

FY2012

FORT GREELY

Army Defense Environmental Restoration Program

Installation Action Plan

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Table of Contents

Statement Of Purpose.....	1
Acronyms.....	2
Acronym Translation Table.....	4
Installation Information.....	5
5-Year / Periodic Review Summary.....	7
Land Use Control (LUC) Summary.....	8
Cleanup Program Summary.....	10
Installation Restoration Program.....	12
IRP Summary.....	13
IRP Contamination Assessment.....	15
IRP Previous Studies.....	16
Installation Restoration Program Site Descriptions.....	22
FGLY-002 UST'S,BLDG 110.....	23
FGLY-004 BLDG 605,COLD REG TEST CENTER.....	25
FGLY-006 FIRE TRAINING AREA-SITE 85/94/133.....	26
FGLY-007 LANDFILL 1/2 - BRAC SITE 31/32.....	28
FGLY-008 LANDFILL 2-SITE 32.....	29
FGLY-010 LANDFILLS 4 AND 5-BRAC SITE 88.....	30
FGLY-011 LANDFILL 5.....	31
FGLY-012 LANDFILL 6.....	32
FGLY-015 BLDG 100, DRUM STORAGE-SITE 92.....	33
FGLY-018 INJECTION WELL FOR NUCLEAR WASTE.....	34
FGLY-019 SM1A PIPELINE REMOVAL-SITE 90/132.....	35
FGLY-022 LANDFILL #7 (1970'S).....	36
FGLY-027 TAR AND ASPHALT DISPOSAL AREA.....	37
FGLY-031 BLDG 615 ROADS AND GROUNDS/DRUM STORAGE.....	39
FGLY-033 UST, BLDG 162 BRAC Site 99.....	40
FGLY-043 UST BLDG 159 BRAC Site 98.....	41
FGLY-045 ROBIN ROAD FUEL SPILL-SITE 30.....	42
FGLY-046 EVERGREEN ROAD FUEL SPILL-SITE 73.....	44
FGLY-049 DELTA TANK FARM.....	46
FGLY-053 OLD POWER GENERATION BLDG-SITE 116.....	47
FGLY-056 POL STORAGE AREA-SITE 113.....	48

Table of Contents

FGLY-058 BLDG 340 UST SITE-SITE 77.....	49
FGLY-059 BLDG 160 UST-SITE 100.....	50
FGLY-071 BLDG 144 UST-SITE 101.....	51
FGLY-072 HELICOPTER REFUELING AREA-SITE 121.....	52
FGLY-075 BLDG 675 LAUNDRY (54).....	53
FGLY-076 REFUSE BURN PIT-SITE 89.....	55
FGLY-099 Misc UST/AST Sites.....	57
FGLY-100 CANOL pipeline Tank Farm/South Tank.....	59
Installation Restoration Program Site Closeout (No Further Action) Sites Summary.....	61
IRP Schedule.....	63
Installation Restoration Program Milestones.....	63
IRP Schedule Chart.....	66
Military Munitions Response Program.....	68
MMRP Summary.....	69
MMRP Contamination Assessment.....	70
MMRP Previous Studies.....	71
Military Munitions Response Program Site Descriptions.....	72
FGLY-004-R-01 JARVIS CREEK MUNITIONS BURIAL SITE.....	73
FGLY-005-R-01 BRAC Site 112, Former Scrap Yard.....	74
Military Munitions Response Program Site Closeout (No Further Action) Sites Summary.....	75
MMRP Schedule.....	76
Military Munitions Response Program Milestones.....	76
MMRP Schedule Chart.....	77
Compliance Restoration.....	78
CR Summary.....	79
CR Contamination Assessment.....	80
CR Previous Studies.....	81
Compliance Restoration Site Descriptions.....	82
CCFGLY002 BLDG 617 FUEL SPILL AND TANKS 419 & 420.....	83
CCFGLY008 MOGAS/DFA Fuel line (BRAC 94/97/101/134).....	84
FGLY-074 BLDG 320 DIESEL SPILL - SITE 72.....	85

Table of Contents

Compliance Restoration Site Closeout (No Further Action) Sites Summary.....	86
CR Schedule.....	87
Compliance Restoration Milestones.....	87
CR Schedule Chart.....	88

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 (RAs).

In an effort to coordinate planning information between the restoration manager, the US Army Environmental Command (USAEC), Fort Greely (FGLY), the Installation Management Command (IMCOM), the executing agencies, the regulatory agencies, and the public, an IAP was completed. The IAP is used to track requirements, schedules and tentative 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 Cleanup Level
ADEC	Alaska Department of Environmental Conservation
ASCG	Arctic Slope Consulting Group Inc.
AST	Aboveground Storage Tank
Bldg	Building
BRAC	Base Realignment and Closure
CANOL	Canadian Oil
CERFA	Community Environmental Response Facilitation Act
CMI(C)	Corrective Measures Implementation (Construction)
CMI(O)	Corrective Measures Implementation (Operation)
CMS	Corrective Measures Study
COPC	Contaminants of Potential Concern
CR	Compliance Restoration
CRTC	Cold Regions Test Center
CS	Confirmation Sampling
CTT	Closed, Transferring, and Transferred
DD	Decision Document
DES	Design
DPW	Directorate of Public Works
DRO	Diesel Range Organic
EBS	Environmental Baseline Survey
EDB	Ethylene Dibromide
EM	Electromagnetic
ER'A	Environmental Restoration, Army
FGA	Fort Greely, Alaska
FGLY	AEDB-R designation for Fort Greely
FRA	Final Remedial Action
ft	feet
FY	Fiscal Year
gal	gallon
GMD	Ground-based Midcourse Defense
GPR	Ground Penetrating Radar
GRO	Gasoline Range Organic
IC	Institutional Controls
IM	Interin Measure
IMCOM	Installation Management Command
IR	Installation Restoration
IRA	Interim Remedial Action
IRP	Installation Restoration Program
K	thousand
kg	kilogram
LF	Landfill
LRE	Limited Risk Evaluation
LTM	Long-Term Management
LUC	Land Use Control

Acronyms

MCL	Maximum Contaminant Level
MEC	Munitions and Explosives of Concern
mg	milligram
mm	millimeter
MRS	Munitions Response Site
MW	Monitoring Well
N/A	Not Applicable
NFA	No Further Action
NPL	National Priorities List
PAH	Polycyclic Aromatic Hydrocarbons
POL	Petroleum, Oil and Lubricants
RA	Remedial Action
RA(C)	Remedial Action (Construction)
RA(O)	Remedial Action (Operation)
RAB	Restoration Advisory Board
RC	Response Complete
RD	Remedial Design
RFA	RCRA Facility Assessment
RFI	RCRA Facility Investigation
RI	remedial investigation
RIP	Remedy-in-Place
ROD	Record of Decision
RRO	Residual Range Organics
SESOIL	Seasonal Soil Compartment Model
sf	square feet
SI	Site Inspection
SVE	Soil Vapor Extraction
SVOC	Semi-Volatile Organic Compound
SWMU	Solid Waste Management Unit
TAADA	Tar and Asphalt Disposal Area
TAPP	Technical Assistance for Public Participation
TBD	To Be Determined
TEQ	Toxic Equivalents
TRC	Technical Review Committee
USACE	US Army Corps of Engineers
USAEC	US Army Environmental Command
USARAK	US Army Alaska
USASMDC	US Army Space and Missile Defense Command
USEPA	US Environmental Protection Agency
UST	Underground Storage Tank
UXO	Unexploded Ordnance
VOC	Volatile Organic Compound
WWII	World War II

Acronym Translation Table

CERCLA

Preliminary Assessment(PA)
Site Inspection(SI)
Remedial Investigation/Feasibility Study(RI/FS)
Remedial Design(RD)
Remedial Action (Construction)(RA(C))
Remedial Action (Operation)(RA(O))
Long Term Management(LTM)
Interim Remedial Action(IRA)

RCRA

= RCRA Facility Assessment(RFA)
= Confirmation Sampling(CS)
= RCRA Facility Investigation/Corrective Measures Study(RFI/CMS)
= Design(DES)
= Corrective Measures Implementation (Construction)(CMI(C))
= Corrective Measures Implementation (Operation)(CMI(O))
= Long Term Management(LTM)
= Interim Measure(IM)

Installation Information

Installation Locale

Installation Size (Acreage): 7200

City: Delta Junction

County: N/A

State: Alaska

Other Locale Information

The installation was originally comprised of 661,051 acres and was under the cognizance of the US Army Alaska (USARAK). In 2002, FGLY was restructured into a much smaller area of 7,200 acres. Responsibility for the remainder of the former FGLY was transferred to Fort Wainwright, Alaska, and is now called the Donnelly Training Area (DTA); DTA remains under the control of the USARAK. US Army Space and Missile Defense Command (USASMDC) briefly controlled FGLY (2002-2005) before the installation transferred to IMCOM. USASMDC remains a major tenant on the post.

Installation Mission

The mission of FGLY is to support the ground-based midcourse defense (GMD) interceptor deployment and the Cold Regions Test Center. The installation also maintains the Allen Army Airfield, which is used by GMD, and a number of other agencies for miscellaneous activities in the area (e.g. US Air Force training, forest fire fighting, etc.).

Lead Organization

Lead Executing Agencies for Installation

USASMDC under direction of FGLY Directorate of Public Works (DPW)

Regulator Participation

Federal

US Environmental Protection Agency (USEPA) Region 10

State

Alaska Department of Environmental Conservation (ADEC) Contaminated Sites Program

National Priorities List (NPL) Status

FORT GREELY is not on the NPL

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

RAB established 199609

Installation Program Summaries

IRP

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

Affected Media of Concern: Groundwater, Soil

MMRP

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

Affected Media of Concern: Soil

Installation Information

CR

Primary Contaminants of Concern: Petroleum, Oil and Lubricants (POL), Volatiles (VOC)

Affected Media of Concern: Soil

5-Year / Periodic Review Summary

5-Year / Periodic Review Summary

Status	Start Date	End Date	End FY
Planned	201408	201408	2014

5-Year / Periodic Review Details

Associated ROD/DD Name	Sites
Nine IRP Sites ROD	FGLY-007, FGLY-008, FGLY-010, FGLY-011, FGLY-019, FGLY-032, FGLY-050, FGLY-076

Land Use Control (LUC) Summary

LUC Title: LUC

Site(s): FGLY-007, FGLY-008, FGLY-010, FGLY-011, FGLY-019, FGLY-076

ROD/DD Title: Nine IRP Sites ROD

Location of LUC

Landfills 1, 2, 4, & 5. Wastewater Pipeline station 21+25 and Refuse Burn Pit

Land Use Restriction: Landfill restriction - Prohibit activities that would impact the LF cap (or cover system) and drainage system, Landfill restriction - Prohibit excavation on LF cap or cover system, Landfill restriction - Prohibit installation of utility system lines through the site, Landfill restriction - Restrict construction of buildings that may interfere with LF cap or cover system, Restrict land use - No residential use

Types of Engineering Controls: Fences, Signs

Types of Institutional Controls: Construction Permit, Dig Permits, Notations in Master Plan

Date in Place: 200908

Modification Date: N/A

Date Terminated: N/A

Inspecting Organization: USACE District

Record of LUC: Master Plan or Equivalent

Documentation Date: 200908

LUC Enforcement: Annual Inspections, 5 Year Reviews

Contaminants: METALS, PETROLEUM HYDROCARBON

Additional Information

Dig restrictions land use restrictions would consist of denoting the site in the Administrative Controls GIS database. The database is used by the Fort Greely Department of Public Works (DPW) to evaluate dig permits (any activity requiring ground penetration) and is used by the Master Planner in planning future activities. DPW staff would evaluate if the proposed dig activity or change in land use would increase potential exposure to contaminants. Increased exposure to contaminants would not be allowed without engineering controls to mitigate exposure. Change in land use and digging would not necessarily be prohibited, but potential exposure must be evaluated prior to the dig activity or change in land use.

LUC Title: LUC (05 Env Sites DD)

Site(s): FGLY-004, FGLY-012, FGLY-019, FGLY-022

ROD/DD Title: Environmental Sites Decision Document

Location of LUC

Building 605, CRTG; Landfill 6; Station 20+70 POL Site; Station 24+00 POL Site; Station 9+50 POL Site; Landfill 7

Land Use Restriction: Landfill restriction - Prohibit activities that would impact the LF cap (or cover system) and drainage system, Landfill restriction - Prohibit excavation on LF cap or cover system, Landfill restriction - Prohibit installation of utility system lines through the site, Landfill restriction - Restrict construction of buildings that may interfere with LF cap or cover system, Media specific restriction - restrict drinking water well installation, Restrict land use - No residential use

Types of Engineering Controls: Fences, Signs

Types of Institutional Controls: Construction Permit, Dig Permits, Notations in Master Plan, Restrictions on land use

Date in Place: 200506

Modification Date: N/A

Date Terminated: N/A

Inspecting Organization: USACE District

Record of LUC: Master Plan or Equivalent

Documentation Date: 200506

Land Use Control (LUC) Summary

LUC Enforcement: 5 Year Reviews

Contaminants: METALS, PETROLEUM HYDROCARBON

Additional Information

N/A

Cleanup Program Summary

Installation Historic Activity

The installation is approximately 100 miles southeast of Fairbanks and five miles south of Delta Junction. The entrance is on the Richardson Highway, a paved, two-lane roadway. Jarvis Creek, the only major stream flowing through FGLY, is glacier-fed and silt-laden. Other than Fairbanks, which is home to about 50,000 people, there are no major population centers for several hundred miles.

Except for transient explorers and hunters, the area near FGLY was not inhabited until about 1915, when roadhouses and trading centers became established with construction of the Richardson Trail (which later became Richardson Highway). During World War II (WWII), the military constructed bases and developed several of the state's major highways, including the Alaska Highway in 1942. After completing the Alaska Highway, the Army established a base called Station 17, which was used as a staging field for military operations. Few of the original Station 17 buildings remain at FGLY.

Over the years, the post has gradually expanded, and buildings with antiquated or inadequate facilities have been decommissioned and demolished. Through the years FGLY has supported the Cold Regions Test Center, operations at Allen Army Airfield, several hundred thousand acres of ranges, and numerous other activities.

The installation has undergone a number of environmental studies and restoration activities dating back to 1978. In 1989, the first stage of the Installation Restoration Program (IRP) initiated a number of investigations. The first significant study was a preliminary assessment (PA) conducted in 1992. Between 1992 and 1995, most of the sites were studied and several remediation projects were completed.

In 1995 FGLY was selected for realignment under the Base Realignment and Closure (BRAC) program. The Army subsequently declared as surplus 1,700 acres, including most of the cantonment area. A cleanup plan was developed to remediate the sites so that the surplus property would not pose any environmental liabilities to future occupants. The BRAC-driven remediation continued through 2002, the scheduled implementation date for realignment. Just prior to this date, the Department of the Army decided to retain previously identified surplus property at FGLY and directed transition of the current footprint from USARAK to USASMDC.

The GMD joint program office is the current major tenant on FGLY. The Missile Defense Agency has begun fielding the Ballistic Missile Defense System. Under recent Army initiatives, IMCOM is responsible for base operations at Army installations. The former FGLY totaled approximately 600,000 acres. The current FGLY is approximately 7,000 acres. The portions of FGLY not transferred to USASMDC are now called Donnelly Training Range and are still under the control of USARAK. USASMDC restarted the IRP following the transfer from USARAK.

In June 2003 the USASMDC organized a meeting with past and current environmental personnel involved with FGLY to list all sites where there was suspected or confirmed contamination. A list of 132 sites was developed originating from examination of all BRAC parcels, the USEPAs solid waste management units (SWMU) list, the ADEC contaminated sites database, and the Army Environmental Database - Restoration (AEDB-R). As a result of the June 2003 meeting and follow-on research, an environmental fact sheet was produced for each unique site. In 2005 a decision document (DD) was produced to close out 73 of the sites. A record of decision (ROD) in 2009 closed or determined the final RAs at nine additional sites. Since 2003, four additional sites have been identified. The remaining 54 sites require additional documentation, investigations, and/or RA prior to closeout, either under the Military Munitions Response Program (MMRP) or IRP.

Installation cleanup activities in 2008-2012 focused on achieving a remedy-in-place, a remedy complete, or site closure for all sites by 2014. Extensive investigations, removal actions, RAs, and a treatability study for remediation by ozone injection were utilized to characterize sites, perform cleanup, and prepare most of the sites for closeout. A proposed plan (PP)/ROD is under development in 2012 to close out an additional 50 sites (some with no restrictions, some with land use controls (LUC), and some with final closeout actions).

Installation Program Cleanup Progress

IRP

Prior Year Progress: FGLY-100 transitioned to plume monitoring with no source area identified for treatment. FGLY-006 has in situ oxidation by ozone injection continued along with plume monitoring. RI/FS documents for FGLY-006 and FGLY-100 will be completed. MMRP sites began subsurface anomaly investigation. PP for closure of 50 sites (by FGLY/State numbering scheme; all but FGLY-006/100 and reactor sites

Cleanup Program Summary

in AEDB-R) sent to ADEC for approval.

Future Plan of Action: Remediation is planned to continue for FGLY-006 in 2013/14 to address source areas for groundwater (GW) contamination. Plume management will continue for FGLY-006/100. A PP/ROD to close out majority of remaining sites is planned for signature in fiscal year (FY) 2013. LTM will continue on-site as required. PP/ROD to be developed for FGLY-006/100 for approval in FY2014.

MMRP

Prior Year Progress: Work was initiated on subsurface anomaly investigation at multiple sites in order to eliminate unexploded ordnance (UXO) concern. A PP/ROD to close out remaining sites and propose fencing/LTM for FGLY-005-R-01 was sent to ADEC for approval.

Future Plan of Action: A DD will be completed for engineering controls at FGLY-005-R-01. Following the DD, MEC engineering controls (boundary fencing) will be implemented at site 112 (FGLY-005-R-01). Minor MEC monitoring is assumed to follow to ensure that the engineering controls are in place. Multiple sites subsurface anomaly investigations will be completed [with assumed no further action (NFA) required].

CR

Prior Year Progress: Compliance Restoration (CR) sites all in PP/ROD were sent to ADEC for approval.

Future Plan of Action: Site closure is planned.

