

FY2015

ROCK ISLAND ARSENAL
Army Defense Environmental Restoration Program
Installation Action Plan

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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 (AOC), 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 restoration manager, Installation Management Command (IMCOM), the US Army Environmental Command (USAEC), Rock Island Arsenal (RIA), 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

ACL	Alternative Concentration Limit
AEDB-R	Army Environmental Database - Restoration
AOC	Area of Concern
ARAR	Applicable or Relevant and Appropriate Requirements
CC	Compliance-related Cleanup
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CMS	Corrective Measures Study
CR	Compliance Restoration
CTC	Cost-to-Complete
DD	Decision Document
DRA	Dispute Resolution Agreement
EE/CA	Engineering Evaluation/Cost Analysis
ER,A	Environmental Restoration, Army
FFS	Focused Feasibility Study
FRA	Final Remedial Action
FS	Feasibility Study
FY	Fiscal Year
GWCI	Groundwater Classification Investigation
HHRA	Human Health Risk Assessment
IAP	Installation Action Plan
IEPA	Illinois Environmental Protection Agency
IMCOM	Installation Management Command
IRA	Interim Remedial Action
IRP	Installation Restoration Program
ITR	Internal Technical Review
JMTC	Joint Manufacturing and Technology Center
K	thousand
LTM	Long-Term Management
LUC	Land Use Control
LUCIP	Land Use Control Implementation Plan
LUCMOA	Land Use Control Memorandum of Agreement
MNA	Monitored Natural Attenuation
N/A	Not Applicable
NFA	No Further Action
NHL	National Historic Landmark
NPDES	National Pollutant Discharge Elimination System
NPL	National Priority List
NRHP	National Register of Historic Places
ODUSD (I&E)	Office of the Deputy Under Secretary of Defense for Installations and Environment
OLF	Old Landfill
PA	Preliminary Assessment
PAH	Polynuclear Aromatic Hydrocarbons
PBA	Performance-Based Acquisition
PCB	Polychlorinated Biphenyl
PNA	Polynuclear Aromatic

Acronyms

POL	Petroleum, Oil and Lubricants
PP	Proposed Plan
RA	Remedial Action
RA(C)	Remedial Action (Construction)
RA(O)	Remedial Action (Operation)
RAB	Restoration Advisory Board
RC	Response Complete
RCRA	Resource Conservation and Recovery Act
RD	Remedial Design
RFI	RCRA Facility Investigation
RI	Remedial Investigation
RIA	Rock Island Arsenal
RIP	Remedy-in-Place
ROD	Record of Decision
RRSE	Relative Risk Site Evaluation
SI	Site Inspection
SVE	Soil Vapor Extraction
SVOC	Semi-Volatile Organic Compound
TAPP	Technical Assistance for Public Participation
TBD	To Be Determined
TCE	Trichloroethylene
TMP	Technical Management Plan
TRC	Technical Review Committee
USACE	US Army Corps of Engineers
USAEC	US Army Environmental Command
USAEHA	US Army Environmental Hygiene Agency
USAJMC	US Army Joint Munitions Command
USATHAMA	US Army Toxic and Hazardous Materials Agency
USEPA	US Environmental Protection Agency
UST	Underground Storage Tank
VA	US Department of Veterans Affairs
VOC	Volatile Organic Compound

Installation Information

Installation Locale

Installation Size (Acreage): 866.5

City: Rock Island

County: Rock Island

State: Illinois

Other Locale Information

The RIA, located in Rock Island County, Illinois, is a 946.3-acre island in the Mississippi River. The US Army Corps of Engineers (USACE) occupies 9.5 acres, the US Department of Veteran's Administration (VA), which includes a cemetery, occupies 70.3 acres, and the RIA occupies 866.5 acres. The Iowa cities of Davenport (population 100,827) and Bettendorf (population 32,584) are located immediately north, across the Mississippi River. The Illinois cities of Rock Island (population 38,139) and Moline (population 43,088) are located immediately south of the RIA and are separated by a channel of the Mississippi River called the Sylvan Slough and the Moline Pool.

Installation Mission

Rock Island Arsenal is the US Army's center of excellence for Logistics and Readiness. As such, the Arsenal serves as the home of over 80 diverse tenant organizations which provide a broad spectrum of logistics and Soldier readiness functions. The US Army Sustainment Command, the US Army Joint Munitions Command (USAJMC), and the US Army Contracting Command-Rock Island provide all logistics, all conventional ammunition, and the majority of contracting support to America's Warfighters worldwide. The Joint Manufacturing and Technology Center produces artillery, armor kits, mobile maintenance kits and small arms parts and gauges to support the Department of Defense's (DoD) vital mission. Joint Manufacturing and Technology Center (JMTC) is also the DoD's only vertically integrated metal manufacturing facility and has the Army's only foundry. First Army trains, mobilizes, deploys and demobilizes all Reserve component units for the Department of the Army. First Army ensures Reserve Component mission readiness to support the nation's needs worldwide. Other RIA tenant activities provide worldwide support in human resources management, research and development, chemical and biological defense engineering and infrastructure and water management for the midwest and the nation. RIA is truly the logistics and readiness hub providing nearly all critical services to Army and joint and federal agencies in every corner of the globe.

Lead Organization

IMCOM

Lead Executing Agencies for Installation

USAEC

RIA

Regulator Participation

State Illinois Environmental Protection Agency (IEPA)

National Priorities List (NPL) Status

ROCK ISLAND ARSENAL is not on the NPL

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

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

Installation Program Summaries

IRP

Primary Contaminants of Concern: Metals, Pesticides, Petroleum, Oil and Lubricants (POL), Polychlorinated Biphenyls (PCB), Polycyclic Aromatic Hydrocarbons (PAH), Semi-volatiles (SVOC), Volatiles (VOC)

Affected Media of Concern: Groundwater, Soil, Surface Water

CR

Primary Contaminants of Concern: Metals, Volatiles (VOC)

Affected Media of Concern: Groundwater

5-Year / Periodic Review Summary

5-Year / Periodic Review Summary

Status	Start Date	End Date	End FY
Planned	201806	201902	2019

5-Year / Periodic Review Details

Associated ROD/DD Name	Sites
RIA-001 - Old Landfill	RIA-001

Land Use Control (LUC) Summary

LUC Title: RIA-014 (UST 34)

Site(s): RIA-014

ROD/DD Title: Record of Decision for RIA-014 (UST 34)

Location of LUC

Rock Island Arsenal Administrative Repository located in Bldg 102.

