties: The Army, the United States Environmental Protection Agency (USEPA), and the Illinois EPA. The Army has also included language in the Deed for "Right of Access" for the FFA parties and, in accordance with the 1998 ROD, has provided notification to the Will County (IL) Recorder's Office concerning the environmental issues of the site. See Memorandum of Agreement between Department of Army and the Joliet Arsenal Development Authority for the Transfer of Joliet Army Ammunition Plant Property, dated August 2, 2000.

#### 7. REGULATORY/PUBLIC COORDINATION

The U.S. EPA Region 5, the Illinois Environmental Protection Agency, and the public were notified of the initiation of the FOST. Regulatory/public comments received during the FOST development will be incorporated as appropriate. All regulatory/public comments and the Army Responses are included in the FOST (Enclosures 7 and 8).

#### 8. NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) COMPLIANCE

The environmental impacts associated with proposed transfer of the Property have been analyzed in accordance with the National Environmental Policy Act (NEPA). The results of this analysis have been documented in the Environmental Assessment for the Conveyance of Land, Joliet Army Ammunition Plant, IL, November 1997. No encumbrances or conditions were identified in such analysis as necessary to protect human health or the environment that require incorporation into the FOST.

#### 9. FINDINGS OF SUITABILITY TO TRANSFER

Based on the above information, I conclude that all removal or remedial actions necessary to protect human health and the environment have been taken and the Property is transferable under CERCLA section 120(h)(3). In addition, all DOD requirements to reach a finding of suitability to transfer have been met subject to the terms and conditions set forth in the attached Environmental Protection Provisions, which shall be included in the deed for the Property. The Environmental Protection Provisions also include the CERCLA 120(h)(3) Notice, Covenant, Access Provisions and Other Deed Provisions. The hazardous substance notification (Table 2) shall be included in the deed as required under the CERCLA Section 120(h) and DOD FOST Guidance.

THOMAS E. LEDERLE Chief, BRAC Division HQDA, DCS, G-9

9 Enclosures

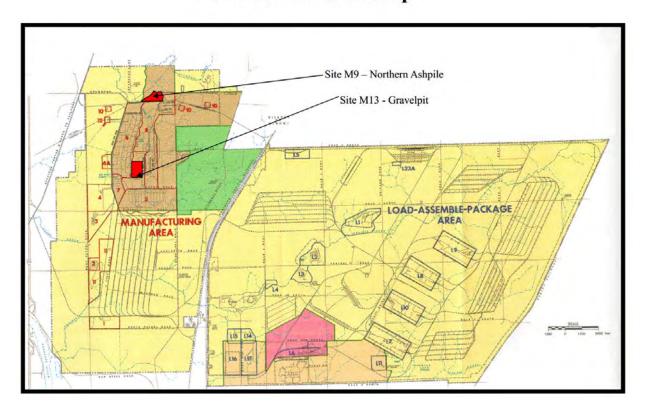
#### **List of Enclosures**

#### Encl 1.A. Transfer Parcel Locator Map

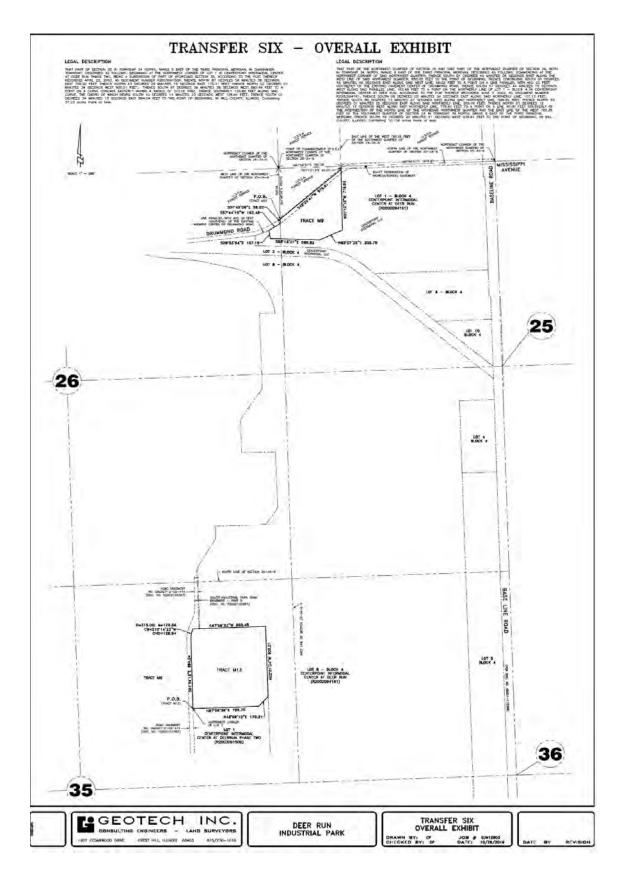
- 1.B. Plat of Survey Maps
- 1.C. Legal Descriptions
- Encl 2. Environmental Documentation
- Encl 3. Table 1: Description of Property
- Encl 4. Table 2: Notification of Hazardous Substance Storage, Release, or Disposal
- Encl 5. CERCLA Notice, Covenant, and Access Provision and Other Deed Provisions
- Encl 6. Environnemental Protection Provisions and Army Responses
- Encl 7. Regulatory/Public Comments
- Encl 8. Army Response
- Encl 9. Groundwater Map
- Site Photographs