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Installation Restoration Program

IRP Summary

Installation Total Army Environmental Database-Restoration (AEDB-R) Sites/Closeout Sites Count: 63/34

Installation Site Types with Future and/or Underway Phases

1	Above Ground Storage Tank (FGLY-049)
1	Burn Area (FGLY-076)
1	Contaminated Buildings (FGLY-053)
1	Disposal Pit/Dry Well (FGLY-075)
1	Fire/Crash Training Area (FGLY-006)
7	Landfill (FGLY-004, FGLY-007, FGLY-008, FGLY-010, FGLY-011, FGLY-012, FGLY-022)
1	Radioactive Waste Area (FGLY-018)
3	Soil Contamination After Tank Removal (FGLY-059, FGLY-071, FGLY-100)
3	Spill Site Area (FGLY-045, FGLY-046, FGLY-072)
3	Storage Area (FGLY-015, FGLY-031, FGLY-056)
1	Surface Disposal Area (FGLY-027)
5	Underground Storage Tank (FGLY-002, FGLY-033, FGLY-043, FGLY-058, FGLY-099)
1	Waste Lines (FGLY-019)

Most Widespread Contaminants of Concern

Dioxins/Dibenzofurans, Metals, Pesticides, Petroleum, Oil and Lubricants (POL), Polycyclic Aromatic Hydrocarbons (PAH), Semi-volatiles (SVOC), Volatiles (VOC)

Media of Concern

Groundwater, Soil

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

Site ID	Site Name	Action	Remedy	FY
FGLY-002	UST'S,BLDG 110	IRA	WASTE REMOVAL - DRUMS, TANKS, BULK CONTAINERS	1992
FGLY-002	UST'S,BLDG 110	IRA	WASTE REMOVAL - SOILS	1992
FGLY-034	UST, BLDG 210	FRA	WASTE REMOVAL - SOILS	1992
FGLY-035	USTS BLDG 602	FRA	WASTE REMOVAL - SOILS	1992
FGLY-036	UST'S, BLDG 606	IRA	WASTE REMOVAL - DRUMS, TANKS, BULK CONTAINERS	1992
FGLY-036	UST'S, BLDG 606	IRA	WASTE REMOVAL - SOILS	1992
FGLY-037	TEXAS TOWER BLDG COMPLEX	IRA	WASTE REMOVAL - DRUMS, TANKS, BULK CONTAINERS	1992
FGLY-037	TEXAS TOWER BLDG COMPLEX	IRA	WASTE REMOVAL - SOILS	1992
FGLY-033	UST, BLDG 162 BRAC Site 99	IRA	WASTE REMOVAL - DRUMS, TANKS, BULK CONTAINERS	1993
FGLY-033	UST, BLDG 162 BRAC Site 99	IRA	WASTE REMOVAL - SOILS	1993

IRP Summary

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

Site ID	Site Name	Action	Remedy	FY
FGLY-002	UST'S,BLDG 110	FRA	SOIL VAPOR EXTRACTION	1994
FGLY-002	UST'S,BLDG 110	FRA	AIR SPARGING	1994
FGLY-034	UST, BLDG 210	FRA	WASTE REMOVAL - DRUMS, TANKS, BULK CONTAINERS	1994
FGLY-035	USTS BLDG 602	FRA	WASTE REMOVAL - DRUMS, TANKS, BULK CONTAINERS	1994
FGLY-027	TAR AND ASPHALT DISPOSAL AREA	IRA	WASTE REMOVAL - DRUMS, TANKS, BULK CONTAINERS	1995
FGLY-043	UST BLDG 159 BRAC Site 98	IRA	WASTE REMOVAL - SOILS	1995
FGLY-029	UST SOIL PILE	FRA	INCINERATION	1996
FGLY-037	TEXAS TOWER BLDG COMPLEX	FRA	IN-SITU SOIL TREATMENT	1996
FGLY-006	FIRE TRAINING AREA-SITE 85/94/133	IRA	BIOREMEDIATION - IN SITU	1999
FGLY-006	FIRE TRAINING AREA-SITE 85/94/133	IRA	SOIL VAPOR EXTRACTION	1999
FGLY-045	ROBIN ROAD FUEL SPILL- SITE 30	IRA	THERMAL DESORPTION	2000
FGLY-049	DELTA TANK FARM	FRA	REMOVAL	2000
FGLY-019	SM1A PIPELINE REMOVAL- SITE 90/132	IRA	REMOVAL	2001
FGLY-006	FIRE TRAINING AREA-SITE 85/94/133	IRA	CAPPING	2003
FGLY-100	CANOL pipeline Tank Farm/South Tank	IRA	REMOVAL	2009
FGLY-075	BLDG 675 LAUNDRY (54)	IRA	REMOVAL	2010
FGLY-076	REFUSE BURN PIT-SITE 89	FRA	WASTE REMOVAL - SOILS	2010
FGLY-099	Misc UST/AST Sites	IRA	LANDFARMING	2011

Duration of IRP

Date of IRP Inception: 199005

Estimated Date for Remedy-In-Place (RIP)/Response Complete (RC): 201409/201712

Date of IRP completion including Long Term Management (LTM): 204209

IRP Contamination Assessment

Contamination Assessment Overview

As at most facilities, operations at FGLY required the use of many types of potentially hazardous substances. Historically, most of the hazardous wastes generated at FGLY have been spent petroleum products, such as oil, transmission, brake and hydraulic fluids, fuel and cleaning solvents. Other less frequently used hazardous substances included leaded paint, battery acid, polychlorinated biphenyls (PCB), rodenticides, insecticides, and herbicides.

In the late-1990s, many investigations and RAs were undertaken as part of the BRAC efforts to close out a portion of FGLY. In 2002, the USASMDC reopened the facility as a ballistic missile defense facility and took over the investigation and remediation activities from USARAK and the US Army Corps of Engineers (USACE). The primary focus of recent investigations has revolved around the discovery of trichloroethylene (TCE) in the groundwater downgradient of FGLY-006, benzene in the groundwater upgradient of FGLY-006, and ethylene dibromide (EDB) in the groundwater downgradient of FGLY-100.

FY2005 investigations also revealed significant petroleum contamination at FGLY-100 (South Tank Farm) and in late FY2006 a bioremediation effort of the surface contamination [20,000 cubic yards (cy)] was initiated and completed by 2008. Additional investigation is required for subsurface petroleum contamination at this site.

Four other sites involve the downgradient groundwater monitoring of landfills or past significant petroleum spill sites. Other sites include dioxin and metals contamination at a former refuse burn pit, two former dry cleaning facilities, a former asphalt/tar disposal area, and two small petroleum spill sites. A ROD in 2009 closed nine sites with the final actions determined for the refuse burn pit (225cy of lead contaminated soil removed in 2009 and a cap completed in 2010).

An in situ remediation treatability study was initiated at FGLY-006 in 2009 to determine if treatment of deep petroleum contamination was feasible. Bioremediation proved to be impractical due to low temperatures. Ozone injection showed promise and the treatability study was expanded to an IRA in 2010 and there are plans to install similar system at FGLY-100 in 2011.

Cleanup Exit Strategy

The ongoing RAs are at FGLY-006 and FGLY-100 (both ozone injection in situ oxidation) and soil removal/landfarming at multiple sites under FGLY-099. Upon completion of RAs, sites with contamination remaining above the ADEC Method 2 cleanup levels (screening level) will require the development of site-specific alternative cleanup levels (ACL) by ADEC Method 3 or use of ADECs hydrocarbon risk calculator (HRC). LUCs have been implemented on all known contaminated sites (as part of the Garrison's dig permit process) and will be maintained.

IRP Previous Studies

Year	Title	Author	Date
1982	Internal Notice: Pollution Incident Report 44,000 Gallon Spill	US Army	JAN-1982
	Report and Memorandums regarding 132,000-Gallon Fuel Spill	USACE	DEC-1982
1983	Installation Assessment of the HQ, 172d Infantry Brigade, Ft Greely, For the Commander, Headquarters, 172d Infantry Brigade (Alaska), Ft Richardson, AK, and U.S. Army Toxic and Hazardous Materials Agency, (DRXTH - AS - IA - 82328C), Fort Greely	US Army	JAN-1983
	Analysis of Existing Facilities/Environmental Assessment Report, Ft Greely, AK Preliminary	Unwin, Scheben, Korynta, and Huettl, Inc. (USKH)	JAN-1983
	Evaluation of Solid Waste Disposal Practices, Ft Greely	US Army Environmental Hygiene Agency	JAN-1983
1990	Waste Site Locations, Ft Greely Cantonment Area, Delta Junction	U.S. Army Toxic and Hazardous Materials Agency	JAN-1990
	FGLY 06 RCRA Facility Assessment PR/VSI Report	SAIC	JAN-1990
	FGLY 07 RCRA Facility Assessment (PR/VSI) Report	SAIC	JAN-1990
	FGLY 010 RCRA Facility Assessment PR/VSI Report	SAIC	JAN-1990
	Installation Restoration Program, Stage 1, Joint Resources Project, Ft Richardson, Wainwright and Greely, Site 4, Fire Training Pits, Volumes 4, 5, and 6, For Alaskan Air Command HQ ACC/DEP, Elmendorf AFB, and US Army Directorate of Engineering and Housing AFVR - DE, Ft Richardson	Woodward-Clyde Consultants	JAN-1990
1991	Groundwater Monitoring Network, Ft Greely	US Army Corps of Engineers	AUG-1991
1992	Progress Report for the Confirmation of Fire Training Pits at Ft Richardson and Greely, Ecology and Environment, Inc.	Ecology and Environment, Inc.	FEB-1992
	FGLY 06 Fire Training Pits Work Plan, Pt 1, Ft Richardson & Greely	E&E	FEB-1992
	FGLY 06 Fire Training Pits Work Plan, Part 2, Subsurface Exploration Plan, Ft Richardson and Greely	E&E	FEB-1992
	Preliminary Assessment, Ft Greely	CH2M Hill	SEP-1992
1993	Site Inspection Report for Fire Training Pits at Ft Richardson and Greely	EEI	SEP-1993
1994	Sampling Report for Groundwater Monitoring Network at Ft Greely, Volume II, Fort 6th Infantry Division (L)	Public Works, Environmental Resources Department, Ft Richardson, ENSR, Consulting and Engineering	JAN-1994
	Site Assessment/Corrective Action Plan (FGLY 06), Three Former Fire Training Pits	USAED	MAR-1994

IRP Previous Studies

1994	Title	Author	Date
	Environmental Assessment and Finding of No Significant Impact (FGLY-06), Remedial Treatment of Petroleum Contaminated Soils, Fire Training Pits	USAED	APR-1994
	Corrective Action Plan Release Investigation, Ft Greely, Volumes I and II	Harding Lawson Associates	MAY-1994
	Remedial Design Investigation, Oil & Tar Burial Site, Ft Greely, Contract No. DACA85-94-D-005, Delivery Order No. 0001	Woodward-Clyde Consultants	JUN-1994
	Site Health and Safety Plan, Building 110 Remedial Investigation and Design, Ft Greely, DACA85-94-D001	AGRA Earth & Environmental, Inc	SEP-1994
	Chemical Data Report, Spring 1994, Groundwater Monitoring, Ft Greely	COE	SEP-1994
	Geotechnical Report, Groundwater Monitoring Network for Ft Greely		SEP-1994
	Remedial Design Investigation, Oil & Tar Burial Site, Ft Greely, Contract No. DACA85-94-D-005, Delivery Order No. 001	Woodward-Clyde Consultants	NOV-1994
	Post-wide Site Inspection, Ft Greely, Contract No. DACA85-94-D-005, Delivery Order No. 0008	Woodward-Clyde Consultants	NOV-1994
1995	Final Respiration Test Report: Fire Burn Pits Treatment System, Ft Greely, Contract No. DACA85-94-D-001 1	AGRA Earth & Environmental, Inc.	MAR-1995
	Final Site Inspection Letter Report: Building 110, Ft Greely, Contract No. DACA85-94-D-001 1, Delivery Order No. 0003	AGRA Earth & Environmental, Inc.	MAR-1995
	Work plan Addendum: Ft Greely Postwide Site Inspection, Contract No. DACA85-94-D-005, Delivery Order No. 008	Woodward-Clyde Consultants	APR-1995
	Remedial Design Investigation Phase II: Oil & Tar Burial Site, Ft Greely, Contract # DACA85-94-005, Delivery Order No. 0001	Woodward-Clyde Consultants	APR-1995
	Final Remedial Design Report (FGLY 06), Contract No. DACA85-94-D-0011, Fire Burn Pits Treatment System	AGRA	MAY-1995
	Schematic Submittal: Repair Bulk Fuel Storage Tanks (Tank 420), DFSP Ft Greely, Contract No. N62472-93-D-1302, For Northern Division Naval Facilities Engineering Command, Lester, Pennsylvania	Enterprise Engineering, Inc.	JUN-1995
	Workplan: Post-Wide Site Inspection, Ft Greely, Contract No. DACA85-94-D-005, Delivery Order No. 0008	Woodward-Clyde Consultants	JUN-1995
	Ft Greely Post-wide SI, Contract No. DACA5794-D-0012	Sound Analytical Services, Inc.	JUL-1995
	Ft Greely Post-wide SI, Work Order No. 95-0202	Columbia Analytical Services	JUL-1995
	Ft Greely Post-wide SI, Work Order No. 950202	Columbia Analytical Services	AUG-1995
	Investigation Report: Confirmation Drilling Buildings 162 and 606, Ft Greely, Contract No. DACA85-94-D-001 1, Delivery Order 5	AGRA Earth & Environmental, Inc.	NOV-1995
	Remedial Design Investigation Report, Building 110, Ft Greely, Contract No. DACA85-94-D-0011, Delivery Order 3	AGRA Earth & Environmental, Inc.	DEC-1995
1997	US Army Base Realignment and Closure 95 Program,	Woodward-Clyde	JAN-1997

IRP Previous Studies

Year	Title	Author	Date
1997	Environmental Baseline Survey Report	Consultants	
	Oil Discharge Prevention and Contingency (ODPC) Plan (FGLY 045)	USACE	JAN-1997
	Final Release Investigation Report, North Delta Tank Farm, Delta Junction, Contract # DACA85-94-D-0009, Delivery Order 12, Modification # 0001	Shannon and Wilson, Inc.	SEP-1997
1998	Draft Report on Soil Vapor Extraction System Monitoring, Remedial Investigation and Design, Bldg 110, Ft Greely, Contract No. DACA85-94-D-001 1, Delivery Order No. 003	AGRA Earth & Environmental, Inc.	JUL-1998
	Remedial Design Investigation Report (FGLY 06), Former Fire Burn Pits	AGRA	JUL-1998
	1997 Site Investigation/Limited Remedial Investigation Report	Jacobs	SEP-1998
1999	Final Report on Confirmation Soil Sampling, RI and Design, Building 110, Ft Greely	AGRA Earth & Environmental, Inc.	APR-1999
	1998 Remedial Investigation Report, Final	Jacobs	APR-1999
2000	Summary Report, 1999 Remedial Investigation/Removal Action	Radian/ Jacobs	AUG-2000
2001	Technical Memorandum, 1997 Analytical Data Review	Lockheed Analytical Services, Jacobs	APR-2001
	Limited Risk Evaluation	Jacobs	NOV-2001
	Summary Report, 2000 Remedial Investigation/Removal Action	Jacobs	DEC-2001
2002	Soil Evaluation and Risk Assessment, Sites: 85 South, 85 North, 133, and 112	USAED	DEC-2002
2003	Cumulative Chemical and Radiological Data Report, 1983-2003, Groundwater Monitoring	USACE	JUL-2003
	Former South Tank Farm Soil Investigation Summary	Artic Slope Combined Group	NOV-2003
2004	SM-1A 2003 Surveillance Report	General Health Physics, Inc.	MAR-2004
	Class V Underground Injection Control Inventory Report	USACE-AK District	APR-2004
	Comprehensive Evaluation of Groundwater Monitoring Program	Midwest Environmental Consultants	JUL-2004
	SM-1A Reactor Waste Laydown Yard Verification Survey Report	USACE	AUG-2004
	SM-1A Reactor Waste Pipeline Corridor Verification Survey Report	USACE	AUG-2004
	Groundwater Sampling and Analysis Report	Shannon & Wilson	OCT-2004
2005			

IRP Previous Studies

Year	Title	Author	Date
2005	2005 Fort Greely Fuel Facility Additional Site Characterization and Assessment	North Wind, Inc	FEB-2005
	SM-1A 2004 Environmental Surveillance Report (FGLY 018)	General Health Physics	MAR-2005
	2004 Field Investigation Report	Arctic Slope Technical Services (ASTS)	MAY-2005
	Groundwater Monitoring and Data Analysis Workplan	ASCG	MAY-2005
	2005 Installation Restoration Program Workplan	ASCG	MAY-2005
	Environmental Sites Decision Document	TSI	JUN-2005
	South Tank Farm Corrective Action Plan (FGLY 100)	ASCG	DEC-2005
2006	2006 Installation Restoration Program Workplan	ASCG	JUL-2006
	2006 Fort Greely Site Inspection Work Plan (MMRP)	TLI, Solutions	SEP-2006
2007	2006 Groundwater Monitoring and Data Analysis Report	Arctic Slope Technical Services	FEB-2007
	2006 Soil Characterization Analytical Data Report	Arctic Slope Technical Services	MAR-2007
	2007 Groundwater Monitoring Memorandum (Addendum to 2005 Groundwater Work Plan)	Arctic Slope Technical Services	APR-2007
	2006 South Tank Farm Biopile Soil Sampling Analytical Data Report	Arctic Slope Technical Services	APR-2007
	North Delta Tank Farm Characterization Report	OASIS Environmental, Inc.	MAY-2007
	2006 South Tank Farm Corrective Action Report	Arctic Slope Technical Services	JUN-2007
	Military Munitions Response Program Final Site Inspection Report Fort Greely Delta Junction, AK 2007 IRP Work Plan	TLI Solutions Arctic Slope Technical Services	JUL-2007 OCT-2007
2008	2005 Remedial Investigation Report BRAC Sites 54, 89, 85N/S, 103, 133, and the South Tank Farm	Arctic Slope Technical Services	JAN-2008
	2006 Remedial Investigation Report: BRAC Sites 31, 32, 41, 48, 89, 133, SM-1A 21+25 Pipeline Station, Tar & Asphalt Disposal Area, and the South Tank Farm	Arctic Slope Technical Services	FEB-2008
	2007 Groundwater Monitoring and Data Analysis Report	Arctic Slope Technical Services	APR-2008
	2007 SM-1A Environmental Surveillance Report	U.S. Army Corps of Engineers	MAY-2008
	2006 SM-1A Environmental Surveillance Report	U.S. Army Corps of Engineers	MAY-2008
	2007 IRP Remedial Investigation Report: South Tank Farm, Tar and Asphalt Disposal Area, and BRAC Sites 85N/85S, 89, and 133	Arctic Slope Technical Services	JUL-2008
	2008 IRP Work Plan	Arctic Slope Technical Services	AUG-2008
2009	2008 IRP Remedial Investigation Report: BRAC Sites 85N/85S & 133; Including SB41/MW-10 Area, South	Arctic Slope Technical Services	JUN-2009

IRP Previous Studies

2009

Title	Author	Date
Tank Farm, and Building 675 (BRAC 54)		
2008 SM-1A Environmental Surveillance Report	U.S. Army Corps of Engineers	JUN-2009
2009 Record of Decision, Nine Installation Restoration Sites, FGA, AK	USASMDC/Teledyne Solutions, Inc.	AUG-2009
2009 IRP Work Plan	Arctic Slope Technical Services	AUG-2009
2009 North Delta Tank Farm Work Plan	Arctic Slope Technical Services	OCT-2009
2008 Groundwater Monitoring and Data Analysis Report	Arctic Slope Technical Services	NOV-2009

2010

2009 SM-1A Environmental Surveillance Report	U.S. Army Corps of Engineers	APR-2010
2010 IRP Work Plan	Arctic Slope Technical Services	JUL-2010
2010 Groundwater Monitoring Work Plan	Arctic Slope Technical Services	JUL-2010
2010 North Delta Tank Farm Groundwater Work Plan	Arctic Slope Technical Services	AUG-2010
2008 Revised Final Compliance Cleanup Sites Annual Report: MOGAS/DFA Fuel Line at Old Post (BRAC Sites 134, 96, 97, 98, 99, and 100); Building 163 and Former UST Tank Farm (BRAC Site 94); Building 100 Drum Storage (BRAC Site 92); Evergreen Road POL Yard (BRAC Site 102); Dry Wells Located at Buildings 628, 612, and 675 (BRAC Sites 57, 135, and 54); Preconstruction Environmental Survey for Proposed CAC Site	Arctic Slope Technical Services	SEP-2010
2010 IRP Work Plan Addendum	Arctic Slope Technical Services	OCT-2010

2011

Pilot Test Design and Performance Report, BRAC Site 94	Sivuniqu, Inc	JAN-2011
2009 North Delta Tank Farm Investigative Report	Arctic Slope Technical Services	FEB-2011
Interim Corrective Action Work Plan, BRAC Site 94	Sivuniqu, Inc	FEB-2011
2009 Groundwater Monitoring and Data Analysis Report	Sivuniqu, Inc	MAR-2011
2009 Revised IRP Remedial Investigation Report: BRAC Sites 54, 72, 76, 77, 84, 94, 101, 111, 113, and 118; Former 2,4,5-T Drum Storage at Building 601; UST Sites at Building 615, 658, 660, and Mid-Post Road; POL Yard and Valve Pit; South Tank Farm; Decommissioning of Monitoring Wells M-7, MW-9, MW-14, and Mid-Post Road Abandoned Well	Arctic Slope Technical Services	MAR-2011
2010 SM-1A Environmental Surveillance Report	U.S. Army Corps of Engineers	APR-2011
Draft Site Characterization and Remediation System Installation Report, BRAC Site 94	Sivuniqu, Inc	MAY-2011
Draft South Tank Farm Characterization Report	Sivuniqu, Inc	MAY-2011
Draft Interim Corrective Action Work Plan Addendum, BRAC Site 94	Sivuniqu, Inc	MAY-2011

IRP Previous Studies

	Title	Author	Date
2011	Draft Interim Corrective Action Work Plan Addendum, South Tank Farm	SivunIQ, Inc	MAY-2011
	2011 Groundwater Work Plan	SivunIQ, Inc	JUL-2011
	2011 IRP Work Plan	SivunIQ, Inc.	AUG-2011
	2011 POL Soil Stockpile Multi-Increment Sampling Work Plan	SivunIQ, Inc.	AUG-2011
2012	2010 IRP Remedial Investigation Report: MOGAS/DFA Line Removals; BRAC Sites 30, 62, 72, 73, 76, 77, 79, 80, 92, 98, 99, 100, 101, 113, 116, 118, 121, 130, 133, and 134; Buildings 110 and 658; 2,4,5-T Drum Storage Area, POL Yard Valve Pit, and 2010 Soil Stockpiles	SivunIQ, Inc	MAR-2012

FORT GREELY
Installation Restoration Program
Site Descriptions

STATUS

Regulatory Driver: CERCLA

RRSE: NOT EVALUATED

Contaminants of Concern: Petroleum, Oil and Lubricants (POL)

Media of Concern: Soil

Phases	Start	End
PA.....	199206.....	199212
SI.....	199206.....	199212
RI/FS.....	199305.....	199406
RD.....	199206.....	199407
IRA.....	199206.....	199209
RA(C).....	199207.....	199407
RA(O).....	199209.....	199809
LTM.....	201001.....	204209

RIP Date: 199407

RC Date: 199809

SITE DESCRIPTION

Former building 110 was utilized as a pump house for aircraft fuel. Three aboveground storage tanks (AST) were located at the site and have been removed. Three underground storage tanks (UST) (407, 408, and 409) were also located at Building 110. USTs 407 and 408 stored aviation fuel while UST 409 stored used oil. These USTs were removed in September 1989.