Land Use Restriction: Restrict land use - No residential use

Types of Engineering Controls: None

Types of Institutional Controls: Notations in Master Plan, Restrictions on Groundwater Withdrawal, Restrictions on land use

Date in Place: 201406

Modification Date: N/A

Date Terminated: N/A

Inspecting Organization: Installation

Record of LUC: Master Plan or Equivalent

Documentation Date: 201406

LUC Enforcement: 5 Year Reviews

Contaminants: PAH

Additional Information

N/A

Cleanup Program Summary

Installation Historic Activity

RIA is an active Installation Management Command (IMCOM) installation located on Arsenal Island which is about 3 miles long and 3/4 of a mile wide. It is bound on the north by the Mississippi River and the south by a channel of the Mississippi River called the Sylvan Slough and Moline Pool. Arsenal Island is divided into RIA, USACE, and the VA. The VA portion includes the National Cemetery of 70.3 acres and a Confederate Cemetery of 3 acres.

Arsenal Island is in the center of the Quad Cities region, surrounded on all sides by the four cities of Davenport, Bettendorf, Rock Island and Moline. Land use in the cities consists of retail, services, administrative, industrial, transportation, wholesaling, warehousing, communications, utility, recreation, exhibition, conservation, and a cemetery.

Arsenal Island has been owned and operated by the government since the US acquired the title to the land in 1804 through a treaty with the Sauk and Mesquakie (Fox) Indians. The US flag flew above the island long before any of the communities of the surrounding area were founded. Even before Illinois and Iowa achieved statehood, the US Army established a significant military presence on the island with the building of Fort Armstrong in 1816. The fort served as a sanctuary to early pioneers who sought refuge behind its walls during the threatening days of the early frontier.

In July 1862, the US Congress passed an act which established an arsenal on Rock Island; however, prior to the construction of permanent arsenal buildings, the US Army began building a prisoner-of-war camp on the island. A total of 12,192 Confederate Soldiers were confined at Rock Island during the Civil War years of 1863 to 1865. Construction of the first manufacturing shop buildings began in 1866 and continued until the last, the Stone Shop, was completed in 1893.

Arsenal Island and the swing span bridge leading to it were nominated to the National Register of Historic Places (NRHP) as an historic district in 1969. The State Historic Preservation Officer met with the officials from RIA in 1988 to establish contributing structures within the NRHP District.

The historic nineteenth century manufacturing core of RIA was further designated a National Historic Landmark (NHL) District in 1987. The NHL District is composed of two distinct zones: the nineteenth century manufacturing core (Zone 1), and the officers quarters (Zone 2).

The arsenal has evolved over the years into a center of technical excellence for weaponry and support equipment.

Completion of the renovation of the armament manufacturing (1982-1989) greatly enhanced the physical plant, machine tool inventory, and data processing capabilities. RIA's tenants include: the US Army JMTC; the USAJMC; Headquarters, First Army; Headquarters, US Army Sustainment Command; Rock Island Contracting Center; and the US Edgewood Chemical Biological Center; and Navy Surface Warfare Center Division.

The USACE owns and operates Lock and Dam No. 15 and maintains a district office on Arsenal Island which is responsible for the administration of federal water resource development programs in Iowa, Illinois, Wisconsin, Missouri, and Minnesota.

The VA maintains two cemeteries on Arsenal Island. The National Cemetery, located on the eastern end of Arsenal Island, inter US military veterans, spouses and dependent children. The Confederate Cemetery, situated near the southern border of the island, contains the remains of 1,959 prisoners who died on Arsenal Island during the Civil War.

Installation Program Cleanup Progress

IRP

Prior Year Progress: The bedrock and overburdened groundwater studies at the old landfill are finished. The groundwater sampling at the underground storage tank (UST) 34 site will continue. Groundwater monitoring at Old Landfill (OLF), removal of storm water lines, finalization of bank revetment and cover installation for OLF will continue. Initiation of a remedial investigation (RI)/feasibility study (FS) at RIA-007 and RIA-069.

Future Plan of Action: Initiate Silurian groundwater investigation at the old landfill. Finalize interim actions for soils at OLF. Finalize RI/FS at RIA-007 and RIA-069. Close out RIA-014 if groundwater results support closure. Institute land use controls (LUC) at sites as actions warrant.

Cleanup Program Summary

CR

Prior Year Progress: Began RI/FS at CC-RIA-007 and installed additional monitoring wells at and sampled CC-RIA-69.

Future Plan of Action: Complete the RI/FS and implement remedy as necessary at RIA-007. Bioremediate and continue to monitor the groundwater at CC-RIA-69. Both sites are expected to have LUCs implemented.

ROCK ISLAND ARSENAL
Army Defense Environmental Restoration Program
Installation Restoration Program

IRP Summary

Installation Total Army Environmental Database-Restoration (AEDB-R) Sites/Closeout Sites Count: 30/27

Installation Site Types with Future and/or Underway Phases

- 2 Landfill
(RIA-001, RIA-001A)
- 1 Soil Contamination After Tank Removal
(RIA-014)

Most Widespread Contaminants of Concern

Metals, Pesticides, Petroleum, Oil and Lubricants (POL), Polychlorinated Biphenyls (PCB), Polycyclic Aromatic Hydrocarbons (PAH), Semi-volatiles (SVOC), Volatiles (VOC)

Media of Concern

Groundwater, Soil, Surface Water

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

Site ID	Site Name	Action	Remedy	FY
RIA-002	USTs 8,9,10,11 at BLDG 222	FRA	WASTE REMOVAL - DRUMS, TANKS, BULK CONTAINERS	1988
RIA-014	UST (34)	IRA	WASTE REMOVAL - DRUMS, TANKS, BULK CONTAINERS	1992
RIA-008	OLD QUARRY FILLED WITH WATER	FRA	REMOVAL	2003
RIA-014	UST (34)	FRA	WASTE REMOVAL - SOILS	2011

Duration of IRP

Date of IRP Inception: 197902

Estimated Date for Remedy-In-Place (RIP)/Response Complete (RC): 201906/204509

Date of IRP completion including Long Term Management (LTM): 204509

IRP Contamination Assessment

Contamination Assessment Overview

The RIA has a total of 30 sites of environmental concern. These sites include industrial and construction debris landfills, storage tanks, a quarry, a training area, storage areas and burial sites. There are presently five open sites and 21 sites in operation that are not Environmental Restoration, Army (ER,A) eligible. Eighteen of these were accumulation areas in operation during the survey. Currently, there are 15 accumulation areas in operation. Two sites became ER,A eligible, one in fiscal year (FY)09 and one in FY10. The remaining six sites have achieved no further action (NFA), although one is awaiting final documentation from the IEPA. Currently, the IEPA is requesting that five of the previously closed sites be reopened due to a lack of closure documentation from the IEPA.

Since the early-1900s, over 40 USTs have been installed at RIA. The USTs have been used to store a variety of fuels and solvents, including diesel fuels, gasoline, kerosene, dry cleaning solvent, used oil and used water-soluble cutting fluids. To date, 33 USTs have been removed and seven USTs are being used. Of the remaining seven US Environmental Protection Agency (USEPA)-compliant USTs, one is used for gasoline, two for diesel fuel, one for used water-soluble cutting fluid, one for used oil, and two as reserve for quench oil emergency fire suppressant. There are also various aboveground diesel fuel storage tanks used for heating and for emergency power.