### Encl. 1A

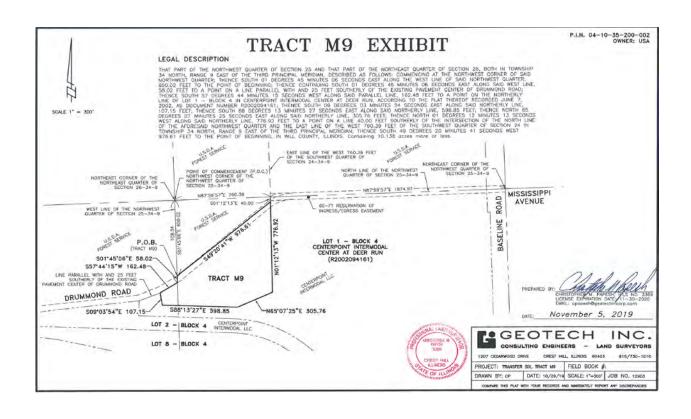
### **JADA T-6 Parcel Map**



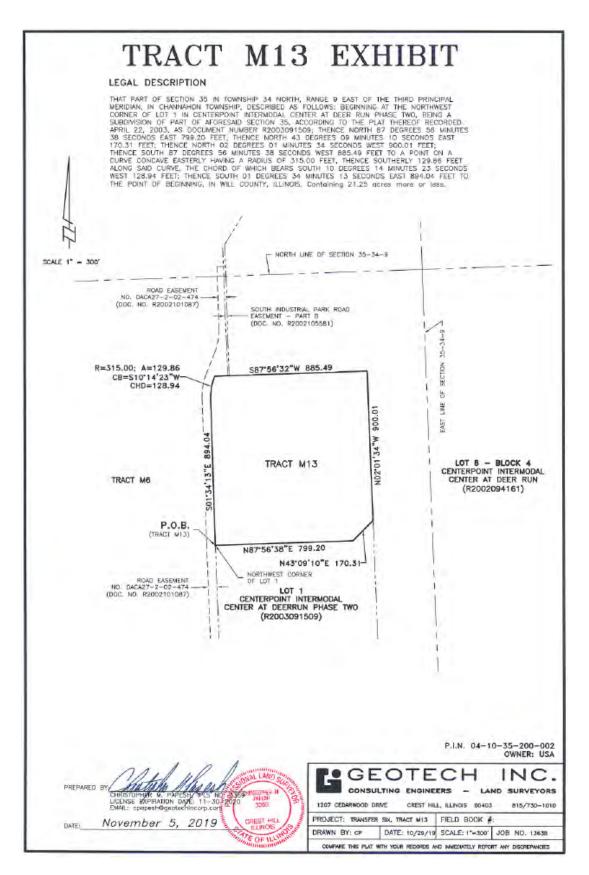
Encl. 1.A.



Encl. 1.B.a



Encl. 1.B.b



Encl. 1.B.c

## LEGAL DESCRIPTION TRACT M9

THAT PART OF THE NORTHWEST QUARTER OF SECTION 25 AND THAT PART OF THE NORTHEAST QUARTER OF SECTION 26, BOTH IN TOWNSHIP 34 NORTH, RANGE 9 EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS: COMMENCING AT THE NORTHWEST CORNER OF SAID NORTHWEST QUARTER; THENCE SOUTH 01 DEGREES 45 MINUTES 06 SECONDS EAST ALONG THE WEST LINE OF SAID NORTHWEST QUARTER, 650.02 FEET TO THE POINT OF BEGINNING; THENCE CONTINUING SOUTH 01 DEGREES 45 MINUTES 06 SECONDS EAST ALONG SAID WEST LINE, 58.02 FEET TO A POINT ON A LINE PARALLEL WITH AND 25 FEET SOUTHERLY OF THE EXISTING PAVEMENT CENTER OF DRUMMOND ROAD; THENCE SOUTH 57 DEGREES 44 MINUTES 15 SECONDS WEST ALONG SAID PARALLEL LINE, 162.48 FEET TO A POINT ON THE NORTHERLY LINE OF LOT 1 – BLOCK 4 IN CENTERPOINT INTERMODAL CENTER AT DEERRUN, ACCORDING TO THE PLAT THEREOF RECORDED JUNE 7, 2002, AS DOCUMENT NUMBER R2002094161; THENCE SOUTH 09 DEGREES 03 MINUTES 54 SECONDS EAST ALONG SAID NORTHERLY LINE, 107.15 FEET; THENCE SOUTH 88 DEGREES 13 MINUTES 27 SECONDS EAST ALONG SAID NORTHERLY LINE, 598.85 FEET; THENCE NORTH 65 DEGREES 07 MINUTES 25 SECONDS EAST ALONG SAID NORTHERLY LINE, 305.76 FEET; THENCE NORTH 01 DEGREES 12 MINUTES 13 SECONDS WEST ALONG SAID NORTHERLY LINE, 776.92 FEET TO A POINT ON A LINE 40.00 FEET SOUTHERLY OF THE INTERSECTION OF THE NORTH LINE OF THE AFORESAID NORTHWEST QUARTER AND THE EAST LINE OF THE WEST 760.39 FEET OF THE SOUTHWEST QUARTER OF SECTION 24 IN TOWNSHIP 34 NORTH, RANGE 9 EAST OF THE THIRD PRINCIPAL MERIDIAN; THENCE SOUTH 49 DEGREES 20 MINUTES 41 SECONDS WEST 976.61 FEET TO THE POINT OF BEGINNING, IN WILL COUNTY, ILLINOIS. Containing 10.136 acres more or less.