Five soil samples were collected during the UST removals, total petroleum hydrocarbon (TPH) concentrations ranged from 22 milligrams (mg)/kilogram (kg) to 645 mg/kg. The impacted soil was placed at the Fort Greely, Alaska (FGA) landfill.

A release investigation was conducted in May 1994 where five soils borings were drilled. Samples were analyzed for gasoline range organics (GRO), diesel range organics (DRO), TPH, Total Organic Carbon (TOC), VOCs, SVOCs, and metals. Analyte concentrations in soil samples from USTs 407 and 408 were below ADEC Method 2 migration to groundwater cleanup levels. USTs 407 and 408 were granted closure in October 1996. Soil samples from the UST 409 location contained concentrations of DRO, GRO, and benzene up to 450 mg/kg, 2,200 mg/kg, 1.1 mg/kg respectively. These concentrations were above ADEC Method 2 migration to groundwater cleanup levels. Additional investigation was warranted.

A soil vapor extraction (SVE) system was installed at the UST 409 location in November 2005. Soil samples were collected during the SVE well installation and analyzed for DRO, GRO, and benzene, toluene, ethylbenzene, and xylene (BTEX). DRO (up to 296 mg/kg) GRO (1,300 mg/kg), benzene (up to 1.9 mg/kg), toluene (up to 39 mg/kg), ethylbenzene (up to 17 mg/kg), and xylenes (up to 63 mg/kg). Based on those results, two zones of contamination were identified at 20 feet (ft) below ground surface (bgs) and 60 to 70 ft bgs.

An SVE test was conducted and the results found SVE to be a feasible technology for cleanup. As a result, two additional SVE wells were added to the system.

Samples collected during the drilling of the two additional wells were analyzed for DRO, GRO, and BTEX. The results indicated approximately 3,600 cy of impacted soil existed at the site.

Initially, the SVE system operated from August 1995 through October 1996. The system was restarted and operated for four separate 30 days tests in May 1997, October 1997, February 1998, and May 1998. After analyzing the gas samples, it was determined that a point of diminished returns had been reached.

Confirmation samples were conducted in October 1998 and analyzed for DRO, GRO, and BTEX. From 38 samples, maximum concentrations were of DRO (620 mg/kg), GRO (580 mg/kg), toluene (2 mg/kg), ethylbenzene (5.3 mg/kg) and xylenes (32 mg/kg). Benzene was not detected.

Based on the results, the sparging/SVE system was successful in removing most contaminants. Site to be closed in PP/ROD

Site ID: FGLY-002
Site Name: UST'S,BLDG 110

currently under development with LUCs. LTM is required.

This is a zero cost site.

CLEANUP/EXIT STRATEGY

The FGLY administrative controls database would be utilized to control subsurface intrusions into the location of former Building 110 USTs and prevent the land usage from changing (preventing construction on the plot of land). Land use will be restricted to industrial or "green space" (no usage) and dig restrictions would be used to control future land-use. The site would be considered "cleanup complete" in ADECs contaminated sites database. A review will be conducted every five years to ensure that the restrictions and protection programs are being maintained properly and that site conditions have not changed. PP/ROD to be completed 2012/2013.

Site ID: FGLY-004

Site Name: BLDG 605,COLD REG TEST CENTER

STATUS

Regulatory Driver: CERCLA

RRSE:

Contaminants of Concern: Petroleum, Oil and Lubricants (POL)

Media of Concern: Soil

Phases	Start	End
PA.....	199206.....	199212
SI.....	199707.....	199709
LTM.....	201009.....	204209

RIP Date: N/A

RC Date: 199709

SITE DESCRIPTION

This site is a Cold Regions Test Center facility that contained a vehicle maintenance shop, paint shop, battery storage, washrack, repair shops, and vehicle warm storage. A UST was removed prior to initiation of ADEC tank regulations/requirements. Site potentially has petroleum contamination from UST. Site was included in the 2005 DD and closed as no further remedial action planned (NFRAP) with LUCs. LTM is covered under FGLY-007.

CLEANUP/EXIT STRATEGY

This site was closed as NFRAP in the 2005 DD. LTM consists of maintaining the digging permit program and the base geographic information system (GIS) which is used to monitor the digging permit system.

Site Name: FIRE TRAINING AREA-SITE 85/94/133

STATUS

Regulatory Driver: CERCLA

RRSE: LOW

Contaminants of Concern: Pesticides, Semi-volatiles (SVOC), Volatiles (VOC)

Media of Concern: Groundwater, Soil

Phases	Start	End
PA.....	199206.....	199210
SI.....	199206.....	199210
RI/FS.....	199306.....	201212
IRA.....	199410.....	201309
RA(C).....	201310.....	201312
RA(O).....	201312.....	201712
LTM.....	201712.....	204209

RIP Date: 201312

RC Date: 201712

SITE DESCRIPTION

Site 85N/S is located south of the east end of Allen Army Airfield east-west runway. 85N was previously a depression used as drummed liquids storage for use in fire training. According to 1969 aerial photos, drums were stored on the southwest side of the pit. Site 85S was the firefighter training burn area on the south side of the taxiway. Investigations revealed contamination to a depth of 17 ft. Seven SVE wells were installed (four in 85N, three in 85S) and operated 1994 to 1997 to remediate deeper soil. The top five feet of soil were remediated using landfarming techniques to accelerate the biodegradation of the contaminants. In 2002, soil was placed atop BRAC Site 85N to reduce exposure potential. In 2005, the biovent system was removed. Site sampling occurred in 1991, 1992, 1994, 1995, from 1995 to 1997 (landfarm samples) and in 1998. In 2004 and 2005 a passive soil gas survey of the area was conducted as part of a source investigation after TCE was discovered in 2002 in two downgradient groundwater monitoring wells (MW). Results of the survey did not indicate a source of contamination remaining at Site 85N/S.

Site 133 is located south of the aircraft parking apron of Allen Army Airfield. The site consisted of a grassy field, an area containing concrete fill, a forested area, a raised circular area approximately six inches high by five ft in diameter, and a pit six ft deep extending approximately 20 ft by 30 ft. The site was investigated at the same time as 85N/S. Contamination was found to a depth of only 6.5 ft. The soil was remediated using landfarming, but post remediation samples revealed that DRO and pesticides exceeding the ADEC Method 2 cleanup levels still remained. A well, MW-5, installed in 2003 upgradient of Site 133 contained benzene.

The TCE levels in the downgradient well continue to stay near the maximum contaminant level (MCL) (slightly below since fall 2007). The ADEC requested additional well installation to determine if the TCE plume is moving deeper. A well was installed in FY2008 and sampling events showed slight detection of TCE (below MCL). An additional series of wells were installed to determine the source of benzene in MW-5. The benzene source was located (BRAC Site 94, former UST tank farm at Building 163). An Ozone Injection Insitu Oxidation Treatability study was initiated at BRAC Site 94 in 2009 after extensive characterization that defined a large source area for fuel products and a groundwater plume extending downgradient for benzene, DRO, EDB, and 2-methylnaphthalene. In situ oxidation showed promise for remediating smear zone (remediating entire source area estimated to take 15-20 years). The treatability study was expanded into IRA in Fall 2010. Significant equipment failures and problems plagued system during 2010-2011. The system was finally up and running consistently by Fall 2011. Target zone for remediation is the 40 ft of vadose zone immediately above the groundwater (including smear zone). Soil borings and sampling will be used to gauge efficacy starting in 2013. Since groundwater flow is slow (inches per/day), downgradient wells would take many years to show any effects from remediation of source material; however, data indicates plume is shrinking from natural attenuation forces so the combination of source area treatment and natural attenuation forces will mitigate risk.

The first three of the four sites are included in the multi-site PP/ROD currently under development. PP for BRAC Site 133 will propose a cap to prevent access to pesticide contaminated soils. PP for BRAC Sites 85N/S will propose NFA with no restrictions on land use since TCE groundwater concentrations have stayed below MCLs since 2007. The fourth site, BRAC Site 94, currently is in the RI/FS document prep stage and a future PP/ROD will propose that the In situ oxidation system is the final remedy combined with monitoring of the plume.

Site ID: FGLY-006

Site Name: FIRE TRAINING AREA-SITE 85/94/133

CLEANUP/EXIT STRATEGY

IRA (in situ chemical oxidation by ozone injection) will continue to run while RI/FS/PP/ROD developed in 2012/2013. Anticipate continuing to run the ozone injection system with goal of 50 percent reduction of vadose zone source material. Contaminated groundwater plume will continue to be monitored (currently have possible evidence that the plume is shrinking). Due to the decreasing TCE contamination and the fact that deeper, downgradient, and cross-gradient wells have not shown TCE above the MCL, the strategy for the TCE contamination is to continue to monitor the decreasing concentrations and proceed to site closeout since we have had four years of results below the MCL (closeout of TCE portion of site planned in 2012 PP/ROD). ACLs and institutional controls (ICs) (as appropriate) will be used to close sites with contamination remaining at depth. Five-year reviews will monitor the petroleum plume while above MCLs. The PP for BRAC Site 133 is adding a cap to prevent access to pesticide contaminated soils.

Site ID: FGLY-007

Site Name: LANDFILL 1/2 - BRAC SITE 31/32

STATUS

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

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

SITE DESCRIPTION

These two landfills are located within the northwest undeveloped geographic area. Per the environmental baseline survey (EBS), the landfill was closed prior to 1953. In 1990, Landfill No. 1 was identified as SWMU No. 38 and Landfill No. 2 was identified as SWMU No. 41. The types and quantities of waste in the landfills are unknown. The landfills are believed to have accepted sanitary wastes. The size and start dates are also unknown; they probably were closed prior to 1953.

During 1999, two groundwater monitoring wells were installed downgradient of Sites 31/32 (31/32/112-MW-A and 32-MW-A) and one was installed upgradient (31-MW-A). Levels of chlorinated hydrocarbons below MCLs have been detected in the groundwater.

Since installation, periodic samples from well 31/32/112-MW-A have contained toluene, DRO, and TCE at levels less than MCLs. Each of these analytes has been detected on two of seven sampling events. Since 2001 the groundwater monitoring has found no contaminants above MCLs. The groundwater samples were collected in even-numbered years. In 2006 at the request of the ADEC soil sampling was conducted to support closeout of the landfill. A few samples showed PAHs above the ADEC screening levels. The ACLs were developed using the ADEC Method 3 calculations and the site was inserted into the 2008 PP for closeout of nine IRP sites. The ROD was completed in 2009 and Landfills 1 and 2 were closed with LUCs and five-year reviews.

This site serves as the site for estimating/reporting POST-WIDE LTM efforts. Efforts include groundwater monitoring, five-year reviews, and LUC administration. Sites with LTM estimated here include FGLY-002, -004, -004-R-01, -007, -008, -010, -011, -012, -015, -018, -019, -022, -031, -033, -043, -045, -046, -049, -053, -056, -058, -059, -071, -072, -074, -076, -099, and CCFGly-002/-008.

CLEANUP/EXIT STRATEGY

A ROD was signed in 2009 closing this site with LUCs and five-year reviews which are continuing.

Five-year review costs for most LTM sites are captured under site FGLY-007.

Site ID: FGLY-008
Site Name: LANDFILL 2-SITE 32

STATUS

Regulatory Driver: CERCLA

RRSE: LOW

Contaminants of Concern: Volatiles (VOC)

Media of Concern: Groundwater, Soil

Phases	Start	End
PA.....	199206.....	199210
SI.....	199906.....	200003
LTM.....	200110.....	204209

RIP Date: N/A

RC Date: 200003

SITE DESCRIPTION

This is a remote old landfill used in the 1950s. A monitoring well was installed in September 1999 and samples indicate no contamination of groundwater. The site was closed in 2009 via a ROD and will have LUCs and LTM. This site is now monitored and funded through FGLY-007 (Landfill No. 1).

CLEANUP/EXIT STRATEGY

This site was closed in 2009 with a ROD with LUCs. LTM consists of maintaining the digging permit program and the base GIS which is used to monitor the digging permit system.

Site Name: LANDFILLS 4 AND 5-BRAC SITE 88

STATUS

Regulatory Driver: CERCLA

RRSE: LOW

Contaminants of Concern: Volatiles (VOC)

Media of Concern: Groundwater, Soil

Phases	Start	End
PA.....	199206.....	199210
SI.....	199708.....	200009
RI/FS.....	200403.....	200409
LTM.....	200410.....	204209

RIP Date: N/A

RC Date: 200409

SITE DESCRIPTION

This site is located in the northeast industrial area. Landfills 4 and 5 were identified as SWMUs No. 42 and 39. The landfills operated in the 1960s and are believed to have accepted sanitary wastes, metals, and ashes, which were buried in trenches. Per the EBS, Landfill No. 4 was closed in 1969 and Landfill No. 5 was closed prior to 1962. Currently, the area serves as a picnic area and a skeet shooting range. The EBS classified this site as category 7; additional evaluation was needed. Per EBS Table 5-1a and Table 21, the site was evaluated by reviewing various hazardous waste management compliance reports dated 1987 through 1995.

In 1997 field activities were conducted. The results of the survey indicated the presence of 15 discrete magnetic anomalies. Trace pesticides were detected, all well below the ADEC Method 2 cleanup levels. The 1997 report recommended further geophysical survey to delineate anomalies, and additional test pit excavation and sampling. During 1998 additional geophysical survey and groundwater sample collection was conducted. The geophysical survey identified several anomalous areas that appeared to be associated with discrete metallic objects. A review of former disposal practices determined that the landfill features were associated with solid waste disposal and a decision was made that further investigation for potential discarded munitions was not warranted. In the summer of 2004, a passive soil gas survey for downgradient areas was completed and no evidence of downgradient contamination was discovered.

Bis(2-ethylhexyl)phthalate exceeded the MCL. TCE, chloroform, and 1,1,2,2-tetrachloroethane at levels less than MCLs have been detected in four sampling events since well installation. Five wells (88MW-A, 88MW-B, 88MW-C, MW-3, and E-2) are sampled semiannually to monitor the landfills. In 2008 the site was included in a PP with a DD expected in FY2009. ROD was signed in 2009 closing the site with dig restrictions, LUCs, and five-year reviews. The first five-year review will include groundwater monitoring of downgradient wells because of the previous detections of VOCs. Groundwater monitoring will be discontinued after the five-year review unless results warrant further monitoring. FGLY was placed into an Army review cycle for five-year reviews starting in 2010; therefore, groundwater monitoring will be conducted at 2015 five-year review.

LTM activities estimated under FGLY-007.

CLEANUP/EXIT STRATEGY

This site was closed in 2009 with a ROD with LUCs. LTM consists of maintaining the digging permit program and the base GIS which is used to monitor the digging permit system.

Site ID: FGLY-011
Site Name: LANDFILL 5

STATUS

Regulatory Driver: RCRA

RRSE:

Contaminants of Concern: Volatiles (VOC)

Media of Concern: Groundwater, Soil

Phases	Start	End
RFA.....	199206.....	199210
CS.....	199206.....	199210
LTM.....	200910.....	204209

RIP Date: N/A

RC Date: 199210

SITE DESCRIPTION

See FGLY-010, Landfill 4 for description (two landfills are adjacent and had joint investigation/ROD).

LTM activities estimated under FGLY-007.

CLEANUP/EXIT STRATEGY

This site was closed in 2009 via a ROD with LUCs. LTM consists of maintaining the digging permit program and the base GIS which is used to monitor the digging permit system.

Site ID: FGLY-012
Site Name: LANDFILL 6

STATUS

Regulatory Driver: RCRA

RRSE:

Contaminants of Concern: Metals, Volatiles (VOC)

Media of Concern: Groundwater, Soil

Phases	Start	End
RFA.....	199206.....	199210
CS.....	199206.....	199210
LTM.....	200509.....	204209

RIP Date: N/A

RC Date: 199210

SITE DESCRIPTION

The original purpose of this landfill was to provide a disposal site for grubbing material and debris from construction of main cantonment housing. The landfill is believed to have accepted sanitary wastes (domestic garbage and septic tank wastes) buried in trenches. It is not known if other types of waste were placed in the landfill.

Four soil borings were drilled to 41.5 to 42.0 ft bgs (bgs) around the perimeter of the landfill in 1995 to investigate for leachate. Thirty-six samples were collected. Analyses included TPH, DRO, GRO, VOCs, SVOCs, chlorinated herbicides, pesticides, PCBs, and metals.

Maximum concentrations of DRO (33 mg/kg) and GRO (58 mg/kg) are below ADEC Method 2 cleanup levels. Trace concentrations of di-n-butyl phthalate and bis(2-ethylhexyl) phthalate were detected well below ADEC Method 2 cleanup levels. Chlorinated herbicides were not detected.

Methylene chloride was detected up to 0.023 mg/kg, slightly exceeding the ADEC Method 2 migration to groundwater cleanup level. The report attributed this analyte to most likely be the result of laboratory contamination. No other VOC detections exceeded ADEC Method 2 cleanup levels.