During the removal of USTs 8, 9, 10, and 11, soils contaminated with chlorinated solvents were identified. The soil in the immediate area was removed and monitoring wells were installed downgradient. No further contamination of this site (RA-002) has been observed.

In 1979, an installation assessment of the RA was conducted by the US Army Toxic and Hazardous Materials Agency (USATHAMA). This assessment was to evaluate the environmental quality of RA with regard to the use, storage, treatment, and disposal of toxic and hazardous materials and define any conditions that may adversely affect health and welfare or result in environmental degradation. Twenty-nine sites were listed as potentially contaminated. (This list has been narrowed down to the two open sites: the plume from an underground tank removal south of Building 250 and the Old Landfill site.)

In 1987 an update of the initial assessment of RA was conducted to determine if conditions had changed. This report indicated a clay cap had been placed over the landfill; however, the need to investigate all contaminates is required by the Army. At this point, the two remaining sites became part of the RA Restoration IAP for cleanup.

A groundwater monitoring well inventory conducted in the first quarter of 2009 determined that there are a total of 131 viable monitoring wells on RIA. The wells are associated with the landfills, the POL/UST areas, the quarry, Building 64 Resource Conservation and Recovery Act (RCRA) closure, and background areas. After the major Mississippi River flood in 1993, all of the monitoring wells were sampled, which indicates changes from previous sampling results. The area of major concern is the landfill, site RIA-001, because of SVOCs. The results identified an increased potential for off-site contamination and ER,A funding was available for the phase II RI, a draft FS, technical management plan (TMP) phase II RA with a risk assessment and a groundwater classification investigation (GWCI). The TMP is useful for future investigations requiring only modifications and updating. The TMP, which includes the Community Relations Plan, was completed in FY97. In April 2009 the Silurian Aquifer beneath the Old Landfill site was designated as site RIA-001A for investigative purposes. Groundwater monitoring wells were installed into the aquifer at the Old Landfill in February 2011 and a year of quarterly groundwater sampling has followed. The GWCI was completed in November 1997 and is being used for determining the basic cleanup objectives, not only for the landfill site, RIA-001, but for all sites on the RIA.

RIA is currently a large-quantity, 90-day generator of hazardous waste. A Part B permit application was withdrawn and the hazardous waste container storage unit was properly closed. It is now used as an accumulation area. The RIA water treatment facility processes Mississippi River water. Modifications which allow the use of chlorine and ammonia as disinfectant were completed in 1995. The modified potable water treatment plant has been in compliance since its inception.

RIA sends its sanitary effluent to the city of Rock Island publicly owned treatment works; the permit with the city includes total effluent and two pretreatment industrial wastewater facilities. The RIA has a general National Pollutant Discharge Elimination System (NPDES) permit for storm water. The RIA has a Nuclear Regulations Commission materials license for storage and usage of radioactive material. The main sources are thorium and tritium.

RIA has one IEPA air permit for 19 processes with a total of 94 air emission sources. The permit was submitted under the Title V section of the Clean Air Act. The Title V application was approved by the IEPA for use as blanket coverage for all air emission sources on RIA as listed in the application until the permit was approved in 2001. RIA submitted a renewal for its Title V Permit in August 2006. This renewal is currently under review by the USEPA.

IRP Contamination Assessment

Contamination Assessment Overview

The small business performance-based acquisition (PBA) that was awarded in September 2004 has expired. A new PBA was contracted in 2011. The PBA includes groundwater treatment studies, bank revetment, cover, in situ treatment, compliance sampling and removal of three storm water lines that traverse the landfill. Upon its successful completion, response complete (RC) will be achieved for soils and RIP for groundwater. LTM, which includes LUCs, is expected. The Army and the IEPA have entered into a dispute resolution agreement (DRA) which outlined the soil remediation for the landfill. The groundwater remediation path forward will be determined at a later date.

An RI for site RIA-014, (the UST-34 site) was approved by the USEPA in January 2008. The Final FS will be written and submitted to the state. The site is expected to be closed.

One sampling event was conducted in FY10 and one in FY11. The results of these events indicated that the site has not reached remedial limits. In FY12 the FS was completed using the sampling data. The groundwater will continue to be monitored at the site and a LUC will be put into effect. The site is close to the regulatory requirements. The site will go to monitored natural attenuation (MNA) and a Land Use Control Implementation Plan (LUCIP) put in place and the site become part of the Land Use Control Memorandum of Agreement (LUCMOA) program.

Cleanup Exit Strategy

A PBA was awarded in 2011 to complete the RA phase of the restoration program at RIA. The contractor completed a focused feasibility study (FFS) for site RIA-001, the Old Landfill, and an FS for the site RIA-014, the former UST 34.

The remedy for the Old Landfill (RIA-001) will be a cover, river bank revetment, storm water line removal, in situ groundwater treatment, and vegetation planting and a LUC. The remedy for the UST-34 site (RIA-014) will be groundwater monitoring with a LUC.

IRP Previous Studies

Year	Title	Author	Date
1979	Water Pollution Study for RIA	USACE, Contractor: Harland Bartholomew and Associates	MAR-1979
	Installation Assessment of Rock Island Arsenal Report No. 164.	US Army Toxic and Hazardous Materials (USATHAMA)	DEC-1979
1988	Interim Report, Groundwater Contamination Survey No. 38-26-0308-89, Evaluation of Solid Waste Management.	US Army Environmental Hygiene Agency (USAEHA)	MAY-1988
1989	Geohydrologic Study No. 38-26-8814-90, RCRA Facility Assessment Sampling Investigation, RIA.	USAEHA	MAY-1989
1991	POL Facility Investigation of Leaking Underground Storage Tanks, RIA.	Daily and Associates, D&A	MAY-1991
1992	Guidance Document for Renovation/Demolition of Buildings 65 and 106, RIA	COE Contractor: TCT-St. Louis, St. Louis, Missouri	JAN-1992
	Site Investigation in Support of the Closure of the Building 33 Hazardous Waste Management Unit, RIA.	Daily and Associates, D&A	FEB-1992
	Building 251/254 Site Investigation (Former TNT Building), Rock Island Arsenal Final Report	Daily and Associates, D&A	MAY-1992
1993	Specification Number 3230-2008. PR Number 8-91, Environmental Cleanup Buildings 64, RIA	COE Contractor: TCT-St. Louis, St. Louis, Missouri	MAY-1993
	Addendum No. 1 Site Investigation in Support of Closure of the Building 33 Hazardous Waste Management Unit, RIA	Daily and Associates, D&A	DEC-1993
1994	Groundwater Quality Consultation No. 38-66-kv27-94, Phase I & II, RIA 13-18 September 1993 and 1-5	USAEHA	FEB-1994
1996	Installation Assessment Relook Program, Working Document.	USATHAMA	AUG-1996
1997	Technical Management Plan for the RIA	SAIC	MAY-1997
	Phase I Remedial Investigation Report, Old Landfill, RIA.	USACE Contractor: Maxim Technologies Inc., St. Louis, MO	MAY-1997
	Installation Restoration Program, Community Relations Plan	SAIC	AUG-1997
1998	Update of the Initial Installation Assessment of RIA.	USATHAMA	JUL-1998
1999	Extended Site Inspection Report, the Old Quarry Site	US Army Center for Health Promotion and Preventative Medicine	SEP-1999
	Phase II Remedial Investigation Report, Old Landfill, RIA.	USACE Contractor: SAIC	DEC-1999