#### **LEGAL DESCRIPTION**

#### TRACT M-13

THAT PART OF SECTION 35 IN TOWNSHIP 34 NORTH, RANGE 9 EAST OF THE THIRD PRINCIPAL MERIDIAN, IN CHANNAHON TOWNSHIP, DESCRIBED AS FOLLOWS: BEGINNING AT THE NORTHWEST CORNER OF LOT 1 IN CENTERPOINT INTERMODAL CENTER AT DEER RUN PHASE TWO, BEING A SUBDIVISION OF PART OF AFORESAID SECTION 35, ACCORDING TO THE PLAT THEREOF RECORDED APRIL 22, 2003, AS DOCUMENT NUMBER R2003091509; THENCE NORTH 87 DEGREES 56 MINUTES 38 SECONDS EAST 799.20 FEET; THENCE NORTH 43 DEGREES 09 MINUTES 10 SECONDS EAST 170.31 FEET; THENCE NORTH 02 DEGREES 01 MINUTES 34 SECONDS WEST 900.01 FEET; THENCE SOUTH 87 DEGREES 56 MINUTES 38 SECONDS WEST 885.49 FEET TO A POINT ON A CURVE CONCAVE EASTERLY HAVING A RADIUS OF 315.00 FEET, THENCE SOUTHERLY 129.86 FEET ALONG SAID CURVE, THE CHORD OF WHICH BEARS SOUTH 10 DEGREES 14 MINUTES 23 SECONDS WEST 128.94 FEET; THENCE SOUTH 01 DEGREES 34 MINUTES 13 SECONDS EAST 894.04 FEET TO THE POINT OF BEGINNING, IN WILL COUNTY, ILLINOIS. Containing 21.25 acres more or less.

#### Encl 2

#### **Environmental Documentation and Reference Material**

- 1. Enhanced Preliminary Assessment Screening (Environmental Baseline Survey), Land Transfer to State of Illinois for Industrial Parks, Joliet Army Ammunition Plant, Will County, Illinois, September 1997
- 2. Record of Decision, Soil and Groundwater Operable Units, Manufacturing and Load-Assemble-Package Areas, Joliet Army Ammunition Plant, Wilmington, Illinois, October 1998
- 3. Final Closure Report, Site M9, Joliet Army Ammunition Plant, June 2006
- 4. Final Closure Report, Site M13, Joliet Army Ammunition Plant, November 2003
- 5. Public Law 104-106, Section 2923, enacted 2/10/1996
- 6. Memorandum of Agreement Between the Department of the Army and the Joliet Arsenal Development Authority for Transfer of Joliet Army Ammunition Plant Property, August 2000
- 7. Federal Facility Agreement (FFA) among United States Environmental Protection Agency Region V (USEPA), the State of Illinois (IL EPA), and the United States Army, 1989.
- 8. Environmental Assessment for the Conveyance of Land, Joliet Army Ammunition Plant, IL, November 1997
- 9. Groundwater Operable Unit Draft Final Remedial Design/Remedial Action Workplan Load-Assemble-Package Area/Manufacturing Area, Joliet Army ammunition Plant, IL, February 1999.

#### **Enclosure 3**

#### TABLE 1

Table 1 – Description of Property

| Site Name        | EBS Parcel<br>Designation | Condition<br>Category | Remedial Actions   |
|------------------|---------------------------|-----------------------|--|
| Northern Ashpile | M9                        | 4                     | 50,535 cy of redwater ash were removed<br>between December 7, 2005 and February 6,<br>2006 and transported to the WCLF for<br>disposal. The Site is within a Groundwater<br>Management Zone (GMZ) wherein Limited<br>Action Remedy is ongoing. (See Record of<br>Decision, October 1998.)  |
| Gravel Pit       | M13                       | 4                     | A RCRA Subtitle D Landfill cap was constructed over approximately 10.8 acres of waste between November 2006 and August 2008. The cap is subject to 15 years of long-term care and monitoring. Groundwater monitoring is also required. The Site is within a GMZ wherein Limited Action Remedy is ongoing. All landfill related responsibilities and liabilities remain with the Dept. of Army. |

**Category 1**: Areas where no release or disposal of hazardous substances or petroleum products has occurred, to include no migration of these substances from adjacent areas)

**Category 2**: Areas where only release or disposal of petroleum products has occurred.

**Category 3**: Areas where release, disposal, and/or migration of hazardous substances has occurred, but at concentrations that do not require a removal or remedial response.

**Category 4**: Areas where release, disposal, and/or migration of hazardous substances has occurred, and all removal or remedial actions to protect human health and the environment have been taken.

#### **Enclosure 4**

#### TABLE 2

Table 2 – Notification of Hazardous Substance Storage, Release, and Disposal\*

| Site<br>Number                  | Name of<br>Hazardous<br>Substance(s) | Date of Storage, Release, or<br>Disposal | Remedial Actions  |
|---------------------------------|--------------------------------------|--|---|
| M9<br>Northern<br>Ashpile       | Redwater Ash                         | 1966 – 1967                              | 50,535cy of Redwater Ash were disposed (landfilled) on the site. Between Dec. 7, 2005 and Feb. 26, 2006, the ash was excavated and properly disposed at the WCLF. The site was then restored with soil and vegetative cover.  |
| M13 Gravel<br>Pit               |                                      | 1966 – 1984                              | Landfilling activities took place to dispose wastes such as creosote-containing railroad ties and telephone poles, and a variety of construction and office debris. A RCRA Subtitle D Landfill cap was constructed over approx. 10.8 acres of waste. Cap monitoring and maintenance as well as groundwater monitoring, both Army responsibilities, are ongoing. |
| Under-<br>lying the<br>Property | Contaminated<br>Groundwater          | 1941 - Present                           | The groundwater under the Property has become contaminated from the years of releases. The Limited Action remedy is in place. Deed restrictions will be included as part of the remedy.   |

<sup>\*</sup> The information contained in this notice is required under the authority of regulations promulgated under section 120(h) of the Comprehensive Environmental Response, Liability, and Compensation Act (CERCLA or 'Superfund') 42 U.S.C. section 9620(h). This table provides information on the storage of hazardous substances for one year or more in quantities greater than or equal to 1,000 kilograms or the hazardous substance's CERCLA reportable quantity (whichever is greater). In addition, it provides information on the known release of hazardous substances in quantities greater than or equal to the substances CERCLA reportable quantity. See 40 CFR Part 373.