Maximum detected concentrations of the pesticides alpha BHC (0.002 mg/kg), delta BHC (0.002 mg/kg), 4,4-DDD (0.065 mg/kg), endosulfan (0.003 mg/kg), 4,4-DDT (0.36 mg/kg), 4,4-DDE (0.04 mg/kg), and dieldrin (0.009 mg/kg) were below ADEC Method 2 cleanup levels. PCBs were not detected.

The maximum detected concentration of arsenic (41 mg/kg) and chromium (98 mg/kg) exceed ADEC Method 2 cleanup levels. The maximum arsenic concentration is only slightly outside the background range (four to 40 mg/kg), and probably actually represents background. Only one chromium sample result out of 44 exceeded the background range of eight to 43 mg/kg for FGLY.

CLEANUP/EXIT STRATEGY

This site was closed in 2005 via a DD with LUCs. LTM, estimated under FGLY-007, consists of maintaining the digging permit program and the base GIS which is used to monitor the digging permit system.

Site Name: BLDG 100, DRUM STORAGE-SITE 92

STATUS

Regulatory Driver: CERCLA

RRSE: LOW

Contaminants of Concern: Metals, Polycyclic Aromatic Hydrocarbons (PAH)

Media of Concern: Soil

Phases	Start	End
PA.....	199206.....	199212
SI.....	199708.....	199805
RI/FS.....	199810.....	201103
IRA.....	201003.....	201103
LTM.....	201103.....	204209

RIP Date: N/A

RC Date: 201103

SITE DESCRIPTION

This is a former accumulation point for hazardous wastes and POLs. It is contaminated with 196 parts per million (ppm) lead, 2.7 ppm benzo(a)anthracene, 1.7 ppm benzo(b)fluoranthene, 2.7 ppm benzo(a)pyrene, 0.72 ppm ideno(1,2,3-cd)pyrene, and 0.34 ppm dibenz(a,h)anthracene at very shallow depth (1997 site investigation/limited RI (LRI) report, September 1998). Further characterization revealed that these contaminants were limited to one isolated sample. The soil was reworked during backfilling, so there was no discernible area of contamination identified (draft 1998 RI report, November 1998). Investigations in 2001 at neighboring BRAC Site 134 revealed near-surface contamination (3100 mg/kg DRO) that was attributed to BRAC Site 92. Follow-up investigations in 2008 delineated the extent of remaining near surface contamination with test pits. Thirty cy of contaminated soil was removed for landfarming in 2010 and borings were used to delineate the remaining DRO contamination between 15 and 45 ft bgs. Site will be proposed for closure with LUCs in the 2012 multi-site PP/ROD. LTM will be included with FGLY-007.

CLEANUP/EXIT STRATEGY

The FGLY administrative controls database would be utilized to control subsurface intrusions into the location of BRAC Site 92 and prevent the land usage from changing (preventing construction on the plot of land). Land use will be restricted to industrial or "green space" (no usage) and dig restrictions would be used to control future land use. The site would be considered "cleanup complete" in ADECs contaminated sites database. A review will be conducted every five years to ensure that the restrictions and protection programs are being maintained properly and that site conditions have not changed. A PP/ROD will be completed during the 2012 to 2013 time period.

Site ID: FGLY-018

Site Name: INJECTION WELL FOR NUCLEAR WASTE

STATUS

Regulatory Driver: OTHER

RRSE:

Contaminants of Concern: Radionuclides

Media of Concern: Groundwater

Phases	Start	End
PA.....	199206.....	199212
SI.....	199206.....	199212
LTM.....	201009.....	204209

RIP Date: N/A

RC Date: 199410

SITE DESCRIPTION

This well was used from 1967 to 1972 for the injection of reactor cooling wastewater after processing through waste treatment (condensation) skid. Tritium would not have been removed. Sampling and modeling during the SAM-1A wastewater pipeline removal effort in 1999 indicated tritium has a short half life and would have degraded. Well was evaluated under Army Reactor Program in a USACE all-hazard assessments (of remaining reactor operations contamination) with fieldwork conducted in 2011 (reported expected spring 2012). All-hazard assessments will lead to final decommission plans for reactor complex and remaining hazards.

LTM (currently just LUCs) is covered under FGLY-007.

CLEANUP/EXIT STRATEGY

The cleanup/exit strategy is the responsibility of the Army Reactor Program. The LTM under FGLY control includes administrative controls database utilized to control subsurface intrusions into the location of injection well for nuclear waste site and prevent the land usage from changing (preventing construction on the plot of land). Land use will be restricted to industrial or "green space" (no usage) and dig restrictions would be used to control future land use.

Site Name: SM1A PIPELINE REMOVAL-SITE 90/132

STATUS

Regulatory Driver: CERCLA

RRSE: LOW

Contaminants of Concern: Petroleum, Oil and Lubricants (POL), Radionuclides

Media of Concern: Soil

Phases	Start	End
PA.....	199206.....	199210
SI.....	199206.....	199709
RI/FS.....	199908.....	200909
IRA.....	199708.....	200109
LTM.....	201001.....	204209

RIP Date: N/A

RC Date: 200909

SITE DESCRIPTION

The pipeline here took wastewater nuclear reactor waste cooling water from the reactor to a dilution station near Jarvis Creek prior to discharge to Jarvis Creek. The pipeline was operational from 1962 to 1967 before being replaced with a wastewater treatment skid and injection well (FGLY-018) in 1967. The pipeline was known to freeze and rupture in the harsh arctic climate which led to its replacement.

In August of 1999 the excavation of approximately 1,700 cy of contaminated soil and debris was completed. Shipment of the waste to a disposal facility in Utah was completed in FY2000. Maximum soil contamination is 517 picoCuries (pCi)/liter (L) cesium-137 and 290 pCi/L strontium-90 (1997-1998 Draft Field Report, removal of SM-1A radioactive waste pipeline, January 1999). In FY2000 final confirmation sampling (FY1998 funds) of the pipeline corridor was done. At the end of FY1998, the dilution well associated with this pipeline was sampled and found to contain 49.9 pCi/l strontium-90, which is more than six times the MCL for this contaminant. The source was a slug of contaminated soil in the bottom of the well. In September 1999, the well was cleaned, purged, and sampled. Results show strontium levels are now well below MCLs. Quarterly samples were taken until August of 2000 (all below MCLs) and the well was abandoned per the work plan. In fall 2004, the final cleanup report was submitted to the ADEC and the USEPA . The ADEC reviewed the report in the second quarter of FY2005. Comments were addressed by the USACE Omaha District.

Various stations along the wastewater pipeline were identified either prior to or during the removal as also having petroleum contamination. These stations include Station 20+70, Station 24+00, Station 9+50, and Station 21+25. The first three of these stations were closed in the 2005 DD with LUCs.

Station 21+25 had POL contamination that required further characterization prior to closeout. Passive soil gas modules were placed along the pipeline corridor surrounding Station 21+25 in 2005. In 2006, three borings were placed along the corridor and results were two orders of magnitude below the ADEC Method 2 cleanup levels. No other contaminants of concern were detected. The site was included in the 2008 PP that went out for public comment in May 2008. A ROD was signed in August 2009 which included LUCs and five-year reviews for petroleum contamination along the pipeline. Five-year review costs will be combined with FGLY-007 and will not be costed here.

The 2009 ROD also closed the remaining pipeline site (with respect to radioactive contamination) with no restrictions on future land use.

CLEANUP/EXIT STRATEGY

The site closed in 2009 via a ROD with LUCs on petroleum spill points (identified as stations along the pipeline).

Site ID: FGLY-022
Site Name: LANDFILL #7 (1970'S)

STATUS

Regulatory Driver: RCRA

RRSE:

Contaminants of Concern: Volatiles (VOC)

Media of Concern: Groundwater, Soil

Phases	Start	End
RFA.....	199206.....	199212
CS.....	199206.....	199212
RFI/CMS.....	199410.....	199511
LTM.....	200509.....	204209

RIP Date: N/A

RC Date: 199511

SITE DESCRIPTION

This site is a former landfill which is now used as the construction and debris (C&D) landfill (on top of former Landfill No. 7). Site was closed in the 2005 DD with LUCs. LTM covered under FGLY-007.

CLEANUP/EXIT STRATEGY

The site closed via a 2005 DD with LUCs. LTM consists of maintaining the digging permit program and the base GIS which is used to monitor the digging permit system.

Site Name: TAR AND ASPHALT DISPOSAL AREA

STATUS

Regulatory Driver: CERCLA

RRSE: LOW

Contaminants of Concern: Polycyclic Aromatic Hydrocarbons (PAH), Semi-volatiles (SVOC)

Media of Concern: Soil

Phases	Start	End
PA.....	199206.....	199212
SI.....	199206.....	199212
RI/FS.....	199311.....	201212
IRA.....	199311.....	199503
RA(C).....	201403.....	201409
LTM.....	201409.....	204209

RIP Date: N/A

RC Date: 201409

SITE DESCRIPTION

The former tar and asphalt disposal area (TAADA) consists of 10 to 20 acres located on the west side of the Allen Army Air Field north of the cantonment area. The site contains areas previously used for tar and asphalt disposal and consists of at least three gravel turnouts that were used as tar and drum disposal areas, and a central unpaved access road that loops off the northeast-southwest runway.

At the time of the PA the site contained pools of asphalt tar approximately 20 ft in diameter, three timber cribs filled with tar, narrow gauge rails and pipes stuck in tar, drums, cables, pipes, a buried pump, and chunks of graveled asphalt debris. The site was probably active in the 1950s during runway expansion and upgrades.

Five potential source areas of contamination are present at the site: four asphalt disposal areas and one drum/asphalt burial area. In 1994, Woodward-Clyde conducted an investigation of the site. Test pits were excavated at all four asphalt disposal areas and soil samples were collected at six inches and four feet bgs. Samples for DRO, GRO, VOCs, SVOCs, pesticides, and PCBs were below the ADEC Method 2 cleanup levels at all four disposal areas. A geophysical survey conducted at asphalt disposal areas No. 2 and 4 included electromagnetics (EM), ground-penetrating radar (GPR), a magnetometer, and surface resistivity.

The study area at Area 2 was 220 ft by 265 ft. A wooden railroad tie system was present in this source area, and asphalt/tar extended from 2.5 ft to three ft deep. The geophysical survey results suggest this area was once a borrow area up to 30 ft deep that was filled with soil and debris. A geophysical survey conducted at Area 4 resulted in the identification of anomalies. One test pit was excavated to investigate an anomaly, and drums were encountered directly beneath the surface. The test pit was terminated and backfilled without sampling.

Six borings were drilled at the drum/asphalt disposal area, each to 20 ft bgs. Twenty-five samples were collected. Samples for DRO, GRO, VOCs, SVOCs, pesticides, and PCBs were below the ADEC Method 2 cleanup levels. This source area was also investigated by a geophysical survey which included EM, GPR, a magnetometer, and surface resistivity. The investigation area was 300 ft by 360 ft. The results suggest the site was used as a borrow area, and then as a landfill after borrow material was removed. The depth of the borrow area/landfill was approximately 35 ft.

NFA was recommended for Asphalt Disposal Areas No. 1 and 3. Additional investigation was recommended for asphalt disposal areas No. 2 and 4 to better define the limits of impact and buried materials at the source areas. Deeper drilling was recommended for the drum/asphalt burial area. In summer FY2006 investigations in Areas 2 and 4 were initiated. The investigations failed to find the reported location of asphalt disposal areas 2 and 4. Geophysical investigation in 2007 relocated the AOCs. Borings beneath the disposal areas show only minor solvent detections. NFA was recommended. The ADEC concurred with the 2007 investigation report (recommending closeout as a landfill); however, ADEC management personnel in 2009 questioned agreeing to close the site without removing the drums. Supply well downgradient of site was sampled in 2010 with no contamination identified. Site will be proposed for closure as a landfill (with LUCs) in the multi-site 2012 PP/ROD. Drum removal will also be via an analyzed alternative and remedy selection process (with public and regulator input) will determine the closeout method.

Site ID: FGLY-027

Site Name: TAR AND ASPHALT DISPOSAL AREA

CLEANUP/EXIT STRATEGY

The FGLY administrative controls database will be utilized to control subsurface intrusions into the location of TAADA and prevent the land usage from changing (preventing construction on the plot of land). Land use will be restricted to industrial or "green space" (no usage) and dig restrictions would be used to control future land-use. The site will be considered "cleanup complete with ICs". No change in use status will be allowed without ADEC approval. A review will be conducted every five years to ensure that the restrictions and protection programs are being maintained properly and that site conditions have not changed. Five-year reviews will be conducted to ensure long-term effectiveness. Groundwater monitoring of the downgradient monitoring well for petroleum constituents and VOCs will be completed in the fall of the year prior to a five-year review (so that data is available for analysis during the five-year review). A PP and a ROD are to be completed in the 2012/2013 time period.

Site Name: BLDG 615 ROADS AND GROUNDS/DRUM STORAGE

STATUS

Regulatory Driver: CERCLA

RRSE:

Contaminants of Concern: Petroleum, Oil and Lubricants (POL)

Media of Concern: Soil

Phases	Start	End
PA.....	199206.....	199212
SI.....	199206.....	199212
LTM.....	201009.....	204209

RIP Date: N/A

RC Date: 199410

SITE DESCRIPTION

This site is a DPW roads and grounds maintenance facility. The site had a drum storage area in the northwest corner of the fenced yard north of the building. Drum Storage area was closed as a SWMU through USEPA. ADEC did not agree entire facility was closed and requested possible USTs and underground injection control (UIC) well be investigation. Decision was made not to reopen the AEDB-R site but instead address under FGLY-099. No USTs (or records of USTs found). UIC well located in 2010. UIC well removed (using IMCOM garrison funds) and Remediation of contaminated soil completed 2011. Site will be proposed for closure with LUCs in the 2012 multi-site PP/ROD. LTM will fall under FGLY-007.

CLEANUP/EXIT STRATEGY

The FGLY administrative controls database will be utilized to control subsurface intrusions into the location of Building 615 and prevent the land usage from changing (preventing construction on the plot of land). Land use will be restricted to industrial or "green space" (no usage) and dig restrictions will be used to control future land-use. The site will be considered "cleanup complete" in ADECs Contaminated Sites Database. A review will be conducted every five years to ensure that the restrictions and protection programs are being maintained properly and that site conditions have not changed. A PP and ROD are to be completed in the 2012/2013 time period.

Site ID: FGLY-033
Site Name: UST, BLDG 162 BRAC Site 99

STATUS

Regulatory Driver: RCRA

RRSE:

Contaminants of Concern: Petroleum, Oil and Lubricants (POL)

Media of Concern: Soil

Phases	Start	End
ISC.....	199206.....	199212
INV.....	199206.....	199212
IRA.....	199206.....	199212
LTM.....	201009.....	204209

RIP Date: N/A

RC Date: 199604

SITE DESCRIPTION

This former leaking UST site had surface soils (down to 15 ft bgs) remediated in 2010 under CCFGLY-008 (105 cy of petroleum contaminated soil removed and landfarmed). The site was a 2000 gallon (gal) UST removed in 1989. DD signed by USEPA/USARAK/USACE late in the BRAC process. When FGA emerged from BRAC and was transferred from USARAK to USASMDC, ADEC declared that they did not give USEPA authority to sign DDs for them. ADEC expressed concerns about remaining soil contamination. A decision was made to not reopen AEDB-R site, but to lump them together in CCFGLY-008. Contamination remains at depth, but there is no potential migration to groundwater at 185 ft bgs. The site will be included in the 2012 PP/ROD closing site with LUCs. LTM will be covered under FGLY-007.

CLEANUP/EXIT STRATEGY

The FGLY administrative controls database will be utilized to control subsurface intrusions into the location of BRAC Site 99 and prevent the land usage from changing (preventing construction on the plot of land). Land use will be restricted to industrial or "green space" (no usage) and dig restrictions will be used to control future land-use. The site will be considered "cleanup complete" in ADEC's Contaminated Sites Database. A review will be conducted every five years to ensure that the restrictions and protection programs are being maintained properly and that site conditions have not changed. A PP/ROD will be completed in the 2012/2013 time period.

Site ID: FGLY-043
Site Name: UST BLDG 159 BRAC Site 98

STATUS

Regulatory Driver: RCRA

RRSE:

Contaminants of Concern: Petroleum, Oil and Lubricants (POL)

Media of Concern: Soil

Phases	Start	End
ISC.....	199405.....	199405
INV.....	199405.....	199405
CAP.....	199503.....	199511
IRA.....	199412.....	199412
LTM.....	201009.....	204209

RIP Date: N/A

RC Date: 199604

SITE DESCRIPTION

This site was a 3000 gallon UST which was removed in 1994. Under actions taken under CCFGLY-008 (consolidated Old Post petroleum contaminated sites), 375 cy of soil was excavated in 2010 and landfarmed. The site will be included in a 2012 multi-site PP/ROD for closure with LUCs (petroleum contamination remaining at depth). Remediation was funded under CCFGLY-008 since site had been closed in AEDB-R and there was a decision made not to reopen. LTM will be covered under FGLY-007.

CLEANUP/EXIT STRATEGY

The FGLY administrative controls database will be utilized to control subsurface intrusions into the location of BRAC Site 98 and prevent the land usage from changing (preventing construction on the plot of land). Land use will be restricted to industrial or "green space" (no usage) and dig restrictions will be used to control future land use due to petroleum contamination remaining between 15 and 55 ft bgs. The site will be considered "cleanup complete" in ADECs contaminated sites database. A review will be conducted every five years to ensure that the restrictions and protection programs are being maintained properly and that site conditions have not changed. A PP/ROD will be completed in the 2012/2013 time period.

Site Name: ROBIN ROAD FUEL SPILL-SITE 30

STATUS

Regulatory Driver: CERCLA

RRSE: LOW

Contaminants of Concern: Petroleum, Oil and Lubricants (POL)

Media of Concern: Groundwater, Soil

Phases	Start	End
PA.....	199510.....	199610
SI.....	199702.....	199806
RI/FS.....	199702.....	200009
IRA.....	199910.....	200009
LTM.....	200110.....	204209

RIP Date: N/A

RC Date: 200009

SITE DESCRIPTION

This site is a December 1982 diesel fuel release (estimated to be between 52,000 and 133,000 gal) from an aboveground pipeline which was located along a power line right-of-way about 0.25 mile west of Robin Road. The site is located within the northwest undeveloped geographic area. The spill spread 325 ft east of the source and 50 ft west. Borings drilled within a week of the fuel spill indicated fuel contamination had penetrated to at least 50 ft bgs. In January 1983, impacted soil was excavated three to four ft bgs over an area of about 7,500 square ft (sf). The disposal method and location of the excavated soil are not known. Seven groundwater monitoring wells were installed at and downgradient of the spill. In 1997 and 1998 this site was sampled. The report indicated 6,600 sf of impacted surface soil, as well as a larger zone at 40 to 50 ft bgs resulting from lateral migration above a silt-rich layer. DRO-impacted soil extended to about 70 ft beneath the spill location. Based on corrected results, DRO ranged up to 10,100 mg/kg. The GRO and BTEX levels were also elevated.

Documentation suggests that spilled fuel thawed the frozen soils at the spill site, leached downward through coarse soils until reaching silt-rich soils at about 40 ft bgs, then spread laterally along the upper interface of the silt-rich layer and soaked into the upper zone of the silt-rich layer. Vertical migration into the silt-rich layer was greatest directly beneath the spill location, extending to about 70 ft bgs. In the summer of 1999 approximately 3,050 cy of soil was excavated from the site. Of this, about 1,070 cy was clean and was staged adjacent to the excavation, 220 cy was suspected of being impacted and was staged at the excavation, and 1,760 cy was believed to be POL-contaminated and was transported and stockpiled near the active landfill. Analytical results for much of this latter material indicated it was not impacted above cleanup levels; in the summer of 2000 it was returned to the excavation.