IRP Previous Studies

Year	Title	Author	Date
2000	Remedial Investigation, Old Quarry Site	US Army Center for Health Promotion and Preventative Medicine	JUL-2000
2001	Work Plan for Additional Investigations in Support of the FS at the RIA Old Landfill	SAIC	JUL-2001
	Well Installation Plan for the RIA Time Critical Removal Action for LNAPL	USACE: Tetra Tech NUS	JUL-2001
2002	Phase I Remedial Investigation Report and Proposed Phase II Sampling UST 34, Old Landfill, RIA	Daily and Associates, D&A	MAR-2002
	Mussel Survey in Sylvan Slough RIA Old Landfill - Final	SAIC	AUG-2002
	EE/CA for Quarry	Installation	AUG-2002
	Phase I Remedial Investigation Report and Proposed Phase II Sampling UST 34, Old Landfill, RIA.	Daily and Associates, D&A	SEP-2002
	Soil Vapor Extraction Pilot Test Summary Report, Landfill	Installation	SEP-2002
	Addendum to the Ecological risk Assessment	Unknown	OCT-2002
	Addendum to the Data Summary Report for Add. Investigation of the FS	Unknown	NOV-2002
2003	Work Plan Amendment no. 3 for the POC Sampling,	Unknown	DEC-2002
	Additional Investigation Report for the Old Landfill	SAIC	MAY-2003
	RA Safety and Health Plan, Quarry	RIA	JUL-2003
	Data Summary Report for Year 2002/2003 Point of Compliance Monitoring at the Rock Island Arsenal Old Landfill	SAIC	AUG-2003
	Passive Soil Vapor Test Report to IEPA	RIA	AUG-2003
	Final Addendum to the Ecological Risk Assessment for the Old Landfill	SAIC	DEC-2003
2004	Removal Action Report for the Old Quarry	Tetra Tech NUS	FEB-2004
	Removal Action Report for the Old Quarry	Tetra Tech NUS	APR-2004
2005	Phase II RI for RIA-014 (UST 34)	Daily and Associates	FEB-2005
	Data Summary Report for Year 2004 Point of Compliance Monitoring at the Rock Island Arsenal Old Landfill	SAIC	MAY-2005
	Summary Interim Report, Environmental Evaluation and Site Closure Activities for the Remediation of RIA-0014 (UST-34)	TolTest	MAY-2005
	Final Second Summary Interim Report, Environmental Evaluation and Site Closure Activities for the Remediation of RIA-0014 (UST-34)	TolTest	NOV-2005
2006	2005 Fourth Quarter (October) Deep Monitoring Well		MAR-2006

IRP Previous Studies

	Title	Author	Date
2006	Sampling and Analysis Results for the Rock Island Arsenal Old Landfill		
	Data Summary Report for Year 2005 Point of Compliance Monitoring at the Rock Island Arsenal Old Landfill	TolTest	MAR-2006
2007			
	RI Report RIA-014 (UST 34)	FOTH	MAY-2007
2008			
	Data Summary Report for Year 2007 Point of Compliance Monitoring at the Rock Island Arsenal Old Landfill	TolTest, Inc	FEB-2008
2010	Old Landfill Silurian Aquifer Groundwater Sampling	Foth Infrastructure & Environmental, LLC	MAR-2010
	Feasibility Study for Old Landfill RIA-001 (Army Approved)	TolTest	JUN-2010
	Feasibility Study for RIA-014	TolTest	JUN-2010
	1st Quarterly GW Sampling RIA-14	TolTest	SEP-2010
	2nd Quarterly GW Sampling RIA-14	Foth	DEC-2010
2012			
	Feasibility Study - RIA-14	Tetra Tech, Inc.	JAN-2012
	Focused Feasibility Study - Old Landfill	Tetra Tech, Inc.	JAN-2012
	Old Landfill POC Sampling Report	Tetra Tech, Inc.	DEC-2012

ROCK ISLAND ARSENAL
Installation Restoration Program
Site Descriptions

Site ID: RIA-001
Site Name: OLD LANDFILL

STATUS

Regulatory Driver: CERCLA

RRSE: HIGH

Contaminants of Concern: Metals, Pesticides, Petroleum, Oil and Lubricants (POL), Polychlorinated Biphenyls (PCB), Semi-volatiles (SVOC), Volatiles (VOC)

Media of Concern: Groundwater, Soil, Surface Water

Phases	Start	End
PA.....	197902.....	197912
SI.....	198805.....	198805
RI/FS.....	201212.....	201809
RA(C).....	201212.....	201809
RA(O).....	201212.....	204509

RIP Date: 201809

RC Date: 204509

SITE DESCRIPTION

The OLF occupies approximately 20 acres in the south central part of RIA. Historical records indicate that a variety of wastes generated by the industrial processes at RIA were potentially disposed of in the OLF during its active life. Historical records also indicate that the OLF was active between 1920 and 1965. Waste oils, solvents, and other liquids were poured into pits and either burned or allowed to percolate into the ground. Additionally, industrial wastes, including degreaser sludges, heat-treating salts, electroplating solutions, sludges, and wastewaters from operation on RIA were disposed of in this area.

In 1987, an update of the initial assessment of RIA was conducted to determine if conditions had changed. This report indicated a clay cap has been placed over the landfill; however, the Army is required to investigate all contaminants. At this point, the three remaining sites became part of the RIA restoration IAP for cleanup. The USACE, Nashville District was hired to act as the project manager for the cleanup of the landfill.

In 1994 and 1995, a Phase I RI was conducted. The overall objective was to assess the nature of the contamination present at the landfill. Activities performed included a search of historical records, a topographic survey, site maps, magnetometer sweep, geophysical survey, sampling and analysis of soil and water, permeability testing, groundwater elevation measurement, monitoring well installation and sampling, and other items.

In 1997 and 1998, a Phase II RI was conducted. The field activities associated with this investigation included obtaining additional characterization data to complement the phase I results, support the baseline human health risk assessment (HHRA) and ecological risk assessment, and define the extent of contamination.