#### **ENCLOSURE 5 – CERCLA Notice, Covenant, and Access Provision and Other Deed Provisions**

The following CERCLA Notice, Covenant, and Access Provisions, along with the Other Deed Provisions, will be placed in the deed to ensure protection of human health and the environment and to preclude any interference with ongoing or completed remediation activities.

I. Property Covered by Notice, description, Access Rights, and Covenants Made Pursuant to Section 120(h)(3)(A) of the Comprehensive Environmental Response Compensation, and liability Act of 1980(42 U.S.C. Section 9620(h)(3)(A)):

For the Tracts Site M9 and Site M13, the Grantor provides the following notice, description and covenants and retains the following access rights:

A. Notices Pursuant to Section 120(h)(3)(A)(i)(I) and (II) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. Section 9620(h)(3)(A)(i) and (II)):

Pursuant to section 120(h)(3)(A)(i)(I) and (II) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. §9620(h)(3)(A)(i)(I) and (II)), available information regarding the type, quantity, and location of hazardous substances and the time at which such substances were stored, released, or disposed of, as defined in section 120(h), is provided in Exhibit \_\_\_\_ of the Deed, attached hereto and made a part hereof.

B. Description of Remedial Action Taken, if Any, Pursuant to Section 120(h)(3)(A)(i)(III) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. § 9620(h)(3)(A)(i)(III)):

Pursuant to section 120(h)(3)(A)(i)(III) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. §9620(h)(3)(A)(i)(III)), a description of the remedial action taken, if any, on the property is provided in Exhibit \_\_\_\_ of the Deed, attached hereto and made a part hereof.

C. Covenant Pursuant to Section 120(h)(3)(A)(ii) and (B) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. § 9620(h)(3)(A)(ii) and (B)):

Pursuant to section 120(h)(3)(A)(ii) and (B) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. §9620(h)(3)(A)(ii) and (B)), the United States warrants that -

- (a) All remedial action necessary to protect human health and the environment with respect to any hazardous substance identified pursuant to section 120(h)(3)(A)(i)(I) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 remaining on the property has been taken before the date of this deed, and
- (b) Any additional remedial action found to be necessary after the date of this deed shall be conducted by the United States.

# D. Access Rights Pursuant to Section 120(h)(3)(A)(iii) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. § 9620(h)(3)(A)(iii)):

The United States retains and reserves a perpetual and assignable easement and right of access on, over, and through the property, to enter upon the property in any case in which a remedial action or corrective action is found to be necessary on the part of the United States, without regard to whether such remedial action or corrective action is on the Property or on adjoining or nearby lands. Such easement and right of access includes, without limitation, the right to perform any environmental investigation, survey, monitoring, sampling, testing, drilling, boring, coring, testpitting, installing monitoring or pumping wells or other treatment facilities, response action, corrective action, or any other action necessary for the United States to meet its responsibilities under applicable laws and as provided for in this instrument. Such easement and right of access shall be binding on the Grantee and its successors and assigns and shall run with the land.

In exercising such easement and right of access, the United States shall provide the Grantee or its successors or assigns, as the case may be, with reasonable notice of its intent to enter upon the property and exercise its rights under this clause, which notice may be severely curtailed or even eliminated in emergency situations. The United States shall use reasonable means to avoid and to minimize interference with the Grantee's and the Grantee's successors' and assigns' quiet enjoyment of the property. At the completion of work, the work site shall be reasonably restored. Such easement and right of access includes the right to obtain and use utility services, including water, gas, electricity, sewer, and communications services available on the property at a reasonable charge to the United States. Excluding the reasonable charges for such utility services, no fee, charge, or compensation will be due the Grantee, nor its successors and assigns, for the exercise of the easement and right of access hereby retained and reserved by the United States.

In exercising such easement and right of access, neither the Grantee nor its successors and assigns, as the case may be, shall have any claim at law or equity against the United States or any officer or employee of the United States based on actions taken by the United States or its officers, employees, agents, contractors of any tier, or servants pursuant to and in accordance with this clause: Provided, however, that nothing in this paragraph shall be considered as a waiver by the grantee and its successors and assigns of any remedy available to them under the Federal Tort Claims Act.

#### II. OTHER DEED PROVISIONS:

#### A. "AS IS"

a. The Grantee acknowledges that it has inspected or has had the opportunity to inspect the Property and accepts the condition and state of repair of the subject Property. The Grantee understands and agrees that the Property and any part thereof is offered "AS IS" without any representation, warranty, or guaranty by the Grantor as to quantity, quality, title, character, condition, size, or kind, or that the same is in condition or fit to be used for the purpose(s) intended by the Grantee, and no claim for allowance or deduction upon such grounds will be considered.