During the summer of 2000, an additional 90 cy of contaminated soil was removed to address xylene detections above the ADEC health-based criteria. The excavation was then backfilled. In 2000 contaminated soil excavated from the site was thermally processed by a mobile thermal processor set up at the stockpile area near the landfill. Based on the results of sampling at the site, it met the ADEC Method 2 health-based cleanup levels (ingestion and inhalation) down to a depth of 15 ft bgs. Leachability modeling was then conducted under the limited risk evaluation (LRE) to address contaminants remaining at the site that exceeded the ADEC Method 2 migration-to-groundwater cleanup levels. The results of the modeling indicated that contaminant breakthrough at levels exceeding MCLs is not expected to occur at the site. The ADEC has not accepted the LRE conclusions and is not confident the modeling is reflective of actual site conditions. Work on FGLY-006 will be used to try to validate the seasonal soil compartment model (SESOIL); however, ADEC has not accepted leachability modeling due to unpredicted breakthroughs at other sites. The groundwater samples have never had detections above MCLs at this site. USARAK and USACE signed a DD with USEPA closing the site late in the BRAC process (and moved the site to LTM phase). When the site was taken out of BRAC process with transfer from USARAK to USASMDC, ADEC stated they did not authorize USEPA to sign DD for them. Site investigation/monitoring reinitiated to address ADEC concerns but site was retained in LTM phase within AEDB-R. Monitoring was moved to twice a year (spring and fall to represent seasonal high and low) in even-numbered years starting in 2006. In 2010, ADEC requested subsurface soil characterization (to support modeling using ADEC HRC) was completed. The site will be proposed for closure with LUCs in the 2012 multi-site PP/ROD.

Site ID: FGLY-045

Site Name: ROBIN ROAD FUEL SPILL-SITE 30

CLEANUP/EXIT STRATEGY

ADEC HRC results will be used to justify leaving remaining contamination at depth in place (calculation of site-specific cleanup levels). The FGLY administrative controls database will be utilized to control subsurface intrusions into the location of BRAC Site 30 and prevent the land usage from changing (preventing construction on the plot of land). Land use will be restricted to industrial or "green space" (no usage) and dig restrictions will be used to control future land-use. The site will be considered "cleanup complete" in the state contaminated sites database. No occupied buildings will be constructed on the site, but other uses for industrial or recreational/"green space" could be allowed. Contaminated soil associated with fiber optic cable will be removed down to 15 ft bgs when cable no longer operational (and if contaminant levels still warrant excavation). A review will be conducted every five years to ensure that the restrictions and protection programs are being maintained properly and that site conditions have not changed. A PP/ROD will be completed in the 2012/2013 time period.

Site Name: EVERGREEN ROAD FUEL SPILL-SITE 73

STATUS

Regulatory Driver: CERCLA

RRSE: LOW

Contaminants of Concern: Petroleum, Oil and Lubricants (POL)

Media of Concern: Groundwater, Soil

Phases	Start	End
PA.....	199510.....	199510
SI.....	199702.....	199806
RI/FS.....	199702.....	200009
LTM.....	200110.....	204209

RIP Date: N/A

RC Date: 200009

SITE DESCRIPTION

This site is a 64,830 sf former diesel fuel release located within the old post geographic area about 300 ft south of the intersection between Evergreen Road and 64th Avenue. The release occurred in January 1982 when a tracked vehicle crossed and broke a three-inch diesel fuel line. Documents conflict regarding whether the line was above or below ground. Because documentation references removal of diesel-contaminated snow, the pipe is assumed to have been aboveground. An estimated 44,000 gal were released. The pipeline had not been used since 1983.

In the spring of 1982 an unknown volume of impacted soil was removed and replaced with Jarvis Creek gravel. The disposal location of the impacted soil is unknown.

In 1997 and 1998 the site was investigated. In 1997, DRO levels ranged up to 26,000 mg/kg, GRO up to 7,600 mg/kg, benzene up to five mg/kg, and xylenes up to 327 mg/kg. Naphthalene was detected at 100 mg/kg. In 1998, DRO ranged up to 1,600 mg/kg, GRO up to 2,600, benzene to 6.1 mg/kg, and xylenes to 190 mg/kg.

Documentation suggests that spilled fuel thawed the frozen soils at the spill site, leached downward through coarse soils until reaching silt-rich soils about 30 ft bgs, then spread laterally along the upper interface of the silt-rich layer and soaked into the upper zone of the silt-rich layer. Vertical migration into the silt-rich layer was greatest at a location about 70 ft west of the spill location where fuel may have puddled. Vertical migration above the ADEC Method 2 cleanup levels extended to at least 70 ft bgs.

In 1999 two groundwater monitoring wells associated with Site 73 were installed: one well (73-MW-A) very near the spill location on the downgradient side and the other (73-MW-B) about 400 ft upgradient (southwest) of the spill site. Data collected during drilling these wells indicates analyte concentrations did not exceed the ADEC Method 2 cleanup levels.

Leachability modeling was then conducted. None of the site characterization sample results from the upper 15 ft exceeded the ADEC Method 2 ingestion and inhalation cleanup levels. The results of the modeling indicated that contaminant breakthrough at levels exceeding MCLs is not expected to occur at Site 73; however, ADEC has not accepted leachability modeling due to unpredicted breakthroughs at other sites. The groundwater samples have never had detections above MCLs at this site. USARAK and USACE signed a DD with USEPA closing the site late in the BRAC process (and moved the site to LTM phase). When site was taken out of BRAC process with transfer from USARAK to USASMDC, ADEC stated they did not authorize USEPA to sign DD for them.

Site investigation/monitoring reinitiated to address ADEC concerns but site was retained in LTM phase within AEDB-R. Monitoring was moved to twice a year (spring and fall to represent seasonal high and low) in even-numbered years starting in 2006. In 2010, ADEC requested subsurface soil characterization (to support modeling using ADEC HRC) was completed. Site will be proposed for closure with LUCs in the 2012 multi-site PP/ROD.

CLEANUP/EXIT STRATEGY

Site ID: FGLY-046

Site Name: EVERGREEN ROAD FUEL SPILL-SITE 73

ADEC Method 3 or HRC results will be used to justify leaving remaining contamination at depth in place (calculation of site-specific cleanup levels). The FGLY administrative controls will be utilized to control subsurface intrusions into the location of BRAC Site 73 and prevent the land usage from changing (preventing construction on the plot of land). Land use will be restricted to industrial or "green space" (no usage) and dig restrictions will be used to control future land-use. The site will be considered "cleanup complete" in ADECs contaminated sites database. No occupied buildings will be constructed on the site, but other uses for industrial or recreational/green space could be allowed. A review will be conducted every five years to ensure that the restrictions and protection programs are being maintained properly and that site conditions have not changed. A PP/ROD will be completed in the 2012/2013 time period.

Site ID: FGLY-049

Site Name: DELTA TANK FARM

STATUS

Regulatory Driver: OTHER

RRSE: NOT EVALUATED

Contaminants of Concern: Petroleum, Oil and Lubricants (POL)

Media of Concern: Groundwater, Soil

Phases	Start	End
PA.....	199008.....	199008
SI.....	199707.....	199709
RI/FS.....	199707.....	199709
RD.....	199809.....	199809
RA(C).....	199905.....	199910
LTM.....	200901.....	204209

RIP Date: N/A

RC Date: 200009

SITE DESCRIPTION

The Delta Tank Farm site was the location of two former ASTs (believed to have been 10,000-barrel tanks) that were part of the Canadian Oil (CANOL) and Haines pipelines. The site is located with Delta Junction and was previously leased by the Army.

In 1999, remediation was partially completed by the USACE using dig-and-haul.

After the transfer of FGA from USARAK to USASMDC (and removal from BRAC), responsibility for site was temporarily confused. USASMDC did not realize USARAK lease was retained beyond 1986 and was not eligible for FUDS. In the interim while site responsibility was being worked out, soil work at the site (an investigation and dig-and-haul removal under state regulations) was completed by ADEC in 2006 and 2007 and state was later reimbursed by the Army for costs incurred. The state also requested FGA to conduct a groundwater investigation. Three monitoring wells were installed in a 20ft thick perched zone in the fall of 2009 north and northwest of the former tank farm (direction of regional groundwater flow). Wells were placed in a perched aquifer encountered significantly above the regional water table aquifer (but would be first aquifer to be impacted if soil contamination reached groundwater). No contaminants were found. Wells were dry in December 2009 tapping indicating perched zone may only be present when Delta river flowing (during summer/fall). USARAK and USACE signed a DD with USEPA closing the site late in the BRAC process (and moved the site to LTM phase). When site was taken out of BRAC process with transfer from USARAK to USASMDC, ADEC stated they did not authorize USEPA to sign DD for them. Site investigation/monitoring reinitiated to address ADEC concerns but site was retained in LTM phase within AEDB-R. Site will be proposed for closure with no restrictions on land use in the 2012 multi-site PP/ROD.

CLEANUP/EXIT STRATEGY

The site will be considered "cleanup complete" in the ADEC contaminated sites database. FGLY will include the site in its five-year review process to ensure future owners remain aware of the site's history. A deed notice will be requested of the Bureau of Land Management (BLM) and current owners of the property, prior to transferring the property to another entity. A PP/ROD will be completed in the 2012/2013 time period. If ADEC agrees with the PP, then LTM will be stopped.

Site Name: OLD POWER GENERATION BLDG-SITE 116

STATUS

Regulatory Driver: CERCLA

RRSE: LOW

Contaminants of Concern: Petroleum, Oil and Lubricants (POL)

Media of Concern: Soil

Phases	Start	End
PA.....	199606.....	199701
SI.....	199804.....	199809
RI/FS.....	199906.....	200009
LTM.....	201009.....	204209

RIP Date: N/A

RC Date: 200009

SITE DESCRIPTION

This site is where an old power plant once stood. It is contaminated with DRO of 55,000 ppm at 40-42 ft (1998 RI report dated April 1999). A SESOIL model demonstrates the migration to groundwater pathway is incomplete. ICs will still be required to prevent actions that would complete this pathway. USARAK and USACE signed a DD with USEPA closing the site late in the BRAC process. When FGA was taken out of BRAC and transferred from USARAK to USASMDC, ADEC declared that they had not authorized USEPA to sign DD for them. ADEC still had concerns with characterization of site. Site investigations reinitiated in 2010 under FGLY-099 (FGLY-053 LTM phase opened) which revealed surface petroleum contamination requiring removal.

Removal of 370 cy of petroleum contaminated surface soils (down to 15 ft bgs) was completed in 2011. Soils will be landfarmed and the site will be proposed for closure with LUCs (due to remaining petroleum contamination at depth, but no potential to migrate to groundwater at 200 ft bgs) in the 2012 multi-site PP/ROD. LTM will be included with FGLY-007.

CLEANUP/EXIT STRATEGY

The FGLY administrative controls database will be utilized to control subsurface intrusions into the location of BRAC Site 116 and prevent the land usage from changing (preventing construction on the plot of land). Land use will be restricted to industrial or "green space" (no usage) and dig restrictions will be used to control future land-use. This site will be considered "cleanup complete" in ADECs contaminated sites database. A review will be conducted every five years to ensure that the restrictions and protection programs are being maintained properly and that site conditions have not changed. A PP/ROD will be completed in the 2012/2013 time period.

Site ID: FGLY-056

Site Name: POL STORAGE AREA-SITE 113

STATUS

Regulatory Driver: OTHER

RRSE: MEDIUM

Contaminants of Concern: Petroleum, Oil and Lubricants (POL)

Media of Concern: Soil

Phases	Start	End
PA.....	199606.....	199701
SI.....	199806.....	200003
LTM.....	201009.....	204209

RIP Date: N/A

RC Date: 200003

SITE DESCRIPTION

This site is an old POL storage yard. The site is divided into northern and southern areas. Each area has former foundations, asphalt/tar disposal areas, and petroleum contamination below/around the former foundations. A regulatory agreement with USEPA to close the site out was signed late in the BRAC process. When FGA emerged from BRAC and was transferred from USARAK to USASMDC, ADEC declared that they did not authorize USEPA to sign closeout documents for them and they considered the site open. It was decided not to reopen the site in AEDB-R. Investigations were initiated under FGLY-099 in FY2009 and removals completed in FY2010. Petroleum contamination remains at depth in relation to the former foundations. LTM will be included with FGLY-007. The site will be included and proposed for closure with LUCs in the 2012 multi-site PP/ROD.

CLEANUP/EXIT STRATEGY

The FGLY administrative controls database will be utilized to control subsurface intrusions into the location of BRAC Site 113 and prevent the land usage from changing (preventing construction on the plot of land). Land use will be restricted to industrial or "green space" (no usage) and dig restrictions will be used to control future land-use. The site will be considered "cleanup complete" in ADECs contaminated sites database. A review will be conducted every five years to ensure that the restrictions and protection programs are being maintained properly and that site conditions have not changed. A PP/ROD will be completed in the 2012/2013 time period.

Site ID: FGLY-058
Site Name: BLDG 340 UST SITE-SITE 77

STATUS

Regulatory Driver: CERCLA

RRSE: LOW

Contaminants of Concern: Semi-volatiles (SVOC)

Media of Concern: Soil

Phases	Start	End
PA.....	199606.....	199702
SI.....	199709.....	199803
RI/FS.....	199806.....	200003
LTM.....	201009.....	204209

RIP Date: N/A

RC Date: 200003

SITE DESCRIPTION

This UST was pulled with non-BRAC funds, and did not meet cleanup standards completely under the UST program. Additional investigation revealed contamination above BRAC cleanup standards. Bis-(2-ethylhexyl)phthalate exists at 220 ppm from five to 16.5 ft bgs and there is chromium at 35.8 ppm (draft 1998 RI report, dated November 1998, pp. 14 to 17)). Contamination is from five to 12 ft bgs. The SVOC was found to be below the state cleanup standard, and the is thought to be a lab contaminant and chromium was found to be within the range of background (draft 1999 RI/RA report, February 2000.) The site is eligible for NFA. The site was closed with DD signed by USEPA/USACE/USARAK late in the BRAC process. When FGA emerged from BRAC and was transferred from USARAK to USASMDC, ADEC declared they had not authorized USEPA to sign for them and they considered the site open. A decision was made to not reopen the site in AEDB-R, but instead the site is addressed under FGLY-099. The site was investigated in 2009 and 2010 and contaminated soils are inaccessible due to building and existing AST. The Site will be proposed for closure with LUCs in the 2012 multi-site PP/ROD. LTM will be covered under FGLY-007.

CLEANUP/EXIT STRATEGY

The site will be closed with no restrictions on future use. A PP/ROD will be completed in the 2012/2013 time period.

Site ID: FGLY-059
Site Name: BLDG 160 UST-SITE 100

STATUS

Regulatory Driver: OTHER

RRSE: LOW

Contaminants of Concern: Petroleum, Oil and Lubricants (POL)

Media of Concern: Soil

Phases	Start	End
PA.....	199606.....	199701
SI.....	199606.....	199701
RI/FS.....	199806.....	199903
LTM.....	201009.....	204209

RIP Date: N/A

RC Date: 199903

SITE DESCRIPTION

The heating oil tank associated with Building 160 was pulled many years ago and a site assessment was performed; however, the contractor gave no recommendation for cleaning up the contaminated soil. The BRAC contractor did follow-up investigation and found DRO concentration of 6,500 ppm in one sample at 11 ft bgs (draft 1998 RI report dated November 1998). This concentration exceeds the state standard. An NFA DD was signed by USEPA/USARAK/USACE late in the BRAC process. When FGA emerged from BRAC and was transferred from USARAK to USASMDC, ADEC declared that they did not authorize USEPA to sign DD for them. ADEC considered the site still open. The Army decided to not reopen the site in AEDB-R, but instead perform investigations/removals under CCFGLY-008. In 2010, 285 cy of petroleum contaminated soil were excavated and landfarmed. Petroleum contamination remains at depth between 15 and 25 ft bgs. The site will be included and proposed for closure with LUCs in the multi-site 2012 PP/ROD. LTM will be included with FGLY-007.

CLEANUP/EXIT STRATEGY

The FGLY administrative controls database to control subsurface intrusions into the location of BRAC Site 100 and prevent the land usage from changing (preventing residential construction on the plot of land). Land use will be restricted to industrial or "green space" (no usage) and dig restrictions would be used to control future land-use. The site will be considered "cleanup complete" in ADECs contaminated sites database. A review will be conducted every five years to ensure that the restrictions and protection programs are being maintained properly and that site conditions have not changed. A PP/ROD will be completed in the 2012/2013 time period.

Site ID: FGLY-071
Site Name: BLDG 144 UST-SITE 101

STATUS

Regulatory Driver: OTHER

RRSE: LOW

Contaminants of Concern: Petroleum, Oil and Lubricants (POL)

Media of Concern: Soil

Phases	Start	End
PA.....	199601.....	199701
SI.....	199702.....	199710
LTM.....	201009.....	204209
RIP Date:	N/A	
RC Date:	199710	

SITE DESCRIPTION

This is a site associated with a previously removed heating oil tank. No contaminants above screening levels were found in 1997 (1997 site investigation/LRI report dated September 1998). NFA DD was signed between USEPA, USARAK, and USACE late in the BRAC process. When FGA emerged from the BRAC process and was transferred from USARAK to USASMDC, ADEC declared that they had not authorized USEPA to sign for them and they considered the site open. A decision was made to not reopen the site in AEDB-R, but instead the site was moved to LTM and investigations/removals were completed under CCFGly-008. Removal in 2009 excavated and landfarmed over 500 cy of petroleum contaminated soil. Investigations revealed petroleum contaminated soil remains between 15 and 45 ft bgs. The site will be proposed for closure with LUCs in the 2012 multi-site PP/ROD. MILCON project (fire station) proposed for immediately south of area of known contamination (would be under parking lot). Use as fire station consistent with LUCs. Design of fire station will include vapor intrusion preventive measures. The site will have LTM included with FGLY-007.

CLEANUP/EXIT STRATEGY

The Fort Greely administrative controls database would be utilized to control sub-surface intrusions into the location of BRAC Site 101 and prevent the land usage from changing (preventing residential construction on the plot of land). Land use will be restricted to industrial or "green space" (no usage) and dig restrictions would be used to control future land-use. The site would be considered "cleanup complete" in ADEC's Contaminated Sites Database. A vapor barrier was included in the fire station design to minimize vapor intrusion issues. A review will be conducted every five years to ensure that the restrictions and protection programs are being maintained properly and that site conditions have not changed. A Proposed Plan/Record of Decision will be completed 2012/2013.

Site Name: HELICOPTER REFUELING AREA-SITE 121

STATUS

Regulatory Driver: OTHER

RRSE: LOW

Contaminants of Concern: Petroleum, Oil and Lubricants (POL)

Media of Concern: Soil

Phases	Start	End
PA.....	199601.....	199701
SI.....	199702.....	199709
RI/FS.....	199806.....	199903
LTM.....	201009.....	204209

RIP Date: N/A

RC Date: 199903

SITE DESCRIPTION

This site is contaminated with DRO at 6,600 ppm at depths greater than 5.5 ft (1997 site investigation/LRI report dated September 1998). Since this concentration is lower than the cleanup standard in the new state regulation, NFA is planned for this site. Soil was deemed acceptable to a depth of 15 ft after the 1990 investigation. A regulatory agreement with USEPA to close the site was signed late in the BRAC process; however, when FGA emerged from BRAC and was transferred from USARAK to USASMDC, ADEC declared that they did not authorize USEPA to sign for them and they considered the site still open. A decision was made to not reopen the site in AEDB-R, but instead perform investigations and remediation if required under CCFGLY-008. The site was investigated in 2010 and revealed that it was suitable for closure with LUCs. The site will be proposed for closure with LUCs in the 2012 multi-site PP/ROD. LTM will be included in FGLY-007.