In September 2004, a small business PBA was awarded. It covers work through RC for sites RIA-001 and RIA-014. The contract funds expired with a final Army FS in FY10. A new PBA was awarded in FY11. The new contract included a soil FFS, groundwater treatability studies, proposed plan (PP), interim soil decision document, remedial design for interim actions under a DRA signed by the Army and IEPA in FY12, interim actions for the soils included vegetation removal, soil cover, storm water line removal and shoreline revetment. Point of compliance monitoring will continue. Storm water lines have been removed and the shoreline revetment constructed. Soil cover will be completed in FY15. A new PBA will be awarded in FY15 to complete the groundwater FFS, PP and decision document (DD) as well as continued point of compliance monitoring.

The groundwater will be addressed separately from the OLF soils under the RI/FS phase.

In December 1999, a final RI report was prepared by the USACE, Nashville District. The recommendations in the report stated that the nature and extent data and risk assessment findings should be used in the FS to develop remedial alternatives for the OLF. IEPA-developed alternate concentration limits (ACL) should be used as remediation goals for groundwater and applied at the point of compliance as part of a long-term groundwater monitoring program. The ACLs should also be used to back-calculate soil cleanup levels for the OLF contaminants of concern.

Site ID: RIA-001

Site Name: OLD LANDFILL

In March 2000, a draft FS was prepared by the USACE, Nashville District indicating 11 alternatives to close the site. After a screening evaluation of the alternatives, five site-wide alternatives were retained. Based on the detailed evaluation in the FS, Alternative 4, capping combined with hot spot removal and product recovery was selected.

In June 2000, an internal technical review (ITR) of the OLF project was conducted by USAEC. The purpose of the review is to ensure that installations are attaining the appropriate level of risk reduction while maximizing the effective and efficient use of environmental restoration funds. The ITR team serves only to advise and provide recommendations to the installation. A draft report was received and reviewed by RIA, the USACE, Nashville District, and the IEPA. A final report of recommendations was written and sent to the installation in FY01.

Additional activities conducted in FY01 included further sampling and analysis of the slough bank to determine groundwater discharge points, skimming of free-product from one of the wells that showed free-product, installation of compliance wells, and a mussel survey.

In FY02, a draft report from the mussel survey conducted in the slough adjacent to the landfill was completed. The final report from the mussel survey was sent out for comment to the Natural Resource trustees in February 2002.

In April 2002, a soil vapor extraction (SVE) pilot study was conducted and any bulk free-product found in the wells in question was pumped out. This pilot study was used to extract contamination from the soil in specific locations on the landfill. The results of the test indicated SVE was not a viable option. The compliance wells were sampled on a quarterly basis to determine the level of contamination at those points.

The FS was drafted in FY02 and was submitted to the IEPA. A PBA was awarded in FY04. Comments from the FS were received and the new PBA contractor is responsible for addressing the comments.

In 2004, under the newly awarded PBA, the contractor began to revise the FS to include the data from the mussel survey, SVE pilot study and an Endangered Species Act effects analysis and ecological risk addendum.

The draft final FS was sent to the IEPA on July 25, 2006 and the IEPA responded with substantive comments on April 2, 2007. The previous PBA expired in 2010 and a new PBA was contracted in 2011 to run through 2015 to address the soil contamination. The Army and the IEPA have entered into a DRA which outlined the soil remediation for the landfill. The groundwater remediation path forward will be determined at a later date. A new PBA will be contracted in 2016 to address the groundwater contamination.

CLEANUP/EXIT STRATEGY

The Army and the IEPA have reached a DRA. To address the DRA a new PBA was contracted in FY11 to run through FY15 and it includes completing an FFS, river bank revetment, groundwater bioremediation, compliance sampling, storm water line removal, and cover installation. A project to investigate the Silurian Aquifer beneath the landfill was initiated in FY10 and will be complete in FY13. The OLF PBA includes bioremediation studies for removal of VOC, metals, and benzene in soil and groundwater, provides a soil cap for the landfill, provides removal of three storm water lines that transect the landfill, and provides erosion control/bank revetment. Bi-annual monitoring of point of compliance wells is also scheduled.

Following this PBA, a new PBA will be issued in FY16 to address the groundwater contamination and incorporate the ARARs to be decided on by the Army and the IEPA. This PBA will include bioremediation of the groundwater as indicated by the studies included in the previous PBA. Once the site has reached regulatory standards LTM will be started (projected in FY21). The LTM will include site maintenance and required groundwater monitoring. A site-specific LUCIP will be written and incorporated into the installation LUC MOA between the IEPA and the Army.

The LUCIP will also be incorporated in the installation master plan.

Site Name: Old Landfill - Silurian Aquifer

STATUS

Regulatory Driver: CERCLA
RRSE: LOW

Table with 3 columns: Phases, Start, End. Rows include PA, SI, RI/FS, RIP Date, and RC Date.

SITE DESCRIPTION

The OLF occupies approximately 20 acres on the south central shore of RIA. Records indicate that industrial processes wastes at RIA were disposed of in the OLF between 1920 and 1965.

In 1978, a water pollution study evaluated the potential seepage of pollutants from the landfill.

In 1979, an installation assessment was conducted by the USATHAMA to evaluate the environmental quality at RIA with regard to the use, storage, treatment, and disposal of toxic and hazardous materials.

In 1987, a site assessment was conducted at RIA. A clay cap has been placed over the landfill and required the Army to investigate the landfill for contaminants.

In 1994 and 1995, a site Phase I RI was conducted.

In 1996, the XYZ Fire Training Area (RIA-003) was combined with the Landfill (RIA-001). The training at the XYZ area, discontinued in 1982, used wood and other combustible materials during exercises inside buildings.

In 1997 and 1998, a Phase II RI was conducted at the site and included obtaining additional site characterization data to complement the Phase I results, supporting the baseline HHRA and ecological risk assessment.

In September 2004, a small business PBA was awarded. It covers work through RC for sites RIA-001 and RIA-014 (the UST site south of Building 250). The contractor has completed the draft FS for site RIA-001, the OLF and it has been submitted to the IEPA.

In 2005, as part of the RI of the OLF, two deep wells were installed into the Silurian aquifer and were then sampled in March and October. The sample results identified the presence of contamination in the Silurian aquifer; however, the connection or pathway between contamination in the OLF and the Silurian aquifer could not be determined.

To delineate the contamination in the Silurian aquifer a separate project from the OLF project was undertaken. A sampling event took place February 2010 at the two deep wells to determine if previous sampling results were accurate. The results of this sampling event confirmed the previous sampling. An SI has been completed for the Silurian aquifer.

Site ID: RIA-001A
Site Name: Old Landfill - Silurian Aquifer

RIA-001A was developed to address the trichloroethylene (TCE) in groundwater associated with RIA-001. Other sites on RIA have detected TCE in groundwater. More specifically, the Silurian Bedrock groundwater. Although RIA extracts surface water for drinking water purposes, the Silurian groundwater is a source of drinking water per the state of Illinois.

A contract for an RI/FS was awarded in May FY15. The purpose of the RI/FS is to determine a potential course and possibly combine all sites that have TCE contamination in a Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) action and help reduce the overall groundwater monitoring program.