- b. No warranties, either express or implied, are given with regard to the condition of the Property, including, without limitation, whether the Property does or does not contain asbestos or lead-based paint. The Grantee shall be deemed to have relied solely on its own judgment in assessing the overall condition of all or any portion of the Property, including, without limitation, any asbestos, lead-based paint, or other conditions on the Property. The failure of the Grantee to inspect or to exercise due diligence to be fully informed as to the condition of all or any portion of the Property offered, will not constitute grounds for any claim or demand against the United States.
- c. Nothing in this "As Is" provision will be construed to modify or negate the Grantor's obligation under the CERCLA Covenant or any other statutory obligations.

#### **B. HOLD HARMLESS**

- a. To the extent authorized by law, the Grantee, its successors and assigns, covenant and agree to indemnify and hold harmless the Grantor, its officers, agents, and employees from (1) any and all claims, damages, judgments, losses, and costs, including fines and penalties, arising out of the violation of the NOTICES, USE RESTRICTIONS, AND RESTRICTIVE COVENANTS in this Deed by the Grantee, its successors and assigns, and (2) any and all any and all claims, damages, and judgments arising out of, or in any manner predicated upon, exposure to asbestos, lead-based paint, or other condition on any portion of the Property after the date of conveyance.
- b. The Grantee, its successors and assigns, covenant and agree that the Grantor shall not be responsible for any costs associated with modification or termination of the NOTICES, USE RESTRICTIONS, AND RESTRICTIVE COVENANTS in this Deed, including without limitation, any costs associated with additional investigation or remediation of asbestos, lead-based paint, or other condition on any portion of the Property.
- c. Nothing in this Hold Harmless provision will be construed to modify or negate the Grantor's obligation under the CERCLA Covenant or any other statutory obligations.

#### C. POST-TRANSFER DISCOVERY OF CONTAMINATION

- a. If an actual or threatened release of a hazardous substance or petroleum product is discovered on the Property after the date of conveyance, Grantee, its successors or assigns, shall be responsible for such release or newly discovered substance unless Grantee is able to demonstrate that such release or such newly discovered substance was due to Grantor's activities, use, or ownership of the Property. If the Grantee, it successors or assigns believe the discovered hazardous substance is due to Grantor's activities, use or ownership of the Property, Grantee will immediately secure the site and notify the Grantor of the existence of the hazardous substances, and Grantee will not further disturb such hazardous substances without the written permission of the Grantor.
- b. The Grantee, for itself, its successors and assigns, as part of the consideration for the conveyance of the Property, hereby releases the Grantor from any liability or responsibility for any claims arising solely out of the release or threatened release of any hazardous substance on the Property occurring after the date of the conveyance herein where such hazardous substance was placed on the

Property by the Grantee, or its successors, assigns, employees, invitees, agents, contractors, or any person other than the Grantor after the date of the conveyance herein. This "Post-Transfer Discovery of Contamination" provision shall not affect the Grantor's responsibilities to conduct response actions or corrective actions that are required by applicable laws, rules and regulations, or the Grantor's obligations under the "Covenant Pursuant to Section 120(h)(3)(A)(ii) and B of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. § 9620(h)(3)(A)(ii) and (B))."

#### D. ENVIRONMENTAL PROTECTION PROVISIONS

The Environmental Protection Provisions are at Exhibit \_\_\_\_, which is attached hereto and made a part hereof. The Grantee shall neither transfer the property, lease the property, nor grant any interest, privilege, or license whatsoever in connection with the property without the inclusion of the Environmental Protection Provisions contained herein, and shall require the inclusion of the Environmental Protection Provisions in all further deeds, easements, transfers, leases, or grant of any interest, privilege, or license.

#### **ENCLOSURE 6 – ENVIRONMENTAL PROTECTION PROVISIONS**

The following conditions, restrictions, and notifications or their substantive equivalent will be placed in the Deed to ensure protection of human health and the environment and to preclude any interference with ongoing or completed remediation activities at Joliet Army Ammunition Plant (JOAAP).

#### I. PURPOSE AND INTENT:

- A. The intent of these deed restrictions is to protect human health and the environment by: (i) preventing the exacerbation of contaminated groundwater aquifers; (ii) maintaining the integrity of the confining layers that underlie the contaminated groundwater aquifers, and to prevent drainage or other migration thereof from their current positions; and (iii) preventing the creation of pathways of exposure to human or ecological receptors from contaminated groundwater aquifers; and (iv) limiting the use of the property to commercial and industrial parks.
- B. The Property for transfer to Joliet Authority Development Authority (JADA) (hereinafter "GRANTEE") as defined in the GRANTOR's Finding of Suitability for Transfer (FOST) for JOAAP shall be referred to herein as "Property." In accordance with the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980, 42 U.S.C. Section 9601, et al., the following deed restrictions shall form part of any deed or other agreement proposed to govern the transfer of Property which includes, either in whole or part, the two contiguous parcels bounded as follows:
  - Site M9 Tract that includes part of <u>Sections 25 in Township 34 North, Range 9 east of the</u> third principal meridian, in Channahon Township, Will County, Illinois; and
  - Site M13 Tract that includes part of <u>Section 36</u>, of <u>Township 34 North</u>, <u>Range 9 east of the third principal meridian</u>, in Channahon Township, Will County, Illinois.

The above Tracts shall be collectively referred to herein as the "Deed Restricted Parcels." The T6 Deed Restricted Parcels constitute a subset of the real estate to be ultimately transferred to the Grantee for use as industrial parks.

C. The Property for transfer to GRANTEE is located within a Groundwater Management Zone (GMZ) as defined by the Groundwater Operable Unit Remedial Design/Remedial Action Plan for JOAAP. As such, groundwater monitoring and implementation of remedial actions within these areas will be ongoing until successful remediation of the entire GMZ is documented by the Army and approved by the United States Environmental Protection Agency (USEPA) and Illinois EPA. Because the Property lies within a GMZ, it falls under specific restrictions the USEPA and Illinois EPA imposed. These restrictions are clearly delineated in the following sections.