CLEANUP/EXIT STRATEGY

The FGLY administrative controls database will be utilized to control subsurface intrusions into the location of BRAC Site 121 and prevent the land usage from changing (preventing construction on the plot of land). Land use will be restricted to industrial or "green space" (no usage) and dig restrictions would be used to control future land-use. This site will be considered "cleanup complete" in ADECs contaminated sites database. A review will be conducted every five years to ensure that the restrictions and protection programs are being maintained properly and that site conditions have not changed. A PP/ROD will be completed in the 2012/2013 time period.

Site ID: FGLY-075
Site Name: BLDG 675 LAUNDRY (54)

STATUS

Regulatory Driver: CERCLA

RRSE: LOW

Contaminants of Concern: Volatiles (VOC)

Media of Concern: Groundwater, Soil

Phases	Start	End
PA.....	199708.....	199710
SI.....	199806.....	200009
RI/FS.....	200501.....	201212
IRA.....	200907.....	200910

RIP Date: N/A

RC Date: 201212

SITE DESCRIPTION

This is the site of a former dry cleaner with an AST tank vault that contained solvent tanks and a dry well. Pursuant to FGLY being selected for BRAC, an EBS was conducted to ascertain the environmental condition of property for all surplus parcels on the installation. The EBS listed Parcel 54 as a Community Environmental Response Facilitation Act (CERFA) Category 7 parcel. Category 7 is defined as areas that are not evaluated or require additional evaluation.

Based on EBS Tables 5-1a and 2-1, the site was evaluated by reviewing various environmental compliance reports and other available documentation dated between 1987 and 1995.

In 1997 as-built drawings were reviewed to attempt to find the locations of the dry well and AST vault. A geophysical survey was also conducted in an attempt to locate the dry well. The dry well location was not definitively determined because of the interference from buried utilities and the AST vault was not found during the geophysical survey.

In 1997 two soil borings were drilled and one test pit was excavated at the approximated AST vault location. The AST vault was found when digging the test pits. Samples were analyzed for VOCs and BTEX. Trace concentrations of VOCs were detected, well below the ADEC Method 2 cleanup levels. The AST vault was not investigated further under BRAC.

An additional investigation was conducted in 1998 to address the reported dry well. One test pit was excavated to 11 ft bgs, very near the approximated dry well location. The dry well drain line was encountered in the test pit. Power poles and guy wires prevented digging directly at the dry well location. Samples were collected and analyzed for VOCs. No VOCs were detected. The 1998 report recommended additional investigation of the dry well itself.

During 1999 one soil boring was drilled to 37 ft bgs at the dry well location. This was facilitated by the FGLY DPW allowing a power disruption at the nearby power pole. Photoionization detector (PID) field screening results appeared to increase with depth. Drilling was stopped because of time constraints implemented by the DPW associated with the power disruption at the nearby pole. Samples were analyzed for VOCs and SVOCs. Toluene, naphthalene, and phthalates were detected at concentrations below the ADEC Method 2 cleanup levels. The 1999 BRAC report recommended NFA status for the entire site, including the dry well and AST vault.

In 2004 the regulators requested that an additional investigation be completed at this site. In FY2005 the investigation (using directional drilling to sample under the dry well) did not reveal any contamination exceeding the ADEC Method 2 cleanup levels. In 2008, at the request of the ADEC, an investigation of soils beneath the vault was conducted. Fuel-contaminated soil was found within the vault. An RA was conducted in 2009 to remove the fuel contaminated soils within the vault. During removal, a solvent tank was also found in the vault and was removed. The vault was demolished and soil samples beneath the vault showed no exceedances of cleanup levels. Site will be proposed for closure with no land use restrictions in 2012 multi-site PP/ROD.

CLEANUP/EXIT STRATEGY

Site ID: FGLY-075
Site Name: BLDG 675 LAUNDRY (54)

The site will be closed with no restrictions on future use. A PP/ROD will be completed in the 2012/2013 time period.

STATUS

Regulatory Driver: CERCLA

RRSE: LOW

Contaminants of Concern: Dioxins/Dibenzofurans, Metals

Media of Concern: Soil

Phases	Start	End
PA.....	199601.....	199701
SI.....	199708.....	199809
RI/FS.....	199810.....	200606
RA(C).....	200803.....	201009
LTM.....	201009.....	204209

RIP Date: N/A

RC Date: 201009

SITE DESCRIPTION

In 1997 three test pits (TP-844, TP-845, and TP-846) were excavated at this site: one each at the loading areas of two incinerators, and the third at a depression about 100 ft northeast of the incinerators. Samples were analyzed for DRO, residual range organics (RRO), SVOCs, VOCs, and metals. Samples from the areas of the two incinerators were below the ADEC Method 2 cleanup levels; however, elevated concentrations of metals were detected at TP-846 at the northeast depression area. Arsenic (up to 43.3 mg/kg), cadmium (up to 11.8 mg/kg), chromium (up to 95.6 mg/kg), and lead (up to 15,200 mg/kg) exceeded screening levels in effect at the time of the work. These concentrations also exceed the current ADEC Method 2 cleanup levels. The TCLP lead result on the sample containing total lead of 15,200 mg/kg was 17.7 mg/L. Scrap metal was found at TP-846.

In 1998 four soil borings (AP-880 through AP-883) were drilled and 10 samples were collected to further investigate the northeast depression area. Boring AP-880 was drilled immediately adjacent to the former test pit TP-846 where lead had been detected at 15,200 mg/kg. Lead was detected at only 190 and 270 mg/kg, well below the 1997 result. Other metal detections were less than screening levels. Also, dioxins/furans were detected at AP-880 in two samples down to seven ft bgs. Toxic equivalents (TEQ) up to 5.51x10⁻⁵ mg/kg (5.51 per 100,000) exceeded the USEPA residential preliminary remediation goal (PRG) of 3.8x10⁻⁶ mg/kg (3.8 per million).

In 1999 additional background sampling and evaluation of metals was conducted. Elevated detections of arsenic, cadmium, and chromium from 1997 were resolved as background and dropped as contaminants of potential concern (COPC); however, lead and dioxin/furan TEQ remained as COPCs.

Lead and dioxin/furan were evaluated further as part of the LRE. The LRE was essentially an ADEC Method 3 evaluation for various sites at FGLY. An ACL for ingestion was calculated for 2,3,7,8-TCDD TEQ at the site using the ADEC Method 3 under the industrial/commercial exposure scenario. The calculated ACL (3.75x10⁻⁴ mg/kg) is greater than the maximum detected concentration. Additionally, leachability modeling was conducted and the results demonstrated that 2,3,7,8-TCDD would not impact groundwater at the site.

Lead concentrations exceeding the ADEC Method 2 residential cleanup level of 400 mg/kg were found in only one test pit (AP846), and subsequent investigation in the immediate area was unable to reproduce the results. This demonstrated that this lead contamination is a localized occurrence in the immediate area of the test pit TP-846. In 2004, the regulators requested an additional investigation to look for possible pesticides and PCBs at this site and requested that shallow (zero to 15 ft bgs) dioxin contamination be remediated. FY2005 investigations revealed no PCB or pesticide contamination above the ADEC Method 2 levels. Additional dioxin/lead sampling in FY2006 defined the amount of contaminated soil that would require remediation. This site was included in the 2008 PP and the 2009 ROD. An RA (hot spot lead contaminated soil removal and capping) was initiated in 2009. About 225 cy of lead contaminated soil was removed and shipped off-site as hazardous waste (25 TCLP failures). Asphalt cap was constructed in 2009/2010. LTM will be covered under FGLY-007.

Site ID: FGLY-076

Site Name: REFUSE BURN PIT-SITE 89

CLEANUP/EXIT STRATEGY

The site was closed in 2009 via a ROD. LTM consists of maintaining the digging permit program and the base GIS which is used to monitor the digging permit system.

Site ID: FGLY-099
Site Name: Misc UST/AST Sites

STATUS

Regulatory Driver: RCRA

RRSE: LOW

Contaminants of Concern: Petroleum, Oil and Lubricants (POL)

Media of Concern: Soil

Phases	Start	End
ISC.....	199005.....	199009
INV.....	200005.....	200009
CAP.....	200906.....	201102
IRA.....	201003.....	201102
LTM.....	201103.....	204209

RIP Date: N/A

RC Date: 201102

SITE DESCRIPTION

Site FGLY-099 consists of petroleum contaminated sites lacking data to close, including USTs at Buildings 320, 351, 340, 210, 663, 626, 658, 615, 660, BRAC Sites 113, 118, and the Mid-post Road UST.

Building 320

Three USTs removed (two heating oil east of the building and one used oil west of the building) and was site of a 600 gal diesel spill within the bldg (from a vehicle). UVOST borings, direct-push soil samples, and cored (through building floor) soil samples were taken in 2009. Another UST was identified south of the building (to be removed by DPW). 100 cy of POL contaminated surficial soils was removed on the west side of the building in 2010.

Building 351

One hundred gal diesel spill during the winter of 1991/1992. Seventy-five cys of contaminated soil were removed in 1992. A 1998 follow-up investigation identified up to 1500 mg/kg of DRO in surficial soil samples. A 2009 investigation at this site included test pits north of the 1998 borings; no contamination was found. Four cy were removed and landfarmed in 2010.

Building 340

Multiple heating oil and used oil USTs were removed (removed 1,000-gal heating UST in 1985, 5,000 gal used oil UST in 1997, 500 gal heating UST in 1998). A 2009/2010 investigation revealed contaminated surficial soils near the southwest corner of the building and next to current AST. Conditional closure with LUCs is planned since contamination cannot be addressed until AST and/or building removed.

Building 210

Two USTs were removed (500 gal in 1989 and 1000 gal in 2007). Thirty-eight cy of contaminated soil removed during the 1989 removal. Records searches in 2009 uncovered sufficient information to close the site.

Building 663

Two former USTs were removed; a 700 gal in 1988 and a 1000 gal in 1995. The first UST was used for both diesel and gasoline at different times in its service life. Investigations in 2009 revealed no contamination of concern at this site and site will be closed.

Building 626

A 300 gal UST was removed prior to 1988. A 1996 investigation by ENSR identified high levels of DRO in surficial soil. Records review in 2010 turned up sufficient information to close the site.

Building 658

This is a former vehicle maintenance bay now used for warm storage and washing. A 500 gal UST was removed in the late 1980s. A 2010 investigation collected confirmatory samples for this removal.

Building 615

This is a DPW equipment/vehicle maintenance facility. Drum staging area was closed as a Resource Conservation and Recovery

Site ID: FGLY-099
Site Name: Misc UST/AST Sites

Act (RCRA) SWMU in the 1990s. A 1000 gal UST was removed in 1986 and three ASTs remain in-service (one inside the building and two outside). Building also has an oil/water separator (OWS) and a dry well (out of service since the early 1970s). The dry well location was investigated in 2010. UST location could not be confirmed. Excavation of contaminated dry well and OWS vault completed in 2011 (combined with IMCOM compliance non-recurring project funds for vault/dry well). Contamination remains at depth (but no potential to migrate to groundwater 200-plus ft bgs).

Building 660

A 300 gal UST was removed in 1988 that was a radio station backup generator fuel supply. Utilities prevent collecting confirmatory samples and the site will be closed.

BRAC Site 113

This POL area was an area with two old foundations with uncertain use. Previous documents have speculated the area might have been a POL or asphalt loading/unloading area. Investigations in 1998/1999 identified two concrete areas (north/south) and three asphalt (north/central/south) areas. The south concrete and south asphalt areas were investigated in 2009 due to DRO exceedances in the 1998/1999 investigation (up to 3400 mg/kg of DRO). Removal of surficial tar and asphalt completed in 2010.

FGA intends to close out all of these sites (some with LUCs as appropriate) in the 2012 multi-sites PP/ROD.

Mid-Post Road UST

This site had a 1400 gal UST and 28 cy contaminated soil removed in 2008. Contamination remains at depth. Site history is unknown; the site is to be closed with ICs.

BRAC Site 118 Undeveloped Area

A 1000 gal UST removed in 1998 along with 96 cy of contaminated soil. Soil samples show contaminated soil with DRO up to 3840 mg/kg remain at the site. The 2009 investigations revealed contaminated surficial soil that was removed in 2010. The 2010 activities also included a boring to delineate the depth and breadth of contamination. The site will be closed with no restrictions on future land use in 2012 PP/ROD.

CLEANUP/EXIT STRATEGY

These sites will be closed with or without LUCs (as appropriate for each site) in a 2012 PP/ROD.

Site Name: CANOL pipeline Tank Farm/South Tank

STATUS

Regulatory Driver: CERCLA

RRSE: LOW

Contaminants of Concern: Metals, Petroleum, Oil and Lubricants (POL)

Media of Concern: Groundwater, Soil

Phases	Start	End
PA.....	200310.....	200310
RI/FS.....	200410.....	201312
IRA.....	200510.....	201312
LTM.....	201401.....	204209

RIP Date: N/A

RC Date: 201401

SITE DESCRIPTION

This site consisted of four 10,000 barrel ASTs [three containing arctic diesel and one containing motor gasoline (MOGAS)] and a pump station, and was operational from 1944 to an unknown date presumably in the late 1960s or early 1970s with the shutdown of the Haines pipeline. The tank farm was built as part of the CANOL pipeline system during WWII to bring oil from the Canadian Whitehorse Refinery to military bases in Alaska. The tank farm was also used as part of the Haines pipeline system built during the 1950s (reutilizing many of the components of the CANOL system). An aerial photograph from 1977 documents that the tank farm was there. The ASTs were removed shortly thereafter.

In October 2003 the Army conducted a limited soil investigation. Five borings were done to a depth of 20 ft, one in each of the four bermed areas and the remaining one in the approximate location of multiple piping connections as determined from an aerial photo. One sample was analyzed at each boring (to a depth of the highest PID reading) for GRO, BTEX, DRO, RRO, and lead. Levels exceeding cleanup occurred in two locations with DRO of 2,480 mg/kg (10 ft bgs) and 360 mg/kg (five ft bgs). Laboratory remarks indicate that the DRO samples were characteristic of weathered middle distillate.

In FY2004 during a fence line installation, weathered diesel soil contamination was found. This area is south of the CANOL tank farm. Approximately 100 cy of contaminated soil were removed at the time that it was discovered. A passive soil gas survey conducted in the summer of 2004 showed TPH contamination in the southern portion of the tank farm. Follow-on investigations in FY2005 revealed significant diesel contamination in the former AST berms and subsurface diesel/gasoline contamination at the former location of a valve pit. In FY2006 a corrective action plan was prepared and bioremediation of the berm soils and shallow subsurface contaminated soils was initiated. Seven thousand cy of soil were remediated. An additional 13,000 cy of soil were treated in Phase 2 in 2007. The confirmatory sampling (CS) in October 2007 did not meet cleanup levels, so the bioremediation project continued through summer 2008. Diesel and gasoline contamination was found down to a perched aquifer approximately 100 ft bgs at the valve pit. Monitoring wells were placed downgradient of the known contamination to determine if the water table was impacted. Additional investigations of the deeper petroleum contamination and the water table aquifer (250-plus ft bgs) revealed EDB (a lead scavenger added to leaded gasoline) contamination in the aquifer (100 times MCL below site and just above the MCL in a drinking water well approximately 1200 ft downgradient). Additional groundwater monitoring wells were placed in summer 2008 to assist in delineating the plume. Investigation of the gasoline AST berm (southwest berm) and subsurface in 2008 did not reveal significant contamination.

Due to planned expansion of neighboring mission facility, plans to remediate the subsurface were accelerated and an ozone injection in situ oxidation system was planned to be installed in 2011 to remediate the portion of the contaminated vadose zone interacting with the groundwater. Extensive investigations in 2010 and 2011 could not identify a source area worthy of treatment. groundwater will require LTM. EDB plume extends roughly 1200 meters, has been defined, and is bounded on all sides with "clean" wells. The plume includes two drinking water wells. The latest IRA involves wellhead treatment (point of use filters) to keep drinking water potable. Drinking water wells are monitored quarterly (before and after filter) to document efficacy of treatment.

CLEANUP/EXIT STRATEGY

Site ID: FGLY-100

Site Name: CANOL pipeline Tank Farm/South Tank

The FGLY administrative controls database will be utilized to control subsurface intrusions into the location of the south tank farm and prevent the land usage from changing (preventing construction on the plot of land). Land use will be restricted to industrial or "green space" (no usage) and dig restrictions would be used to control future land-use. No change in use status will be allowed without ADEC approval. Under the current IRA, point of use filters were placed on water supply wells (SW) SW-3 and SW-4. These filters will be maintained and monitored quarterly (sampled before and after the filters to prove effectiveness) to ensure potable drinking water is provided to the industrial facilities. Additionally, the four downgradient wells that bound the groundwater plume (MW-17, MW-21, MW-28, and MW-31) will be monitored semiannually until at least the first five-year review to monitor the groundwater plume. Monitoring frequency after the first five-year review will be determined at that time, but will be no less than every five years until contaminants fall below the MCLs. A review will be conducted every five years to ensure that the restrictions and protection programs are being maintained properly and that site conditions have not changed.

Groundwater monitoring of the four monitoring wells on the site (MW-12/12A, MW-13, MW-19, and MW-20), the five downgradient/side-gradient monitoring wells (MW-17, MW-18, MW-21, MW-28, and MW-31), and the five downgradient or side-gradient water supply wells (SW-1, SW-2, SW-3, SW-4, and Pump 9) for petroleum constituents will be completed in the fall of the year prior to the five-year reviews (so that data is available for analysis during the five-year review). A PP/ROD will be completed in the 2012/2013 time period.