CLEANUP/EXIT STRATEGY

The cleanup exit strategy consists of additional biotreatment, groundwater monitoring and eventually MNA.

Site ID: RIA-014
Site Name: UST (34)

STATUS

Regulatory Driver: CERCLA

RRSE: LOW

Contaminants of Concern: Polycyclic Aromatic Hydrocarbons (PAH), Volatiles (VOC)

Media of Concern: Groundwater

Phases	Start	End
PA.....	198606.....	198612
SI.....	199901.....	199909
RI/FS.....	200001.....	200905
IRA.....	199205.....	199207
RA(C).....	200806.....	201010
RA(O).....	201201.....	204504
RIP Date:	201201	
RC Date:	204504	

SITE DESCRIPTION

RIA-014 (UST 34) is a site near Buildings 250, 251, and 254. Contamination was discovered during the removal of UST 34. In 1989 an IRA in conjunction with the removal of the abandoned UST removed about 200 cubic yards of contaminated soil. The soil was sent to a permitted landfill manifested as special waste. The FS was finalized to incorporate new groundwater data. An RI was completed and the plume migration pathways have been identified. PAHs were the initial contaminants of concern. TCE has been subsequently discovered at relatively low levels. An additional investigation was completed to delineate the soil contamination and groundwater plume. A low level detection of explosives has been found in soils. A World War I melt and pour facility is the probable source of the explosive contaminants that were identified. The final RI report was submitted to the IEPA and approved in January 2008.

In FY04, a PBA was awarded on this site and RIA-001 (the Old Landfill), however, this contract lapsed prior to the completion of the FS.

One sampling event was conducted in FY10 and one in FY11. The results of these events indicated that the site has not reached remedial limits. In FY12 a PBA was awarded on this site and RIA-001. An FS, PP and record of decision (ROD) was completed for this site using previous sampling data and it is expected that the site will be monitored until regulatory parameters are met. The site will be placed in the RIA Master Environmental LUCMOA program.

A new PBA will be awarded in FY15 to continue monitoring.

CLEANUP/EXIT STRATEGY

The site is close to meeting the regulatory requirements. The site groundwater will be monitored semiannually until regulatory requirements are met, a LUCIP will be put in place, and the site will become part of the LUCMOA program.

Site Closeout (No Further Action) Summary

Site ID	Site Name	NFA Date	Documentation
RIA-002	USTs 8,9,10,11 at BLDG 222	198809	IEPA Coordinated Permit Committee (COPRA) letter accepting cleanup effort at site, 16 Aug 88
RIA-004	ASH PILE	198805	Site was entered into database erroneously therefore no closure documentation is available.
RIA-005	AST AT BLD 222 TEMPORARY	198805	Site was entered into database erroneously therefore no closure documentation is available. However, state closure was granted in 1995.
RIA-006	LANDFILL CONSTRUCTION DEBRIS	198805	Site was entered into database erroneously therefore no closure documentation is available.
RIA-008	OLD QUARRY FILLED WITH WATER	200309	Closure letter from IEPA - Apr 2004
RIA-009	BURIAL SITE NE BLD 342	198805	Site was entered into database erroneously therefore no closure documentation is available.
RIA-010	FORMER SHELLBREAKER AND DRMO STG	198805	Site was entered into database erroneously therefore no closure documentation is available.
RIA-011	CASING BURIAL AREA MUN BURIAL	198805	Site was entered into database erroneously therefore no closure documentation is available.
RIA-012	HAZARDOUS WASTE STG AREA BLD 242	198805	Active site - not eligible for E,RA funding. Closure was approved by IEPA - 1995
RIA-013A	HAZ SATELLITE STG AREAS BLD 33	199407	Site was entered into database erroneously therefore no closure documentation is available.
RIA-013B	HAZ SATELLITE STG AREAS BLD 64	198805	Site was entered into database erroneously therefore no closure documentation is available.
RIA-013C	HAZ SATELLITE STG AREAS BLD 65	198805	Site was entered into database erroneously therefore no closure documentation is available.
RIA-013D	HAZ SATELLITE STG AREAS BLD 69	198805	Site was entered into database erroneously therefore no closure documentation is available.
RIA-013E	HAZ SATELLITE STG AREAS BLG 106	198805	Site was entered into database erroneously therefore no closure documentation is available.
RIA-013F	HAZ SATELLITE STG AREAS BLG 108	198805	Site was entered into database erroneously therefore no closure documentation is available.
RIA-013G	HAZ SATELLITE STG AREAS BLD 112	198805	Site was entered into database erroneously therefore no closure documentation is available.
RIA-013H	FORMER HAZ SATELLITE STG AREAS BLD 131	198805	Site was entered into database erroneously therefore no closure documentation is available.
RIA-013I	FORMER SATELLITE STG AREA BLD 133	198805	Site was entered into database erroneously therefore no closure

Site Closeout (No Further Action) Summary

Site ID	Site Name	NFA Date	Documentation
			documentation is available.
RIA-013K	HAZ SATELLITE STG AREA BLD 139	198805	Site was entered into database erroneously therefore no closure documentation is available.
RIA-013L	HAZ SATELLITE STG AREA BLD 208	198805	Site was entered into database erroneously therefore no closure documentation is available.
RIA-013M	HAZ SATELLITE STG AREA BLD 220	198805	Site was entered into database erroneously therefore no closure documentation is available.
RIA-013N	HAZ SATELLITE STG AREAS BLD 220 (OIL)	198805	Site was entered into database erroneously therefore no closure documentation is available.
RIA-013O	HAZ SATELLITE STG AREAS BLD 222	198805	Site was entered into database erroneously therefore no closure documentation is available.
RIA-013P	HAZ SATELLITE STG AREAS BLD 230	198805	Site was entered into database erroneously therefore no closure documentation is available.
RIA-013R	HAZ SATELLITE STG AREAS BLD 250	198805	Site was entered into database erroneously therefore no closure documentation is available.
RIA-013S	HAZ SATELLITE STG AREAS BLD 299	198805	Site was entered into database erroneously therefore no closure documentation is available.
RIA-013T	HAZ SATELLITE STG AREAS BLD 337	198805	Site was entered into database erroneously therefore no closure documentation is available.