# II. LAND USE RESTRICTIONS, LANDFILL RESTRICTIONS AND COVENANTS AND MONITORING WELL RESTRICTIONS AND COVENANTS FOR THE PROPERTY:

The Property shall be subject to the land use restrictions and covenants as set forth in this Article.

- A. It is the intent of Grantor and Grantee that the land use restrictions and covenants and monitoring well use restrictions and covenants as set forth in this Article shall run with the land and restrict the use of the Property pursuant to the legislative mandate set forth in the Federal Act (Public Law 104-106) and are necessary to ensure the protection of human health and the environment.
- B. That within the boundaries of the Property, Grantee, its successors and assigns, future owners, heirs, and executors, shall not use, move, access, modify, remove, disturb, close, abandon, or otherwise harm or destroy any existing, or future existing, groundwater monitoring well that is owned by Grantor, without prior written permission from the Grantor in consultation with the USEPA and the Illinois EPA. If written permission is granted to any landowners for the installation of a replacement well, it shall be installed, at no expense to the Grantor, pursuant to applicable federal laws and regulations and the standards current at the time set forth in the Illinois Water Well Construction Code or successor codes.
- C. Grantee covenants for itself, its successors, and assigns, future owners, heirs, and executors, that the land use restrictions and covenants as set forth in this Article shall be covenants running with the land and shall be binding upon the Grantee, its successors and assigns, future owners, heirs, and executors.
- D. Grantee, its successors and assigns, future owners, heirs, and executors, shall include the land use restrictions and covenants as set forth in this Article in all subsequent lease, transfer, or conveyance documents for all or any part of the Property. Notwithstanding this provision, failure to include the land use restrictions and covenants as set forth in this Article in all subsequent lease, transfer, or conveyance documents shall not abrogate the status of these restrictions and covenants as binding upon Grantee, its successors and assigns, future owners, heirs, and executors.
- E. Grantee, its successors and assigns, future owners, heirs, and executors, shall not knowingly or negligently undertake or allow any activity on or use of the Property that would violate the land use restrictions and covenants as set forth in this Article.
- F. The land use restrictions and covenants as set forth in this Article are enforceable by Grantor and its designees. Grantor shall have the right to enforce the terms of this Deed by resort to specific performance or legal process. All remedies available hereunder shall be in addition to any and all remedies at law or in equity, including CERCLA. Enforcement of the terms of this Deed shall be at the discretion of Grantor, and any forbearance, delay, or omission to exercise its rights under this Deed in the breach of any term of this Deed shall not be deemed to be a waiver by Grantor of such term or any subsequent breach of the same or any other term, or of any of the rights of Grantor under this Deed.
  - G. It is the intent of the Grantor and Grantee that the restrictions set forth in this Section shall ensure the protection of human health and the environment. Grantee, its successors and assigns, future owners (excluding the United States), heirs, and executors shall use the

Property for commercial and industrial parks. In addition, the Property shall not be used by Grantee, its successors and assigns, future owners (including the United States), heirs, and executors, for:

- 1. Any type of residential purpose;
- 2. Any type of educational purpose for children in grades kindergarten through the twelfth grade.
- 3. Any type of child or adult care purpose, provided however, this prohibition shall not exclude any child day care facility operated solely within the confines of a building structure:
- 4. Any type of solid or hazardous waste landfill purpose;
- 5. Any type of commercial quarry operation, provided that the foregoing restriction shall not prohibit: (a) mass earth work and site grading activities, including borrow, fill, and balancing; or (b) the excavation and use of gravel, sand, stone, aggregate and other on-site materials as rail bed ballast, in making concrete or asphalt, or in the construction of detention and retention facilities, rail beds, roads, or rights-of-way; or (c) other construction activities on or about the Property or in constructing roads and railroads leading or connecting to the Property to a distance of no more than 10 miles from the Property;
- 6. Any type of incineration of solid waste other than in connection with on-site manufacturing processes; and
- 7. Any type of concrete batch plant or asphalt plant, unless the concrete or asphalt batch plant is operated for the purpose of servicing construction activities associated with the development of the Property or in constructing roads and railroads leading or connecting to the Property to a distance of no more than 10 miles from the Property.
- H. Nothing contained herein shall preclude the GRANTEE from undertaking, in accordance with applicable laws and regulations, such additional steps necessary to allow for other use of the Property. Any additional remediation will be at no additional cost to the GRANTOR and with the GRANTOR's prior written consent. Consent may be conditioned upon such terms and conditions, as the GRANTOR deems reasonable and appropriate, including performance and payment bonds and insurance. Upon completion of such remediation required to allow other use of the Property and upon the GRANTEE's obtaining the approval of the USEPA and the Illinois EPA and, if required, any other regulatory agency, the GRANTOR agrees to release or, if appropriate, modify this restriction by executing and recording, a Partial Release of Covenant. GRANTEE shall bear the cost of recording and reasonable administrative fees.
- I. The Grantee, its successors and assigns, future owners, heirs, and executors shall not remove soil from the Property to an off-site location unless it is tested to determine that the soil can be relocated in compliance with all local, state, and federal laws and regulations without posing a threat to human health or the environment.
- J. Legal restrictions on uncontrolled excavation and land use to minimize human contact with landfill materials will be specified in the deed for the landfills that are capped on-site

Specific institutional controls and restrictions for the M13 landfill are:

#### Engineered Land Use Controls (LUCs):

- A 5-strand barbed wire fence around the perimeter of the landfill cap to control unauthorized access to the site shall be preserved and maintained.
- Restricted area signage on the fence, every 150', warning of restricted access and activities in the area shall be preserved.
- The boundary of the LUCs is defined by the fence that surrounds the perimeter of the site.