Site Closeout (No Further Action) Summary

Site ID	Site Name	NFA Date	Documentation
FGLY-001	POL DRUM STG BLD 601	199410	Environmental Sites Decision Document June 2005
FGLY-003	ABOVE GROUND STORAGE TANKS (VARIOUS)	199511	2005 Environmental Sites DD
FGLY-005	BUILDING 601 DUMP SITE -SITE 115	199709	2005 Environmental Sites DD
FGLY-009	LANDFILL 3	199210	Not eligible for ER,A funding. Now MMRP
FGLY-013	FORMER SEWAGE LAGOON	199511	Not eligible for ER,A funding, no CERCLA contaminants.
FGLY-014	PESTICIDE STORAGE BUILDING 349	199511	Environmental Sites Decision Document June 2005
FGLY-016	DRUMS OF 2,4,5 - T STD IN PRK BLDG 601	201012	Site will be reopened under Compliance-Related Cleanup Program
FGLY-017	DEACTIVATED NUCLEAR REACTOR	199410	Site transferred to USACE Reactor Program for decommissioning.
FGLY-020	PRTC RANGE 13	199210	This range is part of Fort Wainwright's Donnelly Training Area and is no longer part of Fort Greely.
FGLY-021	IMPAC RANGE 3	199210	This range is part of Fort Wainwright's Donnelly Training Area and is no longer part of Fort Greely.
FGLY-023	ACTIVE LANDFILL #8	199511	Site active, therefore not eligible for ER,A funding. Environmental Sites Decision Document June 2005
FGLY-024	SLUDGE DRYING BEDS	199212	Site active, therefore not eligible for ER,A funding. Environmental Sites Decision Document June 2005
FGLY-025	INCINERATOR/BURN PIT	199212	Environmental Sites Decision Document June 2005
FGLY-026	ORDNANCE & HAZARDOUS MAT. STORAGE	199212	Environmental Sites Decision Document June 2005
FGLY-028	MIDAS SITE	199511	This range is part of Fort Wainwright's Donnelly Training Area and is no longer part of Fort Greely.
FGLY-029	UST SOIL PILE	199609	Environmental Sites Decision Document June 2005
FGLY-030	BLDG 612 ALLIED TRADES SHOP/DRUM STORAGE	199410	1997 SI - Study complete. No contamination found
FGLY-032	BLDG 626 AUTO/CRAFT SHOP/DRUM STORAGE	200909	Record of Decision, Nine Installation Restoration Program Sites, Fort Greely, AK (August 2009)
FGLY-034	UST, BLDG 210	199410	Not ER,A eligible (diesel contamination only)
FGLY-035	USTS BLDG 602	199410	Environmental Sites Decision Document June 2005
FGLY-036	UST'S, BLDG 606	199604	Active facility, combined with CCFGLY-004 in Compliance Cleanup Program
FGLY-037	TEXAS TOWER BLDG COMPLEX	199511	This range is part of Fort Wainwright's Donnelly Training Area and is no longer part of Fort Greely.
FGLY-038	BLDG 601 R&U YARD-SITE 49	199903	
FGLY-039	BLDG 628 BOAT SHOP/DRUM STORAGE	199410	1999 RI - study complete, no contamination
FGLY-040	BLDG 658 MOTOR POOL	199410	combined with FGLY-0099

Site Closeout (No Further Action) Summary

Site ID	Site Name	NFA Date	Documentation
FGLY-041	TEXAS CONDO FACILITY	199410	This range is part of Fort Wainwright's Donnelly Training Area and is no longer part of Fort Greely.
FGLY-042	BLDG 606 POWER PLANT/DRUM STORAGE	199410	Active facility, combined with CCFGLY-004 in Compliance Cleanup Program
FGLY-050	BLDG 157 LAUNDRY-SITE 103	200909	Record of Decision, Nine Installation Restoration Program Sites, Fort Greely, AK (August 2009)
FGLY-052	BLDG 318 PESTICIDE STORAGE AREA-SITE 78	200009	
FGLY-060	FENCED SALVAGE AREA-SITE 112	200306	Being addressed under the MMRP.
FGLY-061	CHEMICAL TEST FACILITY - SITE 56	200109	
FGLY-062	ALYESKA SPILL AREA - SITE 119	199809	
FGLY-063	AERATION PAD SOUTH-SITE 87	199903	
FGLY-064	BLDG 627-SITE 52	199809	

IRP Schedule

Date of IRP Inception: 199005

Past Phase Completion Milestones

1990

ISC (FGLY-099 - Misc UST/AST Sites)

PA (FGLY-049 - DELTA TANK FARM)

1991

SI (FGLY-029 - UST SOIL PILE)

PA (FGLY-029 - UST SOIL PILE)

1992

IRA (FGLY-002 - UST'S,BLDG 110, FGLY-036 - UST'S, BLDG 606, FGLY-037 - TEXAS TOWER BLDG COMPLEX)

RD (FGLY-029 - UST SOIL PILE)

1993

IRA (FGLY-033 - UST, BLDG 162 BRAC Site 99)

CS (FGLY-009 - LANDFILL 3, FGLY-011 - LANDFILL 5, FGLY-012 - LANDFILL 6, FGLY-022 - LANDFILL #7 (1970'S), FGLY-023 - ACTIVE LANDFILL #8)

INV (FGLY-033 - UST, BLDG 162 BRAC Site 99, FGLY-034 - UST, BLDG 210, FGLY-035 - USTS BLDG 602, FGLY-036 - UST'S, BLDG 606, FGLY-037 - TEXAS TOWER BLDG COMPLEX)

PA (FGLY-001 - POL DRUM STG BLD 601, FGLY-002 - UST'S,BLDG 110, FGLY-003 - ABOVE GROUND STORAGE TANKS (VARIOUS), FGLY-004 - BLDG 605,COLD REG TEST CENTER, FGLY-005 - BUILDING 601 DUMP SITE -SITE 115, FGLY-006 - FIRE TRAINING AREA-SITE 85/94/133, FGLY-007 - LANDFILL 1/2 - BRAC SITE 31/32, FGLY-008 - LANDFILL 2-SITE 32, FGLY-010 - LANDFILLS 4 AND 5-BRAC SITE 88, FGLY-013 - FORMER SEWAGE LAGOON, FGLY-014 - PESTICIDE STORAGE BUILDING 349, FGLY-015 - BLDG 100, DRUM STORAGE-SITE 92, FGLY-016 - DRUMS OF 2,4,5 - T STD IN PRK BLDG 601, FGLY-017 - DEACTIVATED NUCLEAR REACTOR, FGLY-018 - INJECTION WELL FOR NUCLEAR WASTE, FGLY-019 - SM1A PIPELINE REMOVAL-SITE 90/132, FGLY-020 - PRTC RANGE 13, FGLY-021 - IMPAC RANGE 3, FGLY-024 - SLUDGE DRYING BEDS, FGLY-025 - INCINERATOR/BURN PIT, FGLY-026 - ORDNANCE & HAZARDOUS MAT. STORAGE, FGLY-027 - TAR AND ASPHALT DISPOSAL AREA, FGLY-028 - MIDAS SITE, FGLY-030 - BLDG 612 ALLIED TRADES SHOP/DRUM STORAGE, FGLY-031 - BLDG 615 ROADS AND GROUNDS/DRUM STORAGE, FGLY-032 - BLDG 626 AUTO/CRAFT SHOP/DRUM STORAGE, FGLY-038 - BLDG 601 R&U YARD-SITE 49, FGLY-039 - BLDG 628 BOAT SHOP/DRUM STORAGE, FGLY-040 - BLDG 658 MOTOR POOL, FGLY-041 - TEXAS CONDO FACILITY, FGLY-042 - BLDG 606 POWER PLANT/DRUM STORAGE)

SI (FGLY-001 - POL DRUM STG BLD 601, FGLY-002 - UST'S,BLDG 110, FGLY-003 - ABOVE GROUND STORAGE TANKS (VARIOUS), FGLY-006 - FIRE TRAINING AREA-SITE 85/94/133, FGLY-013 - FORMER SEWAGE LAGOON, FGLY-014 - PESTICIDE STORAGE BUILDING 349, FGLY-016 - DRUMS OF 2,4,5 - T STD IN PRK BLDG 601, FGLY-017 - DEACTIVATED NUCLEAR REACTOR, FGLY-018 - INJECTION WELL FOR NUCLEAR WASTE, FGLY-020 - PRTC RANGE 13, FGLY-021 - IMPAC RANGE 3, FGLY-024 - SLUDGE DRYING BEDS, FGLY-025 - INCINERATOR/BURN PIT, FGLY-026 - ORDNANCE & HAZARDOUS MAT. STORAGE, FGLY-027 - TAR AND ASPHALT DISPOSAL AREA, FGLY-028 - MIDAS SITE, FGLY-030 - BLDG 612 ALLIED TRADES SHOP/DRUM STORAGE, FGLY-031 - BLDG 615 ROADS AND GROUNDS/DRUM STORAGE, FGLY-038 - BLDG 601 R&U YARD-SITE 49, FGLY-039 - BLDG 628 BOAT SHOP/DRUM STORAGE, FGLY-040 - BLDG 658 MOTOR POOL, FGLY-041 - TEXAS CONDO FACILITY, FGLY-042 - BLDG 606 POWER PLANT/DRUM STORAGE)

CAP (FGLY-037 - TEXAS TOWER BLDG COMPLEX)

RFA (FGLY-009 - LANDFILL 3, FGLY-011 - LANDFILL 5, FGLY-012 - LANDFILL 6, FGLY-022 - LANDFILL #7 (1970'S), FGLY-023 - ACTIVE LANDFILL #8)

ISC (FGLY-033 - UST, BLDG 162 BRAC Site 99, FGLY-034 - UST, BLDG 210, FGLY-035 - USTS BLDG 602, FGLY-036 - UST'S, BLDG 606, FGLY-037 - TEXAS TOWER BLDG COMPLEX)

1994

CAP (FGLY-034 - UST, BLDG 210, FGLY-035 - USTS BLDG 602)

INV (FGLY-043 - UST BLDG 159 BRAC Site 98)

ISC (FGLY-043 - UST BLDG 159 BRAC Site 98)

IRP Schedule

RD	(FGLY-002 - UST'S,BLDG 110)
RI/FS	(FGLY-002 - UST'S,BLDG 110)
IMP(C)	(FGLY-034 - UST, BLDG 210, FGLY-035 - USTS BLDG 602)
RA(C)	(FGLY-002 - UST'S,BLDG 110)
1995	
IRA	(FGLY-027 - TAR AND ASPHALT DISPOSAL AREA, FGLY-043 - UST BLDG 159 BRAC Site 98)
1996	
CAP	(FGLY-036 - UST'S, BLDG 606, FGLY-043 - UST BLDG 159 BRAC Site 98)
PA	(FGLY-046 - EVERGREEN ROAD FUEL SPILL-SITE 73, FGLY-052 - BLDG 318 PESTICIDE STORAGE AREA-SITE 78)
IMP(C)	(FGLY-037 - TEXAS TOWER BLDG COMPLEX)
RI/FS	(FGLY-003 - ABOVE GROUND STORAGE TANKS (VARIOUS), FGLY-013 - FORMER SEWAGE LAGOON, FGLY-014 - PESTICIDE STORAGE BUILDING 349, FGLY-028 - MIDAS SITE)
RFI/CMS	(FGLY-022 - LANDFILL #7 (1970'S), FGLY-023 - ACTIVE LANDFILL #8)
RA(C)	(FGLY-029 - UST SOIL PILE)
1997	
SI	(FGLY-004 - BLDG 605,COLD REG TEST CENTER, FGLY-005 - BUILDING 601 DUMP SITE -SITE 115, FGLY-019 - SM1A PIPELINE REMOVAL-SITE 90/132, FGLY-049 - DELTA TANK FARM, FGLY-059 - BLDG 160 UST-SITE 100, FGLY-072 - HELICOPTER REFUELING AREA-SITE 121)
RI/FS	(FGLY-049 - DELTA TANK FARM)
PA	(FGLY-045 - ROBIN ROAD FUEL SPILL-SITE 30, FGLY-050 - BLDG 157 LAUNDRY-SITE 103, FGLY-053 - OLD POWER GENERATION BLDG-SITE 116, FGLY-056 - POL STORAGE AREA-SITE 113, FGLY-058 - BLDG 340 UST SITE-SITE 77, FGLY-059 - BLDG 160 UST-SITE 100, FGLY-060 - FENCED SALVAGE AREA-SITE 112, FGLY-061 - CHEMICAL TEST FACILITY - SITE 56, FGLY-062 - ALYESKA SPILL AREA - SITE 119, FGLY-063 - AERATION PAD SOUTH-SITE 87, FGLY-064 - BLDG 627-SITE 52, FGLY-071 - BLDG 144 UST-SITE 101, FGLY-072 - HELICOPTER REFUELING AREA-SITE 121, FGLY-076 - REFUSE BURN PIT-SITE 89)
1998	
RA(O)	(FGLY-002 - UST'S,BLDG 110)
RD	(FGLY-049 - DELTA TANK FARM)
PA	(FGLY-075 - BLDG 675 LAUNDRY (54))
RI/FS	(FGLY-064 - BLDG 627-SITE 52)
SI	(FGLY-015 - BLDG 100, DRUM STORAGE-SITE 92, FGLY-045 - ROBIN ROAD FUEL SPILL-SITE 30, FGLY-046 - EVERGREEN ROAD FUEL SPILL-SITE 73, FGLY-050 - BLDG 157 LAUNDRY-SITE 103, FGLY-052 - BLDG 318 PESTICIDE STORAGE AREA-SITE 78, FGLY-053 - OLD POWER GENERATION BLDG-SITE 116, FGLY-058 - BLDG 340 UST SITE-SITE 77, FGLY-060 - FENCED SALVAGE AREA-SITE 112, FGLY-062 - ALYESKA SPILL AREA - SITE 119, FGLY-063 - AERATION PAD SOUTH-SITE 87, FGLY-064 - BLDG 627-SITE 52, FGLY-071 - BLDG 144 UST-SITE 101, FGLY-076 - REFUSE BURN PIT-SITE 89)
1999	
RI/FS	(FGLY-038 - BLDG 601 R&U YARD-SITE 49, FGLY-059 - BLDG 160 UST-SITE 100, FGLY-063 - AERATION PAD SOUTH-SITE 87, FGLY-072 - HELICOPTER REFUELING AREA-SITE 121)
2000	
RI/FS	(FGLY-045 - ROBIN ROAD FUEL SPILL-SITE 30, FGLY-046 - EVERGREEN ROAD FUEL SPILL-SITE 73, FGLY-052 - BLDG 318 PESTICIDE STORAGE AREA-SITE 78, FGLY-053 - OLD POWER GENERATION BLDG-SITE 116, FGLY-058 - BLDG 340 UST SITE-SITE 77, FGLY-060 - FENCED SALVAGE AREA-SITE 112)
SI	(FGLY-007 - LANDFILL 1/2 - BRAC SITE 31/32, FGLY-008 - LANDFILL 2-SITE 32, FGLY-010 - LANDFILLS 4 AND 5-BRAC SITE 88, FGLY-056 - POL STORAGE AREA-SITE 113, FGLY-075 - BLDG 675 LAUNDRY (54))

IRP Schedule

RA(C)	(FGLY-049 - DELTA TANK FARM)
IRA	(FGLY-045 - ROBIN ROAD FUEL SPILL-SITE 30)
INV	(FGLY-099 - Misc UST/AST Sites)
2001	
SI	(FGLY-061 - CHEMICAL TEST FACILITY - SITE 56)
IRA	(FGLY-019 - SM1A PIPELINE REMOVAL-SITE 90/132)
2003	
LTM	(FGLY-060 - FENCED SALVAGE AREA-SITE 112)
2004	
PA	(FGLY-100 - CANOL pipeline Tank Farm/South Tank)
RI/FS	(FGLY-010 - LANDFILLS 4 AND 5-BRAC SITE 88)
2006	
RI/FS	(FGLY-076 - REFUSE BURN PIT-SITE 89)
2009	
RI/FS	(FGLY-019 - SM1A PIPELINE REMOVAL-SITE 90/132, FGLY-050 - BLDG 157 LAUNDRY-SITE 103)
SI	(FGLY-032 - BLDG 626 AUTO/CRAFT SHOP/DRUM STORAGE)
2010	
RA(C)	(FGLY-076 - REFUSE BURN PIT-SITE 89)
IRA	(FGLY-075 - BLDG 675 LAUNDRY (54))
2011	
IRA	(FGLY-015 - BLDG 100, DRUM STORAGE-SITE 92, FGLY-099 - Misc UST/AST Sites)
CAP	(FGLY-099 - Misc UST/AST Sites)
RI/FS	(FGLY-015 - BLDG 100, DRUM STORAGE-SITE 92, FGLY-016 - DRUMS OF 2,4,5 - T STD IN PRK BLDG 601)

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: 201409

Schedule for Next Five-Year Review: 2014

Estimated Completion Date of IRP at Installation (including LTM phase): 204209

FORT GREELY IRP Schedule

= phase underway

SITE ID	SITE NAME	PHASE	FY13	FY14	FY15	FY16	FY17	FY18+
FGLY-002	UST'S,BLDG 110	LTM						
SITE ID	SITE NAME	PHASE	FY13	FY14	FY15	FY16	FY17	FY18+
FGLY-004	BLDG 605,COLD REG TEST CENTER	LTM						
SITE ID	SITE NAME	PHASE	FY13	FY14	FY15	FY16	FY17	FY18+
FGLY-006	FIRE TRAINING AREA-SITE 85/94/133	RI/FS						
		IRA						
		RA(C)						
		RA(O)						
		LTM						
SITE ID	SITE NAME	PHASE	FY13	FY14	FY15	FY16	FY17	FY18+
FGLY-007	LANDFILL 1/2 - BRAC SITE 31/32	LTM						
SITE ID	SITE NAME	PHASE	FY13	FY14	FY15	FY16	FY17	FY18+
FGLY-008	LANDFILL 2-SITE 32	LTM						
SITE ID	SITE NAME	PHASE	FY13	FY14	FY15	FY16	FY17	FY18+
FGLY-010	LANDFILLS 4 AND 5-BRAC SITE 88	LTM						
SITE ID	SITE NAME	PHASE	FY13	FY14	FY15	FY16	FY17	FY18+
FGLY-011	LANDFILL 5	LTM						
SITE ID	SITE NAME	PHASE	FY13	FY14	FY15	FY16	FY17	FY18+
FGLY-012	LANDFILL 6	LTM						
SITE ID	SITE NAME	PHASE	FY13	FY14	FY15	FY16	FY17	FY18+
FGLY-015	BLDG 100, DRUM STORAGE-SITE 92	LTM						
SITE ID	SITE NAME	PHASE	FY13	FY14	FY15	FY16	FY17	FY18+
FGLY-018	INJECTION WELL FOR NUCLEAR WASTE	LTM						
SITE ID	SITE NAME	PHASE	FY13	FY14	FY15	FY16	FY17	FY18+
FGLY-019	SM1A PIPELINE REMOVAL-SITE 90/132	LTM						
SITE ID	SITE NAME	PHASE	FY13	FY14	FY15	FY16	FY17	FY18+
FGLY-022	LANDFILL #7 (1970'S)	LTM						
SITE ID	SITE NAME	PHASE	FY13	FY14	FY15	FY16	FY17	FY18+
FGLY-027	TAR AND ASPHALT DISPOSAL AREA	RI/FS						
		RA(C)						
		LTM						
SITE ID	SITE NAME	PHASE	FY13	FY14	FY15	FY16	FY17	FY18+
FGLY-031	BLDG 615 ROADS AND GROUNDS/DRUM STORAGE	LTM						
SITE ID	SITE NAME	PHASE	FY13	FY14	FY15	FY16	FY17	FY18+
FGLY-033	UST, BLDG 162 BRAC Site 99	LTM						
SITE ID	SITE NAME	PHASE	FY13	FY14	FY15	FY16	FY17	FY18+
FGLY-043	UST BLDG 159 BRAC Site 98	LTM						
SITE ID	SITE NAME	PHASE	FY13	FY14	FY15	FY16	FY17	FY18+
FGLY-045	ROBIN ROAD FUEL SPILL-SITE 30	LTM						
SITE ID	SITE NAME	PHASE	FY13	FY14	FY15	FY16	FY17	FY18+
FGLY-046	EVERGREEN ROAD FUEL SPILL-SITE 73	LTM						
SITE ID	SITE NAME	PHASE	FY13	FY14	FY15	FY16	FY17	FY18+
FGLY-049	DELTA TANK FARM	LTM						

FORT GREELY IRP Schedule

SITE ID	SITE NAME	PHASE	FY13	FY14	FY15	FY16	FY17	FY18+
FGLY-053	OLD POWER GENERATION BLDG-SITE 116	LTM						
FGLY-056	POL STORAGE AREA-SITE 113	LTM						
FGLY-058	BLDG 340 UST SITE-SITE 77	LTM						
FGLY-059	BLDG 160 UST-SITE 100	LTM						
FGLY-071	BLDG 144 UST-SITE 101	LTM						
FGLY-072	HELICOPTER REFUELING AREA-SITE 121	LTM						
FGLY-075	BLDG 675 LAUNDRY (54)	RI/FS						
FGLY-076	REFUSE BURN PIT-SITE 89	LTM						
FGLY-099	Misc UST/AST Sites	LTM						
FGLY-100	CANOL pipeline Tank Farm/South Tank	RI/FS						
		IRA						
		LTM						

FORT GREELY
Army Defense Environmental Restoration Program
Military Munitions Response Program

MMRP Summary

Installation Total Army Environmental Database-Restoration (AEDB-R) Sites/Closeout Sites Count: 5/3

Installation Site Types with Future and/or Underway Phases

- 1 Surface Disposal Area
(FGLY-005-R-01)
- 1 Unexploded Munitions/Ordnance
(FGLY-004-R-01)

Most Widespread Contaminants of Concern

Munitions and explosives of concern (MEC)

Media of Concern

Soil

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

Site ID	Site Name	Action	Remedy	FY
N/A				

Duration of MMRP

Date of MMRP Inception 200203

Estimated Date for Remedy-In-Place (RIP)/Response Complete (RC): 201309/201309

Date of MMRP completion including Long Term Management (LTM): 204209

MMRP Contamination Assessment

Contamination Assessment Overview

In 2003 a closed, transferring, and transferred (CTT) range report for FGLY was completed. This report identified four sites that required further investigation. These sites included possible lead contamination at two rifle ranges and possible buried UXO at two disposal locations. The installation supported chemical munitions testing at the Gerstle River test site, an area known to have been a staging area for material for the Gerstle River test site. In 2002 buried drums of chemical agent decontamination fluids were found near Rifle Range 2, in the borrow pit for the missile field. The soil contaminated by the caustic fluids was neutralized in situ and some of the material was removed for off-site disposal.