IRP Schedule

Date of IRP Inception: 197902

Past Phase Completion Milestones

1980

RFA (RIA-004 - ASH PILE)
PA (RIA-001 - OLD LANDFILL, RIA-006 - LANDFILL CONSTRUCTION DEBRIS, RIA-008 - OLD QUARRY FILLED WITH WATER, RIA-009 - BURIAL SITE NE BLD 342, RIA-010 - FORMER SHELLBREAKER AND DRMO STG, RIA-011 - CASING BURIAL AREA MUN BURIAL)

1987

PA (RIA-014 - UST (34))

1988

ISC (RIA-002 - USTs 8,9,10,11 at BLDG 222)
IMP(C) (RIA-002 - USTs 8,9,10,11 at BLDG 222)
CS (RIA-004 - ASH PILE, RIA-012 - HAZARDOUS WASTE STG AREA BLD 242, RIA-013A - HAZ SATELLITE STG AREAS BLD 33, RIA-013B - HAZ SATELLITE STG AREAS BLD 64, RIA-013C - HAZ SATELLITE STG AREAS BLD 65, RIA-013D - HAZ SATELLITE STG AREAS BLD 69, RIA-013E - HAZ SATELLITE STG AREAS BLG 106, RIA-013F - HAZ SATELLITE STG AREAS BLG 108, RIA-013G - HAZ SATELLITE STG AREAS BLD 112, RIA-013H - FORMER HAZ SATELLITE STG AREAS BLD 131, RIA-013I - FORMER SATELLITE STG AREA BLD 133, RIA-013K - HAZ SATELLITE STG AREA BLD 139, RIA-013L - HAZ SATELLITE STG AREA BLD 208, RIA-013M - HAZ SATELLITE STG AREA BLD 220, RIA-013N - HAZ SATELLITE STG AREAS BLD 220 (OIL), RIA-013O - HAZ SATELLITE STG AREAS BLD 222, RIA-013P - HAZ SATELLITE STG AREAS BLD 230, RIA-013R - HAZ SATELLITE STG AREAS BLD 250, RIA-013S - HAZ SATELLITE STG AREAS BLD 299, RIA-013T - HAZ SATELLITE STG AREAS BLD 337)
INV (RIA-002 - USTs 8,9,10,11 at BLDG 222)
PA (RIA-005 - AST AT BLD 222 TEMPORARY)
RFA (RIA-012 - HAZARDOUS WASTE STG AREA BLD 242, RIA-013A - HAZ SATELLITE STG AREAS BLD 33, RIA-013B - HAZ SATELLITE STG AREAS BLD 64, RIA-013C - HAZ SATELLITE STG AREAS BLD 65, RIA-013D - HAZ SATELLITE STG AREAS BLD 69, RIA-013E - HAZ SATELLITE STG AREAS BLG 106, RIA-013F - HAZ SATELLITE STG AREAS BLG 108, RIA-013G - HAZ SATELLITE STG AREAS BLD 112, RIA-013H - FORMER HAZ SATELLITE STG AREAS BLD 131, RIA-013I - FORMER SATELLITE STG AREA BLD 133, RIA-013K - HAZ SATELLITE STG AREA BLD 139, RIA-013L - HAZ SATELLITE STG AREA BLD 208, RIA-013M - HAZ SATELLITE STG AREA BLD 220, RIA-013N - HAZ SATELLITE STG AREAS BLD 220 (OIL), RIA-013O - HAZ SATELLITE STG AREAS BLD 222, RIA-013P - HAZ SATELLITE STG AREAS BLD 230, RIA-013R - HAZ SATELLITE STG AREAS BLD 250, RIA-013S - HAZ SATELLITE STG AREAS BLD 299, RIA-013T - HAZ SATELLITE STG AREAS BLD 337)
SI (RIA-001 - OLD LANDFILL, RIA-005 - AST AT BLD 222 TEMPORARY, RIA-006 - LANDFILL CONSTRUCTION DEBRIS, RIA-008 - OLD QUARRY FILLED WITH WATER, RIA-009 - BURIAL SITE NE BLD 342, RIA-010 - FORMER SHELLBREAKER AND DRMO STG, RIA-011 - CASING BURIAL AREA MUN BURIAL)

1992

IRA (RIA-014 - UST (34))

1994

RFI/CMS (RIA-013A - HAZ SATELLITE STG AREAS BLD 33)

1999

SI (RIA-014 - UST (34))

2002

RI/FS (RIA-008 - OLD QUARRY FILLED WITH WATER)

RD (RIA-008 - OLD QUARRY FILLED WITH WATER)

2003

RA(C) (RIA-008 - OLD QUARRY FILLED WITH WATER)

2005

PA (RIA-001A - Old Landfill - Silurian Aquifer)

IRP Schedule

2009

RI/FS (RIA-014 - UST (34))

2011

RA(C) (RIA-014 - UST (34))

2013

SI (RIA-001A - Old Landfill - Silurian Aquifer)

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
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Final RA(C) Completion Date: 201809

Schedule for Next Five-Year Review: 2019

Estimated Completion Date of IRP at Installation (including LTM phase): 204509

ROCK ISLAND ARSENAL IRP Schedule

= phase underway

SITE ID	SITE NAME	PHASE	FY16	FY17	FY18	FY19	FY20	FY21+
RIA-001	OLD LANDFILL	RI/FS						
		RA(C)						
		RA(O)						
SITE ID	SITE NAME	PHASE	FY16	FY17	FY18	FY19	FY20	FY21+
RIA-001A	Old Landfill - Silurian Aquifer	RI/FS						
SITE ID	SITE NAME	PHASE	FY16	FY17	FY18	FY19	FY20	FY21+
RIA-014	UST (34)	RA(O)						

ROCK ISLAND ARSENAL
Army Defense Environmental Restoration Program
Compliance Restoration

CR Summary

Installation Total Army Environmental Database-Restoration (AEDB-R) Sites/Closeout Sites Count: 3/1

Installation Site Types with Future and/or Underway Phases

- 1 Contaminated Ground Water
(CC-RIA-007)
- 1 Plating Shop
(CC-RIA-69)

Most Widespread Contaminants of Concern

Metals, Volatiles (VOC)

Media of Concern

Groundwater

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

Site ID	Site Name	Action	Remedy	FY
CC-RIA-54	BLDG 54 Oil Storage Building	FRA	REMOVAL	2010

Duration of CR

Date of CR Inception: 200610

Estimated Date for Remedy-In-Place (RIP)/Response Complete (RC): 201709/204509

Date of CR completion including Long Term Management (LTM): 204509

CR Contamination Assessment

Contamination Assessment Overview

The Building 69 site (CC-RIA-69) is the former Small Arms Plating Shop. The groundwater contaminants of concern are chromium and VOCs. It is anticipated that the site will require bioremediation for the groundwater. A RCRA facility investigation (RFI)/corrective measures study (CMS) is planned, a PBA has been issued for this and two other sites.

CC-RIA-007 is a former construction landfill. The contaminant of concern is TCE in the groundwater. An RFI/CMS is planned for the site and it will be part of the above PBA. It is expected that bioremediation will be used to remediate the site groundwater.

Cleanup Exit Strategy

The CC-RIA-69 and CC-RIA-007 sites have both been included in a PBA for three RIA sites. Both sites will have remedial studies conducted and it is expected that both sites will be remediated via groundwater remediation. It is expected that both sites will have LUCIPs instituted and go into LTM.