#### Administrative LUCs:

Although the area of the landfill cap is designated for industrial reuse, future development or construction that may impair the integrity of the cap is prohibited within the LUC boundary.

- No intrusive work may be conducted within the LUC boundary including, but not limited to excavation, drilling, and regrading or modification of the topography of the landfill cap.
- Excavation that may cause groundwater plume migration or any other groundwater disturbance, especially well installation, is restricted.
- The surface water flow from the landfill may not be altered or prevented from draining as the result of any future construction activities in the vicinity of the site.
- Vehicle or equipment traffic of any kind is prohibited on the landfill cap except for vehicles or equipment necessary for maintenance or repair of the cap.

#### III. GROUNDWATER RESTRICTIONS AND COVENANTS FOR THE PROPERTY:

The Property lies within the Groundwater Management Zone established by the JOAAP Record of Decision (ROD), dated October 1998, for the approximate 23,500-acre former JOAAP.

- A. The Property is subject to the groundwater restrictions and covenants as set forth in this Article.
- B. It is the intent of Grantor and Grantee that the groundwater restrictions and covenants as set forth in this Article shall restrict the use of the Property for the protection of human health and the environment until such time as the Property has been remediated to the standards established in the October 1998 Record of Decision and any amendments thereto or any subsequent Records of Decision applicable to the Property (hereinafter "ROD") as contemplated in Section F below. The ROD and amendments or corrections thereto are available at the installation information repository.
- C. Grantee, its successors and assigns, future owners, heirs, and executors, shall include the groundwater restrictions and covenants as set forth in this Article in all subsequent lease, transfer, or conveyance documents for all or any part of the Property. Notwithstanding this provision, failure to include the groundwater restrictions and covenants, as set forth in this Article, in all subsequent lease, transfer, or conveyance documents shall not abrogate the status of these restrictions and covenants as binding upon Grantee, its successors and assigns, future owners, heirs, and executors.
- D. Grantee, its successors and assigns, future owners, heirs, and executors shall not undertake or allow any activity on or use of the Property that would violate the groundwater restrictions and covenants as set forth in this Article.
- E. The groundwater restrictions and covenants as set forth in this Article are enforceable by Grantor and its designees. Grantor shall have the right to enforce the terms of this Deed by resort to specific performance or legal process. All remedies available hereunder shall be in addition to any and all remedies at law or in equity, including CERCLA. Enforcement of the terms of this Deed shall be at the discretion of Grantor, and any forbearance, delay, or omission to exercise its rights under this Deed in the breach of any term of this Deed shall not be deemed to be a waiver by Grantor of such term or any subsequent breach of the same or any other term, or of any of the rights of Grantor under this Deed.
- F. Grantee covenants for itself, its successors, and assigns, future owners, heirs, and executors that the groundwater restrictions and covenants as set forth in this Article shall be covenants running with the land and shall be binding upon Grantee, its successors and assigns, future owners, heirs, and executors. Upon the successful remediation of the Property to the industrial standards set forth in the ROD, Grantor, with the written concurrence of the USEPA and the Illinois EPA, shall release, in whole or in part, any relevant groundwater restriction and covenant set forth in this Article. The referenced release shall not be unreasonably withheld. In addition, the referenced release shall be executed by the Secretary of the Army, United States Department of the Army, or an authorized designee.
- G. It is the intent of Grantor and Grantee that the restrictions set forth in this Section shall ensure the protection of human health and the environment. Unless the following restrictions in this Section G are removed or amended in accordance with this Article, within the boundary of the Property, Grantee, its successors and assigns, future owners, heirs, and executors:

- 1. Shall not conduct any activity (e.g., any anthropogenic seismic activity, deep excavation activity, or drilling or pumping a well within the Silurian dolomite aquifer) that would increase the volume or area of the contaminated groundwater, damage the confining layers that underlie the contaminated groundwater (e.g., fracturing the Maquoketa confining layer or any other existing confining layer(s) or strata of the Maquoketa confining layer), or create pathways of exposure to human or ecological receptors from the contaminated groundwater to the extent prohibited by the ROD. For identification purposes, the groundwater within the glacial drift and the Silurian dolomite aquifer (collectively referred to herein as "the contaminated groundwater") is located above the Maquoketa confining bed.
- 2. Shall not use the groundwater above the Maquoketa confining bed for potable purposes.
- H. Shallow groundwater above the Maquoketa confining bed has the potential to be contaminated with hazardous substances, including, but not limited to explosives, their derivatives or volatile organic compounds. In the event shallow groundwater above the Maquoketa confining bed is encountered at any time due to the disturbance or excavation of surface or subsurface soil, Grantee, its successors and assigns, future owners, heirs, and executors, shall comply with all laws and regulations that are applicable to the safe and proper management, discharge, disposal, or treatment of all shallow groundwater encountered.