An MMRP site inspection (SI) was completed in the 2006/2007 time period which investigated the four sites in the range report and recommended closing all of them. The MMRP SI identified an additional site (BRAC Site 112 - a former scrap yard where munitions debris has been found) requiring an RI (due to the large number of subsurface anomalies). Instead of an RI, FGA plans to move towards a DD with fencing off the site and restricting access.

Cleanup Exit Strategy

An IRA (or RA after a ROD) to install engineering controls (fencing to prevent access) is planned at BRAC Site 112 (FGLY-005-R-01). All other sites will be closed under a PP/ROD in 2012.

MMRP Previous Studies

	Title	Author	Date
2002	Final US Army Closed, Transferring and Transferred Range/Site Inventory for Fort Greely, Alaska	TechLaw, Inc.	SEP-2002
2006	2006 Fort Greely Site Inspection Work Plan (MMRP)	TLI Solutions	SEP-2006
2007	MMRP Final Site Inspection Report, Fort Greely, Alaska	TLI Solutions	JUL-2007
2008	Jarvis Creek Munitions Burial Area Investigation Letter Report	Arctic Slope Technical Services	AUG-2008

FORT GREELY

Military Munitions Response Program

Site Descriptions

Site ID: FGLY-004-R-01

Site Name: JARVIS CREEK MUNITIONS BURIAL SITE

STATUS

Regulatory Driver: CERCLA
MRSPP Score: No longer required
Contaminants of Concern: Munitions and explosives of concern (MEC)
Media of Concern: Soil

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

SITE DESCRIPTION

This site, located within the actual border of FGLY just east of the runway, is a transferred military munitions disposal site consisting of 0.58 acres located entirely on a state of Alaska water body within the northeast portion of the cantonment area.

The SI determined that this site is no longer eligible for the MMRP because it is located within the DTA operational range area associated with Fort Wainwright; however, the installation has since revised their operational area, and now this munitions response site (MRS) is MMRP eligible.

An SI addendum was completed in FY2008. Based on the results of the 2007 UXO investigation and review of aerial photographs, there is no evidence that there is UXO along the current boundary of FGLY and that if there had been a disposal area in proximity to the Jarvis Creek Munitions Burial Site, the area where disposal took place has been eroded away and is now in the creek bed; however, because this area has eroded so dramatically over the years, the boundary of the original MRS has been expanded to include the eroded area of the creek up to and including the northeastern installation boundary of FGLY.

CLEANUP/EXIT STRATEGY

Because the 2008 anomaly has not been investigated, there is a concern that inadvertent hazards to the public may be present. FGLY will secure permission to excavate the Jarvis Creek Munitions Burial Site subsurface anomaly and proceed with determining the nature of the anomaly.

Site ID: FGLY-005-R-01

Site Name: BRAC Site 112, Former Scrap Yard

STATUS

Regulatory Driver: CERCLA

MRSPP Score: 05

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

Media of Concern: Soil

Phases	Start	End
PA.....	200203.....	200305
SI.....	200604.....	200707
RI/FS.....	201101.....	201209
IRA.....	201201.....	201308
RA(C).....	201305.....	201309
LTM.....	201504.....	204209

RIP Date: N/A

RC Date: 201309

SITE DESCRIPTION

This MRS is comprised of 5.06 acres. The site was a former fenced salvage area; however, the storage practices at this site are unknown. During the historic research conducted for the historical records review (HRR) no additional information regarding the operations conducted at this site was found.

The initial installation restoration (IR) site investigation conducted identified several stained areas and noted abundant metallic debris scattered across the surface in the southern half of Site 112. Additionally, a large quantity of scrap metal was encountered during UXO and geophysical surveys conducted at this site, as well as the test pits that were excavated. This munitions debris included expended smoke grenades, ground illumination signals (slap flares), 5.56 millimeter (mm) blanks, a 155mm illumination projectile, a 2.75-inch rocket fin, and .50 caliber links. Although UXO was not positively identified during these surveys, a large quantity of munitions-related scrap was encountered at the surface and in subsurface soil. Continuous UXO monitoring was conducted during the test pit and soil boring activities. Additional UXO clearance and monitoring was conducted. A large pile of .50 caliber links was identified; however, UXO items were not observed.

The MMRP SI proposed to carry this site forward to the RI/FS phase to complete a DD. The site will be included in the multi-site PP/ROD currently underdevelopment. The proposed remedy is anticipated to be engineering controls, such as fencing off this site area with signage, to restrict access.

CLEANUP/EXIT STRATEGY

A contractor specializing in UXO removal will be used to excavate the 200-plus subsurface metallic anomalies. If encountered, UXO will be wither blown in place or moved to DTA range for detonation. Remaining debris will be collected and properly disposed. A PP/ROD will be completed in the 2012/2013 time period.

Site Closeout (No Further Action) Summary

Site ID	Site Name	NFA Date	Documentation
FGLY-001-R-01	RIFLE RANGE 1	200707	MMRP Final Site Inspection Report, Fort Greely, Alaska, July 2007
FGLY-002-R-01	RIFLE RANGE 2	200305	Site transferred to Fort Wainwright
FGLY-003-R-01	LANDFILL 3 - SWMU 40	200707	MMRP Final Site Inspection Report, Fort Greely, Alaska, July 2007

MMRP Schedule

Date of MMRP Inception 200203

Past Phase Completion Milestones

2003

PA (FGLY-001-R-01 - RIFLE RANGE 1, FGLY-002-R-01 - RIFLE RANGE 2, FGLY-003-R-01 - LANDFILL 3 - SWMU 40, FGLY-004-R-01 - JARVIS CREEK MUNITIONS BURIAL SITE, FGLY-005-R-01 - BRAC Site 112, Former Scrap Yard)

2007

SI (FGLY-001-R-01 - RIFLE RANGE 1, FGLY-003-R-01 - LANDFILL 3 - SWMU 40, FGLY-005-R-01 - BRAC Site 112, Former Scrap Yard)

2008

SI (FGLY-004-R-01 - JARVIS CREEK MUNITIONS BURIAL SITE)

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: 201309

Schedule for Next Five-Year Review: 2014

Estimated Completion Date of MMRP at Installation (including LTM phase): 204209

FORT GREELY MMRP Schedule

= phase underway

SITE ID	SITE NAME	PHASE	FY13	FY14	FY15	FY16	FY17	FY18+
FGLY-004-R-01	JARVIS CREEK MUNITIONS BURIAL SITE	LTM						
SITE ID	SITE NAME	PHASE	FY13	FY14	FY15	FY16	FY17	FY18+
FGLY-005-R-01	BRAC Site 112, Former Scrap Yard	IRA						
		RA(C)						
		LTM						

FORT GREELY
Army Defense Environmental Restoration Program
Compliance Restoration

CR Summary

Installation Total Army Environmental Database-Restoration (AEDB-R) Sites/Closeout Sites Count: 3/0

Installation Site Types with Future and/or Underway Phases

- 1 Above Ground Storage Tank
(CCFGLY002)
- 1 POL (Petroleum/Lubricants) Lines
(CCFGLY008)
- 1 Spill Site Area
(FGLY-074)

Most Widespread Contaminants of Concern

Petroleum, Oil and Lubricants (POL), Volatiles (VOC)

Media of Concern

Soil

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

Site ID	Site Name	Action	Remedy	FY
CCFGLY008	MOGAS/DFA Fuel line (BRAC 94/97/101/134)	IRA	LANDFARMING	2011

Duration of CR

Date of CR Inception: 199106

Estimated Date for Remedy-In-Place (RIP)/Response Complete (RC): 201102/201102

Date of CR completion including Long Term Management (LTM): 204209

CR Contamination Assessment

Contamination Assessment Overview

CR sites all in the PP/ROD sent to ADEC for approval.

Cleanup Exit Strategy

CR sites all in the PP/ROD sent to ADEC for approval. Site closure is pending.

CR Previous Studies

Title

Author

Date

There are no Previous Studies

FORT GREELY
Compliance Restoration
Site Descriptions

Site ID: CCFGLY002

Site Name: BLDG 617 FUEL SPILL AND TANKS 419 & 420

STATUS

Regulatory Driver: RCRA

Contaminants of Concern: Petroleum, Oil and Lubricants (POL)

Media of Concern: Soil

Phases	Start	End
ISC.....	200101.....	200110
INV.....	200310.....	201102
LTM.....	201103.....	204209

RIP Date: N/A

RC Date: 201102

SITE DESCRIPTION

This site is the location of a current POL tank farm with former leaking valve pit and multiple recent spills (since 1986). The facility began operation sometime during the early 1950s and likely had an undocumented history of leaks at the valve pits and tanks dating back to that time; however, no contamination was known at this site until the 1990s.

According to the 1996 EBS, a 100 gal spill of MOGAS was reported at Building 619; however, this spill occurred at Building 617. It was also reported that a valve at the west end of the pump house (Building 617) was left open during a refueling operation and diesel spilled to the ground at that location. According to the incident report, dated June 26, 1998, approximately 30 gal were spilled, covering an estimated area of nine sf. In May 1995, Shannon & Wilson performed a geotechnical investigation at Tank No. 420, including five borings. Two environmental samples were collected and analyzed for DRO and BTEX. DRO was detected at 990 mg/kg. In October 2003, ASCG, Inc. installed two groundwater wells in the vicinity of the POL yard. MW6 was installed in the vicinity of Post Road and Fifth Street, about 500 ft northwest and downgradient of the POL yard. MW7 is adjacent to Tank 419, within the containment area. Samples from both wells were analyzed for fuel components without detections. A USACE/Northwind investigation in 2004 revealed extensive contamination around the valve pit and MW8 installed immediately downgradient had trace amounts of POL constituents (toluene at three orders of magnitude below cleanup levels).

Soil analysis has determined that DRO exceeds state cleanup levels for migration to groundwater. Contamination extent was further characterized and defined during FY2009. The UVOST and conventional borings were used to define the extent of contamination around the valve pit (exceeded cleanup criteria from 15 ft bgs to 140 ft bgs). Top of water table is approximately 200 ft bgs. Utilities, active valve pit, and the depth of contamination hamper any remediation at the valve pit. MW7 was decommissioned after bentonite swelled inside well casing and prevented collection of samples. MW6 and MW8 provide adequate downgradient coverage (and have not had any contaminants above cleanup criteria). FY2010 investigations collected data to facilitate using the ADEC HRC (ACL method) to close the site. Site will be proposed for closure with LUCs in the 2012 multi-site PP/ROD currently under development. Remediation while POL Yard is operational is not feasible.

CLEANUP/EXIT STRATEGY

The FGLY administrative controls database will be utilized to control subsurface intrusions into the location of POL yard and prevent the land usage from changing (preventing change from its current use as the POL storage facility). Land use will be restricted to industrial or "green space" (no usage) and dig restrictions would be used to control future land-use. The site will be considered "cleanup complete with ICs" in ADECs contaminated sites database. No change in use status will be allowed without ADEC approval. The site should be assessed for remediation when site is no longer an active POL yard. A review will be conducted every five years to ensure that the restrictions and protection programs are being maintained properly and that site conditions have not changed. Groundwater monitoring of the two downgradient monitoring wells for petroleum constituents will be completed in the fall of the year prior to a five-year review (so that data is available for analysis during the five--year review). A PP/ROD will be completed in the 2012/2013 time period.

Site ID: CCFGLY008

Site Name: MOGAS/DFA Fuel line (BRAC 94/97/101/134)

STATUS

Regulatory Driver: RCRA

Contaminants of Concern: Petroleum, Oil and Lubricants (POL), Volatiles (VOC)

Media of Concern: Soil

Phases	Start	End
ISC.....	200405.....	200410
INV.....	200605.....	201102
IRA.....	201003.....	201102
LTM.....	201103.....	204209

RIP Date: N/A

RC Date: 201102

SITE DESCRIPTION

This site was the MOGAS/diesel fuel pipeline for the Old Post Area. Old Post consists of the former main cantonment and currently active airfield. Fuel distribution lines (both gasoline and diesel) were operational from the 1940s until the 1960s.

The site has former UST locations at numerous buildings along the pipeline route. In 2004, a soil gas survey in the area showed widespread TPH contamination. Initial investigations in 2007 found extensive diesel contamination at one of the former underground tank farms attached to the MOGAS line. A downgradient monitoring well (at another site) has shown benzene contamination for which the source is believed to be the Building 163 underground tank farm supplied by the MOGAS fuel line. In 2008, activities included tracing the entire path of the MOGAS line in the Old Post area and delineating some of the contamination. The 2010 activities included remediation of shallow contamination along the pipeline and investigation of deeper contamination. Additionally, the pipeline was removed and more than 500 gal of fuel recovered. The UST farm on the pipeline and the bend in the pipeline have heavy contamination and are a suspected source of benzene contamination in groundwater.

The deep petroleum contamination at the bend in the pipeline will be managed under IRP site FGLY-006 (since the groundwater plume is being tracked under this site) and an in situ-oxidation treatability study was completed in FY2009. Full implementation of in situ oxidation planned for FY2010. In FY2011, remaining CCFGLY-008 pipeline shallow contamination will be excavated and landfarmed. Remediation is expected to include removal of petroleum contaminated soil with landfarming. All of the sites being tracked under CCFGLY008 will be included in the multi-site PP/ROD currently under development. Sites will be closed either as NFRAP with no land use restrictions or as NFRAP with LUCs depending on whether deep contamination remains at the site. PP/ROD expected to be completed by end of FY2012.

CLEANUP/EXIT STRATEGY

The FGLY administrative controls database will be utilized to control subsurface intrusions into the location of Old Post MOGAS fuel line and prevent the land usage from changing (preventing construction on the plot of land). Land use will be restricted to industrial or "green space" (no usage) and dig restrictions would be used to control future land-use. The site will be considered "cleanup complete" in ADECs contaminated sites database. A review will be conducted every five years to ensure that the restrictions and protection programs are being maintained properly and that site conditions have not changed. A PP/ROD will be completed in the 2012/2013 time period.

Site Name: BLDG 320 DIESEL SPILL - SITE 72

STATUS

Regulatory Driver: OTHER

Contaminants of Concern: Petroleum, Oil and Lubricants (POL)

Media of Concern: Soil

Phases	Start	End
PA.....	199106.....	199107
SI.....	199107.....	199909
RI/FS.....	199909.....	200003
LTM.....	201009.....	204209

RIP Date: N/A

RC Date: 200003

SITE DESCRIPTION

In the early 1990s, a valve on a tanker truck parked inside Building 320 leaked approximately 500 gal of diesel fuel. A site investigation was performed, but no action was taken because the contaminants were under the building. In 1997, a UST adjacent to the Building was removed, and DRO contamination was discovered well under the bottom of the tank. This was attributed to the old fuel spill. Further characterization was done in 1999 and DRO was not found above screening levels. A DD was signed with USEPA as NFA late in the BRAC process. When FGA emerged from BRAC and was transferred from USARAK to USASMDC, ADEC declared that they did not authorize USEPA to sign for them and they considered the site open. A decision was made to not reopen the closed site in AEDB-R, but instead move the site to LTM and cover investigations/remediation under FGLY-099. The site was investigated in 2009 and areas of contamination were delineated on the east, west, and south sides of the building. In 2010, 100 cy of soil were excavated from the west site (UST location) and further depth delineation of contaminants was performed. Contamination from the spill inside the building is largely inaccessible and cannot be addressed until the building is removed. The site will be proposed for closure with LUCs in the 2012 multi-site PP/ROD. LTM will be included in FGLY-007.

CLEANUP/EXIT STRATEGY

The FGLY administrative controls database will be utilized to control subsurface intrusions into the location of Building 320 and prevent the land usage from changing. Land use will be restricted to industrial (current usage) (no usage) and dig restrictions will be used to control future land-use. The site will be considered "cleanup complete" in ADECs contaminated sites database. A review will be conducted every five years to ensure that the restrictions and protection programs are being maintained properly and that site conditions have not changed. Five-year reviews will be conducted to ensure long-term effectiveness. A PP/ROD will be completed in the 2012/2013 time period.

Site Closeout (No Further Action) Summary

Site ID	Site Name	NFA Date	Documentation
There are no NFA sites			

CR Schedule

Date of CR Inception: 199106

Past Phase Completion Milestones

1991

PA (FGLY-074 - BLDG 320 DIESEL SPILL - SITE 72)

1999

SI (FGLY-074 - BLDG 320 DIESEL SPILL - SITE 72)

2000

RI/FS (FGLY-074 - BLDG 320 DIESEL SPILL - SITE 72)

2002

ISC (CCFGLY002 - BLDG 617 FUEL SPILL AND TANKS 419 & 420)

2005

ISC (CCFGLY008 - MOGAS/DFA Fuel line (BRAC 94/97/101/134))

2011

IRA (CCFGLY008 - MOGAS/DFA Fuel line (BRAC 94/97/101/134))

INV (CCFGLY002 - BLDG 617 FUEL SPILL AND TANKS 419 & 420, CCFGLY008 - MOGAS/DFA Fuel line (BRAC 94/97/101/134))

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:

Schedule for Next Five-Year Review: 2014

Estimated Completion Date of CR at Installation (including LTM phase): 204209

FORT GREELY CR Schedule

= phase underway

SITE ID	SITE NAME	PHASE	FY13	FY14	FY15	FY16	FY17	FY18+
CCFGLY002	BLDG 617 FUEL SPILL AND TANKS 419 & 420	LTM						
SITE ID	SITE NAME	PHASE	FY13	FY14	FY15	FY16	FY17	FY18+
CCFGLY008	MOGAS/DFA Fuel line (BRAC 94/97/101/134)	LTM						
SITE ID	SITE NAME	PHASE	FY13	FY14	FY15	FY16	FY17	FY18+
FGLY-074	BLDG 320 DIESEL SPILL - SITE 72	LTM						

Community Involvement

Technical Review Committee (TRC): None

Community Involvement Plan (Date Published): 201107

Restoration Advisory Board (RAB): RAB established 199609

RAB Adjournment Date: N/A

RAB Adjournment Reason: None

Additional Community Involvement Information

The RAB was formed in September 1996 and met quarterly until 2009 when it was decided to move towards semiannual meetings. The most recent RAB meeting was held in November 2011. The RAB meets on a semiannual basis. A TAPP has not been requested. The community relations plan was updated in 2011.

Administrative Record is located at

The RAB website at <http://www.smdcen.us/rabfga>
which is maintained by
USASMDC-ENV-E
PO Box 1500
Huntsville, AL 35807

Information Repository is located at

Delta Junction Public Library
8.5 Mile Jack Warren Road
Delta Junction, AK 99737

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

TAPP Title: N/A

Potential TAPP: N/A