CR Previous Studies

	Title	Author	Date
2010	CC-RIA-69, PI	Foth	FEB-2010
2011	CC-RIA-007 Preliminary Site Assessment	Environmental Quality Management	FEB-2011
	Building 69, RI	Foth	JUL-2011
2013	Fall 2012 Groundwater monitoring Report, RIA-69 Incidence Plating Shop	URS	JAN-2013

ROCK ISLAND ARSENAL
Compliance Restoration
Site Descriptions

Site ID: CC-RIA-007
Site Name: Former Construction Landfill

STATUS

Regulatory Driver: CERCLA
Contaminants of Concern: Volatiles (VOC)
Media of Concern: Groundwater

Phases	Start	End
PA.....	200805.....	200812
SI.....	201006.....	201009
RI/FS.....	201207.....	201709
RIP Date:	N/A	
RC Date:	201709	

SITE DESCRIPTION

The CC-RIA-007 Former Construction Landfill site is a grassed area between the POL facility and Sylvan Slough. The area was named SWMU RIA-7 in the US Army Environmental Hygiene agency (USAEHA) Groundwater Contamination Survey No. 38-26-0308-88, Interim Final Report dated May 16-21, 1988. It may also be known as Site 23, as identified in the Installation Assessment of Rock Island Arsenal, Report No.164, December 1979, USATHAMA. The 1988 USAEHA report states that the site was used to landfill construction debris in the 1960s through the mid-1970s. Some of the area was investigated in 1990 and 1991, as part of a POL spill incident. The final report is "POL Facility Investigation of Leaking Underground Storage Tanks Rock Island Arsenal, D/A File No. 5680.06, May 1991, ". The contractor was not informed of the past use of the site and only the potential for petroleum contamination and transport was investigated. Review of the document indicates that some apparent landfill contamination was detected by the active soil gas survey. During the winter of 1996-1997, groundwater was classified according to IEPA rules ("Draft Groundwater Classification Investigation Report for the Old Landfill Site at Rock Island Arsenal, March 1997"). Although the intent of the wells installed was to only conduct a pump test of the aquifer, some contamination was also discovered. Sampling results of a 2009 monitoring well survey indicated that the RIA-007 site should be investigated. A preliminary investigation has been completed and sampling results indicated contamination above state soil remediation standards and groundwater remediation standards. The site transferred from the Compliance-related Cleanup (CC) program. This site is part of the FY12 PBA effort at RIA.

An RI/FS is in progress at RIA-007 with the final report projected for July 14, 2015. The RI/FS will be used to determine the nature and extent of the contamination at the former construction landfill and to determine if it poses an unacceptable risk to human health and/or to the environment.

CLEANUP/EXIT STRATEGY

An RI/FS is currently being conducted at the site and as part of this RI/FS a PP and a DD will be written outlining the remedial path forward at the site. The site is included on a FY12 PBA for three sites at RIA [CC-RIA-007, CC-RIA-69, and CC-RIA-64 (C-RIA-064) and is part of the CC program].

Site ID: CC-RIA-69

Site Name: BLDG 69 Production, Plating and Tinning

STATUS

Regulatory Driver: CERCLA
Contaminants of Concern: Metals, Volatiles (VOC)
Media of Concern: Groundwater

Phases	Start	End
PA.....	200610.....	200702
SI.....	200903.....	200909
RI/FS.....	201003.....	201709
RA(C).....	201204.....	201709
RA(O).....	201303.....	204509

RIP Date: 201709

RC Date: 204509

SITE DESCRIPTION

A mix of production, plating and tinning operations were performed within Building 69 until about 1980. Until the building structure was demolished in 2007, the major use was for storage.

The building was demolished during FY07, but the foundation and floor remain in place. A plating pit was filled and covered with a high density polyethylene membrane to minimize infiltration. A PA/SI was performed and included groundwater and soil sampling. The PA results indicated chromium contamination. This site is part of the FY12 PBA at RIA. Additional wells have been installed and the site has had biotreatment injections to help reduce chromium contamination. A RI report is expected to be final in early FY16. Groundwater monitoring will continue and a second biotreatment injection will occur in FY15. The site moved into the IEPA Federal Compliance program in FY14

CLEANUP/EXIT STRATEGY

The Building 69 site was included in a PBA for three sites at RIA [CC-RIA-69, CC-RIA-007, and CC-RIA-64 (CC-RIA-064 is part of the CC program)]. There will be an RFI/CMS performed and the expected remediation will be bioremediation of the groundwater. The site should then go to LTM and a LUCIP should be placed on the site.

Site Closeout (No Further Action) Summary

Site ID	Site Name	NFA Date	Documentation
CC-RIA-54	BLDG 54 Oil Storage Building	201008	NFA Letter from the IEPA

Date of CR Inception: 200610

Past Phase Completion Milestones

2007

RFA (CC-RIA-54 - BLDG 54 Oil Storage Building)
PA (CC-RIA-69 - BLDG 69 Production, Plating and Tinning)

2009

PA (CC-RIA-007 - Former Construction Landfill)
SI (CC-RIA-69 - BLDG 69 Production, Plating and Tinning)

2010

CMI(C) (CC-RIA-54 - BLDG 54 Oil Storage Building)
SI (CC-RIA-007 - Former Construction Landfill)

Projected Phase Completion Milestones

See attached schedule

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

To Be Determined

Final RA(C) Completion Date: 201709

Schedule for Next Five-Year Review: 2019

Estimated Completion Date of CR at Installation (including LTM phase): 204509

ROCK ISLAND ARSENAL CR Schedule

= phase underway

SITE ID	SITE NAME	PHASE	FY16	FY17	FY18	FY19	FY20	FY21+
CC-RIA-007	Former Construction Landfill	RI/FS						
SITE ID	SITE NAME	PHASE	FY16	FY17	FY18	FY19	FY20	FY21+
CC-RIA-69	BLDG 69 Production, Plating and Tinning	RI/FS						
		RA(C)						
		RA(O)						

Community Involvement

Technical Review Committee (TRC): None

Community Involvement Plan (Date Published): 200804

Restoration Advisory Board (RAB): No

Reason Not Established: The community has expressed no sufficient, sustained interest in a RAB.

Community Interest Solicited on: 201105

Efforts Taken to Determine Interest

A RAB letter and survey was sent to community leaders and a notice was placed in local newspapers in April 2007. The same was done in May 2009 and the same was done 2011.

Results

Due to a poor response and a lack of interest to the 2007, 2009, and 2011 solicitations, a RAB was not established.

Follow-up Procedures

N/A

Additional Community Involvement Information

A public meeting was held on Jan. 30, 2013 at RIA to allow the public to review and provide input to the remedy selection at the Old Landfill RIA-001 and the UST-34 site RIA-014 in accordance with the CERCLA regulations.

Administrative Record is located at

Rock Island Arsenal Vault, 1st floor
Building 102, Rodman Avenue
Rock Island Arsenal,
Rock Island, IL 61299

Information Repository is located at

Rock Island Arsenal Vault, 1st floor
Building 102, Rodman Avenue
Rock Island Arsenal,
Rock Island, IL 61299

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

TAPP Title: N/A

Potential TAPP: N/A