# IV. GROUNDWATER RESTRICTIONS AND COVENANTS FOR DEED RESTRICTED PROPERTY:

- A. The Property is subject to the groundwater restrictions and covenants as set forth in this Article and shall be referred to in this Article as the Deed Restricted Parcel.
- B. It is the intent of Grantor and Grantee that the groundwater restrictions and covenants as set forth in this Article shall restrict the use of the Deed Restricted Parcel for the protection of human health and the environment until such time as the Deed Restricted Parcel has been remediated to the standards established in the ROD, as provided in Section F below.
- C. Grantee, its successors and assigns, future owners, heirs, and executors, shall include the groundwater restrictions and covenants as set forth in this Article in all subsequent lease, transfer, or conveyance documents for all or any part of the Deed Restricted Parcel. Notwithstanding this provision, failure to include the groundwater restriction and covenant as set forth in this Article in all subsequent lease, transfer, or conveyance documents shall not abrogate the status of these restrictions and covenants as binding upon Grantee, its successors and assigns, future owners, heirs, and executors.
- D. Grantee, its successors and assigns, future owners, heirs, and executors, shall not undertake or allow any activity on or use of the Deed Restricted Parcel that would violate the groundwater restrictions and covenants as set forth in this Article.
- E. The groundwater restrictions and covenants as set forth in this Article are enforceable by Grantor and its designees. Grantor shall enforce the terms of this Deed by resort to specific performance or legal process. All remedies available hereunder shall be in addition to any and all remedies at law or in equity, including CERCLA. Enforcement of the terms of this Deed shall be

at the discretion of Grantor, and any forbearance, delay, or omission to exercise its rights under this Deed in the breach of any term of this Deed shall not be deemed to be a waiver by Grantor of such term or any subsequent breach of the same or any other term, or of any of the rights of Grantor under this Deed.

- F. Grantee covenants for itself, its successors and assigns, future owners, heirs, and executors that the groundwater restrictions and covenants as set forth in this Article shall be covenants running with the land and shall be binding upon Grantee, its successors and assigns, future owners, heirs, and executors. Upon the successful remediation of the Deed Restricted Parcel to the industrial standards set forth in the ROD, Grantor, with the written concurrence of the USEPA and the Illinois EPA, shall release, in whole or in part, any relevant groundwater restriction and covenant set forth in this Article. The referenced release shall not be unreasonably withheld. In addition, the referenced release shall be executed by the Secretary of the Army, United States Department of the Army, or an authorized designee.
- G. It is the intent of Grantor and Grantee that the restrictions set forth in this Section shall ensure the protection of human health and the environment. Unless the following restrictions in this Section G are removed or amended in accordance with Section F of this Article, within the boundary of the Deed Restricted Parcel, Grantee, its successors and assigns, future owners, heirs, and executors:
- 1. Shall not use the contaminated groundwater; and
- 2. Shall not drill, construct, pump, or use groundwater supply wells.

#### V. NOTICES

**A.** Correspondence. Any notice, request, consent, approval, or communication that either party desires or is required to give to the other shall be in writing and shall either be served personally or sent by mail, postage prepaid, addressed as follows:

GRANTOR United States of America Department of the Army DCS, G-9 (DAIM-ODB) 600 Army Pentagon Washington, DC 20310-0600

USEPA Region 5 Joliet AAP Site Manager Superfund Division 77 W Jackson Boulevard Chicago, IL 60604 GRANTEE State of Illinois Joliet Arsenal Development Authority 2364 Essington Rd. Ste. 301 Joliet, IL 60435

Illinois EPA Joliet AAP Project Manager Bureau of Land 1021 N Grand Ave, E Springfield, IL 62794-9276

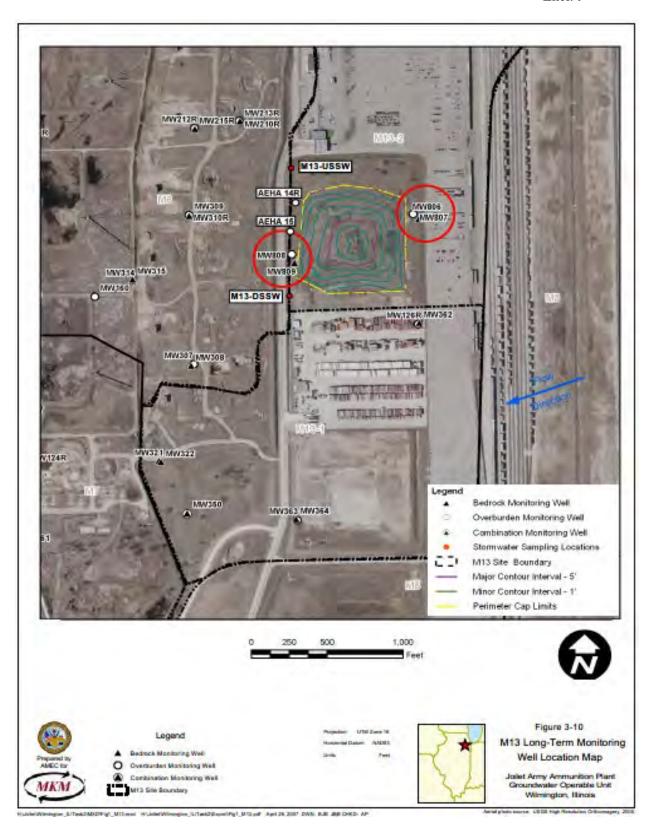
### $Enclosure\ 7-Regulatory/Public\ Comments$

To be completed at a later date

### **Enclosure 8 – Army Response**

To be completed at a later date

Encl. 9





Excavating and moving ash from the southeast corner towards load out position

M9 December 2005



Loading out trucks and cleaning the side wall on the western portion of the ash pile



Placing the vegetative layer (treated soils)

M9 April 2006



### M9 Fall 2019



M13 Cap Construction showing the geocomposite membrane, rooting zone, and vent installation.



Completed M13 Cap looking NE from SW corner, August 2008



Completed M13 Cap looking SE from NW corner, August 2008



M13 Cap looking NE from SW corner, Fall 2019